Academic Calendars

2023–2024

Fall Quarter 2023
- Quarter begins: September 25
- Instruction begins: September 28
- Veterans Day holiday: November 10
- Thanksgiving holiday: November 23–24
- Instruction ends: December 8
- Common final examinations: December 9–10
- Final examinations: December 11–15
- Quarter ends: December 15
- Christmas holiday: December 25–26
- Winter campus closure (tentative): December 27–29
- New Year's holiday: January 1–2

Winter Quarter 2024
- Quarter begins: January 3
- Instruction begins: January 8
- Martin Luther King, Jr. holiday: January 15
- Presidents' Day holiday: February 19
- Instruction ends: March 15
- Common final examinations: March 16–17
- Final examinations: March 18–22
- Quarter ends: March 22

Spring Quarter 2024
- Quarter begins: March 27
- César Chávez holiday: March 29
- Instruction begins: April 1
- Memorial Day holiday: May 27
- Instruction ends: June 7
- Common final examinations: June 8–9
- Final examinations: June 10–14
- Quarter ends: June 14
- Commencement ceremonies: June 14–16

Summer 2024
- Juneteenth holiday: June 19
- Summer session begins: June 24
- Independence Day holiday: July 4
- Labor Day holiday: September 2
- Summer session ends: September 13

2024–2025

Fall Quarter 2024
- Quarter begins: September 23
- Instruction begins: September 26
- Veterans Day holiday: November 11
- Thanksgiving holiday: November 28–29
- Instruction ends: December 6
- Common final examinations: December 7–8
- Final examinations: December 9–13
- Quarter ends: December 13
- Winter campus closure (tentative): December 23, 26–27, 30
- Christmas holiday: December 24–25
- New Year's holiday: December 31–January 1

Winter Quarter 2025
- Quarter begins: January 2
- Instruction begins: January 6
- Martin Luther King, Jr. holiday: January 20
- Presidents' Day holiday: February 17
- Instruction ends: March 14
- Common final examinations: March 15–16
- Final examinations: March 17–21
- Quarter ends: March 21

Spring Quarter 2025
- Quarter begins: March 26
- César Chávez holiday: March 28
- Instruction begins: March 31
- Memorial Day holiday: May 26
- Instruction ends: June 6
- Common final examinations: June 7–8
- Final examinations: June 9–13
- Quarter ends: June 13
- Commencement ceremonies: June 13–15

Summer 2025
- Juneteenth holiday: June 19
- Summer session begins: June 23
- Independence Day holiday: July 4
- Labor Day holiday: September 1
- Summer session ends: September 12
General Catalog Information

UCLA General Catalog
Published August 2023 © 2023 Regents UC

UCLA®
University of California, Los Angeles
Los Angeles, California 90095-1361
Main telephone: 310-825-4321 (campus operator)
Speech- and hearing-impaired access: TTY 310-825-2833

For complete department and school address information, see the campus directory. For mailing address formats, see address standards for UCLA mail.

Accreditation
UCLA is accredited by the Western Association of Schools and Colleges (WASC) Senior College and University Commission, and by numerous special agencies. More information about UCLA accreditation is available at the UCLA Academic Planning and Budget accreditation web page.

Catalog Publication
The UCLA General Catalog is published annually.
Every effort has been made to ensure the accuracy of the information presented in the UCLA General Catalog. However, all courses, course descriptions, instructor designations, curricular degree requirements, and fees described herein are subject to change or deletion without notice. Department websites referenced herein are published independently and may not reflect approved curricula and courses information. Consult this Catalog for the most current, officially approved courses and curricula.

Online Publications
See the Registrar’s website for current detailed information about registration, enrollment, fees, deadlines, updated course descriptions, and other academic information. Classes offered each term can be viewed on the Schedule of Classes.

School Information Materials
Other information about UCLA may be found in materials produced by the College of Letters and Science, and the schools of Arts and Architecture; Dentistry; Education and Information Studies; Engineering and Applied Science; Law; Management; Medicine; Music; Nursing; Public Affairs; Public Health; and Theater, Film, and Television.
Current graduate program information, including officially approved graduate programs and requirements, is available on the Graduate Education website.

Production Credits
Claire McCluskey, Deputy Registrar; Director, Curriculum and Publishing
Blake Livesay, Assistant Registrar, Curriculum Management
Karen Robbins, Designer/Editor
The UCLA General Catalog is produced by the UCLA Registrar’s Office Curriculum and Scheduling/Academic Publications group using CourseLoop, FrameMaker, and other software.

Cover and Title Page
Cover: Late 1920s ceiling fresco in the Royce Hall portico personifies four academic disciplines (clockwise from top): Literature, Philosophy, History, and Mathematics. Originally painted by Julian Ellsworth Garnsey, the mural was restored after the 1994 Northridge earthquake by alumna Tatyana M. Thompson. Personifying the UCLA mission of education, research, and service are (from left): mathematics professor Andrea L. Bertozzi with students simulating oil movement dynamics, geoscience and climate science professor Aradhna Tripati, and students beautifying a school on Volunteer Day. Title page: Royce Hall portico. Photo credits: © Reed Hutchinson, UCLA Image Library; © 2003 by Alan Nyiri, courtesy of the Atkinson Photographic Archive.
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From the Chancellor

This Catalog describes the incredible array of academic offerings available to you at UCLA. Choose from 5,000 courses each term, 141 bachelor’s degree programs, 143 master’s and professional degree programs, 122 doctoral and professional degree programs, and 104 minors as you build a course of study that suits your interests and aspirations. As a world-class research university with strengths in disciplines from the arts to the sciences, UCLA offers you a remarkable range of academic possibilities. Additionally, more than 70 percent of our undergraduate classes have fewer than 30 students—so you can learn in smaller settings and get to know your professors and classmates.

UCLA is a welcoming place for students from diverse backgrounds. Those admitted to our first-year class for 2022–23, for example, represent all 50 U.S. states and Washington, DC; and 87 countries. All of our students have a thirst for knowledge, and are determined to make a positive impact on society.

Our faculty of more than 5,200 is made up of renowned scholars who are highly regarded as leaders in their fields. At UCLA, we are proud that undergraduates, in addition to graduate students, have opportunities to study with top professors and conduct research under their guidance.

This Catalog includes opportunities that offer priority enrollment for lower-division students. Among these are Fiat Lux seminars, which are small classes in a broad range of subjects; clusters, which engage students in yearlong, team-taught interdisciplinary study of timely topics; and advanced research opportunities.

Despite the challenges we have all faced these past few years, UCLA remains a vibrant community of forward-looking achievers, who think outside traditional academic boundaries and share an exuberant desire to improve the world. We have accomplished so much in our first 104 years, and I look forward to seeing you continue this legacy of innovation throughout your time at UCLA and far beyond.

Gene D. Block
Chancellor
Majors and Degrees

College of Letters and Science

African American Studies Department
African American Studies ......................... BA, MA

African Studies Interdepartmental Program
African Studies ........................................ MA

American Indian Studies Department
American Indian Studies ........................... BA, MA

Anthropology Department
Anthropology ........................................ BA, BS, MA, PhD

Archaeology Interdepartmental Program
Archaeology ........................................... MA, CPhil, PhD

Art History Department
Art History ............................................. BA, MA, PhD

Asian American Studies Department
Asian American Studies .............................. BA, MA

Asian Languages and Cultures Department
Asian Humanities ................................ BA
Asian Languages and Cultures ...................... MA, CPhil, PhD
Asian Languages and Linguistics .................. BA
Asian Religions ....................................... BA
Chinese ................................................. BA
Japanese ................................................ BA
Korean .................................................. BA
Southeast Asian Studies ............................ BA
Teaching Asian Languages .......................... MA

Atmospheric and Oceanic Sciences Department
Atmospheric and Oceanic Sciences ............ BS, MS, CPhil, PhD
Atmospheric and Oceanic Sciences/Mathematics .... BS
Climate Science ....................................... BS

Bioinformatics Interdepartmental Program
Bioinformatics ....................................... MS, PhD

Chemistry and Biochemistry Department
Biochemistry ....................................... BS
Biochemistry, Molecular and Structural
Biology ............................................ MS, CPhil, PhD
Chemistry .......................................... BS, MS, CPhil, PhD
Chemistry/Materials Science ..................... BS
General Chemistry .................................. BS
Master of Applied Chemical Sciences .......... MACS

Chicana/o and Central American Studies Department, César E. Chávez
Chicana and Chicano Studies .................... BA, MA, CPhil, PhD

Classics Department
Classical Civilization ............................... BA
Classics ............................................... MA, CPhil, PhD
Greek .................................................. BA, MA
Greek and Latin .................................... BA
Latin ................................................... BA

Communication Department
Communication ................................ BA, MS, PhD

Comparative Literature Department
Comparative Literature .......................... BA, MA, CPhil, PhD

Computational and Systems Biology Interdepartmental Program
Computational and Systems Biology ............. BS

Conservation of Cultural Heritage Interdepartmental Program
Conservation of Cultural Heritage .............. MA
Conservation of Material Culture ............... MS, PhD

Disability Studies Interdepartmental Program
Disability Studies ................................ BA

Earth, Planetary, and Space Sciences Department
Earth and Environmental Science ............. BA
Engineering Geology ............................. BS
Geochemistry ........................................ MS, CPhil, PhD
Geology ............................................ BS, MS, CPhil, PhD
Geophysics .......................................... BS
Geophysics and Space Physics ................. MS, PhD
Planetary Science ................................ MS, PhD

East Asian Studies Interdepartmental Program
East Asian Studies ................................ MA

Ecology and Evolutionary Biology Department
Biology ................................................ BS, MS, CPhil, PhD
Ecology, Behavior, and Evolution ............... BS
Marine Biology ..................................... BS

Economics Department
Business Economics .............................. BA
Economics ........................................... BA, MA, CPhil, PhD
Master of Quantitative Economics .............. MQE

English Department
American Literature and Culture ............... BA
English ............................................... BA, MA, CPhil, PhD

Environment and Sustainability, Institute of the Center for Interdisciplinary Instruction
Doctor of Environmental Science and Engineering .... DEnv
Environment and Sustainability ................. MS, PhD
Environmental Science .......................... BS

**European Languages and Transcultural Studies Department**
European Languages and Transcultural Studies ............. BA
European Languages and Transcultural Studies with French and Francophone ........ BA
European Languages and Transcultural Studies with German .................................. BA
European Languages and Transcultural Studies with Italian ................................ BA
European Languages and Transcultural Studies with Scandinavian .......... BA
French and Francophone Studies ............ MA, CPhil, PhD
Germanic Language ....................... MA, CPhil, PhD
Italian ........................................ MA, CPhil, PhD
Nordic Studies ................................ BA
Scandinavian .................................. MA

**Gender Studies Department**
Gender Studies .................. BA, MA, PhD

**Geography Department**
Geography .............................. BA, MA, CPhil, PhD
Geography/Environmental Studies ................ BA
Master of Applied Geospatial Information Systems and Technologies ............. MAGIST

**Global Studies Interdepartmental Program**
Global Studies ............................. BA

**History Department**
History ...................................... BA, MA, CPhil, PhD

**Individual Field of Concentration**
Individual Field of Concentration ................. BA, BS

**Indo-European Studies Interdepartmental Program**
Indo-European Studies .................... MA, CPhil, PhD

**Integrative Biology and Physiology Department**
Physiological Science ........................ BS, MS

**International and Area Studies Interdepartmental Program**
African and Middle Eastern Studies ............... BA
Asian Studies ................................ BA
European Studies ................................ BA
Latin American Studies ........................ BA

**International Development Studies Interdepartmental Program**
International Development Studies .............. BA

**Labor Studies Interdepartmental Program**
Labor Studies ................................ BA

**Latin American Studies Interdepartmental Program**
Latin American Studies ........................ MA

**Linguistics Department**
Applied Linguistics .......................... BA
Linguistics .................................... BA, MA, CPhil, PhD
Linguistics and Anthropology ................. BA
Linguistics and Asian Languages and Cultures ...... BA
Linguistics and Computer Science .......... BA
Linguistics and English ....................... BA
Linguistics and Philosophy .................... BA
Linguistics and Psychology ................... BA
Linguistics and Spanish ....................... BA

**Mathematics Department**
Applied Mathematics ........................ BS
Data Theory .................................. BS
Financial Actuarial Mathematics ............... BS
Mathematics .................................. BS, MA, MAT, CPhil, PhD
Mathematics/Applied Science ................. BS
Mathematics for Teaching ..................... BS
Mathematics of Computation .................. BS

**Mathematics/Economics Interdepartmental Program**
Mathematics/Economics ....................... BS

**Microbiology, Immunology, and Molecular Genetics Department**
Microbiology, Immunology, and Molecular Genetics .................. BS, MS, PhD

**Molecular Biology Interdepartmental Program**
Molecular Biology ............................. MS, PhD

**Molecular, Cell, and Developmental Biology Department**
Molecular, Cell, and Developmental Biology .................. BS, MS, CPhil, PhD

**Molecular, Cellular, and Integrative Physiology Interdepartmental Program**
Molecular, Cellular, and Integrative Physiology .................. PhD

**Near Eastern Languages and Cultures Department**
Ancient Near East and Egyptology .............. BA
Arabic ........................................ BA
Iranian Studies .............................. BA
Islamic Studies ................................ MA, CPhil, PhD
Jewish Studies ................................ BA
Middle Eastern Studies ....................... BA
Near Eastern Languages and Cultures ........ MA, CPhil, PhD

**Neuroscience Interdepartmental Program**
Neuroscience ................................. BS

**Philosophy Department**
Philosophy .................................... BA, MA, CPhil, PhD

**Physics and Astronomy Department**
Astronomy and Astrophysics .................... MAT, MS, PhD
Astrophysics .................................. BS
Biophysics ........................................ BS
Master of Quantum Science and Technology .......... MQST
Physics ........................................ BS, MA, CPhil, PhD

Political Science Department
Political Science ................................ BA, MA, CPhil, PhD

Psychology Department
Cognitive Science ..................................... BS
Psychobiology ....................................... BS
Psychology .......................................... BA, MA, CPhil, PhD

Slavic, East European, and Eurasian Languages and Cultures Department
Central and East European Languages and Cultures ...... BA
Russian Language and Literature ........................ BA
Russian Studies ..................................... BA
Slavic, East European, and Eurasian Languages and Cultures .. MA, CPhil, PhD

Social Science Interdepartmental Program
Master of Social Science .............................. MSS

Society and Genetics, Institute for Center for Interdisciplinary Instruction
Human Biology and Society ............................ BA, BS

Sociology Department
Sociology ............................................ BA, MA, CPhil, PhD

Spanish and Portuguese Department
Hispanic Languages and Literatures ........................ CPhil, PhD
Portuguese ........................................... MA
Portuguese and Brazilian Studies ........................ BA
Spanish ............................................... BA, MA
Spanish and Community and Culture .................... BA
Spanish and Linguistics ................................ BA
Spanish and Portuguese ................................ BA

Statistics and Data Science Department
Data Theory .......................................... BS
Master of Applied Statistics ........................... MAS
Statistics ............................................. BS, MA, CPhil, PhD

Study of Religion Interdepartmental Program
Study of Religion ................................. BA

David Geffen School of Medicine

Computational Medicine Department
Biomathematics ..................................... MS, PhD
Clinical Research .................................... MS

Human Genetics Department
Genetic Counseling .................................. MS
Human Genetics ..................................... MS, PhD

Medicine Schoolwide Program
Doctor of Medicine ................................. MD

Microbiology, Immunology, and Molecular Genetics Department
Microbiology, Immunology, and Molecular Genetics ... MS, PhD

Molecular and Medical Pharmacology Department
Molecular and Medical Pharmacology ................. MS, PhD

Molecular, Cellular, and Integrative Physiology Interdepartmental Program
Molecular, Cellular, and Integrative Physiology ....... PhD

Neuroscience Interdepartmental Program
Neuroscience ....................................... PhD

Physics and Biology in Medicine Interdepartmental Program
Physics and Biology in Medicine ....................... MS, PhD

Henry Samueili School of Engineering and Applied Science

Bioengineering Department
Bioengineering ...................................... BS, MS, PhD

Chemical and Biomolecular Engineering Department
Chemical Engineering ................................ BS, MS, PhD

Civil and Environmental Engineering Department
Civil Engineering .................................... BS, MS, PhD

Computer Science Department
Computer Engineering ................................ BS
Computer Science .................................... BS, MS, PhD
Computer Science and Engineering ....................... BS

Electrical and Computer Engineering Department
Computer Engineering ................................ BS
Electrical and Computer Engineering ........................ MS, PhD
Electrical Engineering ................................ BS

Engineering Schoolwide Programs
Engineer ............................................. Engr
Engineering .......................................... MS
Engineering — Aerospace ............................ MS
Engineering — Computer Networking ................ MS
Engineering — Electrical ............................ MS
Engineering — Electronic Materials ................. MS
Engineering — Integrated Circuits .................... MS
Engineering — Manufacturing and Design .......... MS
Engineering — Materials Science .................... MS
Engineering — Mechanical ......................... MS
Engineering — Signal Processing and Communications MS
Engineering — Structural Materials ................ MS
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<tr>
<td>Mechanical and Aerospace Engineering Department</td>
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<td>Herb Alpert School of Music</td>
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<td>Ethnomusicology Department</td>
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<td>Music Performance</td>
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<td>Music Industry Interdepartmental Program</td>
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<td>Musicology Department</td>
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<td>Music History and Industry</td>
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<td>Management Department</td>
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<td>Business Analytics</td>
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<td>Master of Public Health for Health Professionals</td>
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<td>School of the Arts and Architecture</td>
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Architecture and Urban Design. . . . . . . . . . . . . . . . . . . . . . . MS
Master of Architecture . . . . . . . . . . . . . . . . . . . . . . . . . . MArch

Art Department
Art. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . BA, MFA

Design|Media Arts Department
Design|Media Arts . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . BA, MFA

Individual Field
Individual Field . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . BA

World Arts and Cultures/Dance Department
Choreographic Inquiry . . . . . . . . . . . . . . . . . . . . . . . . . . . . MFA
Culture and Performance. . . . . . . . . . . . . . . . . . . . . . . . . . . MA, PhD
Dance . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . BA
World Arts and Cultures . . . . . . . . . . . . . . . . . . . . . . . . . . . . BA

School of Dentistry
Dentistry Department
Doctor of Dental Surgery . . . . . . . . . . . . . . . . . . . . . . . . . . DDS

Oral Biology Section
Oral Biology . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . MS, PhD

School of Education and Information Studies
Education Department
Doctor of Education . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . EdD
Education . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . MA, PhD
Educational Administration. . . . . . . . . . . . . . . . . . . . . . . . . . Joint EdD with UCI
Education and Social Transformation. . . . . . . . . . . . . . . . . . BA
Master of Education . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . MEd
Special Education. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Joint PhD with CSULA

Information Studies Department
Information Studies . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . PhD
Master of Library and Information Science . . . . . . . . . . . . . . . . . MLIS

School of Law
Law Department
Doctor of Juridical Science . . . . . . . . . . . . . . . . . . . . . . . . . . SJD
Juris Doctor . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . JD
Master of Laws . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . LLM
Master of Legal Studies. . . . . . . . . . . . . . . . . . . . . . . . . . . . . MLS

School of Nursing
Nursing Department
Doctor of Nursing Practice. . . . . . . . . . . . . . . . . . . . . . . . . DNP
Master of Science in Nursing . . . . . . . . . . . . . . . . . . . . . . . . . MSN

School of Theater, Film, and Television
Film, Television, and Digital Media Department
Film and Television . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . BA, MA, MFA, CPhil, PhD

Individual Field
Individual Field . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . BA

Theater Department
Theater . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . BA, MFA
Theater and Performance Studies . . . . . . . . . . . . . . . . . . . . . . . . . . CPhil, PhD

Undergraduate Minors and Specializations

Minors

College of Letters and Science
African American Studies
African and Middle Eastern Studies
African Studies
American Indian Studies
Ancient Near East and Egyptology
Anthropology
Applied Developmental Psychology
Arabic and Islamic Studies
Armenian Studies
Art History
Asian American Studies
Asian Humanities
Asian Languages
Atmospheric and Oceanic Sciences
Biomedical Research
Brain and Behavioral Health
Central American Studies
Central and East European Studies
Chicana and Chicano Studies
Classical Civilization
Cognitive Science
Community Engagement and Social Change
Comparative Literature
Conservation Biology
Creative Writing
Digital Humanities
Earth and Environmental Science
East Asian Studies
English
Environmental Systems and Society
European Languages and Transcultural Studies
European Languages and Transcultural Studies with French and Francophone
European Languages and Transcultural Studies with German
European Languages and Transcultural Studies with Italian
European Studies
Evolutionary Medicine
Food Studies
Gender Studies
Geochemistry
Geography
Geography/Environmental Studies
Geology
Geophysics and Planetary Physics
Geospatial Information Systems and Technologies
Global Health
Global Studies
Greek Language and Culture
Hebrew and Jewish Studies
History
History of Science, Technology, and Medicine
International Migration Studies
Iranian Studies
Israel Studies
Labor Studies
Latin American Studies
Latin Language and Culture
Lesbian, Gay, Bisexual, Transgender, and Queer Studies
Linguistics
Literature and the Environment
Mathematical Biology
Mathematics
Mathematics for Teaching
Mexican Studies
Middle Eastern Studies
Neuroscience
Philosophy
Pilipino Studies
Portuguese and Brazilian Studies
Professional Writing
Russian Language
Russian Literature
Russian Studies
Scandinavian
Science Education
Social Data Science
Social Thought
Society and Genetics
South Asian Studies
Southeast Asian Studies
Spanish
Spanish Linguistics
Statistics and Data Science
Structural Biology
Study of Religion
Systems Biology
Henry Samueli School of Engineering and Applied Science
Bioinformatics
Data Science Engineering
Environmental Engineering
Herb Alpert School of Music
Ethnomusicology
Iranian Music
Music Industry
Musicology
John E. Anderson Graduate School of Management
Accounting
Entrepreneurship
Meyer and Renee Luskin School of Public Affairs
Gerontology
Public Affairs
Urban and Regional Studies
Jonathan and Karin Fielding School of Public Health
Public Health
School of the Arts and Architecture
Visual and Performing Arts Education
School of Education and Information Studies
Education Studies
Information and Media Literacy
School of Theater, Film, and Television
Film, Television, and Digital Media
Theater
Computing Specializations
These departments in the College of Letters and Science offer a computing specialization to some or all majors. See the individual department section for details.

Chemistry
Communication
Ecology and Evolutionary Biology
Linguistics
Mathematics
Mathematics/Economics
Molecular, Cell, and Developmental Biology
Psychology
Sociology
Graduate Articulated and Concurrent Degrees

Inquiries about articulated and concurrent degree programs should be directed to graduate advisers in the departments and schools involved. Students should contact Graduate Admissions/Student and Academic Affairs for information on designing articulated programs.

Articulated Degrees

Articulated degree programs permit no credit overlap; students must complete degree requirements separately for each degree.

- Clinical Research MS/Doctor of Medicine
- Division of Graduate Education health science major PhD/Doctor of Medicine
- Doctor of Medicine/Education MA
- Doctor of Medicine/Master of Legal Studies
- Doctor of Medicine/Master of Public Health
- Doctor of Dental Surgery or Certificate/Oral Biology MS or PhD
- Latin American Studies Interdepartmental MA/Master of Education in Curriculum
- Latin American Studies Interdepartmental MA/Master of Library and Information Science
- Latin American Studies Interdepartmental MA/Master of Public Health

Concurrent Degrees

Concurrent degree programs allow students to reduce the number of courses required for two degrees, since some courses may apply to both degrees.

- African American Studies MA/Juris Doctor
- African Studies Interdepartmental MA/Master of Public Health
- American Indian Studies MA/Juris Doctor
- Asian American Studies MA/Master of Public Health
- Asian American Studies MA/Master of Social Welfare
- Community Health Sciences MPH/Master of Urban Planning
- Computer Science MS/Master of Business Administration
- Doctor of Dental Surgery/Master of Business Administration
- Doctor of Education/Juris Doctor
- Doctor of Medicine/Master of Business Administration
- Doctor of Medicine/Master of Public Policy
- Education MA/Juris Doctor
- Education PhD/Juris Doctor
- Environmental Health Sciences MPH/Master of Urban Planning
- Juris Doctor/Master of Business Administration
- Juris Doctor/Master of Education
- Juris Doctor/Master of Public Health
- Juris Doctor/Master of Public Policy
- Juris Doctor/Master of Social Welfare
- Juris Doctor/Master of Urban Planning
- Juris Doctor/Philosophy PhD
- Latin American Studies Interdepartmental MA/Master of Urban Planning
- Latin American Studies Interdepartmental MA/Master of Business Administration
- Master of Architecture/Master of Urban Planning
- Master of Business Administration/Master of Library and Information Science
- Master of Business Administration/Master of Public Health
- Master of Business Administration/Master of Public Policy
- Master of Business Administration/Master of Science in Nursing
- Master of Business Administration/Master of Urban Planning
- Master of Public Health/Master of Public Policy
- Master of Public Health/Master of Social Welfare
- Master of Public Policy/Master of Social Welfare
About UCLA

Few universities in the world offer the extraordinary range and diversity of academic programs that students enjoy at UCLA. Leadership in education, research, and public service make UCLA a beacon of excellence in higher education, as students, faculty members, and staff come together in a true community of scholars to advance knowledge, address societal challenges, and pursue intellectual and personal fulfillment.

As a public research university, the mission of UCLA is to create, disseminate, preserve, and apply knowledge to better society. Based on a foundation of learning and teaching, the mission also focuses on discovery, creativity, innovation, and civic engagement.

UCLA administration is led by its chancellor, provost, vice chancellors and vice provosts, and deans of the divisions and schools. Its Student Affairs division oversees programs and services that support student academic and personal success. Its Division of Graduate Education oversees recruitment and admissions, funding and appointments, and maintenance of high-quality standards in graduate programs. Through the Academic Senate, faculty share in the operation and management of UCLA.

UCLA is comprised of the College of Letters and Science—with its humanities, life sciences, physical sciences, social sciences, and undergraduate education divisions—and 12 professional schools: School of the Arts and Architecture; School of Dentistry; School of Education and Information Studies; Henry Samueli School of Engineering and Applied Science; School of Law; John E. Anderson Graduate School of Management; David Geffen School of Medicine at UCLA; Herb Alpert School of Music; School of Nursing; Meyer and Renee Luskin School of Public Affairs; Jonathan and Karin Fielding School of Public Health; and School of Theater, Film, and Television.

Education

The National Research Council Committee to Assess Research-Doctorate Programs evaluates the quality of the faculty in 212 American research universities approximately every 15 years. Of the 62 doctorate degree disciplines studied in the 2011 evaluation, 33 UCLA academic departments ranked among the top 10 in the country and 12 ranked among the top 20.

Distinguished faculty members at UCLA include Nobel prizewinners, Guggenheim fellows, Sloan fellows, and Fulbright scholars, as well as numerous members of the National Academy of Sciences and the American Academy of Arts and Sciences. In fact, UCLA consistently places among the leading universities nationwide in the number of these prestigious awards granted to its faculty members.

This remarkable pool of talent is shared across the College and 12 professional schools. Undergraduate and graduate degree programs are offered by the College and by schools focused on education, engineering, fine arts, media, nursing, performing arts, public affairs, and public health. The other professional schools offer graduate degree programs and undergraduate minors.

Undergraduates may earn one of 141 bachelor degrees; graduate students may earn one of 143 master/professional and 122 doctorate/professional degrees.

Academic programs undergo continuous review and evaluation to maintain their excellence, and new degree programs are added as they are approved by the Academic Senate or the Regents.

Research

Pushing the boundaries of the known, UCLA researchers—faculty members and students, both graduate and undergraduate—venture every day into uncharted worlds from the molecular to the galactic.

Whether tracing the roots of urban decay, pioneering new drug therapies for cancer, or revealing a black hole at the center of our galaxy, research at UCLA is advancing the frontiers of knowledge.

Among the leading research universities in the world, in 2021-22 UCLA received $1.72 billion in extramural grants and contracts to support its research. Each year it hosts hundreds of postdoctoral scholars who share its facilities. UCLA laboratories have seen major breakthroughs in scientific and medical research. Its study centers have helped foster understanding among the various cultures of the world. And its ongoing pursuits of new knowledge in vital areas continue to improve the quality of life for people around the world.

Faculty members teach both undergraduate and graduate courses and, through their research, create knowledge as well as transmit it. At UCLA, students are taught by the people making the discoveries. They exchange ideas with faculty members who are authorities in their fields and, even as undergraduate students, are encouraged to participate in research to experience firsthand the discovery of new knowledge.
Service

As a public university, serving the community is one of the greatest commitments UCLA makes. Undergraduate and graduate programs, research activities, community outreach programs, and grass-roots participation by students, faculty, staff, and alumni help to forge a partnership between UCLA and the entire Los Angeles region.

With the Ronald Reagan UCLA Medical Center, UCLA furthers its tradition of medical outreach and assures the highest quality of care to Los Angeles and the world. The School of Dentistry, with clinics on campus and in Venice, offers free dental care and treatment to those in need at community health fairs. The Rape Treatment Center—located at the UCLA Medical Center, Santa Monica—offers 24-hour care to victims. Faculty and students in the Fielding School of Public Health work in communities around the world to address disparities underlying differences in the health status of individuals, and the School of Nursing offers care to the poor and homeless through its nurse-managed health center at the Union Rescue Mission. UCLA also supports K-12 enhancement programs such as the Music Partnership Program in the Herb Alpert School of Music, which funds UCLA students to be academic and musical mentors for at-risk youth.

Students can get involved in the community in many different ways. The UCLA Volunteer Center coordinates year-round programs and annual events, such as UCLA Volunteer Day where Bruins perform service work at over 55 community partner sites across Los Angeles. BruinCorps tutors under-performing youth in disadvantaged communities.

As UCLA gives to the community, Los Angeles gives something back. UCLA arts and cultural programs, for example, attract more than half a million people each year, drawn by everything from world-class acts performing at Royce Hall to screenings of classic films from the School of Theater, Film, and Television archives. These relationships create opportunities for partnerships and growth that ensure the pre-eminence of UCLA in the twenty-first century and beyond.

History of UCLA

In 1880—with just 11,000 inhabitants—the pueblo of Los Angeles convinced the state government to establish a normal school (teachers college) in Southern California. Enthusiastic citizens contributed between $2 and $500 to purchase a site; and on August 29, 1882, the Los Angeles Branch State Normal School welcomed its first students in a Victorian building that had been erected on the site of an orange grove.

By 1914 Los Angeles had grown to a city of 350,000, and the school moved to new quarters—a Hollywood ranch off a dirt road that later became Vermont Avenue. In 1919 the school became the Southern Branch of the University of California, and offered two years of instruction in letters and science. Third- and fourth-year courses were soon added; the first class of 300 students was graduated in 1925, and two years later the Southern Branch had earned its new name: University of California at Los Angeles. In 1958, at was replaced by a comma and the official name became University of California, Los Angeles.

Continued growth mandated a site that could support a larger campus, and in 1927 ground was broken in the chaparral-covered hills of Westwood. The four original buildings—Royce Hall, College Library, Chemistry Building, and Physics-Biology Building—formed a lonesome cluster in the middle of 400 empty acres. The campus hosted 5,500 students its first term in 1929. The UCLA master’s degree was established in 1933 and the doctorate in 1936. UCLA was fast becoming a full-fledged university that offered advanced study in almost every field.

Following World War II, UCLA began a period of spectacular growth: in 25 years its enrollment tripled to 27,000 students. The campus undertook what would become a $260 million building program that included residence halls, parking structures, laboratories, more classrooms, service buildings, athletic and recreational facilities, and a teaching hospital that is now one of the largest and most highly respected in the world. In the late 1950s and 1960s, UCLA was at the center of many milestones: the first open-heart surgery in the western U.S. was performed at its medical center; the first of 10 NCAA men’s basketball championships was won; and it became the first ARPANET node, heralding the birth of the Internet.

The rest of the twentieth century, through the opening of the twenty-first, was peppered with notable UCLA events: Nobel prizes awarded to multiple faculty; breakthroughs in treatments for cancer, brain aneurysms, and organ transplants; explosive growth in research grants; more than 30 Oscars awarded to creative alumni; completion of a new medical center; expansion of campus housing to accommodate nearly all incoming freshmen; and becoming the first university to win 100 NCAA team championships.

At the start of the 2010s, UCLA began construction on a series of new residence halls with the goal of expanding guaranteed on-campus housing to all students. In 2016, the Herb Alpert School of Music became the 12th professional school at UCLA and first independent music school in the UC system. UCLA celebrated its centennial in 2019-20, raising $5.49 billion toward student scholarships, faculty support, research programs, and campus facilities. Today, UCLA is home to over 47,700 students and 4,100 faculty.
members. With 223 campus buildings, classes are held in more than 85 facilities. As UCLA passes its 100th anniversary, it remains firmly rooted in Westwood but its reach is beyond borders, with programs and collaborations that span the country, the globe, and even outer space.

University of California System

UCLA is part of the University of California (UC) system, which traces its origins to 1868 when Governor Henry H. Haight signed the Organic Act that provided for the first California “complete university.” Classes began the next year at the College of California in Oakland. In 1873 the first Berkeley campus buildings were completed, and the university moved into its new home. The following June, bachelor’s degrees were conferred on 12 graduates.

Today, the University of California is one of the largest and most renowned centers of higher education in the world. Its 10 campuses span the state, from Davis in the north to San Diego in the south. In between are Berkeley, San Francisco, Merced, Santa Cruz, Santa Barbara, Los Angeles, Riverside, and Irvine. All campuses adhere to the same admission guidelines and high academic standards, yet each has its own distinct character and academic individuality. Riverside, for example, excels in the plant sciences and entomology; Davis has a large agricultural school and the only UC veterinary medicine program; San Diego offers excellent oceanography and marine biology programs; and San Francisco is devoted exclusively to the health sciences. Among the campuses are six medical schools and four law schools, as well as schools of architecture, business administration, education, engineering, and many others.

The UC campuses have a combined enrollment exceeding 294,300 students, 75 percent of them California residents. About one-fifth study at the graduate level. Some 150 laboratories, extension centers, and research and field stations strengthen teaching and research while supplying public service to California and the nation. The collections of over 100 UC libraries on the 10 campuses are surpassed in size in North America only by the U.S. Library of Congress collection.

The UC faculty is internationally known for its distinguished academic achievements. On its 10 campuses the University of California has 31 living Nobel laureates, and membership in the National Academy of Sciences is the largest of any university in the country.

The UC system is governed by a Board of Regents whose regular members are appointed by the Governor of California. In addition to setting general policy and making budgetary decisions for the UC system, the Regents appoint the President of the University of California, the 10 chancellors, and the directors and deans who administer the affairs of the individual campuses and divisions of the University of California. The Regents delegate authority in academic matters to the Academic Senate, which determines academic policy for the University of California as a whole. The Senate, composed of faculty members and certain administrative officers, determines conditions for admission and granting of degrees, authorizes and supervises courses and curricula, and advises UC administrators on budgets and faculty appointments and promotions. Local divisions of the universitywide Academic Senate determine academic policy for each campus. Students also participate in policymaking at campus and system levels.

Campus Life

Just six miles from the ocean, UCLA lies in one of the most attractive areas of Southern California. It is bordered on the north by the protected wilderness of the Santa Monica Mountains and on the south by Westwood Village. Besides lecture halls and classrooms, campus facilities include libraries, studios, theaters, and a planetarium; athletic fields, famed Pauley Pavilion, and recreation/exercise space; gar-
dens and outdoor spaces accented by the Inverted Fountain and Janss Steps; the Hill, home to campus residence halls and common spaces; and its renowned medical center.

**Unique Setting**

UCLA is nestled in the hills of Westwood, with the Romanesque architecture of its early buildings a backdrop for diverse campus settings. Bruin Walk continually echoes with the chatter of students and vendors, but nearby, the botanical gardens provide a serene escape. While a hip-hop band energizes lunchtime crowds in Bruin Plaza, a classical recital may be taking place in Schoenberg Music Building, and students contemplating a Rodin or Lachaise in the Murphy Sculpture Garden may be unaware of a political rally organizing in Meyerhoff Park. With its traditional appearance and temperate climate, it is not unusual to find campus locations being used for filming television and movies and hosting large events.

To give a feel for the dynamic atmosphere at UCLA, **tours for prospective undergraduates** are offered by Undergraduate Admission.

**Large Campus with a Comfortable Feel**

The general campus population, some 43,670 students, is enriched by an additional 4,162 in the health sciences schools of dentistry, medicine, nursing, and public health. While such numbers sound daunting, UCLA offers orientation sessions and innovative academic assistance programs to help acclimate new students. Through a range of services and social programs, new students quickly meet people with common interests in their academic departments, residence halls, or clubs and organizations. Even athletic events help to cement relationships as the campus comes together to celebrate Bruin victories.

Large lecture groups exist, especially in introductory courses; however, 83 percent of lower-division lecture classes in 2021-22 had under 200 students, and UCLA is striving to further reduce class size. Large lecture classes typically include discussion sections of about 25 students, or smaller seminars and laboratory classes. There is an overall ratio of one faculty member for approximately 18 students.

Most UCLA faculty members set aside office hours for students and appreciate the opportunity for informal conversation. Professors are often aided by graduate student teaching assistants (TAs).

**Dynamic Student Body**

Students at UCLA pride themselves on academic excellence. The fall quarter 2022 entering freshman class had an average high school GPA of 4.50.

One of the highest UCLA priorities is to advance the diversity of its students, faculty, staff, and administrators. The UCLA student population—nearly equally divided between men and women—yields the wide range of opinion and perspective essential to a great university.

Although most students are from California, they come from all 50 states and 134 foreign countries to study at UCLA. Ethnic minorities comprise 73.5 percent of the undergraduates and 70.8 percent of the graduate student population, and international students presently number almost 6,700, making this one of the most popular American universities for students from abroad.

**Retention and Graduation**

Retention and graduation rates in undergraduate programs at UCLA are consistently among the highest in the nation. At least 96 percent of all students entering as freshmen and 95 percent of all students entering as transfers regularly return to enroll at UCLA for the second academic year and beyond.

For entering freshmen, 85.0 percent graduate within four years, and 92.5 percent within six years. The average time to degree is 12 or fewer quarters (i.e., four or fewer years). For entering transfer students, 73.6 percent graduate within two years and 94 percent of all entering transfer students eventually graduate from UCLA.

More information on campus statistics is available from **Academic Planning and Budget**.

**Academic Programs**

UCLA has a tradition of advancing higher education and the common good through excellence in scholarship, research, and public service. Academic excellence, faculty distinction, and a comprehensive curriculum are hallmarks of the UCLA experience. The College of Letters and Science and 12 graduate and professional schools present an extraordinary richness and diversity of teaching programs.

Academic programs offered at UCLA span the breadth and depth of over 200 disciplines and areas of study. Lecture, discussion, laboratory, research, and creative courses are supplemented by seminars, honors programs, specialized freshman clusters, internships, and education abroad opportunities. Instruction takes place in many unique venues, including specialized classrooms, computer and
scientific laboratories, performance and studio spaces, and off-campus settings. Students and faculty members themselves mirror the cultural and racial diversity of Los Angeles. Academic programs are described in detail in Curricula and Courses.

The International Education Office, Summer Sessions, UCLA Extension, and UCLA International Institute offer academic and professional resources to UCLA and the greater Los Angeles community, as well as to the international community.

Study Abroad
Study abroad and student exchange are exciting and broadening experiences that enrich any educational curriculum. The International Education Office (IEO) works to facilitate international education by serving as the campuswide portal for the development and administration of study abroad and student exchange activity. It supplies assistance to academic units seeking to develop study abroad programs, and it collaborates with the Academic Senate and departments to ensure academic oversight of study abroad programs. The IEO also coordinates student advising services for undergraduate and graduate students interested in studying abroad.

The IEO administers several programs, including the UC Education Abroad Program (UCEAP), Summer Travel Study, Non-UC Programs, and various student exchange agreements.

Education Abroad Program
The UC Education Abroad Program (UCEAP) offers short- and long-term study programs in cooperation with over 115 host universities and colleges in more than 42 countries throughout the world. Participating students remain registered at their home campuses while studying abroad and receive full academic credit for their work. With careful planning, study abroad should not delay progress toward graduation. While on EAP, students are eligible for financial aid.

Summer Travel Study
Summer Travel Study offers short-term summer programs on five continents. Summer Travel Study programs offer UC credit, the promise of an exciting summertime adventure, and intensive learning experiences taught by distinguished UCLA faculty members. Over 17 academic departments offer Summer Travel Study programs that include from 8 to 16 quarter units of UC credit. Financial aid is available for qualified UC students. Registration begins in November for the following summer on a first-come, first-served basis. Summer Travel Study is open to all students at any academic level. There is no grade-point average requirement to participate.

Non-UC Programs
Students may also study abroad through other universities and programs not affiliated with UCLA. The IEO strongly recommends that all students considering non-UC programs contact the IEO early in the planning process about UCLA policies on planned academic leave (PAL), transfer credit, financial support, and more. UC financial aid is not available for study abroad on non-UC programs.

Summer Sessions
UCLA offers various ways to earn UCLA credit during the summer—academic courses, summer institutes, travel study, and more. Hundreds of courses from over 70 departments are offered in three-, six-, eight-, nine-, and 10-week sessions. Pre-college and college/professional summer institutes offer innovative approaches to teaching and learning that combine UCLA coursework with practical training in real-world situations, preparing students for their future careers. Some programs, such as the Summer College Immersion Program, are offered specifically for advanced high-school students, affording them an opportunity to experience the academic rigor of UCLA. Summer Travel Study allows students to learn various subjects as part of an exciting and challenging travel experience. All Summer Sessions offerings can be explored online.

Although visiting students are welcome to enroll, admission to summer sessions does not constitute admission to UCLA in either undergraduate or graduate standing. Students who wish to attend UCLA in regular academic terms must follow admission procedures described in Undergraduate Study and Graduate Study.

Regularly enrolled UCLA undergraduate students may attend summer sessions for full unit and grade credit. Summer session coursework is recorded on the UCLA transcript, and grades earned are computed in the grade-point average. Students should check with a College or school counselor about applying these courses toward degree requirements, and about any limitations the College or school may impose on coursework completed in summer sessions. UCLA financial aid is available to qualified UCLA students.

Regularly enrolled UCLA graduate students may, with department approval, take courses offered in summer sessions for credit toward a master’s or doctorate degree; consult a graduate adviser in advance about this possibility. Summer session courses may also satisfy the academic residence requirement for master’s or doctorate degrees.

Unlike enrollment in regular terms, students may attend another college institution for credit while they are enrolled in summer sessions. Registration information is available from the Summer Sessions office.
UCLA Extension

With over 84,000 adult student enrollments each year, UCLA Extension is one of the largest university continuing education programs in the world. It is designed to bring the benefits of UCLA—its scholars, research, and resources—to the community and the state as a whole.

Many of the 5,500 UCLA Extension classes are innovative and experimental in content, format, and teaching methods. Credit and noncredit courses are offered in nearly every academic discipline, in many interdisciplinary areas, and in emerging fields.

In addition, Extension offers special programs each term on topical issues as well as those of ongoing public concern. Many noncredit Extension courses offer the opportunity to earn Continuing Education Units (CEUs), widely used for relicensure and other professional/career-related purposes.

Although registering for Extension courses does not constitute admission to UCLA, degree credit earned through Extension may apply toward the UCLA bachelor’s or master’s degree; consult a College or school counselor or graduate adviser before enrolling. For more information, refer to UCLA Extension under Transfer Credit in Academic Policies.

UCLA International Institute

The UCLA International Institute promotes interdisciplinary education and research on world regions and global issues. Its 27 interdisciplinary research centers and eight interdepartmental degree programs foster innovative research and offer educational opportunities on virtually every region of the world. The institute seeks to internationalize UCLA curricula and prepare students to be global citizens. Every fall, it leads a popular all-campus celebration of International Education Week.

The institute offers six undergraduate majors including global studies, international and area studies, and international development studies; 10 undergraduate minors, including global health and international migration studies; and three master’s degree programs in African Studies, East Asian Studies, and Latin American Studies. These academic programs annually enroll nearly 1,000 students. Together with its centers, the institute serves the entire campus through a wide range of academic events, scholarships, and grants. It acts as a gateway to the world for UCLA and the global city of Los Angeles, hosting free public events, research conferences, cultural programs, and K-12 outreach. The institute also brings together faculty from the College, professional schools, and research centers across the UCLA campus for collaborative global and regional research initiatives.

Research Programs

At any given time, more than 6,000 funded research programs are in progress at UCLA. Interdisciplinary Organized Research Units, research centers, institutes, and laboratories focus on key research in a specific area.

Organized Research Units

Organized Research Units (ORUs) are campuswide research programs. Members come from more than one department and usually from more than one school, college, or division.

American Indian Studies Center

The American Indian Studies Center (AISC) serves as an educational and research catalyst. It includes a library, postdoctoral fellowship programs, a publishing unit that produces books and a quarterly journal, and a student/community relations unit. AISC is one of four ORUs overseen by the Institute of American Cultures (IAC).

Asian American Studies Center

The Asian American Studies Center (AASC) seeks to increase knowledge and understanding of the experiences of Asian and Pacific Islander peoples in America, and promotes the development of material resources related to Asian American studies. The center includes a library, publications unit, student/community projects unit, and postdoctoral fellowship programs. AASC is one of four ORUs overseen by the Institute of American Cultures (IAC).

Brain Research Institute

The Brain Research Institute (BRI) has one of the largest programs for neuroscience research and education in the country, with approximately 300 scientists from nearly 30 departments involved in every aspect of neuroscience

In addition to its 21 area-based research centers—including its newest members, the Promise Armenian Institute and Armenian Studies Center—the institute also houses the Burkle Center for International Relations, Center for the Study of International Migration, Center for World Languages, Center for Buddhist Studies, Fulbright Enrichment Program, and International Visitors Bureau, among other units. The U.S. Department of Education (DoEd) has designated the centers focused on Latin America, Near East, and Southeast Asia as National Resource Centers. The National Heritage Language Resource Center is the nation’s first specialized center for heritage language teaching; and the Asian Pacific Center and the Center for European and Russian Studies have received DoEd funding for foreign language and area studies fellowships.
research from molecular organization to human behavior. The BRI offers facilities with new technologies for research and training; and sponsors affinity groups, conferences, and symposia to strengthen ties among neuroscientists. Public service activities include an elementary-and-secondary-school outreach program and a joint educational program with UCLA Extension.

Center for European and Russian Studies

The Center for European and Russian Studies (CERS) develops and coordinates teaching and research on Russia and the successor states of the former Soviet Union—and western European countries—through conferences, lectures, seminars, and academic exchange programs with European and Russian institutions. It also funds advanced instruction in languages such as Czech, Hungarian, Romanian, Polish, and Serbian/Croatian, and offers fellowships to graduate students in European area studies.

Center for Medieval and Renaissance Studies

The Center for Medieval and Renaissance Studies (CMRS) supports the research activities of some 125 faculty members in 24 academic disciplines dealing with the development of civilization between AD 300 and 1650. Programs include appointing visiting professors, organizing conferences, and supporting departments in inviting lecturers. The center sponsors two journals: *Viator*, with emphasis on intercultural and interdisciplinary studies; and *Comitatus*, with articles by graduate students and recent PhD graduates.

Center for Seventeenth- and Eighteenth-Century Studies

The Center for Seventeenth- and Eighteenth-Century Studies organizes scholarly programs and workshops, publishes conference results, provides long- and short-term fellowships to students and scholars, offers graduate research assistantships and master classes, and organizes public programs and classical music concerts.

The center administers the William Andrews Clark Memorial Library, located in the West Adams neighborhood of Los Angeles, that specializes in seventeenth- and eighteenth-century British works. The library also has a renowned collection centering on Oscar Wilde and his era, and significant holdings of modern fine printing and Western Americana.

Center for the Study of Women

The Center for the Study of Women (CSW) draws on the expertise of more than 200 faculty members from 10 professional schools and 34 departments. To facilitate faculty research, the center organizes conferences and lecture series on feminist theory, administers research grants, and offers an affiliation for research and visiting scholars. The center sponsors working groups; produces calendar-of-events posters; and hosts graduate programs and an annual graduate student research conference.

Chicano Studies Research Center

The Chicano Studies Research Center (CSRC) promotes the study and dissemination of knowledge about the experience of people of Mexican descent and other Latinos in the U.S. The center supports interdisciplinary and collaborative research and the analysis, understanding, and articulation of issues critical to the development of Chicano and Latino communities in the U.S. It seeks to establish and maintain relationships with communities with similar academic and research interests at the state, national, and international levels. The center also includes a library, academic press, and grant fellowship programs. CSRC is one of four ORUs overseen by the Institute of American Cultures (IAC).

Cotsen Institute of Archaeology

The Cotsen Institute of Archaeology (CIoA) studies and seeks to understand the human past through artifacts, analysis of field data, and the creation of archives. The institute—the only one of its kind in the U.S.—coordinates facilities for more than 30 researchers, and many graduate students and volunteers, in 11 associated academic departments. Facilities include the Ceramics Research Group collections, Cotsen Digital Archive, Lithic Analysis Research Group collections, Moche Archive, Rock Art Archive, and many laboratories such as the Channel Islands Laboratory, East Asian Laboratory, Human Origins Laboratory, and Zooarchaeology Laboratory. It publishes the findings of scholars from UCLA and other archaeology centers and supplies a forum for the public presentation of archaeological discoveries and advances.

Crump Institute for Molecular Imaging

The Crump Institute for Molecular Imaging (CIMI) brings together physical, biomathematical, chemical, biological, and clinical scientists and students to merge the principles of imaging with those of molecular and cellular biology, genetics, and biochemistry. The imaging domains range from the molecular organization of viruses and cellular subunits to the biological processes of organ systems in the living human. A major focus is the development and use of imaging technologies to collect, analyze, and communicate
biological data. The institute has research and educational programs for visiting scientists, postdoctoral scholars, and PhD graduate students that include the development of multimedia computer-based learning technologies.

**Gustave E. von Grunebaum Center for Near Eastern Studies**

The *von Grunebaum Center for Near Eastern Studies* (CNES) coordinates research and academic programs related to the Near East. It supports the degree program in African and Middle Eastern Studies. Center resources include the largest faculty, one of the most comprehensive library holdings, and the richest variety of Near and Middle Eastern studies courses of any institution in the Western Hemisphere. The center conducts publication, community outreach, and scholarly exchange programs.

**Institute for Research on Labor and Employment**

The interdisciplinary research program of the *Institute for Research on Labor and Employment* (IRLE) studies employment relationships including labor markets, labor law, labor and management relations, equal employment opportunity, occupational safety and health, and related issues. Its *UCLA Labor Center* offers social policy and employment relations programs to the public, unions, and management. The academic unit of the institute oversees the Labor Studies major and minor.

**Institute of Geophysics and Planetary Physics**

The *Institute of Geophysics and Planetary Physics* (IGPP) is a multicumcampus research unit of the University of California; the branch at UCLA researches climate dynamics, geophysics, geochemistry, space physics, biochemistry, and biology. Research topics include the nature of the Earth, moon, and other planetary bodies; global and regional environmental change; the origin of terrestrial life; dynamical properties of the sun and solar wind; and the nonlinear dynamics of complex systems. Facilities include analytical laboratories in geochemistry, meteoritics, glaciology, petrology, geochronology, archaeology, and the origins of life; laboratories for experiments in fluid dynamics and high-pressure physics; developmental laboratories for instrumentation in space physics and seismology; and computational laboratories for large-scale numerical modeling.

**Intellectual and Developmental Disabilities Research Center**

The *Intellectual and Developmental Disabilities Research Center* (IDDRC) supplies laboratories and clinical facilities for research and training in intellectual and developmental disabilities. Interdisciplinary activities range from anthropological studies to molecular aspects of inherited metabolic diseases.

**James S. Coleman African Studies Center**

The *Coleman African Studies Center* (ASC) coordinates research on and teaching about Africa in the humanities, social sciences, and natural sciences, as well as in the schools of Arts and Architecture; Education and Information Studies; Law; Medicine; Public Affairs; Public Health; and Theater, Film, and Television. The center sponsors public lectures, seminars, publications, and academic exchanges with African institutions, and an outreach service to the Southern California community.

**Jules Stein Eye Institute**

The *Stein Eye Institute* is one of the best-equipped centers for research and treatment of eye diseases in the world. This comprehensive facility is dedicated to the preservation of vision and prevention of blindness, the care of patients with eye disease, and education in the broad field of ophthalmology. Outpatient, inpatient, and surgical treatments are available.

The *Doris Stein Eye Research Center* houses clinical facilities as well as new research and training programs concentrating on major eye diseases worldwide.

The *Edie and Lew Wasserman Eye Research Center* houses outpatient surgery clinics; faculty offices; and refractive, oculoplastic, and cataract services.

**Latin American Institute**

The *Latin American Institute* (LAI) is a major regional, national, and international resource on Latin America and hemispheric issues. The institute sponsors and coordinates research, academic and public programs, and publications on Latin America in the humanities, social sciences, and professional schools; and links its programs and activities with developments in the field and in other institutional settings. By combining instruction, research, and service—and by encouraging multidisciplinary and interdisciplinary approaches—the institute promotes the use of UCLA Latin American resources for the benefit of the campus, the broader community, and the public at large.
Molecular Biology Institute

The Molecular Biology Institute (MBI) promotes molecular biology research and teaching at UCLA, with emphasis on genomics, proteomics, and chemical biology. The institute houses the laboratories of 200 faculty members from 30 UCLA departments and the Institute for Genomics and Proteomics, as well as the administration of the Molecular Biology Interdepartmental PhD Program and the Graduate Programs in Bioscience consortium.

Plasma Science and Technology Institute

The Plasma Science and Technology Institute (PSTI) is dedicated to research of plasma physics, fusion energy, and the application of plasmas in other disciplines. Students, professional research staff, and faculty members study basic laboratory plasmas, plasma-fusion confinement experiments, fusion engineering and nuclear technology, computer simulations and the theory of plasmas, space plasma physics and experimental simulation of space plasma phenomena, advanced plasma diagnostic development, and laser-plasma interactions. They also study the use of plasma in applications ranging from particle accelerators to the processing of materials and surfaces used in microelectronics or coatings.

Ralph J. Bunche Center for African American Studies

The Bunche Center for African American Studies (CAAS) conducts and sponsors research on the African American experience, supports the African American studies curriculum, publishes research results, and sponsors community service programming. CAAS is one of four ORUs overseen by the Institute of American Cultures (IAC).

UCLA-DOE Institute for Genomics and Proteomics

The UCLA-DOE Institute for Genomics and Proteomics, funded though a Department of Energy (DOE) contract, conducts research in bioenergy, carbon capture, microbial genomics, and structural and functional studies of organisms and their constituents. Institute faculty members have joint appointments in academic departments and teach at both undergraduate and graduate levels. Major facilities include a biomedical cyclotron; advanced scanning equipment; and macromolecular crystallization, nuclear magnetic resonance, protein expression, and X-ray crystallography facilities.

Specialized Research Centers, Institutes, and Laboratories

Additional research centers, institutes, and laboratories advance scholarship in all fields. The breadth of research conducted on campus is reflected in diverse undertakings from behavior to computing, demography to disease, and language to politics. This sampling of current research entities offers a view into the scope of research units.

Social Sciences

California Center for Population Research
Center for Language, Interaction, and Culture
National Center for Research on Evaluation, Standards, and Student Testing
UCLA Anderson Forecast

Health Sciences

Center for HIV Identification, Prevention and Treatment Services
Fernald Child Study Center
Jonsson Comprehensive Cancer Center
Mary S. Easton Center for Alzheimer’s Disease Research

Engineering and Physical Sciences

Center for Autonomous Intelligent Networks and Systems
Center for Energy Science and Technology Advanced Research
Institute for Pure and Applied Mathematics
UCLA Logic Center

Galleries and Museums

Museums, galleries, and gardens offer eclectic resources ranging from the ancient to the avant-garde, helping to make UCLA the leading arts and cultural center in the West.

Fowler Museum at UCLA

The Fowler Museum at UCLA is internationally known for the quality of its collections. They encompass the arts and material culture of much of the world, with particular emphasis on West and Central Africa; Asia and the Pacific; and the Americas, past and present. It supports UCLA instruction and research and sponsors major exhibitions, lecture programs, and symposia. The museum is open to the public Wednesday through Sunday.
Grunwald Center for the Graphic Arts

Housed in the UCLA Hammer Museum, the Grunwald Center for the Graphic Arts holds a distinguished collection of over 45,000 prints, drawings, photographs, and artists’ books, including nearly 10,000 works from the prestigious Armand Hammer Daumier and Contemporaries Collection. A study and research facility for the benefit of students and the community, the center’s permanent holdings include significant European and American examples from the fifteenth century to the present. It is particularly noted for its collection of German Expressionist prints and works on paper by Matisse and Picasso, as well as the Richard Vogler Cruikshank Collection and the Frank Lloyd Wright Collection of Japanese prints. The center is open only by appointment.

Franklin D. Murphy Sculpture Garden

Situated on a picturesque five-acre expanse that spans the heart of north campus, the Murphy Sculpture Garden contains a collection of over 70 major works by Arp, Butterfield, Calder, Falkenstein, Hepworth, Lachaise, Lipchitz, Matisse, Moore, Noguchi, Rodin, Smith, Zuniga, and many other late nineteenth- and early twentieth-century masters. All works in this distinguished collection are private gifts to UCLA. Tours may be arranged.

Meteorite Collection and Gallery

UCLA has the largest collection of meteorites on the West Coast and the fifth largest in the U.S. Many of the most important meteorites are displayed in the Meteorite Gallery located in 3697 Geology. The collection and gallery are a major resource for cosmochemical research and the teaching of planetary science.

New Wight Gallery

The New Wight Gallery is an exhibit space for visual arts, including student and faculty exhibitions, housed in 1100 Broad Art Center.

UCLA Hammer Museum

The Hammer Museum regularly presents its collection of impressionist and post-impressionist paintings by such artists as Cassatt, Monet, Pissarro, Sargent, and Van Gogh. The museum organizes and presents major changing exhibitions devoted to examinations of historical and contemporary art in all periods. Cultural programming—including children’s performance and storytelling series, music, poetry readings, and lunchtime art talks—are presented throughout the week.

Libraries

The UCLA Library, a campuswide network of libraries serving programs of study and research in many fields, is among the top 10 academic research libraries in North America. The total collections number more than 12 million volumes, 100,000 current serial titles, 950,000 e-books, and 700 subscription databases.

Reference librarians are available in all library units to answer questions about using online systems and to provide assistance with reference and research topics. Students find materials through web-based library information systems. The UC Library Search connects all 10 UC campus libraries through a unified discovery and borrowing system. It contains records for all its holdings and other campus collections, including UCLA resources such as the Archive Research and Study Center of the Film and Television Archive, Chicano Studies Research Center Library, Ethnomusicology Archive, Social Science Data Archive, Instructional Media Collections and Services, and William Andrews Clark Memorial Library. The search system also includes library item location and circulation status.

Other available resources include WorldCat, Center for Research Libraries, and Online Archive of California catalogs; numerous abstracting and indexing databases; and gateways to other systems.

While continuing to develop and manage collections of traditional printed materials, the UCLA Library also makes a number of digital resources available for campus use through the library site. These include electronic reserves and electronic journals, texts, reference resources, periodical indexes, and abstracts.

Arts Library

Housed in 1400 Public Affairs Building, the Arts Library has more than 300,000 books on architecture, architectural history, art, art history, design, fashion and costume, film, television, photography as fine art, studio art, theater, urban design, and allied disciplines. It also contains the Elmer Belt Library of Vinciana, a special collection of rare books and incunabula about Leonardo da Vinci and related materials in Renaissance studies. Performing Arts Special Collections, housed in the Young Research Library, contain noncirculating materials including the Artists' File; archival records of major Southern California motion picture studios and television production companies; scripts from film, television, and radio; animation art; personal papers of writers, directors, and producers; photographs and production...
still; and posters, lobby cards, press kits, and West Coast theater playbills.

Charles E. Young Research Library

The Young Research Library (YRL) primarily serves graduate research in the humanities, social sciences, education, public affairs, government information, and maps. Most of its collections are arranged in open stacks. The building also houses reference, circulation, graduate reserve, and periodicals services and the Microform and Media Service, with microcopies of newspapers, periodicals, and other materials. UCLA Library Special Collections contains rare books and pamphlets, primarily in the humanities, social sciences, and visual arts, from the fifteenth to twentieth century; University Archives; early maps and atlases; early California newspapers; manuscript collections; transcripts of oral history; ephemera; microfilm; tape recordings; prints; paintings; and drawings, including original architectural drawings.

Eugene and Maxine Rosenfeld Management Library

Located in the Anderson Graduate School of Management complex, the Rosenfeld Management Library houses materials on accounting information systems, arts management, business history, corporate history, entrepreneurship, finance, general management and management theory, industrial relations, international and comparative management, management information systems, management strategy and policy, marketing, operations, research, production and operations management, public/not-for-profit management, and real estate.

Hugh and Hazel Darling Law Library

The Darling Law Library collects published case decisions, statutes, and codes of the federal and state governments of the U.S. and other common law jurisdictions, legal treatises and periodicals in Anglo-American and international law, and appropriate international and comparative law holdings. The Law Library reports to the dean of the School of Law. It contains over 600,000 print volumes and over 35,000 electronic titles.

Louise M. Darling Biomedical Library

The Darling Biomedical Library, located in the Center for Health Sciences, serves all the UCLA health and sciences departments and schools and the Ronald Reagan UCLA Medical Center. Its collections focus on materials related to medicine, nursing, dentistry, public health, physiological sciences, biology, molecular biology, chemistry, biochemistry, zoology, plant sciences, psychology, and life sciences, as well as rare works in the history of health and life sciences, botanical illustration, and Arabic and Persian medical manuscripts. It contains over 683,778 print volumes and thousands of journal subscriptions.

Music Library

The collections of the Music Library in the Schoenberg Music Building include books, music scores, sheet music, video and sound recordings, microforms, and interactive media on Western music history and criticism; world music styles, cultures, and traditions; and music theory, aesthetics, philosophy, and organology. Performing Arts Special Collections, housed in the Young Research Library, include rare printed and manuscript books, scores, and opera librettos; personal papers of prominent Southern California composers, performers, and writers on music; and archives of film, television, and radio music.

Powell Library

Powell Library features collections and services in support of the undergraduate curriculum in the College of Letters and Science (humanities and social, life, and physical sciences). Course reserve materials—including books, articles, audiotapes, homework solutions, lecture notes, and Academic Publishing Service Readers—are available for loan. The Campus Library Instructional Computing Commons (CLICC), located on the first floor of Powell Library, gives students access to computers and multimedia equipment; and Night Powell offers study space in a late-night reading room. There are Inquiry Laboratories with research assistance and Undergraduate Writing Center services.

Richard C. Rudolph East Asian Library

Located in the Young Research Library, the Rudolph East Asian Library collects Chinese, Japanese, and Korean language materials in the humanities and social sciences. The collection is particularly strong in Japanese Buddhism, religion, Chinese and Japanese fine arts, Chinese archaeology, premodern history and classical literature on both China and Japan, and Korean literature and religion.

Science and Engineering Library

The Science and Engineering Library (SEL) collections on engineering, mathematics, and the physical sciences are
housed in two separate locations. SEL/Boelter in Boelter Hall houses materials on aeronautics, astronomy, and atmospheric sciences; bioengineering; chemical, civil, electrical, environmental, manufacturing, mechanical, and nuclear engineering; computer science and electronics; energy technology; mathematics; metals and materials; pollution; and statistics. SEL/Geology in the Geology Building houses materials on geology, geophysics, geochemistry, space physics, planetary science, regional geology, paleobiology, micropaleontology, invertebrate paleontology, ore deposits, geomorphology, hydrology, chemical oceanography, and all U.S. Geological Survey publications of western U.S. state geological surveys.

Special Archives and Collections

In addition to the extensive collections of the UCLA Library, a rich array of other information resources is independently managed by individual UCLA departments and centers.

Cultural Center Collections

The Bunche Center for African American Studies Library and Media Center contains materials reflecting the African American experience in the social sciences, arts, and humanities. The American Indian Studies Center Library houses a collection on American Indian life, culture, and state of affairs in historical and contemporary perspectives. The Asian American Studies Center Library/Reading Room features Asian American and Pacific Islander resources. Materials related to Chicano and Latino cultures are housed in the Chicano Studies Research Center Library. The William Andrews Clark Memorial Library contains rare books, manuscripts, and other noncirculating materials on English culture (1641 to 1800). The English Reading Room features a noncirculating collection of British and American literature, literary history, and criticism.

Film and Television Archive

The Film and Television Archive is the world’s largest university-based collection of motion pictures and broadcast programming. The archive holdings of over 350,000 motion pictures, 160,000 television programs, and 27 million feet of newsreel footage serve the UCLA community and national and international constituencies.

The Motion Picture Collection is the country’s largest collection after the Library of Congress. Among its outstanding collections are 27 million feet of Hearst Metrotone News film dating back to 1919. Other noteworthy holdings include studio print libraries from Twentieth-Century Fox, Paramount Pictures, Warner Brothers, Sony/Columbia Pictures, Republic Pictures, RKO, New World Pictures, and Orion Pictures. Special collections document the careers of William Wyler, Hal Ashby, Tony Curtis, Rosalind Russell, Stanley Kramer, Cecil B. DeMille, Harold Lloyd, Charlton Heston, Rock Hudson, and other persons of prominence in the American film industry.

The Television Collection is the nation’s largest university-based collection of television broadcast materials. Its titles include kinescopes, telefilms, and videotapes spanning television history from 1946 to the present, with emphasis on drama, comedy, and variety programming. A special collection of over 100,000 news and public affairs programs is also maintained.

The archive exhibition program presents evening screenings and discussions that focus on archival materials, new work by independent filmmakers, and international films.

The Archive Research and Study Center (ARSC) in Powell Library offers on-site viewing of the Film and Television Archive collections, and research consultation to students, faculty, and researchers.

Instructional Media

Instructional Media Collections and Services, located in Powell Library, is the central UCLA resource for collection and maintenance of educational and instructional media. Materials from the collection are loaned to regularly scheduled UCLA classes and may be rented by organizations and individuals from the campus community and beyond. Staff members monitor compliance with UCLA and UC guidelines and federal copyright law governing the use of video recordings. Reference books from educational and feature-film distributors are available. Staff members assist in researching media on any subject and obtaining materials from outside sources.

The Instructional Media Laboratory offers access to course- or textbook-related audio, interactive, and video programs. Students, assigned by faculty members to study specific supplementary materials, may learn at their own pace and time.

Other Collections

The Ethnomusicology Archive houses over 150,000 sound and audiovisual recordings of folk, ethnic, and non-Western classical music. The Social Science Data Archive contains a collection of statistical databases for the social sciences. The UCLA Lab School Gonda Family Library features contemporary materials for children from kindergarten through junior high school and adult works on children’s literature.
Parks, Reserves, and Natural Science Resources

The geography of Southern California is conducive to research in the natural sciences. This diverse region is a natural laboratory supported by numerous UCLA resources for study.

Biological Collections

The Biological Collections of the Ecology and Evolutionary Biology Department include marine fishes from the Eastern Pacific and Gulf of California; and birds and mammals primarily from the Western U.S., Canada, Mexico, and Central America. The department also maintains a more limited collection of amphibians, reptiles, and fossil vertebrates.

Division of Laboratory Animal Medicine

The Division of Laboratory Animal Medicine is responsible for the procurement, husbandry, and general welfare of animals required for teaching and investigative services. It also administers the campus veterinary medical and husbandry programs.

Mildred E. Mathias Botanical Garden

The Mathias Botanical Garden is a living museum with one of the most important botanical collections in the U.S. With specimens from all over the world, the seven-acre expanse on south campus is home to over 3,000 types of plants in a wide range of environments. The botanical garden also has a research herbarium containing 180,000 dried plant specimens. School and community group tours are available, as are individual guided tours.

Stunt Ranch Santa Monica Mountains Reserve

The University of California founded the UC Natural Reserve System (NRS) in 1965 to preserve undisturbed natural areas representing the state’s vast ecological diversity for students, teachers, and researchers from public and private educational institutions to use as outdoor classrooms and living laboratories. The Stunt Ranch Santa Monica Mountains Reserve, administered by the Los Angeles campus, officially joined the UC NRS in November 1995. The 310-acre site is a 40-minute drive from UCLA and includes fine examples of chaparral and oak woodland ecosystems. The reserve lends itself to programs that focus on the natural ecosystems and issues of resource management in the urban/wildland interface. Undergraduate and graduate courses in the departments of Anthropology; Earth, Planetary, and Space Sciences; Ecology and Evolutionary Biology; Geography; Physics and Astronomy; and the Institute of the Environment and Sustainability utilize Stunt Ranch and other NRS sites.

UCLA Health System

Consisting of Ronald Reagan UCLA Medical Center; UCLA Medical Center, Santa Monica; Resnick Neuropsychiatric Hospital at UCLA; UCLA Mattel Children’s Hospital; and the UCLA Medical Group, with wide-reaching primary- and specialty-care offices, UCLA Health is among the most comprehensive and advanced health care systems in the world, and is consistently ranked among the top hospitals in the nation and the West.

From its level-one trauma center and intensive-care units to The BirthPlace Westwood, the Ronald Reagan UCLA Medical Center on campus is equipped with the latest medical advances to provide world-class patient care. The UCLA Medical Center, Santa Monica is home to the UCLA Rape Treatment Center, which serves as a national model for the treatment of rape victims and their families.

Student Services

Like a small city, UCLA has its own police department and fire marshal, an equivalent to the phone company, health center, corner restaurants, and shops. Hundreds of services for the campus community facilitate academic and personal endeavors.

Study Services

From academic advising to advanced computer support, UCLA study services give students the tools they need to achieve academic success.

Academic Counseling

Many sources of academic counseling are available. Faculty advisers and counselors in the College and each school help students with major selection, program planning, academic difficulties, degree requirements, and petitions.

Advisers in each department counsel undergraduates concerning majors offered and their requirements, and possible career and graduate school options (see College and Schools and Curricula and Courses). In addition, graduate advisers are available in each department to assist prospective and currently enrolled graduate students.
Computer Laboratories

Student computer laboratories are supported through the Campus Library Instructional Computing Commons (CLICC), a collaborative effort of the Humanities Technology, Social Sciences Computing, Center for the Advancement of Teaching, and Powell Library. Some 15 computer laboratories are available throughout the campus, each with computers, peripherals, software, and services that cater to specific areas of study. See the departments listed above or Information Technology Services IT resources for more information.

Course Readers

ASUCLA Course Reader Solutions supplies custom course readers for faculty in both print and e-book formats, obtaining copyright authorizations each year. The office is located in the Textbooks department on the A level of Ackerman Union.

Course Websites

The Instructional Enhancement Initiative (IEI) assures that all UCLA undergraduate nontutorial courses offer an individual course website for faculty members, teaching assistants, and enrolled students. The sites facilitate the distribution of supplementary course materials, lecture notes, homework assignments, research links, and electronic communication, including virtual office hours and class bulletin boards for interactive question-and-answer sessions. Instructors decide which of these online capabilities are best suited to their course websites. Many course websites are available through Bruin Learn.

Disabilities and Computing Program

The Disabilities and Computing Program (DCP) supplies adaptive technology and information-access support and services to students, faculty, and staff with disabilities. Applications include voice input, Braille, large print, screen-reading software, and learning disability software. Consulting and training for individuals and departments are available. The program also offers Web accessibility evaluations and guidelines.

Internet

UCLA IT Services is the campus Internet service provider for UCLA students, faculty, and staff; and a vehicle for accessing campus network communication services. Bruin OnLine services include access to the campus backbone network and the Internet, e-mail accounts, Google Apps for UCLA, Box, and personal web hosting. Limited wireless Internet access is available on campus to anyone with a wireless enabled laptop or mobile device. Utility software can be downloaded from the IT Support Services website. Help desk services are available.

MyUCLA

MyUCLA is the easiest way for students to gain real-time access to their academic, financial, and personal records. The site is designed with an intuitive visual interface to walk students through procedural steps. MyUCLA offers a large number of services. Students use the Class Planner to create plans prior to enrollment and are able to share these plans with counselors. MyUCLA also allows students to check enrollment appointments; view real-time enrollment counts; find classes and enroll; exchange or drop classes; change units and grade type; and view their study list, which includes information on class meeting times, final examinations, classmates, gradebook, textbooks, and class websites.

MyUCLA is used to declare candidacy and nonattendance, view Degree Audits, order transcripts and diplomas, change address information, view term grades and calculate grade-point average, find information on holds, order commencement tickets, access BruinBill and tax information, view financial aid awards and notices, and access UCLA Google e-mail accounts. The MyUCLA Message Center contains a database of answers and allows students to correspond with campus departments. MyUCLA also links to important communications regarding registration and UCLA policies. Other features include notifications; voting in student association elections; personal calendar and event reservations; and links to UCLA online resources.

Students can access MyUCLA from Sunday noon through Tuesday 1 a.m., and Tuesday through Saturday from 6 a.m. to 1 a.m. the next day, including holidays. MyUCLA Features contains a full list of features.

Health and Safety Services

Students physical and mental health are priorities at UCLA. Multiple services, from clinics to specialists and medical retail, are available. Student safety services include prevention, emergency and safety systems, and the campus police department.

Arthur Ashe Student Health and Wellness Center

The Ashe Student Health and Wellness Center in Westwood Plaza is a full-service medical clinic available to all registered UCLA students. Most services are subsidized by registration fees, and a current BruinCard is required for
service. Its clinical staff of physicians, nurse practitioners, and nurses is board certified. It offers primary care, specialty clinics, and physical therapy. The center has its own laboratory and radiology sections. It operates the Bruin Health Pharmacy and U See LA Optometry in nearby Ackerman Union. Visits, core laboratory tests, X-rays, and preventive immunizations are all prepaid for students with the University of California Student Health Insurance Plan (UCSHIP).

The cost of services received outside the Ashe Center, such as emergency room services, is each student’s financial responsibility. Students are required to purchase medical insurance either through the UCLA-sponsored UCSHIP or other plans that provide adequate coverage. Adequate medical insurance is a condition of registration. See Student Health Insurance Fee under Registration in Undergraduate Study and Graduate Study.

Contact the Ashe Center for specific information on its primary care, women’s health, immunization, health clearance, optometry, travel medicine, and mind-body clinics, as well as dental care available to students at discounted rates. For emergency care when the Ashe Center is closed, students may obtain treatment at the Ronald Reagan UCLA Medical Center emergency room on a fee-for-service basis.

Mental Health Services

Services for mental health range from routine counseling and psychotherapy to crisis counseling.

Counseling and Psychological Services

Counseling and Psychological Services (CAPS) offers short-term personal counseling and psychotherapy in 221 Wooden Center West, 310-825-0768.

Psychologists, clinical social workers, and psychiatrists assist with situational stresses and emotional problems from the most mild to severe. These may include problems with interpersonal relationships, academic stress, loneliness, difficult decisions, sexual issues, anxiety, depression, or other concerns affecting the personal growth of students.

In addition, Campus Assault Resources and Education (CARE) counselors—individuals who provide information, support, and resources for members of the UCLA community who have been raped, sexually assaulted, stalked, or involved in a dating or domestic violence incident—can discuss options and alternatives, help identify and assist in contacting the most appropriate support services, and answer any questions that may arise.

Service is confidential and available to regularly enrolled students. Students are seen individually by appointment or may choose from a number of groups offered each term. Emergency and walk-in counseling is also available.

Student Safety and Security

For police, fire, or medical emergencies, call 911 from any campus phone. For nonemergency information, call UCLA Police at 310-825-1491.

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<th>UCLA EMERGENCY NUMBERS</th>
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<tr>
<td>Police, Fire, or Medical Emergency</td>
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<td>UCLA Medical Center Emergency Room (24 hours)</td>
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UCLA Campus Assault Resources and Education (CARE) Prevention and Education Services—including workshops, self-defense classes, counseling, and referrals—increase physical and psychological preparedness and heighten awareness of the complex issues of rape, sexual assault, and relationship violence.

UCLA Consultation and Response Team (CRT) is a group of professional staff members charged with responding to reports of students in distress, with representatives from the College, Dean of Students, Counseling and Psychological Services, Residential Life, and UCLA Police.

The Center for Prehospital Care offers cardiopulmonary resuscitation (CPR) and basic emergency care courses, which can be organized most days and times.

The Office of Environment, Health, and Safety (EH&S) works to reduce workplace hazards on campus and to promote safety at all levels of the UCLA community. EH&S is a consulting resource for UCLA departments and personnel who want to learn how to make the workplace safe. It handles requests for safety information and training, regulatory interpretation and applicability, approval for potentially hazardous procedures, resolution of safety problems, and surveillance and monitoring of persons and workplaces.

UCLA Police Department

The UCLA Police Department (UCPD), 310-825-1491, is located at 601 Westwood Plaza. The sworn UCPD officers are empowered by the state of California with the authority to enforce all state and local laws. UCPD officers patrol the campus 24 hours a day, 365 days a year. They enforce all applicable local, state, and federal laws; arrest violators;
investigate and suppress crime; and provide a full range of police services and community safety programs.

The department is linked by computer to city, state, and federal criminal justice agencies that provide access to information concerning criminal records, wanted persons, stolen property, and vehicle identification. The detective unit handles criminal investigations, and detectives conduct interviews, arrest violators, execute search warrants, and file cases with the Los Angeles District and City Attorney offices.

UCPD police officers have primary jurisdiction over the UCLA campus, Reagan UCLA Medical Center, Center for the Health Sciences, Santa Monica-UCLA Medical Center, and University Apartments South. The city of Los Angeles Police Department does not routinely handle calls for service on campus or on most UCLA properties.

Incident Reporting
All requests for police service should be made to UCPD. All crime occurring on campus, the Center for the Health Sciences, and other UCLA properties should be reported immediately to UCPD to ensure appropriate action is taken. Crimes occurring off campus should be reported immediately to the local law enforcement agency. UCPD does take reports from students, faculty, and staff for incidents occurring in the Westwood area.

Police, fire, or medical emergencies can be reported by calling 911 from any telephone on campus. All landline telephones (UCLA, private, public) located on UCLA grounds are tied into the 911 emergency system. Emergencies can also be reported by using the blue-hooded or yellow Emergency Reporting Telephones located throughout the campus.

Calls made to 911 from a cell phone may not go directly to UCPD depending on the tower used by the cell phone at the time of the call. Callers should advise the dispatcher and ask if they are speaking with UCPD. If not, and time permits, callers may ask to be transferred to UCPD 911.

Nonemergency calls for service can be made by contacting the department at 310-825-1491. Campus community members are encouraged to program the department number into their cell phones and report on suspicious circumstances.

Crime Statistics and Reports
As required by the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act and consistent with the amendments of the Violence against Women Reauthorization Act of 2014, UCLA prepares an annual report describing campus security policy and information concerning alcohol and drug use, crime prevention, crime reporting, and related matters. It also includes three years of crime statistics. For a printed copy, call 310-825-1491.

Community Service Officers
UCPD employs approximately 50 student community service officers (CSO) who are the additional eyes and ears (trained observers) of the department and act as noninterceptive visual deterrents to crime. CSOs wear high-visibility uniforms and carry two-way police radios. They are dispatched by the department communications center and provide a direct link to police, fire, and medical aid. CSOs provide security service to a number of campus buildings, including residence halls and libraries. They are most well-known for CSO escorts. CSO escorts operate every day of the year from dusk to 1 a.m. (2 a.m. on Thursdays during academic quarters). Individuals requesting the service call the Communications Center at 310-794-WALK; a CSO is then dispatched to walk them safely to their destination.

The service is available to UCLA students, staff, faculty, and visitors; and operates on campus and in the nearby residential areas.

The free UCLA SafeRide service, operated by UCLA Transportation, offers a safe, accessible, and convenient mode of transportation around campus at night (Monday through Thursday from 7 p.m. to 10:30 p.m. during academic terms). Rides can be requested through the UCLA SafeRide web application, available on Google Play and the Apple App Store; a UCLA login is required to access the app.

Crime Prevention
An involved community is one of the best defenses against crime. Therefore, the department is committed to a community policing philosophy and supports a proactive Crime Prevention Unit that works closely with community members to make UCLA a safer place to work, live, and learn. The unit gives presentations on vehicle and residential security, personal safety, office and equipment security, sexual assault prevention, and active shooter situations. Other programs are developed to meet the special needs of the campus community. Brochures and literature on crime prevention and personal safety are available online.

Counseling and Psychological Services (CAPS) and the Crime Prevention Unit offer presentations on sexual assault issues. Topics include acquaintance rape education and prevention, personal safety and prevention techniques, recovery from sexual assault, clear communications, and the continuum of violence and rape in society. The educational programs, tailored to meet the needs of individual audiences, include films, discussion groups, lectures, role-plays, and communication exercises. CAPS reaches students through the residence halls, sororities, fraternities, athletic teams, student clubs, and various student functions. Services include crisis intervention and advocacy for victims of sexual assault; short-term counseling and referrals for survivors, their families, and friends; support groups for rape
survivors; and self-defense classes and a lending library. CAPS works closely with the student housing offices and the police department to increase campus safety.

Several programs have been designed to increase the level of crime awareness and campus safety at UCLA. Incidents of criminal activity that pose a potential threat to the campus are brought to the attention of the community through campus crime alert bulletins. Additionally, those interested in receiving public safety bulletins and news briefs can sign up for the campus safety listserv.

Emergency Medical Services
UCPD provides emergency medical response for the campus community through the Emergency Medical Services (EMS) unit. The EMS unit is staffed by full-time UCLA students certified as emergency medical technicians (EMTs). Emergency medical services are available 24 hours a day, 365 days of the year. As in all emergencies, call 911 for this service.

Alcohol and Substance Abuse Education
Students with alcohol or substance abuse problems create safety and health risks for themselves and others. Such abuses can result in a wide range of emotional and behavioral problems. Therefore, UCLA makes available to every student a variety of alcohol and substance abuse awareness programs that are designed to discourage the use of illicit substances and to educate students on the merits of legal and responsible alcohol consumption. Counseling and Psychological Services (310-825-0768) provides counseling and referral assistance to students who are troubled by alcohol or substance abuse problems. The service is completely confidential and free to regularly enrolled students. All information and counseling is treated in accordance with UCLA and UC policies and state and federal laws. Any decision to seek assistance is not used in connection with any academic determination or as a basis for disciplinary proceedings.

Residential Housing
UCLA is the size of a small city, and provides residential housing to approximately 20,000 students. Housing facilities range from apartments designed for students with children to multi-student apartment complexes to high-rise student residence halls. UCPD and student housing staff work in partnership to create a safe and comfortable living and learning environment.

Campuswide security and safety programs for residents are held throughout the year to increase awareness of potential crime and improve campus safety. To keep residents immediately informed of major crime or threats to the campus, crime alert bulletins are posted in residential areas by the housing staff. However, residents must take an active role to ensure their own safety by exercising simple common-sense crime prevention techniques. Because the campus is open 24 hours a day, visitation to residence halls and apartments is not restricted. All residence halls have 24-hour access control on entrance doors, and during the evening hours access control monitors are stationed at each entrance. UCPD police officers and CSOs are also assigned to the residence halls.

UCLA-affiliated organizations that maintain off-campus facilities are under the shared jurisdiction of their local police department and the UCLA Police Department, which provides assistance to students, faculty, and staff; and/or referrals to neighboring police departments.

Safety Tips
The nature of the studies and research done at UCLA requires many campus buildings to be open 24 hours a day. Because the campus is so large and adjacent to the greater Los Angeles community, individuals with criminal intent are able to access UCLA grounds.

Regardless of the time of day or night, and no matter where persons are on campus, they should be alert, aware of their surroundings, and exercise common-sense safety precautions. Anyone parking on campus should remember to lock their vehicle and consider investing in a locking device and/or alarm. Use CSO escorts when walking at night. Keep room and apartment doors and windows locked at all times. Most important, anyone needing assistance should not hesitate to contact the department.

Take advantage of the safety services provided by UCLA and UCPD. See the Campus Safety Tips web page for more information.

Associated Student Services
Founded when UCLA opened in 1919, Associated Students UCLA (ASUCLA) delivers services to the campus community through student government, student media, and services and enterprises. Every registered UCLA student is a member of ASUCLA.

Student Government
Many facets of student life at UCLA are sponsored or organized by student government. Getting involved in the decision-making process is rewarding and offers avenues of expression students may not find in other aspects of their university experience.
Graduate Students Association

The Graduate Students Association (GSA) is the official organization representing UCLA graduate and professional students in academic, administrative, campus, and statewide areas. GSA appoints or elects graduate student members to important campus organizations and committees including the Student Fee Advisory Committee and Academic Senate committees. It sponsors graduate student orientation; the Graduate Student Resource Center and Graduate Writing Center; and various graduate student journals, programs, and social events, including the Melnitz Movies film program.

Undergraduate Students Association

Undergraduate student government is embodied in the Undergraduate Students Association (USA). Its governing body, the Undergraduate Students Association Council (USAC), is comprised of elected officers as well as appointed administrative, alumni, and faculty representatives. Every UCLA undergraduate student is a member of USA. USA activities offer services to the campus and surrounding communities, and give students the opportunity to participate in and benefit from multiple programs. For example, its programs tutor youths and adults, address health needs of ethnic communities, combat poverty and homelessness, and better the environment.

Campus Events

Each year approximately 40,000 students, faculty, and staff attend programs of the Campus Events Commission (CEC), including a film program, speakers program, and performances by dozens of outstanding entertainers.

The Speakers Program brings entertainers, politicians, and literary figures to campus and presents two annual awards—the Jack Benny Award for comedic excellence and the Spencer Tracy Award for outstanding screen performance. Speakers and awardees have included notables as varied as Bill Gates, Whoopi Goldberg, and Tom Hanks.

The Concert Program brings new and popular performing artists like Rage Against the Machine or A Tribe Called Quest to UCLA for free and affordably priced concerts.

The Cultural Affairs Commission sponsors art exhibits in the Kerckhoff Hall Art Gallery, the JazzReggae Festival, Bruin Bash, Hip Hop Congress, and Worldfest.

Publications, Web, and Broadcast Media

Student publications and media offer a training ground for aspiring writers, journalists, photographers, and media managers while serving the communication needs of the campus community. Most publications offices are in Kerckhoff Hall. Information and applications are available online.

Daily Bruin

The Daily Bruin, with a circulation of 9,000, is one of the largest daily newspapers in Los Angeles. As the principal outlet for campus news, the Bruin is published each weekday of the academic year (once a week during the summer) and is distributed free from kiosks around campus and local areas. Students work as reporters, editors, designers, photographers, videographers, and radio reporters, as well as advertising sales representatives and marketing account executives. New staff members are welcome every quarter.

Newsmagazines

Seven print newsmagazines reflecting the diversity of the campus community are published each term. Al-Tālib, Fem, Ha’Am, La Gente, Nommo, OutWrite, and Pacific Ties deal respectively with issues relevant to the Muslim; feminist; Jewish; Chicano, Latino, and Native American; African American; lesbian, gay, bisexual, transgender, and queer; and Asian communities. Each includes news and features on political and cultural affairs both on and off campus. Prospective staffers are welcome.

Online Media

Student Media supports the Bruinwalk.com community portal. Features include UCLA professor reviews, used book trading, reviews of apartments near UCLA, and a campus calendar.

UCLA Radio

UCLA Radio broadcasts live over the Internet and features college alternative, hip-hop, jazz, and world music. It also covers select Bruin football, basketball, and baseball games and airs a lineup of sports talk shows. Studios are in Ackerman Union; all positions, including on-air, news staff, and advertising representatives, are open to students.

Yearbook

The UCLA yearbook, BruinLife, is one of the largest student publication efforts on campus. It contains photographs and information on undergraduate students, graduating seniors, athletic teams, fraternities and sororities, and campus activities. Students who would like to participate may contact the yearbook staff.

Graduating students can use BruinLife Photo Studio for their senior yearbook portraits.
Retail and Restaurants

Restaurants
ASUCLA operates more than a dozen restaurants and 10 coffee houses on campus, assuring a range of eating options from Italian to sushi. From the residence halls to the student union, a restaurant is never far. Hours vary, especially during summer and holidays. Locations of all the restaurants are posted online.

UCLA Store
The UCLA Store has six locations on campus. Author signings, sales, and other special events are announced in the Daily Bruin or on the UCLA Store website.

The UCLA Store–Ackerman Union has eight departments. Textbooks carries required and recommended texts for most undergraduate and many graduate courses, and operates a buyback service so students can sell used texts. BookZone offers reference books and a wide selection of titles in literature, science, history, and technical disciplines, including those by faculty authors. Computer Store carries personal computers, peripherals, accessories, and software at low academic prices. Essentials offers school and office supplies, including printer consumables. BearWear specializes in UCLA emblematic merchandise. Fast Track carries active sportswear and accessories for men and women. Beautique stocks makeup, Clinique skin care, and fashion accessories. Market is a convenience store, with snacks, health and beauty aids, gifts, and greeting cards. Ashe-Center-operated U See LA Optometry and Bruin Health Pharmacy are also in Ackerman Union.

UCLA Store–Health Sciences specializes in books and supplies for students in dentistry, medicine, nursing, public health, and related areas. UCLA Store–Lu Valle Commons carries art supplies and books, as well as textbooks and supplies for all on-campus Extension courses and selected academic programs (architecture and urban design, art, design, film, information studies, law, management, public policy, social welfare, theater, urban planning). North Campus Shop, South Campus Shop (Court of Sciences), Energy Zone (Wooden Center) and Hill Top Shop in Sunset Village are convenience store locations.

Other Services and Enterprises
ASUCLA oversees a variety of other services ranging from a post office to a hair salon. Most are located in Ackerman Union.

For students preparing to graduate, Graduation Etc. sells and rents caps, gowns, and hoods for degree ceremonies; and offers announcements, diploma mounting, portraits, and other graduation-related products and services.

Bruin Custom Print offers copying; binding; and banner, poster, and t-shirt printing. The shop streamlines the process involved in printing custom specialty products that need UCLA licensing and trademark clearance.

Student Life Services
From housing to transportation, basic student needs are facilitated by services designed to enhance all aspects of student living.

Banking
Automated teller machines representing several major banks are located in Ackerman Union, and near restaurants and shops around campus.

The University Credit Union and Wescom Credit Union have branch offices in Ackerman Union.

BruinCard
The UCLA BruinCard is a mandatory campuswide identification card that can electronically confirm student status and eligibility for services. Supportive photo identification—such as a driver’s license or state ID, passport, or military ID—is required when the card is issued.

The primary BruinCard benefit is convenience. It is a versatile card that serves the following functions: confirmation of student status; ID card for faculty, staff, and students; residence hall access and meal card; laundry, library, and recreation card; debit card (if activated) for purchases at campus stores and restaurants on and off campus; and discounted access to Santa Monica and Culver City bus lines.

Students with an outstanding financial, academic, or administrative hold may not receive BruinCard services until the hold is released by the initiating office. Information on outstanding holds and initiating offices is available on MyUCLA.

The BruinCard center is located in 123 Kerckhoff Hall. See BruinCard to check account balance, make deposits, view recent transactions, and report lost or stolen cards.

Bruin Resource Center
The Bruin Resource Center (BRC) in the Student Activities Center can help students navigate the campus and its many services by directing them to the correct office or personnel to meet their specific needs.

The center offers services to all UCLA students, including specialized services for transfer and re-entry students, students who are transitioning out of foster care, student parents, and veterans. Additional offerings include workshops and academic courses to help students develop practical skills and knowledge to succeed at UCLA.
The BRC also houses the Veteran Resource Office, which offers services specifically designed to assist students who are U.S. armed forces veterans or current military members.

**Career Center**

The UCLA Career Center, located in the Strathmore Building, offers career education, development, engagement, and support free to all UCLA students.

**Career Support**

Career educators offer assistance with completing self-assessments, exploring career options, evaluating graduate and professional school programs, identifying transitional skills, and conducting a successful job or internship search. Career educators also share information on internship opportunities and how to develop a professional network. A variety of workshops are offered year-round to help students become career-ready. Additionally, students can connect with employers through career fairs, employer information sessions, on-campus interviews for internships and jobs, and other employer-facing events.

**Online Tools and Resources**

Students looking for internships, jobs, and other experiential learning opportunities to develop their skills can find listings through Handshake, an online platform that connects UCLA students with thousands of employers looking to hire and recruit UCLA graduates, exclusively. Additional online resources are available for resume review; interviewing practice; searching for project-based internships, micro-internships, and international options; and tools that allow students to explore interests and career fields.

**Center for Accessible Education**

The Center for Accessible Education (CAE) in A255 Murphy Hall offers academic support services to regularly enrolled students with documented permanent or temporary disabilities in compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, and UC and UCLA policies. Services include campus orientation and accessibility, notetakers, reader service, sign-language interpreters, registration assistance, test-taking facilitation, special parking assistance, real-time captioning, assistive listening devices, on-campus transportation, adaptive equipment, support groups and workshops, tutorial referral, special materials, housing appeals, referral to the Disabilities and Computing Program, and processing of California Department of Rehabilitation authorizations. There is no fee for any of these services. All contacts and assistance are handled confidentially.

For information, see Disabilities and Computing Program under Study Services.

**Central Ticket Office**

Tickets for UCLA events are available at the Central Ticket Office (CTO) in the James West Alumni Center. As part of its service, the CTO offers students with current BruinCards discount tickets to campus athletic and cultural events and local movies. Students may also purchase tickets to off-campus events through Ticketmaster, as well as student discount tickets for Los Angeles-area buses.

**Child Care**

UCLA Early Care and Education (ECE) operates three accredited child care centers near UCLA and student housing. Care is available for children two months to six years old at most centers. Fees depend on the age of the child. A limited number of state grants and partial scholarship subsidies is available for eligible student families.

University Parents Nursery School is a UCLA-affiliated, parent-participation, multicultural cooperative school for two- through five-year-old children of UCLA students, faculty, and staff. It is located in the University Village Child Care Complex.

**Dean of Students/Student Conduct**

The Office of the Dean of Students in Murphy Hall helps students, either directly or by referral, with whatever needs they might have. Direct services include general counseling; sending emergency messages to students; and assisting in understanding UCLA and UC policies and procedures, including grievance procedures regarding student records, discrimination, and student debts.

The office publishes official notices in the Daily Bruin at various times during the year. Such notices are important, and all students are held responsible for the information in them.

The Student Conduct office administers campus discipline and enforces the standards of citizenship that students are expected to follow at UCLA. Standards involve complying with the policies and regulations governing this campus and being aware that violation of those policies or regulations can result in disciplinary action. Refer to Student Conduct Policies for more information.

**International Student Services**

International student services, based in Bradley International Hall, offer support for the UCLA international com-
munity, particularly for nonimmigrant students. An online orientation program helps international students become familiar with visa regulations, campus life at UCLA, and life in the U.S. Programs throughout the year allow them to share viewpoints with American students and the community.

Dashew Center for International Students and Scholars

The Dashew Center for International Students and Scholars assists students with questions about immigration, employment, government regulations, financial aid, academic and administrative procedures, cultural adjustment, and personal matters. The center seeks to improve student and community relationships; helps international students with language, housing, and personal concerns; and sponsors cultural, educational, and social programs. The center offers visa assistance for faculty members, researchers, and postdoctoral scholars.

Lesbian Gay Bisexual Transgender Campus Resource Center

The Lesbian Gay Bisexual Transgender Campus Resource Center in the Student Activities Center offers education, information, and advocacy services for the UCLA community. The center offers support groups, educational workshops, training seminars, and social activities; and maintains a library of 4,000 books, periodicals, and films. The staff provides confidential assistance and support to students, faculty, and staff who feel they have experienced harassment or discrimination or who wish to connect to the campus LGBTQ community.

Office of Ombuds Services

The Office of Ombuds Services responds to issues and concerns from students, staff, faculty, and administrators. Acting impartially, ombudspersons may investigate unresolved conflicts or facilitate the resolution of problems for which there are no established guidelines; and may also, where possible and when requested, assist in resolving an issue through mediation (including sexual harassment cases). The office is located in the Strathmore Building.

Parking and Commuter Services

Parking permits, ridesharing, and other commuting alternatives and services are offered through UCLA Transportation. Commuter programs offer information to help students get to and from campus without driving a car. These programs also help students use the extensive Los Angeles-area public transit network.

Students can use a trip planning tool to determine the best route to campus, or find a carpool or vanpool nearby. The Bruin Commuter Club offers special benefits and incentives to eligible UCLA students who ride public transit or carpool.

Students may also rent a car by the hour through Zipcar.

Packing Permits

Parking at UCLA requires a permit. The Bruin ePermit is paperless, and uses a vehicle’s license plate as its parking permit.

Students must be registered for the current term to apply for parking, and permits are not guaranteed. Parking offers are prioritized according to parking availability and school. Within each category, carpools have priority, and carpool permits are offered at a discounted rate. All carpool members must qualify under the carpool parking requirements. Students must reapply for parking each term.

Students living within ZIP code 90024 pay the residence hall parking rate. Students living in campus residence halls (excluding Regents Scholars) who have off-campus jobs, and commuter students who have extenuating circumstances, must complete an exemption application and supply supporting documents.

Effective winter quarter 2019, disabled students apply for parking in person at the UCLA Transportation lobby. This applies to students with permanent and short-term disabilities who have a DMV-issued disabled person placard or license plate.

Post Offices

Campus mail is handled by UCLA Mail, Document, and Distribution Services (MDDS), which offers full-service document processing and delivery for the campus community. ASUCLA operates a U.S. Postal Service express post office on A Level in Ackerman Union.

Residential Services

UCLA Housing is the best guide for finding the right kind of accommodation for different lifestyles and budgets. It includes detailed information about the different residence options, dining plans, support and extracurricular programs, and an online housing application.

On-Campus Housing

Many students, especially those in their first year, choose to live on campus. Besides the convenience, campus living is a good way to meet other people and to find out about social
and academic activities. Four residence halls, six deluxe residence halls, two residential suites, and five residential plazas accommodate over 13,000 undergraduate students. All on-campus housing buildings are coed and within walking distance of classrooms. New first-year and transfer students who are admitted for fall quarter and apply on time are guaranteed housing. Graduate student housing is also available.

Rooms in undergraduate residences are furnished and usually shared between two or three students. Meals are served daily at residential restaurants, and students may choose from a variety of meal plans.

Students apply for on-campus housing, by posted deadlines, at the My Housing website. Students who apply for winter or spring quarter are assigned housing on a space-available basis in the order their applications are received.

Per-person rates for the academic year vary depending on housing type. See housing rates for current rates.

Residential Life is responsible for student conduct in all residential communities. Its professional and student staff members can counsel students on residential problems.

Facilitated by Residential Life, Living Learning Communities offers students with similar interests an opportunity to live together and participate in programs according to their academic, social, and personal needs and interests. Students can live in communities as varied as creative collective; first-to-go; gender, sexuality, and society; global health; interfaith; public service and civic engagement; sustainable living; technology and innovation; transfer experience; and various cultures.

Off-Campus Housing

Within walking distance of campus, UCLA maintains 13 undergraduate off-campus apartment buildings for full-time, single transfer, and students beyond their first year. Apartments vary from singles to four-bedroom units, with bedrooms usually shared by two or three students. Not all types of apartment spaces are available to entering students. Virtual tours are available.

Married, single-parent, and single graduate students are accommodated in eight off-campus apartments; some are located within walking distance of campus, others about five miles from campus and served by a campus shuttle. Apartments include furnished and unfurnished studio and one-, two-, and three-bedroom units. Assignment to several apartments is by wait list; students must be accepted to UCLA to apply.

Many of the fraternities and sororities at UCLA own chapter houses. Complete information and membership requirements are published by Fraternity and Sorority Life.

Student Legal Services

Through Student Legal Services in Murphy Hall, currently registered students with legal problems or questions about their legal rights can get assistance from attorneys or law students under direct supervision of attorneys. They help students resolve legal problems, including those related to landlord/tenant relations; accident and injury problems; criminal matters; domestic violence and harassment; divorces and other family law matters; automobile purchase, repair, and insurance problems; health care, credit, and financial aid issues; consumer problems; and UCLA-related issues. Assistance is available only by appointment.

Veterans Affairs Services

The veterans affairs benefits officer provides assistance with benefit information, waivers, enrollment certification, and coordinating transitions to and from active duty. For more information, see Registrar’s veteran services.

Part of the Bruin Resource Center, the Veteran Resource Office (VRO) helps veterans navigate UCLA and furnishes mentoring, guidance on educational benefits, and tools to succeed academically and personally through a variety of programs and services.

Student Activities

The opportunities to participate in extracurricular activities at UCLA are virtually unlimited, and are a good way for students to expand their horizons beyond classroom learning.

Clubs and Organizations

Joining a club or organization is a great way to meet other students with shared interests and to get involved in campus life.

Community Programs Office

The UCLA Community Programs Office (CPO) houses student-initiated community service projects that offer educational, legal, social, medical, and academic services to underserved communities in Southern California; seven student-initiated outreach projects that seek to improve the number of students from local underserved areas who attend colleges and universities; and five student-initiated retention projects that seek to ensure that all students who enter UCLA actually graduate. CPO programs foster a multicultural and ethnically diverse environment at UCLA.
Office of Fraternity and Sorority Life

Fraternities and sororities have been at UCLA since the early 1920s. Today UCLA is home to more than 70 national and local Greek-letter organizations that make up one of the largest Greek systems on the West Coast.

The **Office of Fraternity and Sorority Life** (FSL) interprets UCLA policies, procedures, and regulations, and acts as a liaison between established Greek organizations and UCLA. It coordinates Greek-letter social organizations that participate in programs such as the Greek Leadership Conference, Greeks against Sexual Assault (GASA), Greek Week, new member forums, dating expectations programs, intramural tournaments, and UCLA-sponsored programs.

Office of Residential Life

The **Office of Residential Life** hosts True Bruin Welcome and the Common Experience, and brings a variety of programs to the Hill to build a sense of community and offer social enrichment.

Student Organizations, Leadership, and Engagement

UCLA has over 1,000 different organizations recognized by **Student Organizations, Leadership, and Engagement** (SOLE)—more than are found on almost any other university campus in the country. Organizations registered with SOLE include political, recreational, community service, cultural, academic, religious, and residential clubs. It only takes three people to start a new club if their interests are not already represented. SOLE also handles complaints of misconduct against officially recognized student organizations.

Performing Arts

Concerts, dance recitals, and theater productions are all part of exceptional programs offered by the Ethnomusicology; Film, Television, and Digital Media; Music; Theater; and World Arts and Cultures/Dance departments, and by the Center for the Art of Performance at UCLA.

Center for the Art of Performance

Since 1937, the **Center for the Art of Performance** (CAP) at UCLA has been a premier West Coast showcase for world-class performing artists and ensembles as well as innovative new work in dance, music, theater, and performance art. The center presents more than 200 public concerts and events each year, often sponsoring debut performances of new works by major artists. Through the center, the campus hosts a varied and active performance program, ranging from regular concerts by the Los Angeles Chamber Orchestra to events with The Symphonic Body UCLA, Contra-Tiempo, Peter Sellars, Cassandra Wilson, Anoushka Shankar, Afro Latin Jazz Orchestra, Randy Newman, Bojofondo, Buddy Guy, and Young Jean Lee’s Theater Company. Subject to availability, discount tickets are offered to students, faculty, and staff.

Department Events

The **Ethnomusicology Department** offers students the opportunity to perform in various world music and jazz ensembles that give concerts listed in the department schedule of events.

The **Film, Television, and Digital Media Department** features student-directed films and television programs throughout the year, and the **Theater Department** presents a series of major productions to the general public. The School of Theater, Film, and Television annual Design Showcase West features rising entertainment designers; its week-long **Film Festival** celebrates film, digital media, animation, screenwriting, and acting that spans performance art to the classics.

The **Music Department** features performances by ensembles ranging from music theater to opera. Its Gluck Outreach Program and Music Partnership Program reach out to the community through free performances throughout Los Angeles and Southern California.

The **World Arts and Cultures/Dance Department** presents events and concerts involving department faculty members, guest artists, and students. Student performances include MFA concerts, an undergraduate and graduate student-produced concert, and the Senior Concert/Colloquium. Students also perform in more informal programs, such as the end-of-term student works festival or **Pau Hana**, that feature many world dance forms.

Recreation

To help students learn new skills, meet people with similar interests, relieve stress, and increase fitness, **UCLA Recreation** (UREC) oversees programs from intramural sports to outdoor adventures.

Intramural and Club Sports

The UCLA **intramural sports** program consists of team, dual, and individual sports competition in tournament or league play. Over 7,000 participants compete throughout the year in various sports activities ranging from basketball to water polo. UCLA students and recreation membership holders are eligible. Varying skill levels are offered in almost all activities, and the emphasis is on friendly competition.
Club sports offer students the chance to organize, coach, or participate in sports that fall beyond the scope of intramurals but are not offered at the varsity level. Coed teams exist in archery, badminton, boxing, Brazilian jiu-jitsu, climbing, cycling, dragon boat, equestrian, fencing, figure skating, golf, gymnastics, judo, kendo, powerlifting, quidditch, running, sailing, ski and snowboard, squash, swim, table tennis, taekwondo, tennis, track and field, triathlon, water skiing, wrestling, and wushu. Separate men’s and women’s teams exist in basketball, lacrosse, rugby, soccer, ultimate, volleyball, and water polo. There are also men’s teams in baseball, ice hockey, and rowing; and women’s teams in beach volleyball, field hockey, and softball.

Outdoor Adventures

Outdoor Adventures offer students the chance to get away and enjoy the wonders of local and distant mountains and waterways. Activities designed for beginning to experienced outdoors people include bike rides, challenge course, camping, rock climbing, scuba diving, windsurfing, canoeing, kayaking, and hiking.

Class Programs

Noncredit instructional classes in arts, dance, fitness sports, golf, kayaking, martial arts, outdoor adventures, rock wall, rowing, sailing, standup paddling, surfing, swimming, tennis, water aerobics, windsurfing, yoga, and a variety of group fitness programs are offered for beginning and intermediate levels. Private lessons in arts, dance, martial arts, sports, aquatics, and other activities are also available. Fitness is offered either as a recreation class or on a drop-in basis.

Facilities

For registered students who prefer independent recreation and exercise, UREC offers access to many facilities. The John R. Wooden Recreation and Sports Center has multiple gymnasia; basketball, volleyball, and badminton courts; handball/ racquetball/squash courts; a weight training facility, rock climbing wall, exercise/dance and martial arts studios; and a games lounge. The Bruin Fitness Center, located on the Hill, and Kinross Recreation Center, located in Westwood, offer closer-to-home exercise options for undergraduate and graduate students respectively. Sunset Canyon Recreation Center offers activities in an outdoor park setting that features a 50-meter swimming pool, 25-yard family pool, picnic/barbecue areas, play fields, outdoor amphitheater, six lighted tennis courts, sand volleyball court, two multipurpose sports courts, and various meeting rooms and lounges, as well as a challenge course. The UCLA Marina Aquatic Center offers sailing, windsurfing, kayaking, rowing, surfing, and other activities. Students also have the use of Pauley Pavilion, Drake Stadium, Hitch Basketball Courts, Sycamore Tennis Courts, Los Angeles Tennis Center, intramural field, Student Activities Center, and Kaufman Hall for recreational sports and activities.

Sports and Athletics

UCLA Athletics plays a major role in the UCLA mission to furnish a well-rounded education both in and out of the classroom. UCLA continues to live up to its reputation as a national leader in intercollegiate sports. The first school to win 100 National Collegiate Athletic Association (NCAA) championships, UCLA currently ranks second in the U.S. with 120. In 2021-22, UCLA men’s and women’s athletic programs placed 15th in the Directors Cup national all-around excellence survey; men placed in the top 10 three times and women seven times over the 11 years of the Capital One Cup. In the 23-year history of the USA Today survey, the men’s program placed first 11 times; the women’s program placed first five times in the final nine years. UCLA was the first university in the country to win five NCAA men’s and women’s championships in a single year (1981-82). UCLA competes as the Bruins, in colors of blue and gold.

UCLA also has produced a record number of professional athletes such as Kareem Abdul-Jabbar, Troy Aikman, Arthur Ashe, Eric Karros, Reggie Miller, Corey Pavin, Jackie Robinson, Bill Walton, and Natalie Williams; and Olympians such as medalists Gail Devers, Ann Meyers Drysdale, Lisa Fernandez, Jackie Joyner-Kersee, Karch Kiraly, Dot Richardson, Peter Vidmar, and Natasha Watley.

Athletic Facilities

The major indoor arena at UCLA is the famed Pauley Pavilion, which seats approximately 13,800 for UCLA basketball, volleyball, and gymnastics events. It was the site of the 1984 Summer Olympics gymnastics competition. The adjacent Drake Stadium is the site of UCLA soccer and track and field competitions, and of many outdoor events including the 1991 U.S. Olympic Festival. The Spieker Aquatics Center is home to the UCLA water polo, swimming, and diving teams. The Los Angeles Tennis Center—a 5,800-seat outdoor tennis stadium and clubhouse—was the site of the 1984 Olympic tennis competition. Easton Softball Stadium, which seats 1,300, is home to the women’s softball team. The Morgan Intercollegiate Athletics Center houses the UCLA Athletic Hall of Fame and the actual personal den of Coach John Wooden. Off-campus facilities include Jackie Robinson Stadium for varsity baseball and the renowned Rose Bowl in Pasadena, home of the UCLA football team.

Intercollegiate Sports

UCLA Athletics is a member of the Pac-12 Conference.
Men’s teams have won an overall total of 77 NCAA titles—second highest in the nation—including 20 in volleyball, 16 in tennis, 12 in water polo, 11 in basketball, eight in track and field, four in soccer, two each in golf and gymnastics, and one each in baseball and swimming. Students can participate on the varsity level in baseball, basketball, cross country, football, golf, soccer, tennis, track and field, volleyball, and water polo.

Women’s teams have won an overall total of 44 NCAA titles—second highest in the nation—including 12 in softball, seven in water polo, seven in gymnastics, five in track and field, four in volleyball, three in golf, two each in beach volleyball, soccer, and tennis. Students can participate on the varsity level in basketball, beach volleyball, cross country, golf, gymnastics, rowing, soccer, softball, swimming and diving, tennis, track and field, volleyball, and water polo.

UCLA Alumni Association

Through 85 years of serving the UCLA community, the UCLA Alumni Association has more than 92,000 members, making it one of the largest alumni groups in the nation. Whether a person is a recent graduate, a pioneer Bruin, or somewhere in between, membership in the Alumni Association is the best way to stay connected to UCLA and its growing excellence.

Membership dues enable the Alumni Association to serve as an advocate on campus and to play the vital role of guardian of the value of every UCLA degree. Dues also support student programs such as Beat SC Rally, I Love UCLA Week, Locks of Love, Dinners for 12 Strangers, Spring Sing, Alumni Day, senior events, class reunions, career events, and a scholarship program.

The association offers many benefits and services, including alumni career and travel services. Members make friends, pursue lifelong learning, save money, and make a difference. UCLA graduates, Bruin parents, and friends of UCLA are invited to take advantage of all the association has to offer. Offices are in the James West Alumni Center.
Undergraduate Study

Undergraduate students at UCLA can earn bachelor degrees in 141 majors in the College of Letters and Science and eight professional schools: Henry Samueli School of Engineering and Applied Science; Herb Alpert School of Music; Jonathan and Karin Fielding School of Public Health; Meyer and Renee Luskin School of Public Affairs; School of the Arts and Architecture; School of Education and Information Studies; School of Nursing; and School of Theater, Film, and Television.

In addition to its record of academic excellence, UCLA offers undergraduate students an extraordinary opportunity to participate in undergraduate research, internships and community service, a variety of undergraduate programs and seminars, and prepares the next generation for leadership roles after graduation.

Shared Governance

Undergraduate degree programs, courses, and requirements are governed by the Undergraduate Council; College and school faculty executive committees; and committees for general education, Writing II, and diversity requirements.

Undergraduate Council

The Undergraduate Council is a standing committee of the UCLA Academic Senate. The council is responsible for the establishment of policy and standards for undergraduate education at UCLA, recommends to the Legislative Assembly programs that lead to new degrees, and delegates authority to College and school faculty executive committees.

Undergraduate Education Division

Led by the dean for undergraduate education, the Division of Undergraduate Education is a campuswide advocate for undergraduate education. Among its goals are to enrich the quality of the academic experience of undergraduate students, help students find meaningful pathways to timely degree completion, and prepare students for life after college. The division oversees the general education curriculum and offers programs including Fiat Lux seminars, cluster courses, and New Student Academic Programs; as well as the Academic Advancement Program, Center for Academic Advising in the College, Center for Community Engagement, Center for Undergraduate Research, and College Honors programs.

Undergraduate Admission

Undergraduate Admission
1147 Murphy Hall
310-825-3101

Prospective undergraduate students should give careful thought to adequate preparation in reading, writing, mathematics, laboratory sciences, languages, visual and performing arts, and other subject areas related to a degree objective or major. To be competitive, UCLA applicants need to present an academic profile much stronger than that represented by the minimum UC admission requirements.

Undergraduate Admission invites prospective students to visit UCLA for individual or group tours of the campus. Reservations are required.

Application for Admission

Prospective students apply for admission to UCLA for the fall quarter by completing the UC Application for Admission and Scholarships.

One application is used for all nine UC campuses with undergraduate programs. Students apply to one UC campus with a nonrefundable application fee; an additional fee is charged for each additional campus. Students may only apply to one College or school at UCLA.

When to Apply

All majors and programs in the College of Letters and Science; Henry Samueli School of Engineering and Applied Science; Herb Alpert School of Music; Jonathan and Karin Fielding School of Public Health; Meyer and Renee Luskin School of Public Affairs; School of the Arts and Architecture; School of Education and Information Studies; School of Nursing; and School of Theater, Film, and Television are open for fall quarter. The application filing period is October 1 through November 30 of the prior year. See how to apply for up-to-date information on application procedures.

Admission Notification

The UC Application Center sends e-mail notices to acknowledge receipt of applications. Subsequently, UCLA Undergraduate Admission notifies students of the admission decision. Fall-quarter freshman applicants are notified in late March; transfer applicants are notified in late April. Students who are offered admission are asked to submit a Statement of Intent to Register and a Statement of Legal
Residence. A nonrefundable deposit, also required at this time, is applied to the student services fee as long as students register in the term to which they are admitted.

Entrance Requirements

Entrance requirements established by the University of California follow the guidelines set forth in the California Master Plan for Higher Education, which requires that the top 12.5 percent of the state’s high school graduates be eligible for admission to the University of California. Requirements are designed to ensure that all eligible students are adequately prepared for university-level work.

Fulfilling the minimum admission requirements does not assure admission to UCLA. Admission is based on demonstrated high scholarship in preparatory work going well beyond the minimum eligibility requirements. Honors-level high school, and Advanced Placement, International Baccalaureate, and transferable college courses are good preparation regardless of the desired major. UCLA offers admission to those students with the best overall academic preparation, viewed in the context of applicants’ academic and personal circumstances, extracurricular and volunteer experiences, and the overall strength of the UCLA applicant pool. For details, see undergraduate admission.

Admission as a Freshman

Students are considered freshman applicants if they have not enrolled in a regular session of any college-level institution since graduation from high school. Students who attend summer session immediately following high school graduation are still considered freshman applicants.

Minimum Admission Requirements

To be considered for admission as a freshman, students must meet the subject and grade-point average (GPA) requirements.

Subject Requirement

The subject requirement, sometimes called A to G requirements, is a sequence of high school academic courses required for admission to the University of California. Each course must be completed with a grade of C or better. The requirement consists of 15 year-long courses, with 11 completed prior to the beginning of 12th grade. These are the minimum requirements; students should exceed these requirements whenever possible.

A. History/Social Science. Two years of history/social science, including one year of world history, cultures, and historical geography; and one year of U.S. history, or one-half year of U.S. history and one-half year of civics or American government

B. English. Four years of college-preparatory English that include frequent writing, from brainstorming to final paper, as well as reading of classic and modern literature. No more than one year of ESL-type courses may be used to meet this requirement

C. Mathematics. Three years of college-preparatory mathematics, including or integrating the topics covered in elementary and advanced algebra and two- and three-dimensional geometry. Mathematics courses completed in the seventh and/or eighth grades and approved integrated mathematics courses may be used to meet part or all of this requirement

D. Science. Two years of college-preparatory science, including or integrating topics that provide fundamental knowledge in two of these three subjects: biology, chemistry, or physics. One year of approved interdisciplinary or earth and space sciences course may be used to meet one year of this requirement

E. Language Other than English. Two years of the same language—or coursework equivalent to the second level of high school instruction—including emphasis on speaking and understanding, development of awareness and understanding of the cultural context around the target language, practice with reading and composition, and instruction on grammar and vocabulary. Language courses taken in seventh and/or eighth grade may be used to meet part or all of this requirement. American Sign Language and classical languages such as Greek and Latin are acceptable

F. Visual and Performing Arts. One year-long visual and performing arts course selected from dance, drama/theater, music, visual art, or interdisciplinary arts

G. College Preparatory Electives. One year (two semesters), in addition to those required in A through F, or one year (two semesters) approved in the elective category

Subject Requirement Summary

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<th>Subject Requirement</th>
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<tr>
<td>A. History/Social Science</td>
<td>2 years</td>
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<tr>
<td>B. English</td>
<td>4 years</td>
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<tr>
<td>C. Mathematics</td>
<td>3 years</td>
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<tr>
<td>D. Laboratory Science</td>
<td>2 years</td>
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<tr>
<td>E. Language Other than English</td>
<td>2 years</td>
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<tr>
<td>F. Visual and Performing Arts</td>
<td>1 year</td>
</tr>
<tr>
<td>G. College Preparatory Electives</td>
<td>1 year</td>
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Grade-Point Average Requirement

California residents are eligible for admission to the University of California with a 3.0 grade-point average; nonresidents are eligible with a 3.4 GPA. Minimum eligibility does not guarantee admission to UCLA.
**Standardized Testing**

Scores submitted as part of an application may be used to determine eligibility for the California statewide admissions guarantee, as an alternative method of fulfilling minimum requirements for eligibility, or for course placement once admitted.

More information regarding the University of California testing policy may be found on the UC admission website.

**Admission Selection**

UCLA selects students using a carefully designed holistic evaluation process that takes into account an applicant’s achievements, both academic and nonacademic, in the context of the opportunities available. Among other factors, holistic evaluation specifically considers academic grade-point average; the quality, quantity, and level of coursework taken; sustained participation in activities that develop academic and intellectual abilities; leadership and initiative; employment and personal responsibilities; and overcoming life challenges related to personal or family situations.

Because admission requirements and selection criteria may change, freshman applicants should see freshman admission process for the most complete and up-to-date information.

**Admission as a Transfer Student**

Students are considered transfer applicants if they have enrolled in a regular fall, winter, or spring session at another college or university or in college-level extension courses after completion of high school. (This does not include attending a summer session immediately following high school graduation.) Students may not disregard their college record and apply for admission as a freshman.

In accordance with the California Master Plan for Higher Education, first preference is given to California community college applicants. Each application receives a comprehensive evaluation, integrating all available information. Students attaining senior standing are generally not admitted.

Academic criteria are as follows: junior-level standing (60 semester/90 quarter transferable units completed) by the end of the spring term before transfer, grade-point average in transferable courses, significant preparation for the major, completion of the English composition and mathematics requirements, and progress toward completion of the Intersegmental General Education Transfer Curriculum (IGETC), another UC campus general education requirements, or UCLA general education requirements.

Because admission requirements and selection criteria may change, transfer applicants should see transfer admission for the most complete and up-to-date information.

**Intercampus Transfers**

Undergraduate students registered in a regular session at any UC campus (or those previously registered who have not since registered at any other school) may apply for transfer to another campus. Submit the UC Application for Transfer Admission and Scholarships with the required application fees. The filing periods and admission requirements are the same as those for new applicants. Students who have attended another UC campus and wish to be considered for admission to UCLA must have been in good standing when they left their previous UC campus. Intercampus transfers are not automatic; students must compete with all other applicants and must meet UCLA transfer admission requirements.

**Transfer Credit and Credit by Examination**

UCLA awards unit credit to transfer students for certain courses completed at other regionally accredited colleges and universities. To be accepted for credit, the courses must be comparable to those offered by the University of California, as determined by Undergraduate Admission. All courses that meet the criteria are used in determining eligibility for admission.

To convert semester units into quarter units, multiply the semester units by 1.5. For example, 12 semester units x 1.5 = 18 quarter units.

College credit for examinations given by national testing services is generally not allowed, except for the AP Examinations given by the College Board and the International Baccalaureate higher-level examinations. See transfer credit for more information.

**International Applicants**

To be considered for admission to the University of California, international students must have completed secondary school with a superior average in academic subjects and have earned a certificate of completion that would enable them to be admitted to a university in the home country.

The application for admission, copies of official certificates, and detailed records of all secondary schools attended should be submitted as early as possible after the filing period opens. This allows time for the necessary correspondence and, if students are admitted, to obtain passport visas.

**English Language Proficiency**

Students whose native language is not English must have sufficient command of English to benefit from instruction at UCLA. First-year undergraduate students who have not
otherwise satisfied the Entry-Level Writing requirement and who have not taken the Analytical Writing Placement Examination (AWPE) by the time they enter UCLA must take the AWPE in their first term at UCLA. Results of the AWPE are reviewed to determine which credit-bearing English composition courses the student may need to complete in order to satisfy the Entry-Level Writing requirement.

### Second Bachelor’s Degree

By policy, UCLA does not admit students into any undergraduate program if they already hold a bachelor’s degree.

### Registration

**Registrar’s Office**

1113 Murphy Hall

Registration consists of paying fees and enrolling in classes. Students enroll in UCLA, and in the College or one of the professional schools.

1. Registration fees and other UCLA charges are due the 20th of each month. BruinBill accounts can be viewed through MyUCLA.
2. Enrollment in classes is completed through MyUCLA.

Students must complete both processes by the established deadlines to be officially registered for the term.

#### Fees and Payment

Details on fee payment, enrollment procedures, and deadlines are on the Registrar’s website.

#### Electronic Billing

BruinBill accounts are administered electronically (e-bill) through MyUCLA. Financial activity is displayed for the current term, as well as account activity for the last 24 months. Students can pay their BruinBill account electronically using an electronic check with no fee; or with American Express, Discover, MasterCard, and VISA credit cards with a fee.

#### Annual Undergraduate Fees

Although the exact cost of attending UCLA varies, there are some fees that all UCLA students must pay. UCLA does not charge on a per-unit basis for undergraduate students in regular academic terms.

Each entering and readmitted student is required to submit a Statement of Legal Residence. Students classified as nonresidents of California must pay nonresident supplemental tuition in addition to registration fees. Legal residents of California are not required to pay nonresident supplemental tuition. For a definition of residence and nonresidence, see Residence for Tuition Purposes.

### Student Services Fee

The Student Services Fee covers student expenses such as counseling, facilities, registration, graduation, and health services. The fee is charged whether or not students make use of these services.

### Course Materials and Services Fees

The College of Letters and Science and each school are authorized to assess course materials and services fees. Some of these fees are assessed based on actual enrollment at the end of the fourth week of classes. Students are responsible for ensuring that all study list errors and omissions are corrected prior to the end of the second week. All students in a course with an approved course materials and services fee are assessed the fee, regardless of major. The fee is nonrefundable. Students who are approved to add a course after the third week of instruction are required to pay the course materials and services fee for the entire term.

Fee amounts are available on the Registrar’s course fees web page.

#### Instructional Enhancement Initiative Fee

The instructional enhancement initiative (IEI) fee supports technology in undergraduate education. The fee helps support course websites and online tools, computer laboratories, and software.

#### Miscellaneous Fees

Miscellaneous fees include charges for late registration fees payment. Late fees also apply if students file their study list late or do not pay BruinBill balances on time. Fees are charged if any check is returned by a bank for any reason. Charges are assessed for most petitions and other special requests. Study list, document and service, transcript-related, and degree and diploma fees are published on the Registrar’s website.

### Student Health Insurance Fee

All undergraduate students are automatically assessed for and enrolled in the University of California Student Health Insurance Plan (UCSHIP) as a condition of registration at UCLA. Continued enrollment in a qualified health insurance plan is mandatory during all registered terms. UCHP covers medical, vision, dental, and behavioral health services.
The UCSHIP fee is billed each term along with other UCLA fees. UCSHIP fulfills all requirements mandated for a qualified health insurance plan as defined by the University of California. The Ashe Student Health and Wellness Center is the primary health-care provider for UCSHIP, and where all nonemergency medical care is initiated.

Nonregistered students (those who withdraw, or are on approved leave or planned academic leave) may have access to UCSHIP services under certain conditions. Contact the Ashe Center to learn more.

UCSHIP Waiver
Students may waive UCSHIP if they maintain active enrollment in a qualified health insurance plan that meets all established requirements, apply for a waiver within established deadlines each term, and correctly complete the online waiver form. Students are responsible for providing complete and accurate information. Third-party individuals may not waive UCSHIP for a student. Waivers must be submitted before the term fees payment deadline. Deadlines are strictly enforced, and no refunds are issued after the deadline. For more information, see the Ashe insurance web page.

Fees Notice
All fees are subject to change without notice by the Regents. Current academic year fees and updated information is available on the Registrar’s fees web page.

Fee Refunds
Students who formally withdraw from UCLA may receive partial refunds of fees. For more information, see Withdrawal in Policies and Regulations. Consult the Registrar’s refunds web page for policy details and specific refund deadlines for each term.

Fee Waiver Requests
Late registration, processing, and penalty fees are waivable on request in writing to the office assessing the fees only if they were incurred through the fault of UCLA, or because a student suffered sudden and debilitating injury or accident.

Reduced Fee Programs
UCLA recognizes the need for part-time study in special circumstances. Undergraduate resident students—when properly approved by the dean of their College/school for enrollment in 10 or fewer units—may be eligible for a one-half reduction in tuition. The reduction is based on total units enrolled as of Friday of the third week of classes. Students should contact their College or school for eligibility requirements. Students must file a Fee Reduction Request with the academic dean’s office by Friday of the second week.

Except for these qualified and approved part-time students, there is no reduction in tuition, or in student services; Ackerman Student Union; Wooden Center; student programs, activities, and resources complex (SPARC); Undergraduate Students Association fees; or other campus-based fees.

Undergraduate nonresident students pay only half the nonresident supplemental tuition fee.

Full-time UC employees may apply for a reduction of tuition and the student services fee at their campus human resources office. Students who use the part-time fee reduction may not also use the UC employee reduction.

Class Enrollment
New students should see an academic counselor before enrolling in classes (counseling is required in the Henry Samueli School of Engineering and Applied Science). Counselors help new students select courses and formulate a schedule tailored to their academic interests or degree objectives.

New Student Sessions take new students through a step-by-step process designed to ensure that they enroll in an effective program.

Enrollment
Students enroll in classes through MyUCLA during assigned times—called enrollment appointments—when they are allowed to enroll. The Class Planner feature allows students to create class plans prior to enrollment, share plans with counselors, and quickly add classes during their enrollment appointment. Students use the Find a Class and Enroll feature to search the Schedule of Classes and add available classes to their class plan or study list.

MyUCLA is also used to view enrollment appointments; drop classes; change grade type and number of units; exchange classes; and view the study list, which includes information on class meeting times, final examinations, classmates, grades, textbooks, and class websites. For more information, see Registrar’s study list and enrollment policies web pages.

For classes that require written approval or specialized processing, students may inquire about processing steps through MyUCLA Message Center.

Study List
A study list is the record of courses in which a student is enrolled for the term. At 11:59 p.m. on Friday of the second week of instruction the study list of enrolled courses
becomes official, and all wait lists are eliminated. Students should verify their study list through MyUCLA after each enrollment transaction. Students are responsible for all courses and the grading basis as listed on MyUCLA, and cannot receive credit for courses not listed.

After Friday of the second week, most changes to the official study list can be made through MyUCLA. In some cases, a fee may apply. Some changes require an Enrollment Petition along with approval signatures.

See the Registrar’s study list web page for deadlines and complete instructions.

Errors or omissions should be corrected before the College or school deadlines for changes by petition. Unapproved withdrawal from or neglect of a course entered on the study list results in a failing grade.

**Wait List**

Some departments establish wait lists for classes that are full. If a student in the class drops, the seat is filled by a student on the wait list. Students can check enrollment status through MyUCLA. Position on a wait list does not indicate enrollment. Students on a wait list should not assume they will be added to a class.

Wait lists are maintained through Friday of the second week of instruction unless a department deletes them earlier.

**Concurrent Enrollment**

Concurrent enrollment—defined as taking courses during regular sessions for credit at UCLA and, at the same time, at a non-UC institution, including UCLA Extension—is not permitted except in extraordinary circumstances; and no credit is given for such courses unless the approval of the UCLA College or school has been obtained by petition prior to enrollment.

**Intercampus Cross-Enrollment Program**

Undergraduate students enrolled in any campus of the California community colleges, the California State University, or the University of California may enroll without formal admission in a maximum of one course per academic term at a campus of either of the other systems at the discretion of the appropriate campus authorities on both campuses on a space-available basis per the California Education Code sections 66755 and 66756 (amended by California Senate Bill 361 passed in 1999). Enrollment in pre-college courses is excluded.

UCLA students qualify for intersegmental cross-enrollment if they meet all the following requirements:

1. Complete at least one term at UCLA as a matriculated student
2. Enroll for a minimum of 6 units for the current term
3. Earn a grade-point average of 2.0 (C) for work completed
4. Pay appropriate tuition and fees at UCLA for the current term
5. Complete appropriate academic preparation as determined by the host campus
6. Have California resident status

Obtain a concurrent enrollment application from the College or school. An administration fee is charged for each academic term such enrollment is requested.

**Intercampus Visitor Program**

Undergraduate students enrolled at one campus of the University of California may have the opportunity to attend another UC campus for one quarter or semester on the Intercampus Visitor Program. Students should observe the application deadlines. Applications are reviewed by a student’s College or school.

- **College of Letters and Science**
  Center for Academic Advising in the College, A316 Murphy Hall

- **School of the Arts and Architecture**
  Office of Student Services, 2200 Broad Art Center

- **School of Education and Information Studies**
  Office of Student Services, 1002 Moore Hall

- **Henry Samueli School of Engineering and Applied Science**
  Office of Academic and Student Affairs, 6246 Boelter Hall

- **Herb Alpert School of Music**
  Office of Student Affairs, 1642 Schoenberg Music Building

- **School of Nursing**
  Student Affairs Office, 2-147 Factor Building

- **Meyer and Renee Luskin School of Public Affairs**
  Student Services Office, 3250 Public Affairs Building

- **Jonathan and Karin Fielding School of Public Health**
  Office of Undergraduate Student Services, 16-059 Center for Health Sciences

- **School of Theater, Film, and Television**
  Student Services Office, 103 East Melnitz Building
Simultaneous UC Enrollment
Undergraduate students may enroll simultaneously in courses offered by another UC campus. Eligible students must be registered (fees paid), in good standing, and enrolled in at least 12 units at UCLA. Students may simultaneously enroll in no more than one UC host-campus course not to exceed 6 units. Before attending the host campus, both campuses must give approval. Approval to enroll simultaneously on another UC campus does not guarantee credit toward specific degree or general education requirements. Application of host-campus courses to UCLA graduation requirements is determined by the College or school. Details are on the application form. Obtain applications and directions for submitting forms from the following offices:

- **College of Letters and Science**
  Academic Advancement Program, 1209 Campbell Hall
  Center for Academic Advising in the College, A316 Murphy Hall
  College Honors Programs, A311 Murphy Hall
  Student Athletics, Morgan Center
- **School of the Arts and Architecture**
  Office of Student Services, 2200 Broad Art Center
- **School of Education and Information Studies**
  Office of Student Services, 1002 Moore Hall
- **Henry Samueli School of Engineering and Applied Science**
  Office of Academic and Student Affairs, 6246 Boelter Hall
- **Herb Alpert School of Music**
  Office of Student Affairs, 1642 Schoenberg Music Building
- **School of Nursing**
  Student Affairs Office, 2-147 Factor Building
- **Meyer and Renee Luskin School of Public Affairs**
  Student Services Office, 3250 Public Affairs Building
- **Jonathan and Karin Fielding School of Public Health**
  Office of Undergraduate Student Services, 16-059 Center for Health Sciences
- **School of Theater, Film, and Television**
  Student Services Office, 103 East Melnitz Building

The application is also available on the Registrar’s simultaneous enrollment web page.

Immunization Requirements
UCLA requires that all incoming students be vaccinated against or show immunity to multiple infectious diseases consistent with guidelines of the American College Health Association, California Department of Public Health, and U.S. Centers for Disease Control and Prevention (CDC). These requirements help protect the health of students and the entire campus community. Students submit their immunization history to the Ashe secure patient portal. See immunization requirements for more information.

Financial Support

**Financial Aid and Scholarships**
A129J Murphy Hall
310-206-0400

The priority deadline for filing all undergraduate financial aid applications for the regular academic year is March 2. Applications received after the deadline are considered late, and limited aid is offered.

The Financial Aid Handbook is available on the Financial Aid and Scholarships forms and publications web page.

**Application for Financial Aid**
Students do not need to come from low-income families to qualify for financial aid. However, those who apply for need-based aid—including grants, loans, work study, and some scholarships—must demonstrate financial need, which is defined as the difference between the cost of attending UCLA and the amount that they and their families should be able to contribute.

Financial aid is not available for international students.

Students attending UCLA summer sessions, summer travel programs, summer institutes, or UC cross-campus summer programs and in need of financial aid must submit a summer financial aid application in addition to the Free Application for Federal Student Aid (FAFSA). Summer applications are available on MyUCLA (in the Finances and Jobs section).

To qualify for aid, students must also comply with Financial Aid standards for satisfactory academic progress.

**FAFSA Free Application for Federal Student Aid**
To evaluate financial need, all citizen and permanent resident students who apply for aid must provide financial information on the Free Application for Federal Student Aid (FAFSA). If students are financially independent according to the federal financial aid guidelines, their own financial circumstances are analyzed rather than those of their parents. UCLA expects that students and their families bear as much of the cost of a student’s education as their circumstances permit.

The information reported on the FAFSA is used to apply for all federally funded programs, funds administered by UCLA, and the Cal Grant program administered by the California...
Student Aid Commission. Loans that are not need based are also available to all students who complete the FAFSA. Students should complete the FAFSA online by March 2. To ensure that UCLA receives FAFSA information, students should enter federal school code 001315 in the appropriate search field.

California Dream Act Application
Students who are not citizens or permanent residents but who are eligible for Assembly Bill 540 nonresident fee waivers may be eligible to qualify for scholarships, UCLA grant aid, and additional state aid if they complete a California Dream Act application. The priority filing deadline for the Dream application is March 2.

Prospective Student Scholarships
In addition to using the FAFSA and Dream Act application to apply for aid, prospective students who apply to UCLA with the UC Application for Admission and Scholarships may use the admission application to apply for undergraduate scholarships. Once admitted, students may fill out the Financial Aid and Scholarships undergraduate scholarship application to broaden their scholarship opportunities.

Continuing Student Scholarships
Continuing students can access and submit the annual Financial Aid and Scholarships undergraduate scholarship application. Students are able to submit the application year round, although early submission is advisable. Resources to help with a thorough search for outside scholarships are available from the Center for Scholarships and Scholar Enrichment.

Types of Financial Aid
The four basic types of aid are scholarships, grants, loans, and work-study employment. The Financial Aid and Scholarships office usually offers a combination of different award types to most applicants.

Aid can be merit based—awarded on the basis of standards such as academic achievement; or need based—awarded on the basis of financial need as determined by the financial aid application. Scholarships managed by the Financial Aid and Scholarships office are based on merit and need. Grants, loans, and work study are generally need based.

Scholarships
The undergraduate scholarship program at UCLA rewards academic excellence and assists with the expenses of an undergraduate education. Scholarship awards range from $100 to $10,000 per year, and require the student to submit a new scholarship application on an annual basis. Financial need is not required for most scholarships at UCLA.

Entering students apply for scholarships on the UC Application for Admission and Scholarships. Once admitted to UCLA, new students have the opportunity to add additional information to their scholarship profile, to allow various departments across campus to consider them for other scholarships that may open throughout the academic year. Continuing students are encouraged to submit the scholarship application as early as May 1 each year. However, applications are accepted year-round.

In addition to applying for UCLA scholarships, students are encouraged to apply for outside scholarship funding through search engines.

Regents Scholarships
One of the highest honors conferred on an undergraduate student is the Regents Scholarship, which is awarded for four years to students entering from high school and for two years to entering juniors. A UCLA faculty committee selects Regents Scholars on the basis of exceptional academic achievement and promise. Scholars receive a yearly honorarium if they have no financial need. Scholars who establish financial need by filing the FAFSA or California Dream Act application receive a combination of grants and scholarships to cover the amount of their need. Regents Scholars also receive special privileges.

Alumni Scholarships
Since 1936, UCLA Alumni have supported Bruins through merit-based scholarships. The Alumni Scholarships Program is open to all eligible students.

Alumni scholarships are awarded through an application screened by alumni volunteers; final selection is made by Financial Aid and Scholarships. By completing one application, students are considered for several scholarships offered through the alumni program. Students need not be related to UCLA alumni to apply. Alumni scholars’ benefits include getting involved in campus events and organizations, building leadership skills, access to leadership development programs and academic enrichment services, and networking with UCLA alumni.

Prospective first-year and transfer students apply through the UCLA prospective undergraduate scholarship application. Applications open in early January each year and close a few weeks before admission decisions are released. Initial award offers are distributed within one to two weeks of admission decisions. Applicants who do not receive an offer...
before the Statement of Intent to Register deadline may still receive one during the summer.

**Merit-Based Scholarships for Prospective Students**

Financial awards for prospective first-year students range from $6,000 to $20,000 over four years; for prospective transfer students, $6,000 over two years. Applicants must attend UCLA beginning the fall quarter immediately after the application cycle. To maintain eligibility, students submit a compliance agreement, complete 30 hours of renewal service, and attend an alumni event.

**Need-Based Scholarships for Alumni Scholars**

Awarded alumni scholars may receive up to $5,000 each year in need-based aid, in addition to their merit award, by submitting information on the Free Application for Federal Student Aid (FAFSA) or California Dream Act application, and receiving a need-based financial aid package.

Incoming scholars receive this aid automatically, based on their FAFSA or Dream Act application. Continuing scholars apply for a Wasserman alumni grant using the continuing student undergraduate scholarship application. Continuing scholars must also meet several enrollment and grade criteria.

**Merit-Based Scholarships for Seniors**

The True Bruin Distinguished Senior Award (TBDSA) is awarded to deserving students who exemplify the True Bruin values of integrity, excellence, accountability, respect, and service. Recipients receive a one-time scholarship of up to $5,000. The scholarship is open to any UCLA senior—not just current alumni scholars—who meets eligibility requirements. Seniors apply for the TBDSA using the fall undergraduate scholarship application.

For more information, see Alumni Association scholarships.

**ROTC Scholarships**

ROTC scholarships are awarded on a competitive basis to U.S. citizens regardless of parents’ income. Scholarships supply tuition, a book allowance, fees, and a tax-free monetary allowance during the academic year. Scholarship applications and information are available online for the Air Force/Space Force, Army, and Navy/Marine Corps. Completed four-year scholarship applications should be submitted by December 31 (Air Force/Space Force and Navy/Marine Corps) or March 1 (Army) of the year preceding college matriculation. Two- (Army and Navy/Marine Corps) and three-year scholarship applications are also available, and are considered when received.

**Grants**

Grants are need-based awards that do not need to be repaid as long as the student maintains eligibility. Depending on funding availability and awarding policy, a financial aid package may include some of the grants listed here.

**Federal Pell Grants**

Federal Pell Grants are based on exceptional need. They are awarded to undergraduate students who are U.S. citizens or eligible noncitizens and who have not earned a bachelor’s degree. Students who file the FAFSA are automatically considered for a Pell Grant. Eligibility is determined by the federal government. Award amounts depend on a student’s Estimated Family Contribution (EFC) and whether enrollment is full time or below. Awards are reduced for students enrolled less than full time.

**Cal Grants A and B**

California residents who attend at least half-time are eligible to apply for a California Student Aid Commission Cal Grant award. The FAFSA or California Dream Act Application and GPA Verification Form are the official applications for these programs. Cal Grant A awards assist low- and middle-income students with tuition and fee costs. Eligibility is based on need and grade-point average. Cal Grant B awards are intended to assist low-income and disadvantaged students with living expenses, books, supplies, and transportation costs. First-year awards may also cover registration fee costs. Renewal award recipients receive registration fee assistance. New awards are limited to students who have completed no more than one full-time semester or two full-time quarters or 16 semester units of part-time study or the equivalent. Students awarded Cal Grant B receive only the stipend portion in their first year. Amounts are subject to change based on the California budget process. If tuition and school services fees increase, CAL Grant fee-paying award will increase correspondingly. Awards are reduced for students enrolled less than full time.

**University Grants**

University grants offer financial assistance from state funds to eligible applicants who meet the FAFSA or Dream Act application priority deadline. Awards range from $100 to over $25,000 and are based on student need. All undergraduate students who are U.S. citizens, eligible noncitizens, or noncitizens eligible for AB 540 waivers and who apply on time are considered. University grant eligibility is subject to availability of funding. Grants may be exhausted before the end of the academic year. Awards are reduced for students enrolled less than full time.

**University Grants to Purchase UCSHIP**

These grants are based on need, and awarded to on-time FAFSA and California Dream Act applicants to cover the cost of the University of California Student Health Insurance Plan.
(UCSHIP). Students who waive UCSHIP are not eligible for these grants.

**Federal Supplemental Educational Opportunity Grants**

Federal Supplemental Educational Opportunity Grants (FSEOG) are awarded to undergraduate students with financial need. Awards range from $100 to $4,000. Recipients must be U.S. citizens or eligible noncitizens. Preference is given to Pell Grant and Cal Grant recipients. Only on-time, grant-eligible FAFSA applicants are considered.

**Loans**

Loans allow students to postpone paying some of the costs of their education until they have completed school. A financial aid offer includes a long-term, low-interest loan. UCLA makes every effort to assist students during the repayment of their obligation; but UCLA services, including registration and the release of official transcripts, are withheld if the loan becomes delinquent. Seriously delinquent accounts are referred to a professional collection agency for action.

All first-time borrowers must complete a debt management session at student loans before funds are released. Parent and graduate PLUS borrowers whose loans are approved on appeal or with an endorser are also required to complete a mandatory counseling session at federal student aid in addition to the debt management session.

All loan recipients must complete an exit interview with the Loan Services Office, A227 Murphy Hall, before leaving UCLA for any reason. This interview helps students understand their loan agreement and their rights and responsibilities. If students fail to participate in an exit interview, UCLA places a hold on their academic records and registration materials. Exit information is mailed to students by the Loan Services Office after receipt of notification of separation from UCLA.

**William D. Ford Federal Direct Loan Program**

**Direct Loans**

Direct loans are low-interest subsidized and unsubsidized loans financed by the U.S. Department of Education.

Subsidized direct loans are awarded to undergraduate students who have demonstrated financial need. Interest rates are fixed, and adjusted annually by the U.S. Department of Education; contact Financial Aid and Scholarships for additional information. Interest accrues immediately after students graduate or drop below half-time enrollment. Repayment begins six months after students leave school or drop below half-time enrollment.

Unsubsidized direct loans are available to undergraduate, graduate, and professional students who are U.S. citizens or eligible noncitizens regardless of income. Interest accrues from the date of disbursement, but students can avoid the extra costs of accrual by making regular interest payments while in school.

**Direct PLUS Loans**

Direct PLUS loans are designed to help graduate students, and parents of undergraduate students, meet the total cost of education. Graduate students and parents may be eligible to borrow up to the cost of education for the academic year, less any other financial aid received. This loan is available only to borrowers who do not have adverse credit histories. The interest rate is fixed, and adjusted annually by the U.S. Department of Education. Contact Financial Aid and Scholarships for information on current interest rates. Borrowers may want to consult a tax adviser to see if the interest is tax deductible.

**Private Loans**

Private loans are available to students who have received the maximum award amounts under the Direct Loan Program and require additional funding. These loans are sponsored by banks and private lending institutions. Interest rates and repayment schedules vary. These loans must be certified by the Financial Aid and Scholarships office before funds can be disbursed. A list of private lenders that UCLA borrowers have used in the past is available at Financial Aid publications.

**Short-Term Loans**

Students need not be receiving financial aid to apply for a short-term loan. They may borrow up to $200 for immediate emergency needs; the amount is repayable on the 20th of the month following the month in which the loan was made. To qualify, applicants must be registered UCLA students with satisfactory loan repayment records. Applications are available from the Loan Services Office, 106 Strathmore Building.

**Work-Study Program**

The Federal Work-Study Program (FWS) is intended to stimulate and promote part-time student employment, particularly for students from low-income families who are in need of earnings to pursue their studies.

Under FWS, the federal government pays a portion of the student’s wage and the employer pays the balance. Through this program, students may work up to 20 hours per week for UCLA, government agencies, or public and private nonprofit agencies. Students employed through FWS supply essential services to UCLA and community, and have the opportunity to hold jobs that may relate to their
educational objectives or enable them to gain valuable work experience.

**Majors and Degrees**

Students may choose from 141 majors in a wide variety of disciplines offered through the undergraduate degree programs of the College of Letters and Science; Henry Samueli School of Engineering and Applied Science; Herb Alpert School of Music; Jonathan and Karin Fielding School of Public Health; Meyer and Renee Luskin School of Public Affairs; School of the Arts and Architecture; School of Education and Information Studies; School of Nursing; and School of Theater, Film, and Television. For a complete list of major programs and degrees, see Majors and Degrees.

**Planning a Major**

New students should obtain academic counseling before enrolling in classes at UCLA. Counselors can help new students formulate degree objectives based on interests, abilities, and career goals. As students begin to decide on a major, counselors can help them start fulfilling College or school requirements as well as the department requirements necessary for completion of the degree program.

**Declaring a Major**

Regulations and procedures for declaring a major vary for the College and each school. Students in the College of Letters and Science do not need to declare a major in their freshman year, and can attend with an undeclared major until the end of their sophomore year. Certain schools require students to choose a major when applying for admission, or require early declaration. Check specific policies for declaration with the school or department adviser.

All students must declare a major by the beginning of their junior year (90 quarter units). To declare a major, obtain a Petition to Declare a Major at the College or school office. There is no fee for the petition.

**Changing Majors**

Changing majors requires the approval of the department of the new major. Changing majors involving a change in College or school requires the approval of the College or school. To change majors, obtain a Program Change Petition online or at the department office.

**Capstone Majors and Programs**

Capstones are designed to be the culmination of a UCLA undergraduate experience. Capstones range from yearlong sequences of courses or tutorials to a single seminar, and from honors theses to comprehensive seminar projects or internships. They may be based in tutorials, laboratories, advanced courses, or seminars, and may include either individual or team-based projects. Requirements vary among the college and schools. Capstone majors and programs are identified throughout Curricula and Courses. See capstone initiatives for more information.

**Capstone Options**

Four types of capstone options represent different expectations for student engagement and independence. Some students might complete capstones of more than one type. For example, having completed an advanced seminar, a student might decide to engage in independent study or an honors project.

**Honors Thesis or Project**

In a multi-term program, students conduct independent research, laboratory, writing, or other work guided or mentored by faculty. The program culminates in a formal thesis or project that can be granted department honors.

**Individual Major**

Highly motivated students who find that no single major accommodates their specific interest in a given subject may propose their own major. Proposals are designed with faculty guidance and sponsorship, and thoroughly examined for cogency, completeness, and academic merit.

**Individual Project**

Students may propose an individual project or paper as the culmination of an upper-division contract course they create with their instructors.

**Senior Seminar or Advanced Project**

Students may enroll in an advanced senior seminar or project course that requires a comprehensive term paper, performance, or product design.

**Learning Outcomes**

Learning outcomes describe what students should know, be able to do, and value by the end of their undergraduate educational program. There are four types of outcomes: attitude/value, behavior, knowledge, and skill. They define degree-program goals through focus on student experience and achievement, and allow faculty to evaluate whether students have mastered those goals. Each degree program establishes its own learning outcomes, develops methods for assessment, and uses the results to enhance and improve student learning. Outcomes also help inform prospective and current students about a program’s
Degree Requirements

As soon as they are accepted for admission to UCLA, new students should learn the requirements necessary to receive a bachelor’s degree and begin planning an appropriate program of study. All undergraduate students must satisfy UC requirements, College or school requirements, and department requirements.

University Requirements

The University of California has established two requirements that all undergraduate students must satisfy in order to graduate: Entry-Level Writing or English as a Second Language (ESL), and American History and Institutions. It is each student’s responsibility to see that these requirements are fulfilled.

Entry-Level Writing

Because proficiency in English composition is so important to successful performance in many courses, Entry-Level Writing is the only requirement for graduation that students must satisfy before entering UCLA or during their first year in residence. They may meet this requirement by one of the following methods:

- Score 30 or better on the ACT, English Language Arts, or 63 or better on the ACT, English Plus Reading
- Score 680 or better on the SAT, Evidenced-Based Reading and Writing
- Score 3, 4, or 5 on the College Board Advanced Placement Examination in English Language and Composition, English Literature and Composition, Research, or Seminar
- Score 5, 6, or 7 on one of the International Baccalaureate Higher Level English A Examinations, or score 6 or 7 on one of the International Baccalaureate Standard Level English A Examinations
- Before enrolling at UCLA, present transfer credit for an acceptable college-level course in English composition (passed with a grade of C or better) at another institution
- Receive a Writing I placement on the University of California Analytical Writing Placement Examination (all freshmen from California high schools should have taken the examination during the month of May before they enrolled; others take an examination at UCLA early in their first term)

If students do not meet the requirement in one of the ways described above, Academic Senate regulations require them to enroll in a course determined by performance on the Analytical Writing Placement Examination as early as possible during their first year in residence. Each course must be taken for a letter grade and passed with a grade of C or better. Students receiving a final grade of C– or worse must repeat the course during their next term in residence.

The Entry-Level Writing requirement must be satisfied before enrolling in any course that satisfies the Writing I requirement (English Composition 3, 3D, 3DX, 3E, 3SL). For more information, see Entry-Level Writing.

English as a Second Language

First-year undergraduate students whose first language is not English and who have not otherwise satisfied the Entry-Level Writing requirement must take the Analytical Writing Placement Examination (AWPE) either by the time they enter UCLA or during their first term. Results of the AWPE are reviewed to determine whether the student must take designated English composition courses in order to satisfy the Entry-Level Writing requirement. Neither the Test of English as a Foreign Language (TOEFL) nor any other English proficiency test is accepted in lieu of the AWPE. Students may take the AWPE once only; unauthorized retakes result in an invalid score. Students must begin taking courses during their first term in residence at UCLA, and must complete each course in sequence with a grade of C or better. All units are applied toward graduation, but cannot be applied toward general education requirements.

Transfer students whose native language is not English and who have completed the Writing I and Writing II equivalent courses at their transfer institution may still be held for the UCLA English as a Second Language (ESL) requirement at the discretion of UCLA Undergraduate Admission. This includes, but is not limited to, all students who received a grade below B in either Writing I or Writing II equivalent courses at their community college. Transfer students held for the ESL requirement must take the English as a Second Language Placement Examination (ESLPE) either before or during their first term at UCLA to determine whether they must complete one or more English composition courses. Neither the Test of English as a Foreign Language (TOEFL) nor any other English proficiency test is accepted in lieu of the ESLPE. Students may take the ESLPE once only; unauthorized retakes result in an invalid score. Students must begin taking courses during their first term in residence at UCLA, and must complete each course in sequence with a grade of C or better. All units are applied toward graduation, but cannot be applied toward general education requirements.
American History and Institutions

The American History and Institutions requirement is based on the principle that a U.S. citizen or resident attending an American university should understand the history and public institutions of the U.S. under the federal and state constitutions. Candidates for a bachelor’s degree must satisfy the American History and Institutions requirement by one of the following methods:

- Complete a year-long course in American history or American government, or a one-year combination of both, in high school with an average grade of B or better
- Complete any one of the following UCLA courses with a grade of C or better, or a grade of Passed:
  
  - Asian American Studies M171D
  - Chicana/o and Central American Studies M159A, M159B, CM182, M183
  - Economics 183
  - Gender Studies M147B, M147D
  - Study of Religion M142C
- Equivalent courses completed in UCLA Extension or at another college institution, and accepted by the Board of Admissions, may be used to fulfill the requirement
- Present a satisfactory result of the requirement, by examination, as administered at another college or university within the state
- Score 500 or better on the SAT Subject Test in U.S. History
- Score 3, 4, or 5 on the College Board Advanced Placement Test in American History

Candidates for an instructional credential, but not for a degree, must take one of the following courses: History 143A, 143B, Political Science 145B, or 145C.

Students attending UCLA on an F-1 or J-1 visa may petition for exemption from this requirement by showing proof of temporary residence in the U.S.

College or School Requirements

The College and each school with undergraduate programs establish their own degree requirements. These generally include a unit requirement that defines the total number of units to be completed; scholarship requirement that defines a minimum grade-point average; residence requirement that defines the amount of study that must be undertaken in residence at the UCLA campus; and course requirements that may include general education courses, reading and composition courses, foreign language courses, and core courses for the field of study. See College and Schools for details on requirements set by the College and each of the schools.

Department Requirements

Each department or interdepartmental program sets its own degree requirements in addition to those established by the College or school. Department requirements generally include preparation for the major, which are lower-division courses designed to prepare students for advanced study; and the major, which are upper-division course requirements. Requirements for each department are listed in Curricula and Courses.

Degree Policies

Students are responsible for degree policies and regulations as described under Degrees in Policies and Regulations.

Undergraduate Research

Undergraduate Research Centers

The Undergraduate Research Centers (URC) assist students in the humanities, arts, social sciences, and behavioral sciences (URC Humanities, Arts, and Social Sciences, A334 Murphy Hall) and in science, engineering, and mathematics (URC Sciences, 2121 Life Sciences) by supporting scholarly, critical, and creative research. The centers offer mentoring and tutorials, manage the Student Research Program (SRP), and administer summer research programs, academic year research programs, research stipends, and scholarships. They also sponsor two student-run publications—the Undergraduate Science Journal and the Aleph humanities and social sciences journal; organize campuswide conferences and events; and coordinate the Student Research Forum that promotes a broader and deeper understanding of university research, and helps entry-level student researchers define their place in the larger research community. See undergraduate research for more information.

Student Research Program

Administered by each Undergraduate Research Center, the Student Research Program (SRP) offers undergraduates, especially lower division and first-year transfer students, opportunities to become actively involved in the UCLA research community. Working with faculty members on
research projects, SRP students gain valuable research training and experience, as well as preparation for advanced undergraduate work and graduate school. Students enroll in course 99 in any department and receive 1 unit of course credit for each 30 hours of research completed during the term. Science, engineering, and mathematics students should see sciences SRP. Humanities, arts, social sciences (HASS), and behavioral sciences students should see HASS SRP.

Undergraduate Research Fellows Program

The Undergraduate Research Fellows Program (URFP) is available on a competitive basis and by application for undergraduate students seeking entry-level research experience. Funded students typically participate in two terms of research (winter and spring quarters) through SRP. Science, engineering, and mathematics students should see sciences URFP. Humanities, arts, social sciences (HASS), and behavioral sciences students should see HASS URFP.

Undergraduate Research Scholars Program

The Undergraduate Research Scholars Program (URSP) offers scholarships from foundations, industry, and individual donors to continuing students (junior-level standing and higher). Applicants must have a strong commitment to research and must complete an honors thesis or a comprehensive independent studies project during the senior year. Applications are accepted during spring quarter for the following academic year. Science, engineering, and mathematics students should see sciences URSP. Humanities, arts, social sciences (HASS), and behavioral sciences students should see HASS URSP.

Academic Research Courses

All academic departments offer undergraduate research courses that allow students to obtain academic credit for their research experiences. Students enrolled in the courses are often upper-division students with Student Research Program experience. Department requirements for credit vary, but all departments require a research proposal to enroll in upper-division tutorial courses and a research report to receive credit when the research project is completed. Senior students working toward honors or highest honors in many majors must complete a two-term (or more) research project that culminates in an honors thesis. Arrangements must be made with a faculty mentor before students can register for the course. See the undergraduate adviser in the department of interest for more information.

Internships and Service Programs

Rewarding opportunities in the form of internships, community service work, industry and business positions, local, national, and international programs, and community-based teaching furnish students with insights into a range of professional fields and the chance to apply academic theories firsthand.

Career Center

Internship and International Opportunities

The UCLA Career Center, located in the Strathmore Building, offers support researching and finding internships, fellowships, and other experiential learning opportunities in the U.S. and abroad. Career educators are available to meet with students in person or virtually for one-on-one support regarding a variety of topics. These include career and major exploration, professional document review, interview preparation, as well as graduate and professional school consideration and application assistance. Appointments can be made on Handshake, the Career Center’s online job and internship platform. In addition, UCLA career peers advise students on resume and cover letter development and search techniques to identify relevant employers and programs through 15 minute drop-in sessions, available in person or virtually. Many helpful resources are featured online. Opportunities for current students and recent graduates include teaching or volunteering abroad, research or fieldwork, and internships in almost every occupation or industry.

UCDC Summer in Washington Internship Program

The UCDC Summer in Washington Internship Program offers housing to students from all majors who have at least sophomore standing and would like to spend the summer in Washington, DC gaining work experience through an internship. Opportunities are available with elected officials, government agencies, public interest groups, international organizations, media, and a wide range of public and private sector organizations. Through registering in the M195DC course, the program offers advice on searching and applying for internships. There is also the opportunity to apply for a scholarship with the Career Center to help cover some of the costs for the program.
Quarter in Washington, DC

The Quarter in Washington Program (UCDC) program offers an exciting opportunity to combine UC courses with field experience.

Students live at the UC Washington Center for up to 11 weeks, dividing their time between coursework and a part-time internship placement. Students choose from a variety of UCDC seminars with topics relevant to Washington, such as Congress or the Supreme Court. At least one optional additional course is usually offered each quarter. All courses take advantage of the unique resources of Washington for study and research.

UC Washington Center administrators help students find an internship. Placements have included C-SPAN, the Human Rights Campaign, the Department of Justice, Smithsonian museums, the Wilson Center, and various members of Congress.

Reserve Officers’ Training Corps

The University of California, in accordance with the National Defense Act of 1920 and with the concurrence of the Regents, offers courses and programs in military training. This voluntary training allows students to qualify for an officer’s commission in the Air Force, Army, Marine Corps, Navy, or Space Force while completing their college education. ROTC courses are offered by three departments within the College of Letters and Science: Aerospace Studies (Air Force and Space Force), Military Science (Army), and Naval Science (Navy and Marine Corps). Equipment, uniforms, and textbooks are supplied. The programs supply a monthly stipend to eligible students while on contract; and additional financial benefits, including tuition and fee scholarships, to qualified students. Individual programs are described in Curricula and Courses.

Teaching Opportunities

Exciting teaching programs prepare undergraduate students for careers in teaching or education and allow them to serve in classrooms in the Los Angeles area. Many teaching opportunities are offered in conjunction with the School of Education and Information Studies (SE&IS), which helps coordinate programs leading to various instructional credentials or to graduate study.

Education and Social Transformation Major

In the Education and Social Transformation major, students analyze current issues in education through a social justice lens and emerge as effective advocates for positive change. See the program description in Curricula and Courses.

Education Studies Minor

The Education Studies minor offers a sequence of courses designed to introduce students to key issues, research, and policies in education. Students participate in a range of seminar and practicum courses to fulfill program requirements. The program office is in 1002 Moore Hall. See the program description in Curricula and Courses.

General Chemistry Major

The General Chemistry major is for students who want to acquire considerable chemical background in preparation for careers in secondary school chemistry teaching. The major may be appropriate for some students who plan to enter other chemistry-related careers that involve teaching chemistry to nonchemists. See the program description in Curricula and Courses.

Mathematics Education Coursework

The Mathematics Department offers a portfolio of six courses that help students develop a professional understanding of K-12 mathematics content, investigate current issues and research in the teaching of mathematics, and gain clinical practice hours required for a California Single Subject Teaching Credential in Mathematics.

Math for LA

Math For LA is an effort of the Mathematics Department’s Curtis Center to improve the mathematics experiences of Los Angeles K-12 students. Its offerings include two credential pathways, a major, a minor, and a sequence of mathematics education courses (73XP, 74XP, 75XP, 105A, 105B, and 105C).

Credential Pathways

Two pathways are offered jointly with the School of Education and Information Studies. Each leads to a California Single Subject Teaching Credential in Mathematics. In the Integrated Pathway, students complete courses in education and mathematics during the junior and senior years to earn a California teaching credential upon graduation. In the Joint Math Education Pathway, students complete courses in education and mathematics during the senior year. They complete additional education courses the following summer to earn a California teaching credential. Over the following academic year, they complete graduate courses to earn a master’s degree in Education.
For more information, contact Julian Rojas, or visit The Curtis Center in 5602 Mathematical Sciences Building between 8 a.m. and 4 p.m. Mondays through Wednesdays.

Mathematics for Teaching Major
The Mathematics for Teaching major is primarily designed for students preparing for careers in instruction, curriculum development, and assessment of high school mathematics. It is similar to the Mathematics major but has courses devoted to training in high school mathematics instruction. The major offers exceptional training in mathematics as well as in the pedagogy and content needed to teach high school mathematics, as recommended by the Conference Board of Mathematical Sciences. Students who complete the major also satisfy the California Subject Matter Competence requirement for a Single Subject Teaching Credential in Mathematics.

Mathematics for Teaching Minor
The Mathematics for Teaching minor is designed for students who are interested in K-12 mathematics education. The minor provides recognition for completion of mathematics education coursework that is essential for working in secondary school instruction, curriculum development, or assessment.

Science Education Minor
The Science Education minor offers preparation for careers where teaching is an important component, including middle and high school, community college, university, or other science-related outreach careers. Students who wish to become middle or high school science teachers who or plan to teach as graduate students in their disciplines are the primary focus. The minor supplies the broad general science background included in California state subject matter credential examinations, education coursework, field experiences in the development, management, and teaching of science laboratory instruction in grades 7 through 12, and UCLA-based teaching practicums in lower-division science laboratory. See the program description in Curricula and Courses.

Science Teacher Education Program
The Science Teacher Education Program (STEP), cosponsored by the College of Letters and Science and the School of Education and Information Studies, allows science majors to observe and participate in classrooms in schools in the Los Angeles area and to begin teacher education courses in their senior year. Students earn a preliminary teaching credential the summer after the bachelor’s degree is received and a master’s degree in education the following academic year. For details, contact Arlene Russell.

Teacher Education Program
The Teacher Education Program allows students to obtain both a Master of Education degree and a preliminary multiple or single subject credential in a full-time, two-year program that supplies clinical classroom experience and a full-year urban teaching residency.

UCLA Cal Teach
The UCLA Cal Teach program encourages and supports undergraduate students who are interested in exploring K-12 mathematics and science teaching as a potential career. Courses include 20 hours of observation, participation, and assisting in K-12 schools, and seminars to support those field experiences.

Visual and Performing Arts Education Minor
The Visual and Performing Arts Education (VAPAE) minor in the School of the Arts and Architecture is an interdisciplinary and interdepartmental series of courses designed to introduce students to key issues and methodologies in the field of arts education for multiple publics and to a broad range of careers in the arts, including K-12 teaching, museum education, community arts education, creative arts therapies, and arts advocacy.

The arts education teaching sequence, an important component of the minor, consists of three courses in which selected undergraduate students explore core issues in arts education, creativity, and social justice. Students are assigned to K-12 classrooms in the Los Angeles area where they first observe and then implement an eight-week sequential arts-based lesson plan under the supervision of the guiding teacher.

Students are able to focus their studies on the following areas: strategies and methods in teaching in the arts, arts in the community, teaching the arts in non-traditional settings and with special populations, social-emotional learning in the arts, and interdisciplinary arts training.

Upon completion of the minor, students are eligible to be hired to teach in VAPAE Afterschool and Arts Enrichment Programs that take place at school and community sites in Los Angeles. The program office is in 2101 Broad Art Center. See the program description in Curricula and Courses.
Center for Community Engagement
The Center for Community Engagement creates opportunities for UCLA faculty, students, and staff to collaborate with community partners to build an equitable and just society through community-engaged research, teaching, and community programs. The center supports faculty, students, and community partners to create successful community-engaged courses and research, credit-bearing internships, and AmeriCorps programs. The center is home to the undergraduate minor in Community Engagement and Social Change, and such signature student scholarship programs as Astin Community Scholars and Changemaker Scholars. The office is in A265 Murphy Hall.

University of California Center Sacramento
The University of California Center Sacramento (UCCS) is operated by UC Davis. UCCS advances the university’s mission of teaching, research, and public service with an integrated program to train future state leaders, to address challenging public-policy issues confronted by the nation and state, and to carry out the university’s mandate to assist state government. UCCS places students in intensive one-term policy-related internships throughout the state Capitol building and in the Sacramento policy community. Participating students take a full term’s worth of credit-bearing courses in addition to their internships. UCCS is open to all majors. For full eligibility criteria and application information, see the UCCS admissions web page.

Lower-Division Seminar Programs
Collegium of University Teaching Fellows
The Collegium of University Teaching Fellows (CUTF) offers outstanding graduate students the opportunity to develop and teach lower-division seminars in their area of expertise. These unique courses cover all areas, from the humanities to the life, physical, and social sciences. Undergraduate students take courses that are at the cutting edge of a discipline and benefit from a small-seminar environment. General education credit is granted for most seminars, which are offered in winter and spring quarters only. Enrollment is limited.

Fiat Lux Seminar Program
The Fiat Lux Seminar Program is a cornerstone of the innovative undergraduate curriculum at UCLA. These seminars provide students and faculty with small-group settings to engage in meaningful discussions on a range of topics. Students receive 1 unit of academic credit (Passed/Not Passed grading), and faculty members from across campus have the opportunity to share with undergraduates their areas of intellectual passion and expertise. True to the University of California’s motto Fiat Lux—Let There be Light, these seminars illuminate the many pathways of discovery. For details about seminar offerings each term, see the Schedule of Classes.

Honors Collegium
Honors Collegium, a series of interdisciplinary honors courses, offers a unique educational experience where students learn how to think critically and creatively and how to communicate effectively. Courses emphasize the breadth of an interdisciplinary approach to learning and focus on small classes and individual attention.

Undergraduate Student Initiated Education
Undergraduate Student Initiated Education (USIE) is an innovative program designed to provide a select group of juniors and seniors with the opportunity to develop and facilitate, under faculty supervision, a lower-division seminar for their peers.

The application and selection period is during spring quarter. During the fall and winter quarters (of the next academic year), selected student facilitators work closely with their faculty mentors in two 1-unit independent study courses (one each quarter) focused on the content-area of their proposed seminar. In addition, student facilitators enroll in two 1-unit pedagogy seminars (one each quarter) in which various facilitation strategies and techniques are discussed in preparation for leading their own spring seminar.

Through the independent study courses and pedagogy seminars, student facilitators develop a formal syllabus for their spring seminars for review and approval by the USIE Faculty-Student Advisory Committee and the Faculty Executive Committee (FEC).
Academic Advising and Support

Academic advising and support is available from student, staff, and faculty advisers; and through student services, tutorials, and other special programs.

New Student Academic Programs

UCLA New Student Academic Programs is designed to serve the educational planning, academic advising, matriculation, and adjustment needs of all entering UCLA undergraduates. The goal is to ensure that all new UCLA students and their families begin their journeys at UCLA with a comprehensive, positive introduction to Bruin life. The first step begins during New Student Sessions, where new student advisors work in small groups to provide an introduction to UCLA and its world-renowned academic programs, extensive services, and rich traditions. Individual counseling sessions help students adjust to life at UCLA and fulfill the advising requirements of the College or school. Sessions for family members are also offered.

New Student Sessions are three-day, two-night, residence hall live-in programs for first-year students; and one-day programs for transfer students. There is a fee for participation.

New Student Academic Programs also offers the College Summer Institute (CSI), a seven-week residential program in which new first-year students get a head start on graduation requirements through UCLA summer courses.

During the academic year, additional programs offer academic advising and support. For more information, contact the New Student Academic Programs office in 201 Covel Commons or through Message Center.

College and School Advisers

The College and each school and academic department at UCLA have a staff of academic counselors and advisers to help students plan their academic program, monitor their progress toward the bachelor’s degree, provide information about degree requirements, and assist with academic problems.

Students in the College are served by one of four counseling units: Academic Advancement Program, College Academic Counseling, Honors Programs, or Student Athletics. Undergraduates in the seven professional schools are served by their respective student services offices. See the Center for Academic Advising in the College’s undergraduate advising units web page for a list of College and school advising office addresses. To contact a departmental adviser, see the individual department in Curricula and Courses; a list of department websites is available online.

Academic Advancement Program

Academic Advancement Program (AAP) is the largest university-based student diversity program in the U.S. Its programs for first-generation, low-income, and historically underrepresented students help ensure their academic success, retention, and graduation; and support their pursuit of academic excellence. AAP aims to increase member entrance to graduate and professional schools; develop academic, political, scientific, economic, and community leadership; and promote UCLA access and academic success for diverse high school and community college students across California.

Students are eligible for AAP if their academic profiles and personal backgrounds may impact their university experience and their retention and graduation from UCLA. Students are also eligible if they are part of any federally funded program that requires counseling, tutoring, or mentoring. For more information, contact AAP New Student Programs, 1230 Campbell Hall.

Center for Community College Partnerships

The Center for Community College Partnerships (CCCP) develops academic partnerships between California community colleges—particularly those with large underrepresented populations—and UCLA, to improve student competitiveness for UC admissions and increase the transfer admission pool diversity. Its Scholars Program offers mentoring and summer programs to help prepare students for transfer to a four-year school.

Graduate Mentoring Programs

Graduate Mentoring programs (GM) offers AAP undergraduate students one-on-one mentoring in preparation for graduate studies and professional school admission. It also offers workshops on graduate school topics. Appointments are with and workshops are led by current graduate and professional school student mentors.

Arts Initiative Program

The program focuses on integration of the arts into different scholarly fields. AAP students engage in interdisciplinary research involving fine, commercial, and performing arts with an emphasis on connections to social justice issues.
Carter-Huggins Community Development and Social Justice Program
The Carter-Huggins Community Development and Social Justice Program (CDSJ) assists AAP students interested in pursuing graduate study in public health, public policy, social welfare, and urban planning. Students conduct applied research projects while interning at community-based social justice and equity organizations.

Educators for Tomorrow
The Educators for Tomorrow (EFT) program assists a new generation of socially conscious educators. AAP students participate in community service programs, internships, and research related to all facets in the field of education.

High Achievement in Math and Science Program
The High Achievement in Math and Science Program (HighAIMS) supports AAP students in their chosen health science professions. It offers career and academic guidance, and includes graduate school preparation, workshops, and information sessions.

McNair Research Scholars Program
The two-year program prepares AAP students for PhD programs. Students conduct an independent research project and participate in a research-intensive summer program.

Peer Learning
AAP Peer Learning offers numerous academic support sessions with peer learning facilitators (PLFs). Mainly upper-division undergraduates, PLFs are academic role models who have successfully completed courses in the mathematics, sciences, humanities, and social sciences disciplines. PLFs facilitate individual and small-group sessions designed to help AAP students recognize their own intellectual authority by encouraging them to engage with course materials actively, critically, and independently.

Research, Assessment, and Evaluation
The Research, Assessment and Evaluation (RAE) unit maintains data on the Academic Advancement Program and AAP students while designing and implementing assessments and evaluations that examine their progress and outcomes. AAP RAE also provides AAP students with the opportunity to engage independently and collaboratively with institutional research projects that can inform real world practices and decision-making within the program from data cleaning, coding, and visualization to analyses and report writing.

Research Rookies Program
The program gives second-year AAP students the opportunity to develop entry-level research projects in humanities and social sciences. Over two academic terms, students gain valuable knowledge and experience regarding research.

Scholarships
Eligible AAP students may receive merit and need-based scholarships through established financial aid programs. AAP also awards scholarships; see scholarships for help with the application process.

Summer Graduate Preparation Program
Over six weeks during summer session, students prepare to apply to graduate or professional school. Students draft their application materials with a graduate student mentor. The program is not unit or credit bearing.

Freshman/Transfer Summer Program
This seven-week residential summer program prepares incoming AAP freshman and transfer students for the academic rigors of UCLA. Students build an academic support network that supplies interaction and broadens life experiences. Students enroll in three UCLA courses that fulfill graduation requirements, and get support in small groups or individual sessions from teaching assistants and peer learning facilitators.

UndocuBruins Research Program
The program prepares undocumented AAP students for graduate school. Students conduct independent research projects related to issues regarding immigration and immigration policy. Special emphasis is given to resources that best serve undocumented students and their communities.

Vice Provost Initiative for Precollege Scholars
The initiative partnership between UCLA and the Los Angeles and Pasadena school districts prepares historically underrepresented students in 11 high schools to become competitively eligible for admission to UCLA and other flagship universities. The Vice Provost Initiative for Precollege Scholars (VIPS) offers peer mentoring, summer programs, Saturday academies, and research opportunities to scholars and their families.

Academic Excellence
Eligible students receive the following honors and awards in recognition of academic achievement:
Dean’s Honors List
The School of the Arts and Architecture; School of Education and Information Studies; Henry Samueli School of Engineering and Applied Science; Herb Alpert School of Music; Jonathan and Karin Fielding School of Public Health; Meyer and Renee Luskin School of Public Affairs; School of Nursing; School of Theater, Film, and Television; and the deans of the five divisions in the College of Letters and Science award Dean’s Honors to deserving students each term. Honors are based on the grade-point average attained within a specified number of units. Contact the College or school for more information.

Latin Honors
The College and schools award Latin honors according to overall grade-point average at graduation. To be eligible students must have completed at least 90 (98 for the School of Nursing) UC units for a letter grade. The levels of honors are summa cum laude, magna cum laude, and cum laude. Specific requirements vary for each level and are detailed in College and Schools. See the Registrar’s honors web page for the most current calculations of Latin honors.

Departmental Honors
In the College of Letters and Science, departmental honors and highest honors are awarded at graduation on the recommendation of a student’s major department, based on successful completion of a departmental honors program. Students should contact their department for its requirements.

Departmental Scholar Program
Departments in the College of Letters and Science and each school—except the Herb Alpert School of Music; School of Nursing; and School of Theater, Film, and Television—may nominate exceptionally promising juniors and seniors as Departmental Scholars to pursue bachelor’s and master’s degree programs simultaneously. Nominations are submitted to the College or school dean for recommendation to the dean of the Division of Graduate Education. Students interested in becoming Departmental Scholars should contact their departments well in advance of application dates for graduate admission; see the deadlines web page.

Honor Societies
Alpha Lambda Delta and Phi Eta Sigma
Alpha Lambda Delta and Phi Eta Sigma are national honor societies that recognize high-achieving first-year students. Membership is based solely on academic achievement and is by invitation only. To be eligible, students must have a 3.5 grade-point average with 12 graded UC units in the first quarter of their first year at UCLA, or a cumulative 3.5 GPA at the end of the first year. For more information, send e-mail to the Office of the Dean of Students.

Golden Key
Golden Key is an international interdisciplinary academic honors organization dedicated to excellence. Students qualify on the basis of objective academic criteria. To be eligible, students must have a UC grade-point average of 3.6 after their first quarter at UCLA; and have sophomore, junior, or senior standing at the time of invitation. The society recognizes and encourages scholastic achievement and excellence in all undergraduate fields of study. It unites with collegiate faculties, staff, and administrators in developing and maintaining high standards of education, and promotes scholastic achievement and altruistic conduct through voluntary service. Invitations are issued annually. For more information, send e-mail to the Office of the Dean of Students.

Mortar Board
Mortar Board is a national honor society for college seniors that recognizes outstanding and continual scholarship, leadership, and service to the campus community. To be considered for membership, candidates must have completed 90 units and must have attained at least a B average or be in the highest 35 percent scholastically of the junior class, whichever is higher. Applications are available online early in spring quarter and are due by mid-April. Approximately 35 members are selected each spring by the outgoing chapter. For more information, contact the Student Organizations, Leadership, and Engagement (SOLE) office, 105 Kerckhoff Hall.

Phi Beta Kappa
Phi Beta Kappa is a national academic honors society in the humanities, liberal arts, and sciences, founded at the College of William and Mary in 1776. Membership is conferred for high scholastic standing and is determined by vote of the UCLA Eta Chapter Committee on Members in Course according to scholarship records. Students do not apply for Phi Beta Kappa membership. At UCLA, only graduating seniors and selected juniors are elected to membership. The annual election is held in late April, with the initiation ceremony in June. At present, the minimum grade-point average considered is 3.85 (for 140 or more UC units); the minimum number of UC units consid-
ered is 80 (students at the 80-unit level must have at least a 3.90 GPA).

A reasonable distribution of courses in the humanities and sciences is also required, as is a foreign language course at the intermediate level (one level above the UCLA language requirement for graduation) or above. A Passed grade is computed approximately as a B, depending on number of courses taken and graded units. Elected students are notified through MyUCLA.

For more information, see the website, or contact Phi Beta Kappa in the UCLA Center for Scholarships and Scholar Enrichment, 233 Covel Commons.

**Tau Sigma**

**Tau Sigma** is a national honor society that recognizes the high academic achievement of first-year transfer students. To become a member, UCLA students must have a 3.5 grade-point average or better during their first term at UCLA after transferring either from a community college or a four-year institution (summer quarter not typically included). Invitations are issued after each regular academic term.

Tau Sigma honors the large UCLA transfer community for its academic achievement. The society also holds leadership, networking, and social activities. For more information, send e-mail to Tau Sigma or contact the Office of the Dean of Students.
Graduate Study

Graduate students at UCLA benefit from—and contribute to—the resources of one of the country’s outstanding research universities. A distinguished faculty committed to research and teaching; an extensive library system ranked among the best in the nation; and excellent research centers, institutes, and laboratories in virtually every major discipline all offer extraordinary opportunities for graduate endeavor.

Graduate training at UCLA takes place in classrooms, laboratories, and libraries; in specialized seminars; through independent research; and in teaching experiences. Graduate education is enriched by several hundred postdoctoral and visiting scholars from other universities who engage in research and, in some instances, teaching at UCLA every year. This unique research environment promotes the quality of original work and study that is the hallmark of graduate education.

The degree of Master of Arts or Master of Science, or one of several professional degrees such as Master of Business Administration, is intended to develop mastery of a field and prepare students for the practice of a profession. The doctorate degree (PhD, EdD, and so forth) is designed to prepare students for creative activity and original research, often in association with college or university teaching.

Shared Governance

Graduate degree programs, courses, and requirements are governed and administered by the Graduate Council, Division of Graduate Education, College and school faculty executive committees, and department advisers.

Graduate Council

The Graduate Council is a standing committee of the UCLA Academic Senate. The council is responsible for the establishment of UCLA policy and standards for master, doctorate, and graduate professional degree programs (other than those in law, medicine, and dentistry) and postdoctoral scholars; the approval, review, and monitoring of graduate degree programs; and recommendations about fellowships and assistantships. It also recommends to the systemwide Coordinating Committee on Graduate Affairs programs that lead to new degrees; and delegates authority to Division of Graduate Education, and College and school faculty executive committees.

Division of Graduate Education

The UCLA Division of Graduate Education administers policy established by the Academic Senate and its Graduate Council. It oversees graduate recruitment and admissions (including recruitment of a diverse student body), fellowships, teaching assistantships, graduate student researcher appointments, and other graduate student support; and maintenance of high quality standards in all graduate programs.

Graduate Adviser

At matriculation, a graduate student usually selects or is assigned a graduate adviser who assists in program planning and completion of degree requirements. Sometimes this role is temporarily assumed by a faculty adviser assigned to the program as a whole. When the student’s master or doctoral committee is established, the chair of the committee assumes the adviser role.

Graduate Admission

Diversity, Inclusion, and Admissions
1237 Murphy Hall
310-206-3411

Meeting the minimum requirements does not ensure graduate admission, which is limited by the number of places and the amount of student support available in UCLA graduate programs. Applicants are evaluated on scholastic qualifications and formal preparation for the graduate field of study. Departments may have other requirements for admission, which are listed by department and by degree and can be accessed from the Graduate Education website.

Application for Admission

Prospective students apply online. A nonrefundable application fee is required when the application is submitted.

When to Apply

Most departments and schools have deadlines in November and early December for the following fall quarter. Consult the admissions section of the Graduate Education website for specific deadlines for each major. A few departments accept applications for winter and spring quarters.

At the discretion of the department, applications may be considered if submitted after a stated program deadline, provided the enrollment limits have not been exceeded.
Entrance Requirements

U.S. applicants to graduate standing must hold a bachelor’s degree from a regionally accredited institution comparable in standard and content to that awarded at the University of California. Degrees granted on the basis, for example, of nonacademic prior learning, test scores, and other than organized supervised coursework in academic subjects are not considered comparable. A scholastic average of 3.0 (B) on a 4.0 scale, or better (or its equivalent if the letter grade system is not used), is required in undergraduate coursework and in any postbaccalaureate study.

See also requirements for international applicants in this chapter.

Supporting Materials

Supporting materials to be submitted, including official transcripts of record and nonrefundable application fee, are specified on the graduate admissions website. Submitted materials become the property of UCLA and are not returnable.

Graduate Record Examination

Applicants for admission to a department or school that requires Graduate Record Examination (GRE) scores should arrange to take the examination no later than December, so scores arrive on time. GRE scores should be sent directly to the prospective department and not to Division of Graduate Education.

GRE registration and information about testing formats are available from Educational Testing Service (ETS). Information on GRE fee waivers is also available on the ETS site.

Letters of Recommendation

Most graduate professional schools, departments, and interdepartmental programs at UCLA require applicants to submit three letters of recommendation. Letters typically augment, validate, or explain information provided in the application; and should be written by persons qualified to analyze student’s abilities and academic promise.

Admission to Bioscience Programs

Applicants to PhD programs in fields related to life and biomedical sciences apply for admission to one of 11 individual research areas. Graduate Programs in Bioscience is a consortium of PhD programs organized into specialized research training groups, called home areas, that serve as the admissions and training units associated with the degree-granting programs. Through this structure, students can specialize in their chosen area while maintaining the flexibility to move between home areas to best pursue their research interests.

Degree-Granting Programs and Home Areas

Consortium PhD programs offer the research home areas listed.

Bioinformatics
  Bioinformatics
  Medical Informatics

Human Genetics
  Genetics and Genomics

Molecular Biology
  Biochemistry, Biophysics, and Structural Biology
  Cell and Developmental Biology
  Gene Regulation, Epigenomics, and Transcriptomics
  Immunity, Microbes, and Molecular Pathogenesis

Molecular, Cellular, and Integrative Physiology

Molecular and Medical Pharmacology
  Molecular Pharmacology

Neuroscience

Physics and Biology in Medicine

Additional opportunities for doctoral study include Biochemistry, and Molecular and Structural Biology in the College of Letters and Science; Oral Biology in the School of Dentistry; and Molecular Toxicology in the Fielding School of Public Health.

International Applicants

International applicants who have completed their postsecondary education outside the U.S. are expected to hold a degree, with above average scholarship, from a university or university-level institution. If their examinations have been graded Excellent, Very Good, Good, and Pass, applicants must have at least a Very Good general rating to qualify for admission.
Applicants who hold a three-year Bologna degree may be considered for admission on the recommendation of the department, program, or professional school. Applicants who hold a three-year ordinary or pass degree—or who hold a professional diploma in accounting, business, librarianship, social work, physical education, health education, and so forth—or a four-year degree, diploma, or higher certificate from a technical, vocational, or postsecondary specialized school should not apply for graduate admission. Persons with memberships in professional associations such as an Institute of Chartered Accountants, Institute of Chartered Secretaries and Administrators, and so forth, do not qualify for graduate admission unless they also hold recognized university-level degrees or titles.

Applicants should submit transcripts of record, in the original language and with an English translation certified by the institution, for all college and university work. Applicants who are officially offered admission must submit official, final academic records before the term of admission begins. The original of an academic record that cannot be replaced must not be sent; a properly certified copy should be sent instead. Specific information for applicants from different educational systems is available from required academic records.

### English Language Proficiency

Most international applicants to UCLA graduate school are required to submit scores from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS) examination. International students and U.S. citizens who hold a bachelor’s or higher degree from a university located in the U.S. or in another country (e.g., Australia, Barbados, Canada, Ireland, Jamaica, New Zealand, United Kingdom) in which English is both the primary spoken language of daily life and the medium of instruction, or who have completed at least two years of full-time study at such an institution, are exempt from this requirement.

Applicants who are required to submit TOEFL or IELTS scores (i.e., do not belong to the exempted categories listed) may also be required to take the UCLA English as a Second Language Placement Examination (ESLPE) to determine potential coursework in academic writing. Incoming students who score at least 100 on the TOEFL iBT (Internet-based test), or at least a 7.5 overall band score on the IELTS examination, are exempt from the ESLPE requirement.

Students who are required to take the ESLPE must do so before or during their first term at UCLA. Students may take the ESLPE once only. Unauthorized retakes of the examination result in an invalid examination score. Depending on ESLPE results, students may be required to complete one or more courses in the English as a Second Language (ESL) credit-bearing series, beginning in their first term in residence at UCLA. The courses must be passed with a grade of C or better if taken for a letter grade, or the equivalent of B or better if taken on an S/U basis. Taking required ESL courses may prolong students’ time to degree. If students do not achieve a minimum score on the ESLPE, their admission is deferred until they have acquired the necessary proficiency in English.

### Teaching Assistantships

Graduate students whose first language is not English must pass a campus-administered Test of Oral Proficiency (TOP) to be eligible for a UCLA teaching assistantship. Students are exempt from this test if they have already earned an undergraduate degree from an institution at which English was the sole language of instruction. Students who do not plan to work as teaching assistants do not need to take the TOP.

For students who receive a clear pass (7.1 or above) on the TOP, no coursework is required. Students who receive a marginal pass (between 6.4 and 7.0) are required to take an approved oral skills course during their first quarter as teaching assistants. Students scoring 6.3 or below are not eligible to become teaching assistants, and are encouraged to complete recommended ESL coursework before taking the TOP examination again.

No other oral examination is accepted. Entering graduate students who plan to work as teaching assistants in their first quarter at UCLA must arrive early enough to take the TOP before instruction begins. The examination schedule and other information about TOP are available on the Center for the Advancement of Teaching (CAT) TOP web page.

### Admission Policies

#### Duplicate Degrees

The University of California, in general, discourages the duplication of advanced degrees. At the same time, it recognizes that a professional degree does not duplicate an academic one, and that pressing needs may exist for degrees in different areas (see Graduate Articulated and Concurrent Degrees in Majors and Degrees). Students who apply for a second academic degree at the same level or lower than the one they already hold are required to show compelling cause to the department. The Division of Graduate Education is particularly concerned that a careful review and special justification be made by the graduate program in all cases where an applicant or continuing student is recommended for admission to a second doctoral program. This concern also extends to a student support recommendation for pursuit of a second doctorate degree.
All degree requirements and UCLA regulations apply just as they do for a first degree. Courses and other degree requirements already applied to the earlier degree may not be applied to the second.

No Degree Objective

UCLA has no special limited or unclassified categories of graduate admission. Under some circumstances, however, applicants may be admitted for coursework without a degree objective. For example, teachers with a master’s degree who wish some refresher study, or international students on a one-year stay in the U.S., may wish to apply in this manner. Requirements for admission are the same as those for degree programs, and the academic program must agree to accept the student for no degree objective (NDO) status. All admissions to NDO status must be specially approved by the dean of the Division of Graduate Education, as must any University financial assistance for students having NDO status.

Readmission

Students who have registered at any time as a graduate student at UCLA and return after an absence (except a formal leave of absence) must file an Application for Graduate Admissions. See Graduate Student Readmission in Policies and Regulations for readmission procedures.

Summer Session Classes

Enrollment in summer session classes does not constitute admission to graduate standing, nor does it substitute for the required continuous registration in fall, winter, and spring quarters. Students who wish to apply summer sessions classes to their subsequent graduate program should consult in advance with their departmental adviser. This is also true if they have been readmitted to graduate standing and wish to resume graduate study in summer sessions. Information and applications are available from Summer Sessions, 1331 Murphy Hall.

If students take summer session classes following the award of the bachelor’s degree, those grades do not appear on the undergraduate transcript (they are included on a separate transcript). After students are accepted by Division of Graduate Education, summer session grades are included on the graduate transcript and computed in the grade-point average.

Registration

Registrar’s Office
1113 Murphy Hall

Registration consists of paying fees and enrolling in classes. Students enroll in UCLA, and in the College or one of the professional schools.

1. Registration fees and other UCLA charges are due the 20th of each month. BruinBill accounts can be viewed through MyUCLA.

2. Enrollment in classes is completed through MyUCLA. Students must complete both processes by the established deadlines to be officially registered for the term.

Graduate students must be either registered and enrolled or on an official leave of absence every term until their degrees are awarded. As an exception, certain graduate students may be eligible to pay the filing fee. Failure to register, have filing fee status, or be on an official leave of absence for any academic term (fall, winter, or spring quarter) constitutes withdrawal from UCLA.

Fees and Payment

Details on fee payment, enrollment procedures, and deadlines are published on the Registrar’s website registration fee payment section.

Electronic Billing

BruinBill accounts are administered electronically (e-bill) through MyUCLA. Financial activity is displayed for the current term, as well as account activity for the last 24 months. Students can pay their BruinBill account electronically using an electronic check with no fee; or American Express, Discover, MasterCard, and VISA credit cards with a fee.

Annual Graduate Fees

Although the exact cost of attending UCLA varies by program, there are some fees that all UCLA students must pay. Each entering and readmitted student is required to submit a Statement of Legal Residence and Statement of Intent to Register to the Division of Graduate Education Diversity, Inclusion, and Admissions office. A student classified as a nonresident of California must pay nonresident supplemental tuition (NRST) in addition to other registration fees. Legal residents of California are not required to pay NRST. Annual graduate fees and NRST are published online. For more information, see Residence for Tuition Purposes in Policies and Regulations.
Professional Degree Program Fees

Students admitted to professional degree programs must also pay professional degree supplemental tuition (PDST), which varies by program. PDST amounts are published on the Registrar’s annual and term fees web page.

Self-Supporting Degree Program Fees

Students in self-supporting degree programs pay an annual fee, which may be assessed per term, course, or unit. For details, contact the individual program. Self-supporting program fees are published on the Registrar’s self-supporting fees web page.

Miscellaneous Fees

Miscellaneous fees include charges for late registration fees payment. Late fees also apply if students file their study list late or do not pay off BruinBill balances on time. Fees are charged if any check is returned by a bank for any reason. Charges are assessed for most petitions and other special requests. There is also a fee for advancement to doctoral candidacy. Study list, document and service, transcript-related, and degree and diploma fees are published on the Registrar’s website fees and residence section.

Student Health Insurance Fee

All graduate students are automatically assessed for and enrolled in the University of California Student Health Insurance Plan (UCSHIP) as a condition of registration at UCLA. Continued enrollment in a qualified health insurance plan is mandatory during all registered terms. UCHSIP covers medical, vision, dental, and behavioral health services.

The UCHSIP fee is billed each term along with other UCLA fees. UCHSIP fulfills all requirements mandated for a qualified health insurance plan as defined by the University of California. The Ashe Student Health and Wellness Center is the primary health care provider for UCHSIP, and where all nonemergency medical care is initiated.

Nonregistered students (those who withdraw, or are on approved leave or planned academic leave) may have access to UCHSIP services under certain conditions. Contact the Ashe Center to learn more.

UCSHIP Waiver

Students may waive UCHSIP if they maintain active enrollment in a qualified health insurance plan that meets all established requirements, apply for a waiver within established deadlines each term, and correctly complete the online waiver form. Students are responsible for providing complete and accurate information. Third-party individuals may not waive UCHSIP for a student. Waivers must be submitted before the term fees payment deadline. Deadlines are strictly enforced, and no refunds are issued after the deadline. For more information, see the Ashe insurance web page.

Fees Notice

All fees are subject to change without notice by the Regents. Current academic year fees and update information are available on the Registrar’s annual and term fees web page.

Annual Budget Estimates

Budgets are designed to serve as a guide and are subject to change without notice. Budget information is available from Financial Aid and Scholarships. Budgets for the schools of medicine, dentistry, and nursing are higher due to specialized supplies. More information can be found on the websites of the schools of dentistry, law, medicine, and nursing for their respective students.

Fee Refunds

Students who formally withdraw from UCLA or take an approved leave of absence may receive partial refunds of fees. For more information, see Withdrawal in Policies and Regulations. Consult the Registrar’s refunds web page for policy details and specific refund deadlines for each term.

Fee Deferrals

Academic apprentice personnel are eligible to receive a fee deferral for registration fees assessed during the term in which they serve as an academic apprentice. For more information, students should contact their hiring department. Students are responsible for paying fees by the deferred payment deadline, which is two months after the standard term due date. Whether students attend UCLA, take a leave of absence, or withdraw from the University, they are responsible for the fees; but may be eligible to receive a partial fee refund according to the refund schedule. Fees not paid by the deadline are subject to late fees.

Reduced Fee Programs

Under limited circumstances and with prior approval, certain students may qualify for some reduced fees.

In Absentia Registration

Graduate students who conduct research or engage in approved degree-program-related activities outside California may be eligible for in absentia registration, and reduction of tuition and the student services fee to 15 percent of the full amounts. See In Absentia Registration in Policies and Regulations for more information.
Reduced Units
UCLA recognizes the need for part-time study in special circumstances. When recommended by the department and properly approved by the Division of Graduate Education dean for enrollment in 6 or fewer units, students may be eligible for a one-half reduction in tuition; and a one half-reduction in nonresident supplemental tuition and/or professional degree supplemental tuition, when applicable. Students in self-supporting degree programs are not eligible for fee reductions. Doctoral students who have passed the qualifying examination or advanced to candidacy are not eligible for part-time status. For full part-time status eligibility criteria, see part-time enrollment on the Graduate Education website.

Students must submit a Fee Reduction Request to the Division of Graduate Education by Friday of the second week of the term. The request must include a memo from the student’s faculty advisor that contains sufficient detail to allow the graduate dean to independently evaluate the need for, and feasibility of, part-time student status.

Part-time status may be requested for a maximum of three quarters. Extensions beyond this limit, for a total of up to six quarters, may be approved under exceptional circumstances.

Assessment of reduced fees is based on total enrolled units as of Friday of the third week of the term.

Except for these reductions for eligible and approved part-time students, there is no reduction in tuition; UCSHIP; student services or UCGPC fees; Ackerman Student Union; Wooden Center; student programs, activities, and resources complex (SPARC); or Graduate Students Association fees; or other campus-based fees.

Filing Fee
Graduate students may be eligible to pay the filing fee (half the full amount of the student services fee) in lieu of the full student services fee for the term in which they expect to complete final degree requirements and receive their degree. Students are not eligible to pay the filing fee unless registered for the immediately preceding term. For more information on other eligibility requirements, see filing fee.

Students who pay the filing fee are not eligible for UCLA services, and are not considered to have the same status as registered students.

Reduced Nonresident Supplemental Tuition
The annual nonresident supplemental tuition (NRST) for graduate doctoral students who have advanced to candidacy is reduced by 100 percent, effective the term after the student is advanced. Doctoral students may receive this reduced NRST rate for a maximum of three years. After three years, the full nonresident rate is assessed.

University Employees
Full-time UCLA employees may apply for a reduction of tuition and the student services fee at their campus human resources office. Students who use the part-time fee reduction may not also use the UCLA employee fee reduction.

Class Enrollment
Students enroll in classes through MyUCLA during assigned times—called enrollment appointments—when they are allowed to enroll. Graduate students may enroll in a maximum of 22 units in any one term, unless their graduate program has a lower unit maximum. Students who wish to exceed the maximum must request an increase from their department. The Class Planner feature allows students to create class plans prior to enrollment, share plans with counselors, and quickly add classes during their enrollment appointment. Students use the Find a Class and Enroll feature to search the Schedule of Classes and add available classes to their class plan or study list.

MyUCLA is also used to view enrollment appointments; drop classes; change grade type and number of units; exchange classes; and view the study list, which includes information on class meeting times, final examinations, classmates, grades, textbooks, and class websites. For more information, see Registrar’s study list and enrollment policies web pages.

For classes that require written approval or specialized processing, students may inquire about processing steps through MyUCLA Message Center.

Study List
A study list is the record of courses in which a student is enrolled for the term. At 11:59 p.m. on Friday of the second week of instruction, the study list of enrolled courses becomes official and all wait lists are eliminated. Students should verify their study list through MyUCLA after each enrollment transaction. Students are responsible for all courses and the grading basis as listed on MyUCLA, and cannot receive credit for courses not listed.

After Friday of the second week, most changes to the official study list can be made with a fee through MyUCLA. Some changes require an Enrollment Petition along with approval signatures.

See the study list web page for deadlines and complete instructions.

Errors or omissions should be corrected before the College or school deadlines for changes by petition. Unapproved
withdrawal from or neglect of a course entered on the study list results in a failing grade.

Wait List
Some departments establish wait lists for classes that are full. If an enrolled student drops the class, that seat is filled by a student on the wait list. Students can check enrollment status through MyUCLA. Position on a wait list does not indicate enrollment. Students on a wait list should not assume they will be added to a class.

Wait lists are maintained through Friday of the second week of instruction unless a department deletes them earlier.

Full-Time Graduate Program
Three courses (or 12 units) per term are considered the normal enrollment for graduate students, and are required for students not in doctoral candidacy to be counted for full-time standing in UCLA official enrollment records. Therefore, students are directed by their departments to enroll full time whenever possible.

Throughout their appointments, teaching assistants (TAs) and graduate student researchers (GSRs) are required to be registered and enrolled in at least 12 units. TAs or GSRs terminate their appointments if they take a leave of absence, withdraw, or use a filing fee. Course 375 for TAs, and individual study at the 500 level for GSRs, may be counted toward the 12-unit load.

Graduate students holding fellowships must be enrolled in at least 12 units, both before and after advancement to candidacy. The 12-unit minimum required per term may include, among others, the 500 series (individual study or research).

Veterans are required to make normal progress toward the degree as indicated by the major department. Information on Department of Veterans Affairs regulations is available from the veterans benefits coordinator, 1113 Murphy Hall.

Continuous Registration Policy
Graduate students must be either registered and enrolled or on an official leave of absence every term until the degree is awarded. As an exception, certain graduate students may be eligible to pay the filing fee. Failure to register, have filing fee status, or be on an official leave of absence for any academic term (fall, winter, or spring quarter) constitutes withdrawal from UCLA.

Registration in the Final Term
If students are completing courses; using faculty time, library facilities, laboratories, or other UCLA resources; or receiving UCLA funds, they are required to register in the final term in which they expect to receive their degree.

When the award of a degree is expected at the end of a given term, but special circumstances (not involving preparation of the manuscript) over which a student has no control prevent the completion of all requirements before the first day of instruction in the next term, a student may petition for a waiver of registration for that term. Such petitions must be accompanied by a letter from the graduate faculty adviser or department chair elaborating the exceptional circumstances.

Immunization Requirements
UCLA requires that all incoming students be vaccinated against or show immunity to multiple infectious diseases consistent with guidelines of the American College Health Association, California Department of Public Health, and U.S. Centers for Disease Control and Prevention (CDC). These requirements help protect the health of students and the entire campus community. Students submit their immunization history to the Ashe secure patient portal. See immunization requirements for more information.

Health Assessment and Evaluation
Incoming students enrolling in the school of dentistry, medicine, or nursing—or the Social Welfare Department—must meet specific requirements related to their professional health-care program. Information is available from the Ashe Center. For specific questions, contact the individual department.

Financial Support
As a major center for graduate study, UCLA offers its qualified graduate students substantial support through several types of financial assistance.

Information on available funding for entering (and re-entering) students is included in the online graduate admission application. Continuing graduate students should complete the online fellowship application. Completed fellowship applications must be returned to the home department by the published deadlines. Some departments have earlier deadlines; see continuing graduate student funding for details.

The Graduate Education website includes a financial support section for entering students and one for continuing students. Both describe the full range of financial assistance.
available. Students should contact their department for more detailed information.

**Fellowships**

UCLA administers several awards on the basis of scholarly achievement. Most awards are available in open competition, though some are restricted to new students or to specific departments. Some fellowship and scholarship awards are made from university funds; others are made from endowment funds held in trust by UCLA and given by interested friends and alumni. Still others come from annual donations by educational foundations, industry, government, and individual benefactors.

Most fellowship, traineeship, and grant awards are for one academic year (three terms). Fellowships and grants offer stipends in varying amounts for qualified students. Nonresident tuition fellowships cover nonresident supplemental tuition (NRST), for periods of one to three terms, of selected graduate students who are not California residents.

**Assistantships**

Academic apprenticeships train qualified students for careers in teaching and research, and compensate them for their services. Teaching assistantships offer experience in teaching undergraduates, with faculty supervision. Graduate student researcher appointments give students experience working on faculty-supervised research projects. For more information, see [working at UCLA](#).

**Awards Based on Financial Need**

To apply for aid based on financial need, students must complete the online Free Application for Federal Student Aid (FAFSA) or California Dream Act application by the priority filing deadline (March 2). Some awards, such as university grants, are subject to funding availability. Financial aid applicants should make sure that any requested documentation is submitted to Financial Aid and Scholarships as soon as possible.

Students who need financial aid for summer session courses must submit a summer financial aid application in addition to the FAFSA. Summer applications are available on MyUCLA (under the Finances and Jobs tab) beginning April 1 and close on August 27. Applications should be submitted by April 30 for on-time consideration.

Financial aid is also available to UCLA students enrolled in summer travel, summer institutes, and UC cross-campus summer programs. See [Financial Aid and Scholarships](#).

Financial aid awards include work-study and low-interest loans. Students are usually awarded a financial aid package that is a combination of these forms of assistance. More information is available from [Financial Aid and Scholarships](#), A129J Murphy Hall.

**Degree Requirements**

The following information is for prospective applicants and those outside UCLA who are interested in the basic structure of UCLA graduate degree requirements. It is not meant to be comprehensive or to serve as a primary resource for continuing students. Official, specific degree requirements, including language requirements, are detailed on [program requirements for UCLA graduate degrees](#). Detailed information and general policies—many of which emanate from the Academic Senate and its Graduate Council—regarding completion of degree requirements, master’s and doctoral committees, examinations, and foreign language requirements are published in [Standards and Procedures for Graduate Study at UCLA](#). General regulations concerning graduate courses, standards of scholarship, disqualification, appeal, leave of absence, normal progress toward degree, withdrawal, and other matters also are included.

**Master’s and Doctoral Study**

Graduate students earn a master’s or doctorate degree by distinguished achievement in advanced study and research. In addition to coursework, there are various means of evaluating achievement in study, including qualifying examinations, capstones, and various kinds of laboratory and field work. Achievement in research is primarily assessed through evaluation of the master's thesis or doctoral dissertation. In addition to advanced study and research, professional master’s and doctoral programs also may include professional training. This training may take the form of fieldwork, internships, or projects, and may lead to professional licensure.

**University Minimum Standards**

The requirements described here for master’s and doctorate degrees are minimum standards set by the University of California and UCLA. Individual schools or departments may set higher standards and may require additional courses and examinations for their master’s degrees. Each department also sets additional requirements for doctorate degrees according to the demands of the field of study. See [program requirements for UCLA graduate degrees](#) and the departmental graduate adviser for details. Policies and regulations are outlined in [Standards and Procedures for Graduate Study at UCLA](#).

**Academic Residence**

For the master’s degree, the minimum residence requirement is one year (three academic terms) of registration in
graduate standing at the University of California, including at least two academic terms at UCLA.

For the doctorate degree, the minimum residence requirement is two years (six academic terms) of registration in graduate standing at the University of California, including one year (usually the second) in continuous residence at UCLA. If students earned a master’s degree at UCLA, one year (three academic terms) of this requirement will have been met. In most cases a longer period of residence is necessary, and from three to five years is generally considered optimal.

Academic residence for both degrees is established by successfully completing a minimum of one graduate or upper-division course (4 units) during a term.

Students may earn one term of residence for summer study in either of these ways: by enrolling in two six-week UCLA summer sessions, taking at least 2 units of upper-division and/or graduate work in each session; or enrolling in one eight-week session, taking at least 4 units. Residence earned through summer enrollment is limited to one third of the degree requirements.

To maintain satisfactory progress toward the degree, UCLA requires at least a 3.0 (B) grade-point average in all courses taken in graduate standing at the University of California, and in all courses applied toward a graduate degree.

Foreign Language Requirements

Foreign language requirements are determined by individual departments and programs. Many departments require graduate degree candidates to demonstrate proficiency in one or more foreign languages, so that they can acquire broad knowledge in their field of study and keep abreast of foreign developments in the field.

If their program has a language requirement, students are urged to fulfill it either before they begin graduate study or as early as possible in their graduate career. If the department requires two or more foreign languages, students must complete at least one before the University oral qualifying examination (unless, as is most common, the department requires that both be completed before the examination). All foreign language requirements must be satisfied before advancement to candidacy.

Some departments allow students to fulfill language requirements either by passing departmental examinations or by completing coursework in a foreign language. Certain departments may require additional languages, special competence, or other special procedures. In some departments, English satisfies the foreign language requirement if it is not the native language.

For more details on foreign language requirements, see program requirements for UCLA graduate degrees.

Changing Majors

Continuing graduate students may petition for a change of major after discussing plans with the new department. The graduate petition for major/classification change is filed with the Division of Graduate Education. While there is no deadline for this petition, it should be submitted before the end of the tenth week of instruction for changes in the current quarter. Students should contact their department about any deadlines before completing the petition.

Program of Study and Scholarship

Master’s Degree

At least nine graduate and upper-division courses (or any number of fractional courses totaling 36 units) must be completed in graduate standing; at least five of the nine (20 units) must be graduate-level courses. These unit requirements represent the UCLA minimum standard. Many master’s degree programs have higher unit requirements.

UCLA offers master’s degrees under two plans: Plan I, the Master's Thesis; and Plan II, the Master's Capstone. Some departments offer both plans, and students must consult with their department to determine the plan for meeting their degree requirements. UCLA minimum requirements are the same under either plan.

Plan I: Master’s Thesis

Every master’s degree thesis plan requires the completion of an approved thesis that demonstrates the student’s ability to perform original, independent research.

Plan II: Master’s Capstone

Following advancement to candidacy, students under Plan II must pass an individual or group capstone project or comprehensive examination. Information concerning this project or examination and its format (which may be a recital, exhibition, project portfolio, etc.) is available from the department and published in see program requirements for UCLA graduate degrees.

Doctorate Degree

Doctoral programs are individualized and permit a high degree of specialization. UCLA does not specify course requirements for doctoral programs. Individual programs set their own requirements, subject to Graduate Council approval. These may include specific courses, and these
must be completed before students take the University oral qualifying examination. Students determine their course of study in consultation with a graduate faculty adviser until the doctoral committee is appointed.

**Doctoral Examinations before Advancement to Candidacy**

Prior to advancement to candidacy, doctoral candidates fulfill the coursework, teaching, and/or examinations required by the major department or program. They are supervised during this period by a departmental faculty adviser and/or departmental guidance committee. This committee administers a departmental written and, in some cases, oral examination (not to be confused with the University oral qualifying examination) after students complete the recommended or required work. Once all departmental requirements are met, the department chair consults with the student and then nominates a doctoral committee. All students are required to successfully complete a written qualifying examination and the University oral qualifying examination before advancement to doctoral candidacy.

**University Oral Qualifying Examination**

The doctoral committee, consisting of at least four faculty members nominated by the department, is appointed by the dean of the Division of Graduate Education. Consult *Standards and Procedures for Graduate Study at UCLA* and *minimum standards for doctoral committee constitution* for details on committee membership. To determine qualifications for advancement to candidacy, the committee administers the University oral qualifying examination and, at its option, a separate written examination.

**Doctoral Dissertation**

Every doctorate degree program requires completion of an approved dissertation that demonstrates the student’s ability to perform original, independent research; and constitutes a distinct contribution to knowledge in the principal field of study.
Policies and Regulations

Students at UCLA are responsible for understanding the policies and regulations established by the Academic Senate. Should any variations exist between explanations in this catalog and regulations in the Manual of the Academic Senate, the manual prevails in all cases.

Academic Policies

The UCLA campus is home to one College and 12 professional schools. Each has its own degree requirements, and each division and school is headed by a dean who has final academic authority.

Academic Terms

Undergraduate programs and most graduate programs at UCLA use the quarter system for academic terms, credit units, and registration fees. An academic quarter term is 10 weeks of instruction, and there are 146 days of instruction in an academic year. Class credit is accumulated in quarter units (see below). Registration fees are due each quarter. For details on academic dates and deadlines, see the Registrar’s term calendar. For fees, see the Registrar’s fees web page.

The School of Law and Geffen School of Medicine use the semester system.

Language of Instruction

UCLA is a premier American public research institution. Courses at UCLA are taught in the English language, unless otherwise noted in the course description (for example, foreign language courses).

Academic Credit

Academic work at UCLA is measured by units of credit, which are used to evaluate the amount of time a student has devoted to a particular subject and to determine a student’s class level.

Units of Credit

Most UCLA courses are assigned a unit value. One unit represents three hours of work per week per term by the student, including both class attendance and preparation.

Class Levels

Undergraduate Student

Undergraduate class level is based on completed and in-progress units, not years attended.

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<tr>
<th>UNDERGRADUATE CLASS LEVELS</th>
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<tbody>
<tr>
<td>Class Designation</td>
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<tr>
<td>Freshman (UFR)</td>
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<tr>
<td>Sophomore (USO)</td>
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<tr>
<td>Junior (UJR)</td>
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<tr>
<td>Senior (USR)</td>
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Graduate Student

Graduate class level is based on the degree objective, whether or not students are advanced to candidacy for a doctorate, and/or completed units.

<table>
<thead>
<tr>
<th>GRADUATE CLASS LEVELS</th>
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<tbody>
<tr>
<td>Class Designation</td>
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<tr>
<td>Master (MA/MS) (GMT)</td>
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<tr>
<td>Professional Master (GPM)</td>
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<tr>
<td>Doctorate 1 (GD1)</td>
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<tr>
<td>Doctorate 2 (GD2)</td>
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<tr>
<td>Professional School (PF)</td>
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<td>Professional School (PF2)</td>
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<td>Professional School (PF3)</td>
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Repetition of Courses

Certain courses, as noted in their course descriptions, may be repeated for credit. Other courses taken at UCLA (except UCLA Extension) may be repeated only according to the following guidelines:

1. To improve the grade-point average (GPA), students may repeat only those courses in which they receive a grade of C– or lower; NP or U grades may be repeated to gain unit credit. Courses in which a letter grade is received may not be repeated on a P/NP or S/U basis. Courses originally taken on a P/NP or S/U basis may be repeated on the same basis or for a letter grade.
2. Repetition of a course more than once requires the approval of the College, school, or dean of the Division.
of Graduate Education, and is granted only under extraordinary circumstances.

3. Degree credit for a course is given only once, but the grade assigned each time the course is taken is permanently recorded on the transcript.

4. For undergraduates who repeat a total of 16 or fewer units, only the most recently earned letter grades and grade points are computed in the GPA. After repeating 16 units, however, the GPA is based on all letter grades assigned and total units attempted.

5. Certain programs may place additional restrictions on the repetition of courses required for those programs.

6. For graduate students, all courses in which a letter grade is given, including repeated courses, are used in computing the GPA.

Credit for Upper-Division Tutorials
Credit for upper-division tutorial courses numbered 195 through 199 in a single term is limited to a maximum of 8 units. Subject to regulations governing P/NP grades, students may take these courses on a P/NP or letter-grade basis, but the total number of units allowed in upper-division tutorial courses for a letter grade is 32.

To enroll in an upper-division tutorial course, students must have advanced junior standing and at least a 3.0 GPA in the major field, or must have senior standing. Students who have an outstanding Incomplete (I) grade in an upper-division tutorial course may not enroll in another upper-division tutorial course until the I grade has been removed. On the advice of the instructor and chair, the dean of the College or school may authorize exceptions to the limitations listed. Departments may impose additional limitations on upper-division tutorial courses.

Credit by Examination
Students with high scholastic standing may earn credit for regular UCLA courses by taking examinations rather than enrolling in the courses. This is accomplished by establishing, with a UCLA faculty member, an individual plan of study that may include oral and written work in addition to other requirements. To be eligible, undergraduate students must have completed a minimum of 12 units at UCLA. Graduate students must be registered at the time of the examination and are limited to a maximum of three courses taken in this manner.

The results of these courses are entered on the record in the same way as UC transfer credit, and grade points are assigned. Graduate credit earned by examination may be applied to minimum course requirements for master’s degrees but cannot apply to academic residence requirements for master’s or doctorate degrees.

Students need approval from the instructor; the department; and the College, school, or dean of the Division of Graduate Education, from whom petitions for credit by examination (with fee) are available.

Examinations
Alternate Examination Dates Policy
In compliance with Section 92640(a) of the California Education Code, UCLA must accommodate requests for alternate examination dates for any test or examination at a time when that activity would not violate a student’s religious creed. This requirement does not apply in the event that administering the test or examination at an alternate time would impose an undue hardship that could not reasonably be avoided. Accommodation for alternate examination dates is worked out directly and on an individual basis between the student and the faculty member involved.

In general, students should make such requests of the instructor during the first two weeks of any given academic term, or as soon as possible after a particular examination date is announced by the instructor.

Students unable to reach a satisfactory arrangement with their instructor should contact the Office of Ombuds Services, 105 Strathmore Building; or the Office of Student Conduct, 1206 Murphy Hall, for assistance.

Instructors who have questions or who wish to verify the nature of the religious event or practice involved should contact the Office of Ombuds Services or the Office of Student Conduct for assistance.

Undergraduate Final Examinations
No student shall be excused from assigned final examinations, except as provided above in the policy on alternate examination dates and as provided in the following three paragraphs.

The instructor in charge of an undergraduate course is responsible for assigning the final grade in the course. The final grade shall reflect the student’s achievement in the course and shall be based on adequate evaluation of that achievement. The instructor’s method of evaluation must be announced at the beginning of the course. The methods may include a final written examination, term paper, final oral examination, take-home examination, or other evaluation device. Evaluation methods must be of reasonable duration and difficulty and must be in accord with applicable departmental policies. Final written examinations may not exceed three hours’ duration, and are given only at the
times and places established and published by the department chair and the Registrar’s Office.

At the end of the term in which a student is expected to graduate, the major department may examine the student in the field of the major and, with the approval of the Undergraduate Council, assign a credit value to such general examination. The department may also excuse the student from final examinations in courses offered by the department during that term.

An instructor may release to individual students their original final examinations (or copies). This may be done by any method that ensures the students’ right to privacy. Otherwise, the instructor shall retain final examination materials, or a copy thereof, until the end of the next succeeding regular term of instruction, during which period students shall have access to their examinations.

**Grades**

The work of all students at UCLA is reported in grades. Instructors are required to assign a final grade for each student enrolled in a class.

**Undergraduate Grades**

The following grades are used to report the quality of undergraduate student work at UCLA:

- A+ Extraordinary
- A Superior
- B Good
- C Fair
- D Poor
- F Fail
- P Passed (achievement at grade C level or better)
- NP Not Passed
- I Incomplete
- IP In Progress
- DR Deferred Report

Grades A, B, C, and D may be modified by a plus (+) or minus (−) suffix. Grades A, B, C, and P denote satisfactory progress toward the degree. A grade of D may be applied toward graduate degrees unless otherwise prohibited by the program requirements. However, courses in which a grade of C is received must be offset by higher grades in the same term for students to remain in good academic standing. A grade of F yields no unit or course credit.

**Graduate Grades**

The following grades are used to report the quality of graduate student work at UCLA:

- A Superior Achievement
- B Satisfactorily demonstrated potentiality for professional achievement in field of study
- C Passed the course but did not do work indicative of potentiality for professional achievement in field of study
- F Fail
- S Satisfactory (achievement at grade B level or better)
- U Unsatisfactory
- I Incomplete
- IP In Progress
- DR Deferred Report

The grades A, B, and C may be modified by a plus (+) or minus (−) suffix. The grades A, B, and S denote satisfactory progress toward the degree. A grade of C may be applied toward graduate degrees unless otherwise prohibited by the program requirements. However, courses in which a grade of C is received must be offset by higher grades in the same term for students to remain in good academic standing. A grade of F yields no unit or course credit.

The schools of dentistry, law, and medicine use their own grading codes. Students interested in dentistry, law, or medicine programs should contact the appropriate school for more information.

**Grade Points**

Grade points per unit are assigned by the Registrar as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Points per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>4.0</td>
</tr>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A−</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>B−</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
</tbody>
</table>

As indicated, a plus (+) or minus (−) suffix added to a grade raises or lowers the grade-point value, except in the case of A+, which carries the same number of grade points as the A grade. Courses in which students receive a grade of P or S
may count toward satisfaction of degree requirements, but these grades, as well as DR, I, IP, and NR, are disregarded in determining the grade-point average. (If a grade of I is later removed and a letter grade assigned, units and grade points are included in subsequent GPAs.) NR indicates that no grade was received from the instructor.

**Grade-Point Average**

The grade-point average (GPA) is determined by dividing the number of grade points earned by the number of units attempted. The total grade points earned for a course equals the number of grade points assigned times the number of course units. For example, if a student takes three 4-unit courses and receives grades of A–, B–, and C+, then the GPA for the term equals the total grade points (34.8) divided by the total course units (12); the GPA is 2.9. For satisfactory standing, undergraduate students must maintain a 2.0 (C) GPA and graduate students a 3.0 (B) GPA in all courses taken at any UC campus (except UCLA Extension).

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Points</th>
<th>Course Units</th>
<th>Total Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A–</td>
<td>3.7</td>
<td>4</td>
<td>14.8</td>
</tr>
<tr>
<td>B–</td>
<td>2.7</td>
<td>4</td>
<td>10.8</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
<td>4</td>
<td>9.2</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td></td>
<td>34.8</td>
</tr>
</tbody>
</table>

Only grades earned in regular session or summer sessions at any UC campus—and grades earned by undergraduate students in UCLA Extension courses prefixed by XLC—are computed in the UCLA grade-point average. Grades earned at another institution or in UCLA Extension courses other than those prefixed by XLC do not affect the GPA.

Other schools and agencies may calculate GPAs differently from UCLA when evaluating records for admission to graduate and professional school programs. Students should contact those entities about such policies.

**Passed/Not Passed Grades**

Undergraduate students in good standing who are enrolled in at least 12 units (14 in the Henry Samueli School of Engineering and Applied Science) may take certain courses on a Passed/Not Passed (P/NP) basis.

The grade P is assigned for a letter grade of C or better. Units earned this way count toward degree requirements but do not affect the GPA. Students receive neither units nor course credit for a grade of NP.

Students may enroll in one course each term on a P/NP basis (two courses if they have not elected the P/NP option in the preceding term). Their department or school may require that they take some or all courses in their major for a letter grade. Certain other courses or programs may also be exempt from the P/NP option; contact the College or school for details.

Students may make changes to or from P/NP grading through the sixth week of instruction using MyUCLA.

**Satisfactory/Unsatisfactory Grades**

Graduate students in good standing (minimum 3.0 GPA) may enroll for Satisfactory/Unsatisfactory (S/U) grading in one graduate or upper-division course outside the major field each term, in addition to any courses offered only on an S/U grading basis within the major. The grade S is assigned for a letter grade of B or better, but units earned in this manner are not counted in computing the GPA. Students receive neither units nor degree credit for a grade of U. They may not elect the S/U option for summer session courses without an approved petition.

Courses taken on an S/U basis outside the major, and 500-series courses within the major, are applicable toward degree and/or academic residence requirements if so approved. Interdepartmental majors may not apply S/U courses to degree requirements, except for 500-series courses.

Students may make changes to or from S/U grading through the tenth week of instruction using MyUCLA.

**Incomplete Grades**

Once a grade of Incomplete (I) is assigned, it remains on the transcript along with the passing grade students may later receive for the course. The instructor may assign the grade I when work is of passing quality but is incomplete for a good cause (such as illness or other serious problem). It is the student’s responsibility to discuss with the instructor the possibility of receiving an Incomplete as opposed to a non-passing grade.

If a grade of I is assigned, students may receive unit credit and grade points by satisfactorily completing the coursework as specified by the instructor. Students should not re-enroll in the course; if they do, it is recorded twice on the transcript. If the work is not completed by the end of the next full term in residence, the I lapses to an F, NP, or U as appropriate. For undergraduate students, the College or school may extend the deadline in unusual cases.

**In Progress Grades**

For certain courses extending over more than one term, evaluation of student performance is deferred until the end of the final term of the course. Provisional grades of In Progress (IP) are assigned in the intervening term(s) and are
Deferred Report Grades

Students may receive a grade of Deferred Report (DR) when the instructor believes their work to be complete but cannot assign a grade because of disciplinary proceedings or other problems. If students are given a grade of DR, the Office of the Dean of Students assists them in resolving the problem. For graduate students, the dean of the Division of Graduate Education sets a deadline by which the DR lapses to an F if the problem is not resolved and a grade assigned. The DR is changed to a grade, or perhaps to an Incomplete, when the instructor provides written confirmation that the situation is resolved. The DR is not included in determining the grade-point average.

Grade Assignment

The instructor in charge of a course is responsible for determining the grade of each student in the course. The standards for evaluating student performance are based on the course description as approved by the appropriate course committee.

The final grade in the course is based on the instructor’s evaluation of the student’s achievement in the course. When on an examination or other work submitted by a student, the student is suspected of having engaged in plagiarism or otherwise cheated, the suspected infraction is to be reported to the appropriate administrative officer of the University for consideration of disciplinary proceedings against the student. Until such proceedings, if any, have been completed, the Deferred Report (DR) grade is assigned for that course. If in such disciplinary proceedings it is determined that the student did engage in plagiarism or otherwise cheat, the administrative officer, in addition to imposing discipline, reports the nature of the plagiarism or cheating back to the instructor of the course involved. In light of that report, the instructor may replace the DR grade with a final grade that reflects an evaluation of that which may fairly be designated as the student’s own achievement in the course as distinguished from any achievement that resulted from plagiarism or cheating.

Grade Correction

All grades, except DR, I, and IP, are final when filed by the instructor in the end-of-term course report. However, the Registrar’s Office is authorized to change a final grade (1) on written request of an instructor, provided that a clerical or procedural error is the reason for the change; or (2) on written request of the chair of the UCLA Academic Senate, in cases where it has been determined by the Committee on Privilege and Tenure that an instructor has assigned a grade on any basis other than academic grounds. No change of grade may be made on the basis of re-examination or, with the exception of I and IP grades, the completion of additional work. Any grade change request made more than one year after the original filing must be validated for authenticity of the instructor’s signature by the department chair. Any grade change request made by an instructor who has left UCLA must be countersigned by the department chair. No grade change may be made once a student has graduated. All grade changes are recorded on the transcript.

Grade Complaints

A grade may be appealed, on any reasonable grounds, to the instructor, the chair of the department, and the dean of the division or school.

If the student believes that the instructor has violated the Faculty Conduct Policies by assigning the grade on any basis other than academic grounds, the matter should first be taken up with the instructor. If the matter is not resolved, the student may go for counsel to the Office of Ombuds Services, or may follow the procedures for the formal filing of charges. If a charge is sustained by the Academic Senate committees on Charges and on Privilege and Tenure, an ad hoc committee is appointed within two weeks to review the disputed grade, and any warranted change is made within four weeks.

Absence and Readmission

To be registered for a term, students must enroll in courses and pay fees according to deadlines specified in the Registrar’s term calendar. Students who do not register are subject to the following policies on absence and readmission.

Students who register and subsequently discontinue coursework or stop payment on registration fees checks—without an approved petition for withdrawal, leave of absence, or cancellation—receive grades of F, NP, or U, as appropriate, for all courses in which they are enrolled for that term. A fine is assessed if any check for registration fees payment is returned by a bank for stopped payment, insufficient funds, or any other reason. No fees are refunded, and future registration privileges may be curtailed or revoked.

Cancellation of Registration

Before the first day of classes, students may cancel registration by completing and submitting a Cancellation of Registration form. Refund is as follows: For new undergraduate and dentistry students, fees paid are refunded except for the nonrefundable acceptance of admission fee. For new grad-
quate, undergraduate, continuing, and re-entering students, a service fee is deducted from the amount of fees paid. Graduate students who cancel their registration and do not apply for a formal leave of absence must file for readmission to return to UCLA.

Withdrawal
Withdrawing from UCLA means discontinuing attendance in all courses in which the student enrolled. Students who withdraw during a term must file a Withdrawal Notice.

When students officially withdraw, a percentage of the term fees may be refunded depending on the date the withdrawal form is filed. See the Registrar’s withdrawal web page for policy details and specific refund dates.

The UCSHIP fee is nonrefundable in most cases. Contact the Arthur Ashe Student Health and Wellness Center insurance office for more information.

Students may withdraw only if they have not taken any final examinations or otherwise completed the work in any classes. For undergraduates, one withdrawal places no restriction on readmission or continuation if they started the term in good academic standing. If they withdraw after one or more previous withdrawals or while in academic difficulty, a restriction may be placed on their continuance in undergraduate standing. Before withdrawing, they are urged to consult with faculty, department, or College or school advisers to consider the full implications of this action.

Undergraduates may also withdraw from a term retroactively, provided no final examinations have been taken and no coursework has been completed. No withdrawals are accepted once they have officially graduated from UCLA.

Undergraduate One-Term Absence
Undergraduate students who complete a term (fall, winter, or spring quarter) and do not register the following term may return to UCLA the subsequent term as a continuing student, and be eligible to register and enroll in advance.

Students on a one-term absence who plan to attend another institution—including UCLA Extension—should discuss plans with their College or school counselor before enrolling elsewhere. On returning to UCLA, students must have an official transcript sent from the institution directly to UCLA Undergraduate Admission to have coursework evaluated.

Planned Academic Leave (PAL) for International Travel
Students who plan to participate in a study-abroad program sponsored by an institution other than the University of California are required to take a planned academic leave of absence (PAL) from UCLA. After they are accepted into a program, students must register the program with the UCLA International Education Office (IEO), B300 Murphy Hall. Registering the program also generates the student application for the PAL.

See IEO non-UC programs for program and registration requirements.

Students returning from an approved PAL for participation in a registered non-UC study abroad program are not required to seek readmission, but must provide official transcripts for coursework evaluation.

Undergraduate Readmission
To return to UCLA after an absence of more than one term, students—except for those on PAL for non-UC study abroad—must complete an Undergraduate Readmission Application and file it with the Registrar’s Office in accordance with published deadlines. A nonrefundable fee applies.

Students must submit official transcripts from all institutions (including UCLA Extension) and a completed Statement of Legal Residence with readmission applications. Coursework is evaluated when official transcripts are received. The paper records of nonregistered students, including transcripts submitted for transfer credit, are retained by the Registrar’s Office for five academic years after the last registered term.

Students who have not registered for five years must resubmit official transcripts of all work completed outside UCLA. Readmission is generally approved if students were in good academic standing (2.0 GPA) when they left UCLA, if coursework completed elsewhere in the interim is satisfactory, and if readmission applications are filed on time. The College or school may have other regulations. Contact the readmission clerk for more information.

<table>
<thead>
<tr>
<th>READMISSION DEADLINES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Quarter</td>
</tr>
<tr>
<td>Winter Quarter</td>
</tr>
<tr>
<td>Spring Quarter</td>
</tr>
</tbody>
</table>

Graduate Student Continuous Registration Policy
Graduate students must be either registered and enrolled or on an official leave of absence every term until their degrees are awarded. As an exception, certain graduate students may be eligible to pay the filing fee. Failure to register, have filing fee status, or be on an official leave of absence for any term (fall, winter, or spring quarter) constitutes withdrawal from UCLA.
Graduate Leave of Absence
Continuing graduate students in good standing (3.0 GPA or above) who have completed at least one term of UCLA graduate work may, with the support of their department and approval of the Division of Graduate Education, be eligible for leaves of absence. Graduate students are allowed three quarters of official leave of absence. See the Leave of Absence Request web page; for filing deadlines, see the Registrar’s term calendar.

Federal policy governing students on F-1 and J-1 visas restricts leaves of absence to certain conditions. The Dashew Center for International Students and Scholars, in consultation with the Division of Graduate Education, individually evaluates each international graduate student request for a leave of absence to determine that it meets federal (and UCLA) eligibility criteria.

Students on approved leave of absence are not permitted to use faculty time or make use of UCLA facilities for more than 12 hours since their last registration, and are not eligible for apprentice personnel employment or other services normally available to registered students. There is no need to apply for readmission, since the approved leave is for readmission to a specific term. The Registrar’s Office notifies students about registration for the returning term.

Research doctoral students who are new parents or who are confronted with extraordinary parenting demands should consult Standards and Procedures for Graduate Study at UCLA (PDF) regarding Graduate Council policy requiring program accommodations for them.

In Absentia Registration
Academic and professional graduate students who conduct research or engage in approved degree program-related activities outside California may be eligible for in absentia registration. Students registered in absentia pay 15 percent of tuition and the student services fee, but pay the full amounts of other mandatory fees such as health insurance and nonresident supplemental tuition (if applicable). In absentia registration and fee reductions may be used for a maximum of six quarters or four semesters for academic doctoral students, and up to three quarters or two semesters for master’s and professional graduate students. See the In Absentia Registration Petition web page.

Graduate Student Readmission
Students who are granted a formal leave of absence do not have to apply for readmission if they resume their graduate work in accordance with the terms of the leave. All other continuing graduate students who fail to register for any regular session, or who fail to complete a term through cancellation or withdrawal, must apply for readmission.

Students who have registered at any time as a graduate student at UCLA and return after an absence (except for a formal leave of absence) must file an Application for Graduate Admission. Payment of the nonrefundable application fee may be made by credit card only. Transcripts of all academic work completed since registration at UCLA as a graduate student must also be submitted.

Transcripts and Records
The transcript is the complete record of a student’s academic work at UCLA. The Registrar prepares, maintains, and permanently retains this record. Additional records may include financial and personal student information.

Transcripts
The transcript reflects all undergraduate and graduate work completed in UCLA regular and summer sessions. It lists chronologically courses, units, grades, cumulative GPA, transfer credits, and total units.

An official UCLA paper academic transcript is printed on security paper to safeguard against unauthorized duplication, alteration, and misrepresentation. The paper has a faint multicolor security background design, and a border bearing the words University of California, Los Angeles. Authentication details are located in the lower right-hand corner of the transcript. The legend is located on the reverse of the document.

An official UCLA electronic (PDF) academic transcript includes a cover page with UCLA, student, and recipient information. Transcript pages have a background design (except for transcripts sent to LSAC, which have no background design). Identifying text is located at the top of the page. Authentication details are located in the lower right-hand corner of the transcript. A legend page is also included.

Two types of official UCLA transcript—academic transcript and proof of enrollment—are designed to meet specific needs. Both can be ordered through MyUCLA, as can an unofficial (student copy) academic transcript.

Academic Transcript
The academic transcript is a student’s complete academic record, including a list of courses taken, transfer credit, units, grades, grade-point average (GPA), earned UCLA degrees, and in-progress term information. In-progress information includes a list of courses in which a student enrolled during the term the transcript was ordered, and
other in-progress information such as a change in major or removal of an I grade.

Grades for completed terms are processed immediately following the conclusion of final examinations. Complete academic transcripts are available approximately two weeks after the last day of the term. For graduating students, academic transcripts with the graduation date included are available approximately six weeks after the term-end date. Students who need earlier proof of graduation may contact a degree auditor.

For auto insurance good-student discount purposes, an academic transcript can be attached to the insurance form; or the form can be presented at 1113 Murphy Hall.

**Proof of Enrollment**

Proof of enrollment certifies registration (fee payment and enrollment status) and degrees earned. It does not display courses or grades, but does include enrollment status, degree-expected term, and UCLA degree awarded with date of award. Proof of enrollment confirms student enrollment status only after registration fees have been paid for the term.

Verification of student workload is based on actual enrolled units. It does not consider wait-listed units. A study list of 12 or more units for registered undergraduate students, or 8 or more units for registered graduate students, is considered full-time status for enrollment reporting, insurance, intercollegiate athletics, and financial aid purposes.

Verification of degree can be issued after the degree has been posted to the student record, approximately six weeks after the term ends. Students who need verification before the degree is posted may contact a degree auditor.

**Third-Party Verifications**

UCLA has authorized National Student Clearinghouse to act as its agent for all third-party verifications of student enrollment and degrees, including those for loans and creditors. Approved by the U.S. Department of Education, the Clearinghouse is a national organization that facilitates and expedites student enrollment verifications for creditors and other student service-related agencies. The Clearinghouse abides by all provisions of the Family Educational Rights and Privacy Act (FERPA). Degree verification for the most recent term is available approximately seven weeks after the term ends.

**Ordering Transcripts**

Continuing students must order official academic transcripts through MyUCLA. Other students may order transcripts through MyUCLA or Parchment. Most students can order proof of enrollment through a proof of enrollment request.

Orders are not processed if students have outstanding financial, academic, or administrative obligations (holds) to UCLA. Transcripts of work completed elsewhere must be requested directly from the campus or institution concerned.

More information about ordering transcripts is available on the Registrar’s student records web page or by sending e-mail to the transcripts unit.

For UCLA Extension transcripts, order online or by mail from UCLA Extension, PO Box 24901, Department K, Los Angeles, CA 90024-0901.

**Fees and Payment**

Most academic transcripts and proofs of enrollment are available at no charge after payment of the document fee. A fee may be charged for some transcript-related services. For example, forms that must be completed by the Registrar’s Office and envelopes that require official signatures incur a special handling fee. Transcripts can be faxed for an additional fee. Faxed transcripts are generally not considered official, and confidentiality cannot be guaranteed. For exact fees, see transcript-related fees.

**Student Records**

Student files of pertinent documents are maintained for up to five years from the admit term. Students may view their records at the Registrar’s Office, 1113 Murphy Hall. A five-day advance notice is required for viewing.

See also regulations concerning Disclosure of Student Records.

**MyUCLA**

Through MyUCLA, students can obtain academic, financial, and personal information from their UCLA academic records.

**Name or Address Change**

Students who wish to change their legal name on official UCLA records should submit a Legal Name Change or Correction request. Supporting documentation is required. Students on an F or J visa must provide a current passport bearing the exact same name as the new name. All name changes are recorded on the transcript.

Student address changes should be updated through MyUCLA.

**Closure of Student Records**

Student records are closed to revisions in enrollment, grading, and academic actions on award of a degree. Students are responsible for requesting review of their record prior...
to award of their degree. See UCLA Procedure 220.1, Student Grievances Regarding Challenge to Content of Student Records Under the Family Educational Rights and Privacy Act.

Changes requested by an individual after award of a degree are considered by the College or school only under extraordinary circumstances. Supportive documentation is required. On action of the academic dean, a statement of the request for revision and a note of the change will be recorded only in the memoranda section of the transcript.

Maintaining Student Work

During their academic careers at UCLA, undergraduate students create evidence of their learning, which includes but is not limited to course projects, papers, and assignments; student responses on examinations; and documentation of student performance and creative expression. Regularly, and on an ongoing basis, faculty may choose to store a sample of this evidence in digital archives maintained by the Division of Undergraduate Education. All information stored, created, or derived by this archival function is governed by the faculty and the leadership of UCLA academic departments and interdepartmental degree programs. The purpose of maintaining this archive is to make this evidence available exclusively for departmental research studies conducted to inform academic program improvement and to ensure institutional effectiveness.

In the event an academic department or interdepartmental program chooses to conduct a program improvement research study, it may opt to use a sample of evidence that it has chosen to archive, and it may grant permission for the Division of Undergraduate Education, Division of Graduate Education, or other collaborators from the UCLA academic community to evaluate and analyze the student learning. The evidence of student learning is stored anonymously, with no identifiers of individual students attached to the records in the archive. Assessment of student performance in program improvement research studies is not connected with any academic record of the individual student’s performance. Assessment reports may be created for internal departmental improvement purposes only, and they may include an aggregation of student characteristics associated with learning achievement. Evidence of student learning is purged from the digital archive after being stored for a period of 12 years, to ensure it can be made available for analysis of departments and programs in support of the Academic Senate program review requirements.

Students can designate that materials they created, which have been sampled by the faculty, be excluded from the Division of Undergraduate Education digital archive by opting out online.

Degrees

Students must satisfy UC requirements, College or school requirements, and department requirements as described in this catalog.

Undergraduate Degrees

Undergraduate degree requirements are subject to the following degree policies.

Student Responsibility

It is students’ responsibility to keep informed of and to comply with the rules, regulations, and policies affecting their academic standing. Meeting academic deadlines, monitoring the study list for accuracy, completing requirements, and fulfilling degree requirements are all part of their academic duties as students.

Minimum Scholarship

The grades A through C and Passed (P) denote satisfactory progress toward the bachelor’s degree. The grades C– through D– yield unit credit but may not satisfy certain scholarship requirements. Even when they do, they must be offset by grades of C+ or better in other courses. Students must earn at least a 2.0 (C) grade-point average (GPA) in all courses taken at any UC campus. Students who fail to maintain this level may be placed on academic probation or may become subject to dismissal. The College and each school may set additional scholarship requirements.

Academic Probation

Students are placed on probation if their overall or term GPA falls between 1.5 and 1.99. While they are on probation, they may not take any course on a Passed/Not Passed (P/NP) basis. Probation ends at the close of a regular term if students have attained a 2.0 (C) GPA for the term and a cumulative 2.0 (C) GPA in all UC coursework. Students who do not end probation within two terms are subject to dismissal.

Academic Dismissal

Students are subject to dismissal from UCLA under any of the following conditions:

• Their GPA in any one term is lower than 1.5
• They do not earn at least a 2.0 (C) GPA in any term when they are on probation
• They do not end probation within two terms

If students are subject to dismissal, their transcripts carry that notation. Students should make an appointment with their College or school counselor. Depending on the situation, they are given conditions for continuation or are dismissed from UCLA.
Progress toward the Degree

UCLA is a full-time institution, and it is expected that students complete their undergraduate degree requirements promptly. Normal progress toward graduation in four years is defined as the completion of 45 units per year, or 15 units per term.

Minimum Progress and Expected Cumulative Progress

The College and each school enforce minimum progress regulations. The College also enforces expected cumulative progress requirements. Students may be subject to disqualification for failing to meet minimum progress and expected cumulative progress requirements. See College and Schools for specific minimum progress, expected cumulative progress, and study list regulations.

Petitions

A petition is a form submitted to explain an exception from any UCLA or UC standard rule or regulation. It is the only way to obtain formal approval from the department, College or school, Registrar, or office with authority over a particular request. Some petitions require a fee.

Some uses of petitions are to change the College, school, or major; take more or fewer units than regulations permit; make changes to the study list after MyUCLA processing ends; or obtain credit by examination. Students may petition for concurrent enrollment, double major, or waiver of scholarship requirements.

Transfer Credit

Every California community college has transfer course agreements that specify which courses will receive transfer credit. These courses are displayed on ASSIST, the statewide transfer information website. Students can get some knowledge of transfer credit from accredited institutions other than the University of California, or California community colleges, by comparing the descriptions of courses taken with those in this catalog.

Once students complete the courses, they must have the other institution send official transcripts to UCLA Undergraduate Admission electronically through an approved vendor or by mail to Box 951436, Los Angeles, CA 90095-1436. Transfer students should discuss transfer credit with their College or school and/or department adviser.

Community College/Lower Division Transfer Limitation

After completing 105 lower-division quarter units toward the degree at all institutions attended, students are allowed no further unit credit for courses completed at a community college or for lower-division courses completed at any institution outside of the University of California. The University of California does not grant transfer credit for community college or lower-division courses beyond 105 quarter units, but students may still receive subject credit for this coursework to satisfy lower-division requirements. Units earned through Advanced Placement (AP), International Baccalaureate (IB), and/or A-Level examinations are not included in the limitation. Units earned at any UC campus (through extension, summer, cross-campus, UCEAP, Intercampus Visitor Program, and regular academic year enrollment) are not included in the limitation. To convert semester units into quarter units, multiply the semester units by 1.5; for example, 12 semester units x 1.5 = 18 quarter units. To convert quarter units into semester units, multiply the quarter units by .666; for example, 12 quarter units x .666 = 7.99 or 8 semester units.

Summer Session Courses

Summer session courses at any UC campus are computed in the UCLA grade-point average.

UCLA Extension

Students who wish to receive degree credit for work taken through UCLA Extension should take courses that correspond in number to the undergraduate courses offered in regular session. The designation XL or XLC before the number of the Extension course signifies that the course is equivalent to the regular-session course bearing the same number. Grades earned by undergraduate students in the School of the Arts and Architecture, School of Education and Information Studies, College of Letters and Science, and Herb Alpert School of Music in courses prefixed by XLC are computed in the UCLA grade-point average. No degree credit is given for courses numbered X300 through X499. Concurrent enrollment in Extension and regular session is not permitted.

Degree Checks

Any time before graduation, a student may request an official degree check. This review of degree progress details requirements that remain to complete the bachelor’s degree. The degree-check process may be different for the College and each school.

The Degree Audit—a computer-generated assessment of all degree requirements and the courses taken to fulfill them—is an essential review tool. It can be viewed and printed through MyUCLA, or ordered at a counseling office. The student should review their Degree Audit with their College, school, or department counselor to ensure that all requirements will be satisfied. Engineering students are encouraged to also consult the school undergraduate degree audit web page.
Graduation

The awarding of degrees is the culmination of several steps that begin when students identify the term in which they expect to complete degree requirements.

Undergraduate Students

Approximately nine out of every 10 UCLA undergraduates eventually receive a bachelor’s degree, either from UCLA or from another campus or institution. One-third of all UCLA bachelor’s degree recipients go on to graduate school.

Declaration of Candidacy

All undergraduate students are assigned a degree-expected term when they first register at UCLA. This term is based on admission level (first-year or advanced standing), and time-to-degree based on undergraduate program. For most students, this is 12 regular terms (first-year) or six regular terms (transfer). Students must petition the College or school counseling unit to enroll in additional regular terms beyond the allowed number.

Friday of finals week is the last day to declare candidacy for the current term.

Students can verify the degree-expected term through MyUCLA. For questions about degree candidacy status, College students may contact the Registrar’s Office. All other students should contact their school office. Declaring candidacy is not a guarantee of graduation.

In Absentia Graduation

Students who intend to complete degree requirements while nonregistered (those who take a course through UCLA Extension or at another institution, remove an Incomplete grade, and so on) must notify their degree auditor of their intention to graduate as a nonregistered student by Friday of finals week. Students graduating in absentia are assessed the undergraduate in absentia degree-processing fee if they were not also registered in the term immediately prior to their degree-expected term.

Retroactive Degree and Graduation

Students who do not declare candidacy in the term that final degree requirements are met, or who had pending degree-related issues (such as grade changes, department approval of major courses, or advanced-standing work at other institutions) in the declared term, must submit a Retroactive Degree Request form. If the request is approved, the degree is recorded on the transcript immediately, and the student record is closed to any further revision. The $75 special order diploma fee applies.
Final Degree Audits and Graduation

Degree auditors are responsible for verifying each candidate’s eligibility for a bachelor’s degree. Degree auditors have information pertaining to a student’s graduation only if that student declared candidacy and completed 160 quarter units (172 units for engineering students). Degree auditors are available in the following offices:

- **College of Letters and Science**
  - Registrar’s Office, 1113 Murphy Hall
- **School of the Arts and Architecture**
  - Office of Student Services, 2200 Broad Art Center
- **School of Education and Information Studies**
  - Office of Student Services, 1002 Moore Hall
- **Henry Samueli School of Engineering and Applied Science**
  - Office of Academic and Student Affairs, 6246 Boelter Hall
- **Herb Alpert School of Music**
  - Office of Student Affairs, 1642 Schoenberg Music Building
- **School of Nursing**
  - Student Affairs Office, 2-147 Factor Building
- **Meyer and Renee Luskin School of Public Affairs**
  - Student Services Office, 3250 Public Affairs Building
- **Jonathan and Karin Fielding School of Public Health**
  - Office of Undergraduate Student Services, 16-059 Center for Health Sciences
- **School of Theater, Film, and Television**
  - Student Services Office, 103 East Melnitz Building

During their graduating term, students should inform a degree auditor of grade changes, petitions for substitutions or exemptions, transfer credits, or similar changes that may affect their degree. If graduation eligibility cannot be verified, a degree auditor notifies the student of any outstanding requirements or other degree completion problems.

Student records are closed to revisions in enrollment, grading, and academic actions on award of a degree. Students are responsible for requesting review of their record prior to award of their degree.

A summary of shortages for the bachelor’s degree statement is sent to each current-term candidate who does not satisfy degree requirements that term. Students who receive such notices should contact a degree auditor immediately. If students expect to satisfy degree requirements in a later term, they must change their degree-expected term through MyUCLA. They may be assessed applicable fees.

Contact degree auditors only for questions about degree audits. Contact information is published on the Registrar’s service directory. Do not contact auditors regarding commencement procedures; see Commencement.

Graduate Students

Candidates for both master’s and doctorate degrees must be advanced to candidacy and complete all degree requirements—including the master’s thesis or capstone, or doctoral dissertation—before the degree is conferred. See the filing deadlines calendar for thesis/dissertation filing deadlines. For graduate degree requirements and procedures, see program requirements for UCLA graduate degrees and Standards and Procedures for Graduate Study at UCLA (PDF).

Degree Date

Degrees are awarded at the end of fall, winter, and spring quarters and at the end of summer session C. School of Law and School of Medicine degrees are normally awarded at the end of fall and spring semesters. See the UCLA term calendar for the degree-award date, which is the final day of the term.

Commencement

The College, each school, and the Division of Graduate Education conduct commencement ceremonies for their graduates. Ceremonies feature addresses from distinguished speakers, and recognize candidates who have achieved high academic distinction and honors.

Check with the College, school, or department for eligibility requirements, programs, and time schedules. Commencement information—including the schedule of ceremonies, maps and parking, and updates—is published online. Doctoral hooding ceremony information is also published online.

Privacy

Names of students who request that no public information be released do not appear in commencement ceremony programs. Students may change their privacy status on MyUCLA.

Diplomas

Diplomas for both undergraduate and graduate students are available approximately three months after the degree-award date. After week three of their expected term of graduation, students should provide instructions for obtaining the diploma in person or by mail using the diploma request feature on MyUCLA. To expedite receipt of diplomas, instructions should be given no later than one month after the last day of the degree term. Students may
also request diplomas in person at 1113 Murphy Hall or by returning a Diploma Mail Request form.

Name Change
To appear on the diploma, a name change must be submitted using a Legal Name Change or Correction by the last day of the degree-expected term. Supporting documentation is required. Once the degree is awarded, only a court order will be accepted to make a name change; a replacement diploma fee applies.

Replacement Diploma
If an original diploma is destroyed, a replacement may be ordered by using the diploma request feature on MyUCLA. Students may also order a replacement diploma in person at 1113 Murphy Hall, or by returning a Replacement Diploma Request form. A replacement diploma fee applies. The new diploma bears a reissue date and signatures of current California, UC, and UCLA officials.

Administrative Policies

Alcohol and Substance Policies
UCLA is designated as a drug-free environment, and only under certain conditions is alcohol consumption permitted. In keeping with its educational mission, the University assumes the responsibility to better inform the UCLA community about alcohol and substance abuse.

The sale, manufacture, distribution, or possession of designated controlled substances without a prescription is illegal under both state and federal laws. Such laws are strictly enforced by UCPD police officers. Student violators are subject to University disciplinary action, criminal prosecution, fine, and imprisonment. Refer to the UCLA policies on substance abuse for further information.

The sale, consumption, and distribution of alcohol on the UCLA campus is restricted by the UCLA alcohol policy and California state law. Organizations or groups violating alcohol or substance policies or laws may be subject to sanctions by the University.

Financial Aid Standards for Satisfactory Academic Progress
UCLA Financial Aid and Scholarships establishes standards for satisfactory academic progress to measure students’ progress toward degree completion using both qualitative and quantitative methods in accordance with federal regulations. To be eligible for financial aid, students must meet or exceed these standards. Failure to maintain these standards may result in suspension of financial aid eligibility. The standards are as strict as, or more strict than, the UCLA standards for a student enrolled in the same educational program who is not receiving Title IV assistance. See the Standards for Satisfactory Academic Progress Guide (PDF).

Professional Schools
Students attending the schools of Dentistry, Law, Management, Medicine, and UCLA Extension are covered by criteria established by the respective school.

Qualitative Standard
Undergraduate students must maintain a cumulative 2.0 grade-point average (GPA); graduate students must maintain a cumulative 3.0 GPA.

Quantitative Standard
Students must complete a minimum of 67 percent of cumulative coursework attempted.

Maximum Time Frame
Units attempted or total enrolled terms may not exceed 150 percent of the published length of the student’s program.

Academic Major Change/Pursuit of Double Major or Minor
Students who change their academic major, or pursue a double major or minor, do not have additional financial aid eligibility beyond the maximum time frame established in this policy.

Successful Completion of Units
To successfully complete units, students must receive a grade of A, B, C, D, or P (S for graduate students) in each course. Grades of F, I, NP (U for graduate students), NR (No Report), and DR (Deferred Report) do not count as successful completion of coursework attempted.

The standards for satisfactory academic progress apply to all coursework attempted, including coursework for which students did not receive financial aid.

Cancellation of Registration
Cancellation of registration on or before the first day of classes does not count as units attempted.
English as a Second Language and Summer Sessions Coursework

English as a Second Language (ESL) and Summer Sessions coursework counts as units attempted, and toward the cumulative grade-point average.

Remedial Coursework

Remedial coursework counts as units attempted, but does not count toward the cumulative grade-point average.

Repeat Coursework

Repeated courses and grade-point average are treated in accordance with the academic policy as outlined in this Catalog. If the Registrar’s Office counts repeat coursework as attempted/completed, it counts equally for academic progress standards. Financial Aid and Scholarships determines if students are eligible for aid for repeat coursework.

Transfer Coursework

Coursework accepted for transfer credit counts as both units attempted and completed, and has no affect on grade-point average unless the coursework is transferred from another UC campus.

Withdrawal

Withdrawal after the first day of classes during a term counts as units attempted, unless students do not attend any classes for the given term and receive a 100 percent refund of all fees.

Evaluation

Academic progress is evaluated annually after winter quarter grades are available. For students on probation and students who are required to follow an academic plan, academic progress is evaluated each term.

Suspension

Students who fail to meet the standards for satisfactory academic progress are placed on suspension and are no longer eligible to receive financial aid. Suspended students are notified through their MyUCLA account.

Appeal Process

Students who have their financial aid suspended may submit a written appeal using the Satisfactory Academic Progress Appeal form. When filing an appeal, they must provide a full explanation along with documentation, verifying the circumstances that led to their inability to meet the standards for satisfactory academic progress. Before filing an appeal, students should seek assistance from an academic adviser to explore ways to eliminate deficiencies and to establish a realistic plan toward graduation. Refer to the appeal instruction packet for specific examples of valid reasons for an appeal.

Appeal Deadline

Appeals must be submitted to Financial Aid and Scholarships prior to the last day of the term for which students are appealing to have aid reinstated. Retroactive appeals are not considered. Refer to the appeal instruction packet for priority deadlines.

Denied Appeals

If the appeal is denied, students may file a secondary appeal and submit additional information that may help explain the circumstances by which they were not able to maintain the standards for satisfactory academic progress. They are notified of the decision of the secondary appeal in writing; the decision is final.

Probation

Students who have an appeal approved are placed on probation and their academic progress monitored on a quarterly basis to ensure that they meet the conditions of their academic plan.

Reinstatement

Students whose aid eligibility has been suspended for failing to maintain the standards for satisfactory academic progress, or whose satisfactory academic progress appeal has been denied, may regain financial aid eligibility by becoming compliant with the qualitative and quantitative components of the academic progress standards. Students who exceed the maximum time frame cannot regain eligibility through the reinstatement process.

Academic Plans

If students are required to submit an academic plan as a condition of their approved appeal, their financial aid cannot be disbursed until Financial Aid and Scholarships confirms that they are adhering to their academic plan. Students on an academic plan are evaluated each term. Their ability to adhere to the units and courses specified in their academic plan is closely monitored. Failure to adhere to their academic plan causes delays in students’ aid being disbursed, and may result in suspension of their financial aid eligibility.

Residence for Tuition Purposes

Students who have not been living in California with intent to make it their permanent home for more than one year immediately before the residence determination date for
each term in which they propose to attend UCLA must pay nonresident supplemental tuition in addition to all other fees. The residence determination date is the day instruction begins at the last of the University of California campuses to open for the quarter; for schools on the semester system, it is the day instruction begins for the semester.

Who Is a Resident

Persons who are adult students (at least 18 years of age) may establish residence for tuition purposes in California if they are

1. a U.S. citizen
2. a permanent resident or other immigrant, or
3. a nonimmigrant who is not precluded from establishing a domicile in the U.S. Nonimmigrants who are not precluded from establishing a domicile in the U.S. include those who hold valid visas of the following types: A, E, G, H-1, H-4, Humanitarian Parole, I, K, L, N-8, N-9, NATO 1-7, O-1, P-1, P-2, P-3, R, T, U, or V

To establish residence in California, students and/or parents must be physically present in California for more than one year, and they must have come here with the intent to make California their home as opposed to coming to this state to go to school.

Graduate students can establish eligibility independently from their parents.

Undergraduate students under 24 years of age must prove their eligibility as well as their parents’ unless if the student proves financial independence. Physical presence within the state solely for educational purposes does not constitute the establishment of California residence, regardless of the length of stay.

Students and/or parents must demonstrate their intention to make California their home by severing any and all residential ties with their former state of residence and establishing those ties with California. If these steps are delayed, the one-year durational period is extended until students and/or parents have demonstrated both presence and intent for one full year.

If their parents are not California residents (over one year of physical presence with intent to remain in the state), students are required to be financially independent in order to be a resident for tuition purposes. Their residence cannot be derived from their spouse, registered domestic partner, or their parents.

Requirements for Financial Independence

A student is considered financially independent if one or more of the following apply: the student

1. is at least 24 years of age by December 31 of the academic year for which they are requesting residence classification
2. is a veteran of the U.S. Armed Forces
3. is serving in the U.S. Armed Forces, including reserve components of these forces
4. is a ward of the court or a foster youth or both parents are deceased
5. has legal dependents other than a spouse
6. is married or has a registered domestic partner as of the residence determination date
7. has been determined to be an unaccompanied youth who was homeless pursuant to federal financial aid rules
8. receives an independent student status determined by UC campus financial aid office
9. is declared by a court to be an emancipated minor
10. is a graduate or professional student
11. is a single undergraduate student and was not claimed as an income tax deduction by their parents or any other individual for the one tax year immediately preceding the term for which they are requesting resident classification; and can demonstrate self-sufficiency for one full year prior to the residence determination date of the term they propose to attend the University, through their own resources (such as employment, commercial loans, financial aid, and savings that can be officially documented). The one year required for self-support might not coincide with the one tax year during which the student must not have been claimed by their parents.

Establishing Intent to Become a California Resident

Indications of student intent to make California their permanent residence can include the following:

1. registering to vote and voting in California elections
2. designating California as their permanent address on all school and employment records, including military records if they are in the U.S. Armed Forces
3. obtaining a California Driver License or, if they do not drive, a California Identification Card
4. obtaining California vehicle registration
5. paying California income taxes as a resident, including taxes on income earned outside California from the date they establish residence
6. establishing a California residence in which they keep their personal belongings
7. licensing for professional practice in California

Maintaining these indicia in other states during any period for which students claim residence can also serve as an indication of their intent. Documentary evidence is required, and all relevant indications are considered in determining the classification. Intent is questioned if students return to their prior state of residence when UCLA is not in session.

Temporary Absences

If persons are nonresident students who are in the process of establishing a residence for tuition purposes and they return to their former home during noninstructional periods, their presence in the state is presumed to be solely for educational purposes and only convincing evidence to the contrary rebuts this presumption. Students who are in the state solely for educational purposes are not classified as residents for tuition purposes regardless of the length of their stay.

If persons are students who have been classified as residents for tuition purposes and they leave the state temporarily, their absence could result in the loss of their California residence. The burden is on students (or their parents if they are minors) to verify that they did nothing inconsistent with their claim of a continuing California residence during their absence. Steps that students (or their parents) should take to retain a California residence include the following:

1. maintain a domicile in California
2. continue to use a California permanent address in all records—educational, employment, military, etc.
3. continue to satisfy California Resident tax obligations. If a student claims California residence, they are liable for payment of income taxes on their total income from the date they establish their residence in the state, including income earned in another state or country
4. retain California voter registration and vote by absentee ballot
5. maintain a California driver license and vehicle registration. If it is necessary to change the driver license or vehicle registration, the student must change them back within the time prescribed by law

General Rules Applying to Minors

If students are unmarried minors (under age 18), the residence of the parent with whom they live is considered to be their residence. If they have a parent living, they cannot change their residence by their own act, by the appointment of a legal guardian, or by the relinquishment of their parent’s right of control. If students live with neither parent, their residence is that of the parent with whom they last lived. Unless they are minor aliens present in the U.S. under the terms of a nonimmigrant visa that precludes them from establishing a domicile in the U.S., students may establish their own residence when both their parents are deceased and a legal guardian has not been appointed. If they derive California residence from a parent, that parent must satisfy the one-year durational residence requirement.

Specific Rules Applying to Minors

Divorced or Separated Parents

Minor U.S. citizens or eligible aliens may be able to derive California resident status from a California resident parent, if they move to California to live with that parent before their 18th birthday. If they begin residing with their California parent after their 18th birthday, they are treated like any other adult student coming to California to establish residence.

Parent of Minor Moves from California

Students may be entitled to resident status if they are minor U.S. citizens or eligible aliens whose parent(s) was a resident of California who left the state within one year of the residence determination date if they

1. remained in California after their parent(s) departed
2. enroll in a California public postsecondary institution within one year of their parent(s) departure, and
3. once enrolled, maintain continuous attendance in that institution

Financial independence is not required in this case.

Two-Year Care and Control

A minor or 18-year-old student may be entitled to resident classification if, immediately prior to enrolling in a postsecondary institution, they have been living with and been under the continuous direct care and control of an adult or adults other than a parent for a period of no less than two years. The adult or adults having control must have been residents of California during the one year immediately prior to the residence determination date. The classification continues until students have attained the age of 19 and have lived in the state the minimum time necessary to
become a resident, so long as continuous full-time attendance is maintained at a public postsecondary institution.

**Self Support**

If students are U.S. citizens or eligible aliens and are minors who can prove that they lived in California for the entire year immediately before the residence determination date, that they have been self-supporting for that year, and that they intend to make California their permanent home, they may be eligible for resident status.

**Exemptions from Nonresident Supplemental Tuition**

**Member of the U.S. Armed Forces**

Some members of the U.S. Armed Forces may qualify for an exemption from nonresident supplemental tuition based on the federal Higher Education Opportunity Act of 2008. Under this Act, undergraduate and graduate students who are members of the U.S. Armed Forces on active duty for a period of more than 30 days, and whose domicile or permanent duty station is in California, are entitled to an exemption from nonresident supplemental tuition. Students must be continuously enrolled at the University, notwithstanding a subsequent change in their permanent duty station to a location outside of California.

Effective July 2015, certain members of the U.S. Armed Forces on active duty and veterans (and their dependents) who were separated from U.S. military service are eligible for G.I. Bill (Post-9/11 or Montgomery) program funds may qualify for an exemption from nonresident supplemental tuition. Students must be continuously enrolled at the University, notwithstanding a subsequent change in their permanent duty station to a location outside of California.

**Special Circumstances**

Members of the U.S. Armed Forces stationed in California are entitled to resident classification unless their assignment to California is for the purpose of attending a state-supported institution of higher education. They must provide the campus residence deputy with a statement from their commanding officer or personnel officer stating that their assignment to active duty in California is not for educational purposes. The letter must include the dates of their assignment to the state.

Students discharged from military service after having been stationed in California on active duty for at least 366 days are entitled to resident classification for the minimum time necessary to establish residence (366 days).

**Spouse or Other Dependents of Military Personnel**

Some dependents of members of the U.S. Armed Forces may qualify for an exemption from nonresident supplemental tuition based on the federal Higher Education Opportunity Act of 2008. Under this Act, undergraduate or graduate students who are the spouse or dependent child of a member of the U.S. Armed Forces on active duty for a period of more than 30 days and whose domicile or permanent duty station is in California, are entitled to an exemption from nonresident supplemental tuition. Students must be continuously enrolled at the University, notwithstanding a subsequent change in the U.S. Armed Forces member’s permanent duty station to a location outside of California.

**California School Attendee (AB 540)**

Under California law AB 540, certain nonresident students are exempt from paying nonresident supplemental tuition. To be eligible, students must have attended three full-time years at a California high school (9th grade included), adult school, and community college, or attained credits/units earned in California from a California high school equivalent to three or more years of full-time high school coursework and attended a combination of elementary, middle, and/or high school (K-12) in California for a total of three or more years; and graduated from a California high school (or attained the equivalent, such as a High School Equivalency Certificate issued by the state of California or a Certificate of Proficiency resulting from the California High School Proficiency Examination), attained an associate’s degree from a California community college, or fulfilled minimum transfer requirements from a California community college to a UC campus. See [AB 540 nonresident tuition exemption](#). Non-immigrant alien students are not eligible for the exemption.

**Child, Spouse, or Registered Domestic Partner of a UC Faculty Member**

To the extent funds are available, if a student is an unmarried dependent child, spouse, or registered domestic partner of a member of the University faculty who is a member of the Academic Senate, they may be eligible for a waiver of nonresident supplemental tuition resident classification. Confirmation of the faculty member’s membership in the
Academic Senate must be secured each term this waiver is granted.

Child, Spouse, or Registered Domestic Partner of a UC Employee
Students may be entitled to resident classification if they are a dependent child, spouse, or registered domestic partner of a full-time University of California employee whose assignment is outside California. Their parent’s, spouse’s, or registered domestic partner’s employment status with the University must be ascertained each term.

Dependent Child of a California Resident
If students have not been an adult resident of California for more than one year and are the natural or adopted dependent child of a California resident who has been a resident for more than one year immediately prior to the residence determination date, they may be entitled to a resident classification until they have resided in California the minimum time necessary to become a resident, so long as continuous attendance is maintained at an institution.

Native American Graduate of a Bureau of Indian Affairs High School
Students who are graduates of a California high school operated by the federal Bureau of Indian Affairs may be entitled to a resident classification.

Employee of a California Public School District
Students holding a valid credential authorizing service in the public schools of the State of California who are employed by a school district in a full-time certificate position may be entitled to a resident classification.

Team USA Amateur Athlete Student
A Team USA student athlete who trains in California in an elite-level program approved by the U.S. Olympic and Paralympic Committee is eligible for a contingent resident classification for one year, subject to continued eligibility for this provision as defined by California Education Code section 68083. Or, the student is eligible to receive a resident classification based on timely satisfaction of applicable residence requirements. The student should contact Team USA for a letter of eligibility.

Dependent or Ward of the State of California Child Welfare System
Notwithstanding any other provisions, students who reside in California and who are currently dependents or wards of the state through the California child welfare system, or were served by the California child welfare system, shall be entitled to a resident classification as long as they remain continuously enrolled.

Child, Spouse, or Registered Domestic Partner of Deceased Public Law Enforcement or Fire Suppression Employee
Students may be entitled to a waiver of nonresident supplemental tuition if they are the child, spouse, or registered domestic partner of a deceased public law enforcement or fire suppression employee who was a California resident at the time of their death, and who was killed in the course of fire suppression or law enforcement duties.

Congressional Medal of Honor Recipients and Their Children
Students who are recipients of the Congressional Medal of Honor or who are the children of a recipient may be exempt from nonresident supplemental tuition.

Residence Classification Change
Students may obtain a Petition for Residence Classification from the Registrar website to request a change of classification from nonresident to resident status. All changes of status must be initiated in advance of the petition filing deadline.

Time Limit on Submitting Documentation
If additional documentation is required for residence classification but is not readily accessible, students have until the end of the applicable term to submit it.

Incorrect Classification
Students who were incorrectly classified as residents are subject to reclassification as nonresidents and to payment of all nonresident tuition and fees not paid. If students concealed information or furnished false information and were classified incorrectly as a result, they are also subject to University discipline.

Student Status Change
Resident students who become nonresidents must immediately notify the residence deputy of their change in status.

Inquiries and Appeals
Inquiries regarding residence requirements, determination, and/or recognized exceptions should be directed to the Residence Deputy, UCLA Registrar’s Office, 1113 Murphy Hall, Box 951429, Los Angeles, CA 90095-1429, 310-825-3447. Students are cautioned that this summary is not a complete explanation of the law regarding residence. Note that changes may be made in the residence requirements between the
publication of this statement and the relevant residence determination date.

Grounds for Appeal

Students may appeal a campus nonresident determination to the UC Office of the General Counsel only on the grounds and within the deadline specified:

1. The decision to classify a student as a nonresident for tuition purposes was based on (a) a significant error of fact; (b) a significant procedural error; or (c) an incorrect application of policy that, if corrected, would require that the student be reclassified as a resident.

2. Significant new information became available after the date of the campus decision classifying the student as a nonresident; despite the exercise of reasonable diligence (care and attention), the information was not previously known or available to the student; and based on the new information, classification as a nonresident is incorrect.

No appeals based solely on disagreement with the campus decision are acceptable.

Appeal Deadline

The UC Office of the General Counsel must receive the appeal from the student within 30 days of the date of the campus decision notifying the student of the nonresident classification. Send the completed Application to Appeal and a copy of the nonresident decision by e-mail to the Residency Analyst; fax to 510-987-9757; or mail to Residency Analyst, UC Office of the General Counsel, 1111 Franklin Street, 8th Floor, Oakland, CA 94607-5200. No other University personnel are authorized to supply information relative to residence requirements for tuition purposes.

Privacy Notice

All information requested on the Statement of Legal Residence (SLR) form is required for determining whether or not students are legal residents of California for tuition purposes. Registration cannot be processed without this information. The Registrar’s Office on campus maintains the requested information. University of California policies governing residence for tuition purposes are established by the Regents pursuant to and implemented by regulations established by the president, in consultation with the general counsel (Regents Policy 3105). Students have the right to inspect University records containing the residence information requested on the SLR form.

Regulations

Nondiscrimination

The University of California, in accordance with applicable federal and state laws and University policies, does not discriminate on the basis of race, color, national origin, religion, sex, gender identity, pregnancy (including pregnancy, childbirth, and medical conditions related to pregnancy and childbirth), physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or service in the uniformed services (including membership, application for membership, performance of service, application for service, or obligation for service in the uniformed services). The University also prohibits sexual harassment and harassment on any of the above bases. This nondiscrimination policy covers admission, access, and treatment in University programs and activities.

Students may grieve any action that they believe discriminates against them on the ground of race, color, national or ethnic origin, alienage, sex, religion, age, sexual orientation, gender identity, marital status, veteran status, or perceived membership in any of these categories which results in injuries to the student by contacting the Office of the Dean of Students by e-mail, or in person at 1104 Murphy Hall. Refer to UCLA Procedure 2301 Student Grievances Regarding Violations of Anti-Discrimination Laws or University Policies on Discrimination, also available in 1104 Murphy Hall, for more information.

Inquiries regarding the University student-related nondiscrimination policies may be directed to the Office of the Dean of Students by e-mail, in person at 1104 Murphy Hall, or by phone at 310-825-3871. A staff member is available at this office to support students who need information or assistance in filing a discrimination complaint.

In accordance with applicable federal and state laws and University policy, including Title II of the Americans with Disabilities Act, Section 504 of the Rehabilitation Act of 1973, and University of California policy PACAOS-20 (Policy on Nondiscrimination), UCLA does not discriminate on the basis of physical or mental disability. Retaliation for participation in University procedures relating to complaints of discrimination is also prohibited. This nondiscrimination policy covers admission, access, and treatment in University programs and activities. UCLA is committed to prohibiting disability-based discrimination and harassment, and retaliation, performing a prompt and equitable investigation of complaints alleging discrimination, and properly remedying discrimination when it occurs. Examples of discrimination against students with disabilities include, but are not limited to: failure to engage with the student in a discussion of rea-
soning accommodations; failure to implement approved reasonable accommodations such as the provision of notes or extra time on tests; and exclusion of a qualified student from any course, course of study, or other educational program or activity because of the student’s disability. Disability-based harassment is conduct which is sufficiently severe, pervasive, or persistent so as to interfere with or limit an individual’s ability to participate in or benefit from the services, activities, or opportunities offered by the University.

UCLA has issued Procedure 230.2 Student Grievances Regarding Violations of Anti-Discrimination Laws or University Policies on Discrimination on Basis of Disability. Students may grieve any action that they believe discriminates against them on the basis of disability by contacting the Office of the Dean of Students by e-mail, or in person at 1104 Murphy Hall. Refer to this procedure for more information.

Title IX prohibits sex discrimination, including sexual harassment and sexual violence, in any education program or activity receiving federal financial assistance. Inquiries regarding the application of Title IX may be directed to the Title IX Office, 2255 Murphy Hall, 310-206-3417, or the U.S. Department of Education Office for Civil Rights.

**Student Conduct Policies**

Students are members of both society and the academic community with attendant rights and responsibilities. Students are expected to make themselves aware of and comply with the law, and with University and campus policies and regulations. While many UCLA policies and regulations parallel federal, state, and local laws, UCLA standards may be set higher. The University of California Policies Applying to Campus Activities, Organizations, and Students have been incorporated into the UCLA Student Conduct Code either by adapting or inserting verbatim the language of the policies. Students may contact the Office of Student Conduct for more information concerning these policies.

**Jurisdiction**

The University has jurisdiction over student conduct that occurs on University property, or in connection with official University programs or functions whether on or off University property. The University may, at its sole discretion, exercise jurisdiction over student behavior that occurs off campus and would violate student conduct when the alleged misconduct indicates that the student poses a threat to the safety or security of any individual; or it involves academic work or the forgery, alteration, or misuse of any University document, record, key, electronic device, or identification.

In determining whether or not to exercise off-campus jurisdiction, the University may consider factors including but not limited to the seriousness of the alleged misconduct; whether an alleged victim is a member of the campus community; the ability of the University to gather information, including witness statements; and whether the off-campus conduct is part of a series of actions that occurred both on and off campus.

**Types of Misconduct**

Students may be held accountable for committing or attempting to commit a violation of the UCLA Student Conduct Code or for assisting, facilitating, or participating in the planning of an act that violates this Code (or an act that would be in violation of this Code if it were carried out by a student). Violations include the following types of misconduct:

102.01: Academic Dishonesty. All forms of academic misconduct, including but not limited to cheating, fabrication or falsification, plagiarism, multiple submissions, or facilitating academic misconduct that occurs in academic exercises or submissions.

NOTE: Allegations involving students (paid or unpaid) who were working on externally (including federally) sponsored research projects or supported by externally (including federally) funded research training grants when research misconduct involving their supported work was alleged to have occurred, may be afforded a different procedure if the external sponsor requires a process for responding to allegations of research misconduct that is similar to or based on federal research misconduct regulations. In that case, allegations are managed under UCLA Policy 993 (PDF) Responding to Allegations of Research Misconduct and are forwarded to the Research Integrity Officer (RIO), who then determines whether an inquiry and/or review is warranted. Should a review be conducted, a copy of the investigation committee report and the RIO’s written determination of whether or not research misconduct occurred is forwarded to the dean, who may impose one or more sanctions as appropriate. Otherwise, section III of the UCLA Student Conduct Code is the applicable procedure for responding to allegations of fabrication by students. In the event that the RIO determines that the research record needs to be corrected due to a finding that research misconduct occurred, the RIO initiates a correction or retraction as appropriate.

For purposes of the UCLA Student Conduct Code, the following definitions apply:

102.01a: Cheating. Cheating includes, but is not limited to, the use of unauthorized materials (including online sources such as Course Hero, GitHub, or Chegg), information, or study aids in any academic exercise; the alteration of any answers on a graded document before submitting it for
regrading; or the failure to observe the expressed procedures or instructions of an academic exercise (e.g., examination instructions regarding alternate seating or conversation during an examination).

102.01b: Fabrication. Fabrication includes, but is not limited to, falsification or invention of any information or citation in an academic exercise, including fabrication or falsification of research. Fabrication of research is making up data or results and recording or reporting them. Falsification of research is manipulating research materials, equipment, or processes; or changing or omitting data or results such that the research is not accurately represented in the research record.

102.01c: Plagiarism. Plagiarism includes, but is not limited to, the use of another person’s work (including words, ideas, designs, or data), without giving appropriate attribution or citation. This includes, but is not limited to, representing, with or without the intent to deceive, part or all of an entire work obtained by purchase or otherwise, as the student’s original work; the omission of or failure to acknowledge the true source of the work; or representing an altered but identifiable work of another person or the student’s own previous work as if it were the student’s original or new work.

Unless otherwise specified by the faculty member, all submissions, whether in draft or final form, to meet course requirements (including a paper, project, examination, computer program, oral presentation, or other work) must either be the student’s own work, or must clearly acknowledge the source.

102.01d: Multiple Submissions. Multiple submissions includes, but is not limited to, the submission for credit in a UCLA course of any work that has been previously submitted in identical or similar form, at any educational institution, to fulfill the requirements of another course, without the informed permission/consent of the instructor of the UCLA course in which the multiple submission is alleged to have occurred. Multiple submissions also includes the submission of work for credit, in identical or similar form in concurrent courses without the permission/consent of the instructors of both courses.

102.01e: Facilitating Academic Dishonesty. Facilitating academic dishonesty includes, but is not limited to, knowingly helping another student commit an act of academic dishonesty; or publishing assignments, examinations, or solutions without permission of the instructor.

102.01f: Coercion Regarding Grading or Evaluation of Coursework. Threatening personal or professional repercussions or discipline against an instructor to coerce the instructor to change a grade or otherwise evaluate the student’s work by criteria not directly reflective of coursework.

102.01g: Unauthorized Collaboration. Unauthorized collaboration includes working with others without the expressed permission of the instructor on any submission, whether in draft or final form, to meet course requirements (including a paper, project, take-home examination, computer program, oral presentation, or other work). Collaboration between students will be considered unauthorized unless expressly permitted by the instructor.

102.02: Other Forms of Dishonesty. Other forms of dishonesty, including but not limited to fabricating information or knowingly furnishing false information or reporting a false emergency to the University.

102.03: Forgery. Forgery, alteration, or misuse of any University document, record, key, electronic device, or identification, or submission of any forged document or record to the University.

102.04: Theft, Damage, or Destruction of Property.

102.04a: Theft. Theft includes taking without expressed permission or, misappropriation of any property or services of the University or property of others while on University premises or at official University functions; or possession of any property that the student had knowledge or reasonably should have had knowledge was stolen.

102.04b: Damage or Destruction of Property. Damage or destruction of any University property or the property of others while on University premises or at official University functions.

102.05: Computer Misuse.

102.05a: Theft or Abuse of Computers. Theft or abuse of University computers or other University electronic resources such as computer and electronic communications facilities, systems, and services. Abuses include, but are not limited to, unauthorized entry; unauthorized review of personal information of others maintained on University electronic resources; use, transfer, or tampering with the communications of others; use of either software or physical devices to enroll in classes for yourself or on behalf of others using processes other than those specifically delineated by the UCLA Registrar’s Office; interference with the work of others or with the operation of computer or electronic communications facilities, systems, or services; or violation of the University of California Electronic Communications Policy (PDF) or of any other University acceptable or allowable use policies.

102.05b: Violations of Copyright. Violations of copyright laws, whether by theft, unauthorized sharing, or other misuse of copyrighted materials such as music, movies, software, photos, or text.

102.06: Unauthorized Use of University Resources or Name. Unauthorized entry to, possession of, receipt of, or
102.07: Violations of University Policy. Students may be subject to discipline for violation of any University policy.

102.07a: University Housing. Violations of policy regarding University-owned, operated, or leased housing facilities or other housing facilities on University property.

102.07b: University Parking. Violations of policy regarding University parking services or University-owned or operated parking facilities.

102.07c: University Recreation. Violations of policy regarding University recreation services, programs, or within University-owned or operated recreation facilities.

102.07d: University Identification Card (BruinCard). Violation of policies, regulations, or rules governing use of official University identification cards, including manufacturing or possession of false identification cards, using another person’s BruinCard to obtain services or establish identity, facilitating the misuse of one’s BruinCard by another person to obtain services or establish identity, or other misuse of the BruinCard.

102.07e: Unmanned Aircraft Systems. Operation of a drone or other unmanned aircraft system in the airspace above the campus is only permissible with the express written permission of the University of California Unmanned Aircraft Systems Safety Office.

102.07f: Workplace Violence. Violations of policy regarding workplace violence, including violating the terms of a restraining order or court order. See UCLA Policy 132 (PDF) Workplace Violence Prevention.

102.08: Conduct that Threatens Health or Safety. Conduct that threatens the health or safety of any person, including but not limited to, physical assault, threats that cause a person reasonably to be in sustained fear for one’s own safety or the safety of one’s immediate family, incidents involving the use or display of a weapon likely to cause great bodily harm, and intoxication or impairment through the use of alcohol or controlled substances to the point one is unable to exercise care for one’s own safety; or other conduct that threatens the health or safety of any person.

As described in section IV of the Code, before a final determination of alleged misconduct is made, an interim suspension or interim exclusion may be imposed by the dean when there is reasonable cause to believe that the student’s participation in University activities or presence at specified areas of campus will lead to physical abuse, threats of violence, or conduct that threatens the health or safety of any person on University property or at official University functions; or other disruptive activity incompatible with the orderly operation of the campus.

Incidents involving allegations of sexual violence and sexual harassment (including domestic violence, dating violence, and sexual assault), are reviewed initially by the Title IX Office pursuant to the UC Policy on Sexual Violence and Sexual Harassment (PDF) and any local procedures currently in effect. Where the Title IX Office determines that it does not have jurisdiction over an allegation, the Office of Student Conduct may review the matter to determine if the Code applies.

102.09: Sexual Harassment. Sexual Harassment is defined in the UC Policy on Sexual Violence and Sexual Harassment (PDF). Incidents involving allegations of sexual violence and sexual harassment (including domestic violence, dating violence, and sexual assault), are reviewed initially by the Title IX Office pursuant to this policy and any local procedures currently in effect. Where the Title IX Office determines that it does not have jurisdiction over an allegation, the Office of Student Conduct may review the matter to determine if the Code applies.

102.10: Stalking. Stalking is behavior in which a student repeatedly engages in a course of conduct directed at another person and makes a credible threat with the intent to place that person in reasonable fear for their safety, or the safety of their family, where the threat is reasonably determined by the University to seriously alarm, torment, or terrorize the person, and where the threat is additionally determined by the University to serve no legitimate purpose.

The Code prohibits retaliation against a person who reports stalking, assists someone with a report of stalking, or participates in any manner in a review or resolution of a stalking report. Retaliation includes threats, intimidation, reprisals, and/or adverse actions related to employment or education.

For stalking violations of a sexual nature, see also the UC Policy on Sexual Violence and Sexual Harassment (PDF). Incidents involving allegations of sexual violence and sexual harassment (including domestic violence, dating violence, and sexual assault), are reviewed initially by the Title IX Office pursuant to this policy and any local procedures currently in effect. Where the Title IX Office determines that it does not have jurisdiction over an allegation, the Office of Student Conduct may review the matter to determine if the Code applies.

102.11: Discrimination and Harassment.

102.11a: Discrimination. Discrimination means the exclusion of an individual on the basis of race, color, national origin, religion, sex, gender, gender expression, gender identity, gender transition status, pregnancy, physical or mental disability, medical condition (cancer-related or
102.11b: Harassment. Harassment means conduct that is sufficiently severe, pervasive, or persistent so as to interfere with or limit an individual’s ability to participate in or benefit from the services, activities, or opportunities offered by the University; or that creates a work environment that is intimidating, hostile, or abusive.

Sanctions may be enhanced where an individual was selected for harassment because of the individual’s race, color, national or ethnic origin, citizenship, sex, gender, gender expression, religion, age, sexual orientation, gender identity, pregnancy, marital status, ancestry, service in the uniformed services, physical or mental disability, medical condition, or perceived membership in any of these classifications.

For violations involving sexual harassment and sexual violence (including domestic violence, dating violence, and sexual assault), see instead the UC Policy on Sexual Violence and Sexual Harassment (PDF) and any local procedures currently in effect.

102.12: Hazing. Participating in, engaging in, or supporting hazing or any method of initiation or preinitiation into a campus organization or team, or other activity engaged in by the organization or members of the organization at any time that causes, or is likely to cause, physical injury or personal degradation or disgrace resulting in psychological harm to any student or other person, regardless of location, intent, or consent of participants. See the UCLA Hazing web page.

102.13: Obstruction or Disruption. Obstruction or disruption of teaching, research, administration, disciplinary procedures, or other University activities.

102.14: Disorderly Behavior. Engaging in disorderly or lewd conduct.

102.15: Disturbing the Peace. Participation in a disturbance of the peace or unlawful assembly.

102.16: Failure to Comply. Failure to identify oneself to, or comply with directions of, a University official or other public official acting in the performance of their duties while on University property or at official University functions; or resisting or obstructing such University or other public officials in the performance of or the attempt to perform their duties.

102.17: Controlled Substances. Manufacture, distribution, dispensing, possession, use, or sale of, or the attempted manufacture, distribution, dispensing, or sale of controlled substances (including medicinal marijuana), identified in federal or state law or regulation, which is unlawful or otherwise prohibited by, or not in compliance with, any University policy or campus regulations or being unable to exercise care for one’s own safety because one is under the influence of controlled substances. NOTE: This provision shall not apply to circumstances wherein the person under the influence was given a controlled substance without their knowledge and permission.

102.18: Alcohol. Manufacture, distribution, dispensing, possession, use, or sale of, or the attempted manufacture, distribution, dispensing, or sale of alcohol which is unlawful or otherwise prohibited by, or not in compliance with, University policy or campus regulations; or being unable to exercise care for one’s own safety because one is under the influence of alcohol. NOTE: This provision shall not apply to circumstances wherein the person under the influence was given alcohol without their knowledge and permission.

102.19: Destructive Devices. Possession, use, storage, or manufacture of explosives, firebombs, or other destructive devices.

102.20: Weapons and Replica Weapons.

102.20a: Weapons. Except as expressly permitted by law, possession, use, storage, or manufacture of a firearm or other weapon capable of causing bodily injury is prohibited.

102.20b: Replica Weapons. Except as expressly permitted by UCPD policy, possession, use, storage, or manufacture of replicas of firearms or other weapons is prohibited. See UCLA Policy 131 (PDF) Weapons on Campus.

102.21: Violation of Disciplinary Conditions. Violation of the conditions contained in the terms of a disciplinary action imposed under the UCLA Student Conduct Code.

102.22: Violation of Interim or Emergency Suspension Conditions. Violation of the conditions contained in a notice of Interim Suspension, Interim Exclusion, or Emergency Suspension issued pursuant to section IV of the UCLA Student Conduct Code.

102.23: Unauthorized Use or Sale of University Materials. Except as provided herein, no student will give, sell, or otherwise distribute to others or publish any recording made during any course presentation without the written consent of the University and the instructor/presenter. This policy is applicable to any recording in any medium, including handwritten or typed notes.

Any distribution of a recording of a course presentation at UCLA that captures the actual sounds and/or images of that course presentation, in any medium, must consider not only the rights of the instructor and the University, but also those of other parties. Examples include the privacy rights...
of students enrolled in the course, the rights of guest lecturers, and the copyright interests in materials authored by others that are displayed or presented during the course presentation. In addition to the consent of the University and the instructor/presenter, it may be necessary to secure permission from these other parties before any recording, distribution, publication, or communication is legally permitted.

102.23a: Selling Academic Materials. Selling, preparing, or distributing for any commercial purpose academic materials, including but not limited to written, video, or audio recordings of any course, or course materials, unless authorized by the University in advance and explicitly permitted by the course instructor in writing. The unauthorized sale or commercial distribution of academic materials, including but not limited to recordings, by a student is a violation of the UCLA Student Conduct Code whether or not it was the student or someone else who prepared the materials. This policy is applicable to any recording in any medium, including handwritten or typed notes.

102.23b: Copying Course Notes. Copying for any commercial purpose handouts, readers, or other course materials provided by an instructor as part of a University of California course unless authorized by the University in advance and explicitly permitted by the course instructor or the copyright holder in writing (if the instructor is not the copyright holder). Students currently enrolled in a course may provide a copy of their own notes or recordings to other currently enrolled students for noncommercial purposes reasonably arising from participation in the course, including individual or group study.

102.23c: Commencement Tickets. Selling commencement tickets.

102.24: Misuse of University Property. Organizing or carrying out unlawful activity on University property.

102.25: Violations of Law. Students may be subject to discipline on the basis of a conviction under any federal, California state, or local criminal law, when the conviction constitutes reasonable cause to believe that the student poses a threat to the health or safety of any person, or to the security of any property, on University premises or at official University functions, or to the orderly operation of the campus.

When the conviction also represents a violation of section(s) 102.08, 102.09, and/or 102.10 involving sexual harassment and sexual violence (including domestic violence, dating violence, sexual assault and stalking), the Title IX Office will review the matter pursuant to the UC Policy on Sexual Violence and Sexual Harassment (PDF), any related appendixes, and any local procedures currently in effect. Where the Title IX Office determines that it does not have jurisdiction over an allegation, the Office of Student Conduct may review the incident(s) to determine if the Code applies.

102.26: Terrorizing Conduct. Conduct where the actor means to communicate a serious expression of intent to terrorize, or acts in reckless disregard of the risk of terrorizing, one or more University students, faculty, or staff. Terrorize means to cause a reasonable person to fear bodily harm or death, perpetrated by the actor or those acting under their control. Reckless disregard means consciously disregarding a substantial risk. This section applies without regard to whether the conduct is motivated by race, ethnicity, personal animosity, or other reasons. This section does not apply to conduct that constitutes the lawful defense of oneself, of another, or of property.

102.27: Unwanted Personal Contact. Contact (whether physical, verbal, written, face-to-face, telephonic, electronic, or by other means) that (1) a student knows or should know is unwanted; (2) is communicated directly to one or more specific students, student group, faculty, or staff; (3) constitutes severe and/or pervasive, and objectively offensive, conduct; and (4) does not constitute speech protected by the First Amendment to the U.S. Constitution (e.g., speech in a public forum on a matter of public concern).

102.28: Expectation of Privacy. The following is prohibited:

Making a video recording, audio recording, taking one or more photographs, or streaming audio/video of any person in a location where the person has a reasonable expectation of privacy, without that person’s knowledge and express consent; or posting online any audio/video/photograph made by another individual of any person in a location where the person had a reasonable expectation of privacy, without that person’s knowledge and express consent.

Making a video recording, audio recording, or streaming audio/video of private nonpublic conversations and/or meetings, without the knowledge and express consent of all recorded parties; or posting online any audio/video/photographs made by another individual of any private, nonpublic conversations and/or meetings, without the knowledge and express consent of all recorded parties.

Looking through a hole or opening, into, or otherwise viewing, by means of any instrumentality, the interior of a private location without the subject’s knowledge and express consent.

Express consent is clear, unmistakable, and voluntary consent that may be in written, oral, or nonverbal form.

Private locations are settings where the person reasonably expected privacy. For example, in most cases the following are considered private locations: residential living quarters, bathrooms, locker rooms, and personal offices.
Private nonpublic conversations and/or meetings include any communication carried on in circumstances that reasonably indicate that any party wants the communication to be confined to the parties, but excludes a communication made in a public gathering, or in any other circumstance in which the parties to the communication may reasonably expect that the communication may be overheard or recorded.

These provisions do not extend to public events or discussions, nor to lawful official law or policy enforcement activities. These provisions may not be utilized to impinge on the lawful exercise of constitutionally protected rights of freedom of speech or assembly.

For incidents involving allegations of conduct prohibited by the UC Policy on Sexual Violence and Sexual Harassment (PDF) (including invasions of sexual privacy), the Title IX Office will review the matter pursuant to this policy, any related appendixes, and any local procedures currently in effect. Where the Title IX Office determines that it does not have jurisdiction over an allegation, the Office of Student Conduct may review the incident(s) to determine if the Code applies.

**Sexual Assault and Other Sexual Violence**

UCLA does not tolerate sexual violence and responds to all reports of sexual violence in accordance with UCLA procedures and the UC Policy on Sexual Violence and Sexual Harassment (PDF). Sanctions for a student found responsible for committing sexual assault or other sexual violence may include dismissal from the University. See the Title IX policies and rights web page.

**If a Person Has Been Sexually Assaulted**

Those who believe that they are the victims of sexual assault can

1. **immediately call the police department.** If possible, call the UCLA Police Department at 310-825-1491 or 911

2. **get medical attention.** Campus police will provide transportation to the Rape Treatment Center at Santa Monica-UCLA Medical Center for medical treatment and evidence collection. A confidential counselor from the Rape Treatment Center will be available at that time, free of charge

3. **report to Title IX.** Students have the right to report to the University, and can do that by contacting the Title IX Office by e-mail or by calling 310-206-3417. If the other person is a student or employee, the office can take administrative action, and explain those options. The Title IX Office also offers interim measures to prevent individuals from experiencing additional harm. Those measures can include, but are not limited to, academic accommodations, no-contact directives prohibiting contact, and housing transfers

Utilize confidential campus and community support services

1. **contact a Campus Assault Resources and Education (CARE) advocate.** CARE Advocates are available to support and advocate for UCLA victims or survivors. They can discuss options and alternatives, help identify the most appropriate support services, and provide information about medical care, psychological counseling, academic assistance, legal options, how to file a police report, and how to file a complaint with the Title IX Office. CARE advocates are available to assist any member of the UCLA community regardless of where or when the assault occurred. For assistance, contact CARE at 310-206-2465 or go to 205 Covel Commons and ask to speak to a CARE advocate

2. **contact the Rape Treatment Center** at Santa Monica-UCLA Medical Center (424-259-7208) for free emergency medical treatment and counseling services

Assistance is available for persons who have been subjected to sexual violence. They are encouraged in the strongest terms to make a report to the Title IX Office.

**Harassment**

**Sexual Harassment**

The University of California is committed to creating and maintaining a community where all persons who participate in University programs and activities can work and learn together in an atmosphere free from all forms of harassment, exploitation, or intimidation. Every member of the University community should be aware that the University is strongly opposed to sexual harassment and that such behavior is prohibited both by law and by the UC Policy on Sexual Violence and Sexual Harassment (PDF) (hereafter referred to as the SVSH Policy). The University will respond promptly and effectively to reports of sexual harassment and will take appropriate action to prevent, correct and, if necessary, discipline behavior that violates the SVSH Policy. See the Title IX sexual harassment prevention website.

**Definitions**

For detailed definitions of sexual harassment, refer to the SVSH Policy.
Complaint Resolution
An individual who believes that they have been sexually harassed may contact Title IX Director Mohammed Cato, 2255 Murphy Hall, 310-206-3417. If a student reports sexual harassment or sexual violence to a responsible employee, as defined under the SVSH Policy, the responsible employee must report it to the Title IX Office. Responsible employees include academic personnel, faculty members, and most other employees who are not defined as a confidential resource under the SVSH Policy.

Title IX prohibits sex discrimination, including sexual harassment and sexual violence, in any education program or activity receiving federal financial assistance. Inquiries regarding Title IX may be directed to the Title IX Office by e-mail, or at 2255 Murphy Hall, 310-206-3417; or the U.S. Department of Education Office for Civil Rights.

Other Forms of Harassment
The University strives to create an environment that fosters the values of mutual respect and tolerance and is free from discrimination based on race, ethnicity, sex, religion, sexual orientation, disability, age, and other personal characteristics. Certainly harassment, in its many forms, works against those values and often corrodes a person’s sense of worth and interferes with one’s ability to participate in University programs or activities. While the University is committed to the free exchange of ideas and the full protection of free expression, the University also recognizes that words can be used in such a way that they no longer express an idea, but rather injure and intimidate, thus undermining the ability of individuals to participate in the University community. The University of California Policies Applying to Campus Activities, Organizations, and Students (PDF) (hereafter referred to as Policies) presently prohibit a variety of conduct by students which, in certain contexts, may be regarded as harassment or intimidation.

For example, harassing expression which is accompanied by physical abuse, threats of violence, or conduct that threatens the health or safety of any person on University property or in connection with official University functions may subject an offending student to University discipline under the provisions of the Policies.

Similarly, harassing conduct, including symbolic expression, which also involves conduct resulting in damage to or destruction of any property of the University or property of others while on University premises may subject a student to University discipline under the provisions of Section 102.04 of the Policies.

Further, under specific circumstances described in Section 102.11 of the Policies, students may be subject to University discipline for misconduct which may consist solely of expression. Copies of these Policies are available in the Office of Student Conduct, 1104 Murphy Hall.

Complaint Resolution
One of the necessary measures in our efforts to assure an atmosphere of civility and mutual respect is the establishment of procedures which provide effective informal and formal mechanisms for those who believe that they have been victims of any of the above misconduct.

Many incidents of harassment and intimidation can be effectively resolved through informal means. For example, an individual may wish to confront the alleged offender immediately and firmly. An individual who chooses not to confront the alleged offender and who wishes help, advice, or information is urged to contact the Office of Student Conduct.

In addition to providing support for those who believe they have been victims of harassment, the Office of Student Conduct can help students to consider which of the available options is the most useful for the particular circumstances.

With regard to the Universitywide Student Conduct Harassment Policy, complainants should be aware that not all conduct which is offensive may be regarded as a violation of this policy and may, in fact, be protected expression. Thus, the application of formal institutional discipline to such protected expression may not be legally permissible. Nevertheless, the University is committed to reviewing any complaint of harassing or intimidating conduct by a student and intervening on behalf of the complainant to the extent possible.

Faculty Conduct Policies
The complete Faculty Code of Conduct (Code), part of the University of California Academic Personnel Manual, is available in APM 015 (PDF). A portion of the Code outlines faculty obligations to students.

Faculty Code of Conduct
Ethical Principles
As teachers, the professors encourage the free pursuit of learning of their students. They hold before them the best scholarly standards of their discipline. Professors demonstrate respect for students as individuals and adhere to their proper roles as intellectual guides and counselors. Professors make every reasonable effort to foster honest academic conduct and to assure that their evaluations of students reflect each student’s true merit. They respect the confidential nature of the relationship between professor and student. They avoid any exploitation, harassment, or discriminatory
The integrity of the faculty-student relationship is the foundation of the University’s educational mission. This relationship vests considerable trust in the faculty member, who, in turn, bears authority and accountability as mentor, educator, and evaluator. The unequal institutional power inherent in this relationship heightens the vulnerability of the student and the potential for coercion. The pedagogical relationship between faculty member and student must be protected from influences or activities that can interfere with learning consistent with the goals and ideals of the University. Whenever a faculty member is responsible for academic supervision of a student, a personal relationship between them of a romantic or sexual nature, even if consensual, is inappropriate. Any such relationship jeopardizes the integrity of the educational process.

In this section, the term student refers to all individuals under the academic supervision of faculty.

Types of Unacceptable Conduct

Failure to meet the responsibilities of instruction, including

1. arbitrary denial of access to instruction
2. significant intrusion of material unrelated to the course
3. significant failure to adhere, without legitimate reason, to the rules of the faculty in the conduct of courses, to meet class, to keep office hours, or to hold examinations as scheduled
4. evaluation of student work by criteria not directly reflective of course performance
5. undue and unexcused delay in evaluating student work

Discrimination, including harassment, against a student on political grounds or for reasons of race, color, religion, sex, sexual orientation, gender, gender expression, gender identity, ethnic origin, national origin, ancestry, marital status, pregnancy, physical or mental disability, medical condition (cancer-related or genetic characteristics), genetic information (including family medical history), or service in the uniformed services as defined by the Uniformed Services Employment and Reemployment Rights Act of 1994 (USERRA), as well as state military and naval service, or within the limits imposed by law or University regulations, because of age or citizenship or for other arbitrary or personal reasons.

Sexual violence and sexual harassment, as defined by University policy, of a student.

Violation of University policy, including the pertinent guidelines, applying to nondiscrimination against students on the basis of disability.

Use of the position or powers of a faculty member to coerce the judgment or conscience of a student or to cause harm to a student for arbitrary or personal reasons.

Participating in or deliberately abetting disruption, interference, or intimidation in the classroom.

Entering into a romantic or sexual relationship with any student for whom a faculty member has, or should reasonably expect to have in the future, academic responsibility (instructional, evaluative, or supervisory). A faculty member should reasonably expect to have in the future academic responsibility (instructional, evaluative, or supervisory) for (1) students whose academic program will require them to enroll in a course taught by the faculty member; (2) students known to the faculty member to have an interest in an academic area within the faculty member’s academic expertise; or (3) any student for whom a faculty member must have academic responsibility (instructional, evaluative, or supervisory) in the pursuit of a degree.

Exercising academic responsibility (instructional, evaluative, or supervisory) for any student with whom a faculty member has a romantic or sexual relationship.

Charges of Violation

If a student has reason to believe that a faculty member has violated the Faculty Code of Conduct, the student has several options. The student may report the alleged violator to the chair of the department or to the dean of the division or school, seek mediation with the Office of Ombuds Services, or seek advice from the Senate’s Grievance Advisory Committee. If the alleged violation involves grading or other student evaluation, the student may file a grading grievance. If the violation involves sexual harassment, sexual violence, or discrimination, the violation should be reported to the Civil Rights Office. If the student feels that formal discipline may be warranted, the student may so inform the chair of the department, or the dean of the division or school, or may file a charge themselves with the Academic Senate Charges Committee. If the student seeks remedies based on the alleged violations, the student should work with the Office of the Dean of Students.

Disclosure of Student Records

Pursuant to the Federal Family Educational Rights and Privacy Act (FERPA), the California Information Practices Act, and the University of California Policies Applying to the Disclosure of Information from Student Records, students at UCLA have the right to
1. Inspect and review records pertaining to themselves in their capacity as students, except as the right may be waived or qualified under federal and state laws and University policies.

2. Have withheld from disclosure, absent their prior written consent for release, personally identifiable information from their student records, except as provided by federal and state laws and University policies.

3. Inspect records maintained by UCLA of disclosures of personally identifiable information from their student records.

4. Seek correction of their student records through a request to amend the records or, if such request is denied, through a hearing.

5. File complaints with the U.S. Department of Education regarding alleged violations of the rights accorded them by FERPA.

UCLA, in accordance with federal and state laws and University policies, has designated the following categories of personally identifiable information as public information that UCLA may release and publish without the student’s prior consent: name, e-mail address, telephone numbers, major field of study, dates of attendance, number of course units in which enrolled, and degrees and honors received. This information is published in the UCLA Campus Directory, which lists all the offices that may maintain student records, together with each office’s campus address and telephone number. Students who do not wish certain items (e.g., name, e-mail address, telephone numbers, major field of study, dates of attendance, number of course units in which enrolled, and degrees and honors received) to be included in the public information may so indicate through MyUCLA.

Students who do not wish certain items (i.e., name, e-mail address, telephone numbers, major field of study, dates of attendance, number of course units in which enrolled, and degrees and honors received) of this public information released and published may so indicate through MyUCLA. To restrict the release and publication of additional items in the category of public information, complete the UCLA FERPA Restriction Request form available from the Registrar’s Office, 1113 Murphy Hall.

Student records that are the subject of federal and state laws and University policies may be maintained in a variety of offices, including the Registrar’s Office, Office of Student Conduct, Career Center, Division of Graduate Education, External Affairs Department, and offices of a student’s College or school and major department. Students are referred to the online UCLA Campus Directory, which lists all the offices that may maintain student records, together with each office’s campus address and telephone number. Students have the right to inspect their student records in any such office, subject to the terms of federal and state laws and University policies. Inspection of student records maintained by the Registrar’s Office is by appointment only and must be arranged three working days in advance. Call 310-825-1091, option 6; or inquire at the Registrar’s Office, 1113 Murphy Hall.

A copy of applicable federal and state laws and University policies may be requested from the Information Practices office by e-mail, or by calling 310-794-8741. Information concerning student hearing rights may be obtained from that office, and from the Office of Student Conduct, 1206 Murphy Hall.
College and Schools

The UCLA campus is home to one College and 12 professional schools. Each has its own degree requirements, and each division and school is headed by a dean who has final academic authority. Students enroll in UCLA and in the College or one of the schools described in this chapter.

College of Letters and Science

Adriana Galván, PhD, Dean of Undergraduate Education
Miguel A. García-Garibay, PhD, Senior Dean and Dean of Physical Sciences
Tracy L. Johnson, PhD, Dean of Life Sciences
Alexandra Minna Stern, PhD, Dean of Humanities
Abel Valenzuela, Jr., PhD, Dean of Social Sciences (Interim)

College of Letters and Science
2300 Murphy Hall
310-825-9009

UCLA is one of the world’s premier universities. At the core of UCLA research programs, graduate training, and undergraduate instruction is the College of Letters and Science. With over 28,600 students and more than 900 faculty members, the College is the largest academic unit in the UC system and the academic heart of UCLA.

The undergraduate programs in the College stress a liberal arts education that brings together perspectives from many fields in a unified approach to learning. Students learn ways that issues are analyzed, questions are posed, and knowledge is organized. After sampling many general subjects, they concentrate on one field or subject and are required to pursue it rigorously and in depth, according to the standards of scholars in the field. When they reach the graduate level, they pose their own questions, analyze academic issues of their own making and, through their research, participate in the creation of knowledge.

Organization of the College

The College of Letters and Science is organized in five divisions, each led by a dean.

Humanities Division

The Humanities Division promotes—through scholarly inquiry and the transmission of ideas—sensitive, imaginative, and rigorous reflection on the human condition. Courses in literature help students understand the enduring power of texts both great and small—from cuneiform to manuscript to hypertext. Studies of nearly 100 foreign languages create a gateway to civilizations that span the globe and five millennia of human history. Philosophers offer training in the fundamental principles of logic and moral reasoning, and linguists—both theoretical and applied—illuminate the physiological, cognitive, and social aspects of human language. Art historians explore with students the forms and media through which humans have sought to express themselves and to challenge and make sense of their worlds. Programs in the humanities teach students to interpret texts with an informed sensitivity, to evaluate ideas critically, to write clearly and effectively about them, and to be able to question and discuss them with their peers.

Life Sciences Division

Faculty members and students in the Life Sciences Division play an essential role in unlocking the basic mechanisms of life at the most fundamental level. The geography of Southern California is conducive to life sciences research, since the diverse region is a natural laboratory for environmental biologists, plant and animal ecologists, and evolutionary biologists. Scientists in microbiology and molecular, cell, and developmental biology study embryo formation, cell signaling, and genetics. Neurochemists, neurophysiologists, psychobiologists, and behavior biologists study the underlying mechanisms of the neural basis of behavior. Physiological scientists examine the structure of muscle, hormonal control of behavior, and environmental conditions, such as weightlessness, that affect bone and muscle structure and function. Cognitive psychologists are concerned with the nature of knowledge—how people learn, remember, associate, and think; and how computers relate to human thought processes.

Physical Sciences Division

Departments in the Physical Sciences Division present the results of human efforts to understand the natural sciences and their physical aspects, including the properties and characteristics of matter and energy; the science of numbers and order; the origin and structure of the universe, solar system, and Earth; and climatic change and its environmental impact. The bases for the physical sciences are the fundamental laws and proof of mathematics, chemistry, and physics. Studies in the physical sciences are experimental, theoretical, observational, and computational. Faculty members and students are interested in such topics as the nature and evolution of the galaxies; ozone depletion; nuclear winter; greenhouse effect; molecular recognition, interactions, design, synthesis, and structure; evolution of
life and the continents; computational mathematics and symbolic logic; superconducting materials; plasma fusion, space plasmas; and high-energy accelerator physics.

Social Sciences Division

Majors in the Social Sciences Division help students make sense of the rapidly changing world around them by giving them the tools and sensibilities to appreciate the complex interplay of individuals, environment, culture, and economy that makes up their social world. They study human and animal evolution, as well as the transformation of human societies from small groups to states. They explore and debate the meaning of cultural, ethnic, and racial identities in historical and contemporary settings. Some majors challenge students to analyze the role of labor, markets, and exchange, as well as the dynamics of political choices, participation, and institutions. Communication, from interpersonal conversation to mass media, and its impact on personal and political behavior are studied in different fields, while the impact of place and the natural environment are examined through geography. Underlying all of these topics is a drive to capture the elusive nature of human behaviors and relationships through direct observation and the questioning of prevailing theories. In addition, students learn exciting and diverse methods of social and environmental analysis, such as archaeology, linguistics, statistics, game theory, remote sensing and imagery, textual analysis, ethnography, geographic information systems, fieldwork, and ecology.

Undergraduate Education Division

The Undergraduate Education Division is a campuswide advocate for undergraduate education, promoting academic success for the diverse undergraduate population at UCLA and ensuring options for all students to engage in a challenging array of educational opportunities, from foundational general education courses to advanced research and capstone projects.

Academic Advancement Program

The Academic Advancement Program (AAP) is a multiracial, multiethnic, and multicultural program that promotes academic excellence through academic counseling, learning sessions, and mentoring. Students are eligible for AAP if their academic profiles and personal backgrounds may impact their experience and their retention and graduation from UCLA.

Center for Academic Advising in the College

The Center for Academic Advising in the College (CAAC) encompasses programs and initiatives that foster student and staff development. CAAC partners with students to engage them in their undergraduate careers and to support their personal, professional, and academic growth; while also advising them on academic regulations and procedures, course selection, preparation for graduate and professional programs, selection of appropriate majors, and the options and alternatives available to enhance a UCLA education.

Center for Community Engagement

The Center for Community Engagement serves faculty members, undergraduate students, and community partners through academic courses and programs, including credit-bearing internships, community-engaged learning courses, community-based research, AmeriCorps programs, and the Astin Community Scholars Program. It is home to the undergraduate minor in Community Engagement and Social Change.

Center for Educational Assessment

The Center for Educational Assessment (CEA) supplies information and analysis to support planning, program and policy development, and other decision making about undergraduate education at UCLA.

Center for Scholarships and Scholar Enrichment

The Center for Scholarships and Scholar Enrichment (CSSE) is designed to help students in the search for private scholarships, regardless of financial aid eligibility. The center also houses the Phi Beta Kappa office.

Center for the Advancement of Teaching

The Center for the Advancement of Teaching (CAT) supports undergraduate education by enhancing teaching and learning opportunities. Through grants, programs, and services, CAT promotes the effective use of current and emerging instructional methodologies and technologies.

Honors Programs

Honors Programs offers academic programs and services designed to promote an outstanding honors education, including College Honors, Honors Collegium, Departmental Scholar Program, Individual Majors Program, Honors Scholarships, Honors Research Stipends, and specialized counseling and support services for College honors students.

New Student Academic Programs

New Student Sessions are the first introduction to UCLA for new students. During the three-day, first-year student sessions—and the one-day transfer student sessions—a unique set of comprehensive and engaging programs is offered to make student transitions to UCLA great ones.
Transfer Alliance Program

The Transfer Alliance Program (TAP) seeks to strengthen academic ties between UCLA and honors programs in over 45 California community colleges, offering specialized transfer programs for participating students.

Undergraduate Education Initiatives

Undergraduate Education Initiatives are innovative programs designed for undergraduate students that feature best practices in undergraduate education and attract the most distinguished faculty members from all UCLA areas. Programs include UCLA General Education, Fiat Lux Freshman Seminar Program, Cluster Program, Undergraduate Student Initiated Education Program, and Writing II Program.

Undergraduate Research Centers

Undergraduate Research Centers (URC)—one for students in the arts, humanities, social sciences, and behavioral sciences; and one for students in science, engineering, and mathematics—exist as part of a continuing effort by the College to engage undergraduate students in research and creative activities at all levels.

Degrees

The College offers 139 majors leading to bachelor’s, master’s, and doctorate degrees. In addition, the College offers 86 undergraduate minors.

For a complete list of College of Letters and Science degrees, see Majors and Degrees.

Undergraduate Degree Requirements

Degree programs in the College offer students a variety of intellectual challenges by combining a wide distribution of courses and the opportunity to specialize in one particular field. To this end, students are required to select lower-division courses that furnish general foundations of human knowledge. In upper-division courses, they concentrate on one major field of interest.

As described below, College students must satisfy UC requirements, College requirements, and department requirements for the Bachelor of Arts or Bachelor of Science degree.

University Requirements

The University of California has two requirements that undergraduate students must satisfy to graduate: Entry-Level Writing or English as a Second Language, and American History and Institutions. Students who do not satisfy the Entry-Level Writing requirement prior to enrollment must pass an approved course or other program prescribed by their UC campus of residence. Only after satisfying the Entry-Level Writing requirement can they take an English composition course for transfer credit after enrolling at UCLA. See Degree Requirements in Undergraduate Study for details.

College Requirements

There are eight requirements that must be satisfied for award of a degree.

Unit Requirement

Students must satisfactorily complete for credit a minimum of 180 units for the bachelor’s degree. At least 60 of the 180 units must be upper-division courses numbered 100 through 199. A maximum of 216 units may be permitted. Advanced Placement Examination and International Baccalaureate Examination (transfer) credits are not counted toward the unit maximum.

Scholarship Requirement

Students must earn at least a 2.0 (C) grade-point average (GPA) in all courses undertaken at UCLA to receive a bachelor’s degree. Students must also earn a 2.0 GPA in a major...
and satisfy both the course and scholarship requirements for that major, including preparation for the major. Some majors have additional requirements.

**Academic Residence Requirement**

Thirty-five of the final 45 units completed for the bachelor’s degree must be earned while in residence at the College. A minimum of 24 upper-division units must be completed in the major while in residence at the College. The academic residence requirements apply to both continuing and transfer students.

**Writing Requirement**

Students must complete the UC Entry-Level Writing or English as a Second Language (ESL) requirement prior to completing the College writing requirement.

Students admitted to the College are required to complete a two-term writing requirement—Writing I and Writing II. Two courses in English composition are required for graduation. Both courses must be taken for letter grades, and students must receive a C or better grade in each (a C– grade is not acceptable).

**Writing I**

The Writing I requirement must be satisfied within the first three terms of enrollment by completing English Composition 3, 3D, 3DX, 3E, or 3SL with a C or better grade (a C– or Passed grade is not acceptable).

The Writing I requirement may also be satisfied by scoring 4 or 5 on one of the College Board Advanced Placement Examinations in English; completing a course equivalent to English Composition 3 with a C or better grade (a C– or Passed grade is not acceptable) taken at another institution; or scoring 5, 6, or 7 on an International Baccalaureate Higher Level Examination.

Students whose native language is not English may need to take English Composition 1A, 1B, and 2I before enrolling in a Writing I course. All courses in the sequence must be passed with a C or better grade (a C– or Passed grade is not acceptable).

Qualifying examination scores and courses are determined by the College Faculty Executive Committee.

**Writing II**

The Writing II requirement must be satisfied within seven terms of enrollment by completing one course from a list of **Writing II courses** approved by the College Faculty Executive Committee; see the Registrar’s **Writing II requirement** web page for details. Courses that satisfy the requirement are denoted by a W suffix and are **impacted**. The course must be completed with a C or better grade (a C– or Passed grade is not acceptable).

Applicable Writing II courses may also fulfill preparation for the major requirements and, if approved for general education (GE) or diversity credit, may also fulfill a GE or diversity requirement.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the Writing I, Writing II, and reciprocity requirements. No transfer student is admitted to the College without completing, with a C or better grade (a C– grade is not acceptable), a college-level writing course that Undergraduate Admission accepts as equivalent to English Composition 3.

**Quantitative Reasoning Requirement**

The quantitative reasoning requirement may be satisfied by completing one approved UCLA course (see list below) or an equivalent course within the first seven terms of enrollment. The course must be taken for a letter grade, and students must receive a C or better grade (a C– grade is not acceptable).

The requirement may also be satisfied by achieving an SAT Reasoning Test Mathematics Section score of 600 or better for exams taken January 2016 or earlier, or achieving an SAT Mathematics section score of 620 or better for exams taken March 2016 or later, or an SAT Subject Test in Mathematics score of 550 or better, or an ACT mathematics exam score of 26 or better. Approved UCLA courses and examinations, and qualifying scores, are determined by the College Faculty Executive Committee.

Applicable courses may also fulfill preparation for the major requirements and, if approved for general education (GE) credit, may fulfill a GE requirement.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the quantitative reasoning and reciprocity requirements. No transfer student is admitted to the College without completing, with a C or better grade (a C– grade is not acceptable), a college-level quantitative reasoning course that Undergraduate Admission accepts as equivalent to those approved by the College Faculty Executive Committee.

Approved courses include:

- Biostatistics 100A, 100B
- Life Sciences 20, 30A, 30B, 40
- Mathematics 3A, 31A, 31AL
- Philosophy 31
- Political Science 6, 6R
- Program in Computing 10A, 10B, 10C
Foreign Language Requirement

The foreign language requirement may be satisfied by one of the following methods: completing a college-level foreign language course equivalent to level three or above at UCLA with a C or Passed or better grade; or scoring 3, 4, or 5 on the College Board Advanced Placement (AP) foreign language examination in Chinese, French, German, Italian, Japanese, or Spanish, or scoring 4 or 5 in Latin, thereby earning College credit; or presenting a UCLA foreign language departmental examination score indicating competency through level three. Consult the Schedule of Classes or the appropriate department for times and places of regularly scheduled examinations. Students who wish to demonstrate proficiency in a language taught in a UCLA department that has no scheduled examination should contact the appropriate department to arrange for one. Students who wish to take an examination in a language not taught at UCLA should contact a College counselor.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the foreign language and reciprocity requirements.

Courses that may be used to fulfill this requirement are published on the Registrar’s foreign language requirement web page.

Diversity Requirement

The diversity requirement may be satisfied by completing one course from the faculty-approved list of courses. The course must be taken for a letter grade, and students must receive a C or better grade (a C– grade is not acceptable). Applicable courses may also fulfill major, minor, or elective requirements; and if approved for general education (GE) credit, may fulfill a GE requirement. A list of approved courses is available in the Schedule of Classes.

General Education Requirements

General education (GE) is more than a checklist of required courses. It is a program of study that reveals to students the ways that research scholars in the arts, humanities, social sciences, and natural sciences create and evaluate new knowledge; introduces students to the important ideas and themes of human cultures; fosters appreciation for the many perspectives and diverse voices that may be heard in a democratic society; and develops the intellectual skills that give students the dexterity they need to function in a rapidly changing world.

This entails the ability to make critical and logical assessments of information, both traditional and digital; deliver reasoned and persuasive arguments; and identify, acquire, and use the knowledge necessary to solve problems.

Applicable courses may also fulfill major, minor, or elective requirements; and if approved for diversity or writing, may fulfill the diversity requirement and/or Writing II requirement.

Foundations of Knowledge

General education courses are grouped into three foundational areas: Foundations of the Arts and Humanities, Foundations of Society and Culture, and Foundations of Scientific Inquiry.

Ten courses (47 units minimum) are required. GE-approved Writing II courses may fulfill an appropriate foundational area. See the foundational area descriptions below for a breakdown of courses required.

Students who successfully complete a year-long GE cluster series fulfill the Writing II requirement, complete 40 percent of their general education requirements, and receive laboratory/demonstration credit where appropriate.

Courses listed in more than one category can fulfill GE requirements in only one of the categories.

Foundations of the Arts and Humanities

Three 5-unit courses, one from each subgroup:

- Literary and Cultural Analysis
- Philosophical and Linguistic Analysis
- Visual and Performance Arts Analysis and Practice
Courses in this area supply perspectives and intellectual skills necessary to comprehend and think critically about our situation in the world as human beings. In particular, courses furnish the basic means to appreciate and evaluate the ongoing efforts of humans to explain, translate, and transform their diverse experiences of the world through such media as language, literature, philosophical systems, images, sounds, and performances. Courses introduce students to the historical development and fundamental intellectual and ethical issues associated with the arts and humanities, and may also investigate the complex relations between artistic and humanistic expression and other facets of society and culture.

**Foundations of Society and Culture**
Three 5-unit courses, one from each subgroup and a third course from either subgroup:

- Historical Analysis
- Social Analysis

Courses in this area introduce students to the ways in which humans organize, structure, rationalize, and govern their diverse societies and cultures over time. Courses focus on a particular historical question, societal problem, or topic of political and economic concern in an effort to demonstrate how issues are objectified for study, how data is collected and analyzed, and how new understandings of social phenomena are achieved and evaluated.

**Foundations of Scientific Inquiry**
Four courses, two from each subgroup. One 5-unit course from either subgroup must include laboratory credit. Other courses in the subgroups may be 4 units:

- Life Sciences
- Physical Sciences

Courses in this area ensure that students gain a fundamental understanding of how scientists formulate and answer questions about the operation of both the physical and biological world. Courses also deal with some of the most important issues, developments, and methodologies in contemporary science, addressing such topics as the origin of the universe, environmental degradation, and the decoding of the human genome. Through lectures, laboratory experiences, writing, and intensive discussions, students consider the important roles played by the laws of physics and chemistry in society, biology, Earth and environmental sciences, and astrophysics and cosmology.

**Foundations Course Lists**
Creating and maintaining a general education curriculum is a dynamic process; consequently, courses are frequently added to the list. For the most current list of approved courses that satisfy the Foundations of Knowledge GE plan, contact an academic adviser or see the master list.

**Advanced Placement Examination Credit**
Students may not use Advanced Placement (AP) Examination credit to satisfy the College 10-course foundational area general education requirement. See the College AP table. Consult with a departmental adviser for applicability of AP credit toward course equivalencies or satisfaction of preparation for the major requirements.

**Reciprocity with Other UC Campuses**
Students who transfer to UCLA from other UC campuses and have met all GE requirements prior to enrolling at UCLA are not required to complete the College GE requirements. Written verification from the dean at the other UC campus is required. Consult with a College adviser regarding eligibility for this option.

**Intersegmental General Education Transfer Curriculum**
Transfer students from California community colleges have the option to fulfill UCLA lower-division GE requirements by completing the Intersegmental General Education Transfer Curriculum (IGETC) prior to transfer. The curriculum consists of a series of subject areas and types of courses that have been agreed on by the University of California and the California community colleges. Although GE or transfer core courses are degree requirements rather than admission requirements, students are advised to fulfill them prior to transfer. The IGETC significantly eases the transfer process, as all GE and proficiency requirements, excluding diversity, are fulfilled when students complete the IGETC courses.

Students who are unable to complete one or two IGETC courses prior to transfer may request certification of partial completion of IGETC from their community college. On certification, each of the remaining courses must be completed with a minimum C or Passed or better grade in each. Students who fail to complete the remaining IGETC coursework or who are otherwise not eligible for IGETC or partial IGETC must complete the College GE and proficiency requirements. Consult with a college adviser regarding GE requirements prior to enrolling in any courses.

**Department Requirements**
College of Letters and Science departments generally set two types of requirements that must be satisfied for award of a degree: preparation for the major (lower-division courses) and the major (upper-division courses). Departments also set requirements for minors and specializations.
**Preparation for the Major**

Admission to a major may require completion of a set of courses known as preparation for the major. Some majors admit applicants to pre-major status until requisite courses are satisfactorily completed. Students in life sciences majors must complete a set of preparatory courses known as the Life Sciences core curriculum. Each department sets its own preparation for the major and eligibility requirements; see Curricula and Courses.

**The Major**

A major in the College consists of a group of coordinated upper-division courses and is designated as departmental, interdepartmental, or individual. Each course applied toward the major and preparation for the major must be taken for a letter grade unless otherwise stipulated by the department. Students who have been away from UCLA for several terms should consult with their major department or curriculum adviser concerning the requirements under which they are to graduate.

A departmental major consists of a minimum of 36 upper-division units and a maximum of 60 upper-division units. The majors are established and supervised by campus departments. Each department sets its own major requirements; see Curricula and Courses.

**Individual Capstone Majors**

If students have some unusual but definite academic interest for which no suitable major is offered at UCLA, and have completed at least three terms of work (45 units minimum) at UCLA with a grade-point average of 3.4 or better, they may petition for an individual capstone major. The consent of College Honors Programs and the assistance of a faculty adviser are required. Individual majors must be approved by the dean for undergraduate education.

The individual major must consist of at least 48 and no more than 60 upper-division units, a majority of which must be in departments offering a major in the College. A capstone senior thesis of at least 8 but no more than 12 units is required. For details about individual majors, contact Honors Programs, A311 Murphy Hall.

**Double Majors**

Students in good academic standing and on track to graduate on time may be permitted to have a double major, consisting of majors from two departments within the College. Both majors must be completed within the maximum limit of 216 units, and students must obtain the approval of both departments and the College.

With few exceptions, double majors in the same department are unacceptable. No more than 20 upper-division units may be shared by both majors.

**Minors and Specializations**

Students may choose to pursue a minor to complement their major program of study. Minors consist of no fewer than seven courses (28 units) and no more than nine courses (36 units). Some minors also have admission requirements.

The Computing specializations are sequences of supplemental courses that enhance work in a major.

See the list of Undergraduate Minors and Specializations in Majors and Degrees; descriptions appear in Curricula and Courses.

**Policies and Regulations**

Degree requirements are subject to policies and regulations, including the following:

**Student Responsibility**

Students should take advantage of academic support resources, but they are ultimately responsible for keeping informed of and complying with the rules, regulations, and policies affecting their academic standing.

**Study List**

The study list is a record of classes that a student is taking during a particular term. The allowable study list load is up to 19 units. After the first term, students may petition to enroll in more than 19 units if they attained at least a 3.0 grade-point average the preceding term in a total program of at least 15 units and have an overall grade-point average of 3.0. First-term transfer students from any other UC campus may carry excess units on the same basis as students who have completed one or more terms at UCLA; however, they are not encouraged to do so.

**Degree Progress**

UCLA is a full-time institution, and it is expected that students complete their undergraduate degree requirements promptly. In order to encourage on-time graduation and support a quality education that is accessible, undergraduate students in the College are allowed to enroll through spring or summer of their fourth year (for students admitted as first years) or fall of their third year (for students admitted as transfers). Students may request an exception from their academic advising unit by submitting a petition.
for additional time if needed based on documented extenuating circumstances.

The Degree Audit is a record of degree requirements and the courses taken to fulfill them. Students are responsible for monitoring their progress toward the degree. They must read and understand the UCLA General Catalog, and consult regularly with College and departmental advisers to confirm they are satisfying all program requirements. Departmental advisers advise students on progress and completion of the major requirements. Academic advisers and counselors in College Academic Counseling, Academic Advancement Program, Honors Programs, and Student Athletics Counseling assist students with College requirements, degree planning, and Degree Audits on request. Students can also view the Degree Audit through MyUCLA.

**Expected Cumulative Progress**

During a regular term of enrollment, undergraduate students in the College are required to enroll in a minimum of 13 units. Students are also required to meet cumulative progress unit expectations as outlined in the expected cumulative progress table.

The following courses count toward minimum progress and expected cumulative progress, as well as any other degree requirement, but are exempt from the maximum unit limit of 216:

- Any 19, 88S, 89, 89HC, M97X, 98X, 98XA, 98XB, 99, 189, 189HC, 190, 193, and 194
- Honors Collegium 101D, 101E, and 101G
- Research Practice 192B and 194A
- Science Education 1XP and 10XP
- University Studies 10A, 10B, 10C, 10D, 10E, 10F, and 30

**Reduced Fee Programs**

While full-time study is expected and required of students, some students may qualify for part-time study due to compelling reasons of occupation, home and family responsibilities, or health. Under this policy, part-time status is defined as 10 or fewer units per term based on enrolled units at the end of the third week, and is presumed to be of a permanent nature. On approval of part-time status, a reduction of tuition by one half and a reduction of nonresident supplemental tuition by one half are approved.

To be eligible for part-time study, students must provide documentation of occupation, home and family responsibility, or health that prevents them from carrying a full-time study load; as well as documentation of a need for part-time study for a minimum of three consecutive terms. Once approved for part-time study, students must complete two courses totaling 10 units or fewer in each of the three consecutive terms. Only under documented extraordinary circumstances is a one-course study list approved. Documentation must specify that a one-course study list is warranted.

Students should submit a request for reduced fees with the Registrar’s Office. The application for part-time study must be submitted with accompanying documentation by Friday of the second week of the term. Students approved for part-time study who become enrolled in or receive credit for more than 10 units during a term must pay full fees for that term.

**Declaring a Major**

Students are expected to select a major by the beginning of their junior year. This may be a program of related upper-division courses within a single department (departmental major) or a group of related courses involving a number of departments (interdepartmental major) or, under certain circumstances, a group of courses selected to meet a special need (individual capstone major).

Some entering freshmen are unsure about specific academic goals and request to be admitted to the College as “undeclared.” These students then explore fields of study by taking introductory courses in the physical and life sciences, social sciences, and humanities in search of an area that most excites their interest. UCLA encourages all students, even those who may have a specific major in mind, to explore the vast array of disciplines and fields that are available.

All students with 90 or more units toward a degree are expected to declare a pre-major or a major. When they are ready to do so, students obtain approval from the department or interdepartmental degree committee that governs their intended major.

**Changing a Major**

Students in good academic standing who wish to change their major may petition to do so, provided they can complete the new major and are on track to graduate on time. Admission to certain majors may be closed or restricted. Changes are normally not permitted if students are not in good academic standing or have begun their last term. Students should consult the department regarding eligibility and admission procedures.

Students who fail to meet eligibility or major requirements may be denied the privilege of entering or continuing in that major. Some departments may have higher grade-point requirements for their preparation and major courses or other restrictions; consult with the appropriate department regarding minimum standards and eligibility requirements.
Re-entering Students and Their Majors

Students returning to UCLA to resume their studies after an absence of several years may find their previous major area of study is no longer available. They must select a current major in which to complete their studies. Consult with an academic adviser for assistance.

Credit Limitations

The following credit limitations apply to all undergraduate students enrolled in the College. In many cases, units are not deducted until the final term before graduation. Students with questions should consult with an academic adviser.

Transfer students with credit from other institutions (advanced standing credit) receive a Degree Audit from Undergraduate Admission indicating the transferable units from former institutions. However, the following credit limitations may reduce the total number of transferred units that apply toward the degree in the College. Consult with an adviser in the College about these limitations.

Advanced Placement Examinations

Advanced Placement (AP) Examination credit may not be applied toward a degree unless students had less than 36 units of credit at the time of the examination(s). See the College AP table for UCLA course equivalents and credit allowed for GE requirements.

College Level Examination Program

Credit earned through the College Level Examination Program (CLEP) and through the California State University English Equivalency Examination may not be applied toward the bachelor’s degree.

Community College/Lower Division Transfer Limitation

After completing 105 lower-division quarter units toward the degree in all institutions attended, students are allowed no further unit credit for courses completed at a community college or for lower-division courses completed at any institution outside of the University of California.

Credit by Examination

Within the College, eligibility for credit by examination is usually limited to students who have been approved as Departmental Scholars or who are admitted to a departmental honors program or Honors Programs. Students who have completed a minimum of 12 units at UCLA with a minimum 3.5 overall grade-point average may petition for credit by examination. The examination for that course must be taken successfully before students may petition for credit by examination in another course.

Students may receive credit by examination for only one course out of 10 courses completed. Credit by examination may not be used to gain credit for prior knowledge, audited courses, or courses taken elsewhere. Units for a course taken by examination are applied toward the 216-unit maximum allowable units for graduation. Petitions for credit by examination (with fee) are available only through an appointment with a counselor in Honors Programs, A311 Murphy Hall.

Education Abroad Program

Students participating in the Education Abroad Program may receive a maximum of 56 units of credit toward the degree including units earned in an Intensive Language Program.

Foreign Language

Credit is not allowed for completing a less advanced course in grammar and/or composition after students have received credit for a more advanced course. College credit for an international student’s native language and literature is allowed for courses taken in native colleges and universities or upper-division (advanced language courses only) and graduate courses taken at the University of California or another English-speaking institution of approved standing. No credit is allowed for lower-division courses.

Performance Courses

No more than 12 units of music and/or dance performance courses (Dance 5, 6 through 16, 56 through 65, C109A, C113A, 114, C115, 116, Ethnomusicology 68A through 68Z, 91A through 91Z, 161A through 161Z, 168A through 168Z, Music 50, 60A through 61C, 160A through 161C, C185A through C186C, and World Arts and Cultures 114) may be applied toward the bachelor’s degree, whether taken at UCLA or another institution.

Physical Education

No more than 4 units in physical education activities courses may be applied toward the bachelor’s degree.

Physics Courses

Any two or more courses from Physics 1A, 1AH, 5A, and 6A are limited to a total of 6 units of credit.

ROTC Courses

For students contracted in the Aerospace Studies Department, 36 units of aerospace studies credit may be applied toward the requirements for the bachelor’s degree; for students contracted in the Military Science Department, 26 units of military science credit may be applied; for students
contracted in the Naval Science Department, 26 units of naval science credit may be applied.

**Statistics Courses**
Credit is allowed for only one of Statistics 10, 12, 13, 15 (or former 10H, 11, or 14), and a maximum of 8 units for any combination of introductory statistics courses taken at UCLA and another institution.

**Upper-Division Tutorials**
No more than 8 units of credit may be taken per term in upper-division tutorials numbered 195 through 199. The total number of units allowed in such courses for a letter grade is 32; see specific restrictions under each course.

**300- and 400-Level Courses**
No more than 8 units in the 300 and 400 series of courses may be applied toward the bachelor's degree. Credit is not granted for X300 and X400 courses taken at UCLA Extension.

**Academic Advising Services**
The College offers academic advising and counseling to help students develop and thrive, both personally and academically, through individual meetings with an adviser in their advising unit: Academic Advancement Program, College Academic Counseling, College Academic Counseling in Athletics, or Honors Programs. College advisers work with students to plan their programs, understand requirements and regulations, learn about available resources, navigate the university, and maximize their undergraduate careers.

**Academic Advancement Program**
Academic Advancement Program (AAP) values student diversity and fosters student empowerment. **AAP counselors** assist students in planning an academic program and meeting College and UC requirements. They also monitor degree progress and connect students with campus resources and opportunities. Counselors are available for scheduled or same-day appointments. Visit 1205 Campbell Hall or call 310-825-1481.

**AAP peer counselors** offer peer support and an undergraduate-focused view of life at UCLA. They also can assist students with planning an academic program and navigating campus resources.

**College Academic Counseling**
**College Academic Counseling** (CAC) is committed to making students' campus life and learning experience a positive one. Academic advising helps students develop and thrive both personally and academically in individual meetings, workshops, and other events to plan their programs, understand requirements and regulations, learn about available resources, navigate UCLA, and maximize their undergraduate careers. From orientation to graduation, CAC offers information, assistance, and support so that students can make well-informed decisions about their course of study and degree progress. For additional information or advising, students may come to A316 Murphy Hall, Monday through Friday from 8:30 a.m. to 4:30 p.m.; or call 310-825-3382.

**College Academic Mentors** work with first- and second-year students and new transfers for academic advising, choosing a major, and preparing for graduate or professional school. Students can also visit **CAC Peer Counselors** at various locations around campus for quick questions on degree requirements, rules and regulations, deadlines, petitions, and more.

**Honors Programs**
**Honors Programs** offers academic counseling and student advising services in a welcoming, safe, and supportive environment. Honors counselors are specially trained professionals with whom students collaborate for pre- and post-graduate planning; while Honors student affairs advisors assist students in navigating the various university processes, rules, and regulations.

Students are welcome to visit the Honors Programs office, A-311 Murphy Hall, or call 310-825-1553.

**Student Athletics**
**College Academic Counselors in Athletics** (CACiA) are assigned to work with UCLA NCAA varsity student athletes. Each team is assigned a specific counselor. The role of each counselor is to provide academic advising in the areas of program planning, academic difficulty advising, petitioning degree requirements, and major selection. CACiA support students as they explore academic and personal goals, and aim to empower them to take ownership of their educational experience. CACiA are also trained to observe and counsel with NCAA regulations in mind.

College Academic Counselors in Athletics are located in Academic and Student Services (AS2) in Athletics in Suite 127 of the JD Morgan Center. Student athletes can contact this office at (310) 825-8699 or by e-mail.

**Honors**
College undergraduate students who achieve scholastic distinction may qualify for the following honors and programs.
College Honors

The highest academic recognition the College confers on its undergraduate students is College Honors, which is awarded to graduating seniors who successfully complete the College Honors program and who have an overall University of California grade-point average of 3.5 or better. The program offers exceptional undergraduate students an opportunity to pursue individual excellence.

Dean’s Honors

The Dean’s Honors list recognizes high scholastic achievement in any one term. The following criteria are used to note Dean’s Honors on student records: a 3.915 grade-point average (GPA) in any one term, with at least 12 letter-graded units. The minimum GPA required is subject to change on an annual basis. Students are not eligible for Dean’s Honors in any given term if they receive anIncomplete or a Not Passed (NP). Dean’s Honors are automatically recorded on the transcript for the appropriate term.

Departmental Honors

Individual departments and programs in the College offer departmental honors. Admission and curricular requirements vary according to the department or program. See Curricula and Courses for details, and consult with a departmental adviser about procedures and arrangements. Students who successfully complete the requirements graduate with departmental honors or highest honors.

Latin Honors

Students who have achieved scholastic distinction may be awarded the bachelor’s degree with Latin honors. To be eligible, students must have completed 90 or more units for a letter grade at the University of California and must have attained an overall grade-point average (GPA) at graduation that places them in the top 20 percent of College graduates (GPA of 3.915 or better) for cum laude, the top 10 percent (GPA of 3.965 or better) for magna cum laude, or the top five percent (GPA of 3.985 or better) for summa cum laude. Coursework taken on the Education Abroad Program is applied toward Latin honors at graduation. The minimum GPAs required are subject to change on an annual basis. Required GPAs in effect in the graduating year (fall, winter, spring, summer) determine student eligibility. Students should consult their Degree Audits, or the Registrar’s honors web page, for the most current Latin honors calculations.

Departmental Scholar Program

Departments may nominate exceptionally promising undergraduate students (juniors and seniors) as UCLA Departmental Scholars to pursue bachelor’s and master’s degrees simultaneously. Qualifications include completion of 24 courses (96 quarter units) at UCLA or the equivalent at a similar institution, the requirements in preparation for the major, and eligibility to participate in the College Honors program. Students must also have at least one term of coursework remaining at UCLA. To obtain both the bachelor’s and master’s degrees, students must be provisionally admitted to the Division of Graduate Education, fulfill requirements for each program, and maintain a minimum 3.0 (B) GPA. No course may be used to fulfill requirements for both degrees. Interested students should consult with their department well in advance of application dates for graduate admission. For more information, contact the Honors Programs Office in A311 Murphy Hall.

Graduate Study

The College of Letters and Science offers graduate students a variety of opportunities for academic pursuit, faculty-sponsored research, and fieldwork relative to specific programs and career goals.

With Division of Graduate Education approval and subject to UCLA minimum requirements, each department sets its own standards for admission and other requirements for award of master’s and doctorate degrees. For complete degree requirements, see program requirements for UCLA graduate degrees.

For information on proficiency in English requirements for international graduate students, see Graduate Admission in Graduate Study.

David Geffen School of Medicine

Steven M. Dubinett, MD, Dean

Geffen School of Medicine
1400 Geffen Hall
310-825-6081

School admissions e-mail

The top-ten-ranked David Geffen School of Medicine at UCLA is internationally recognized as a leader in research, medical education, and patient care. Along with the UCLA Health hospitals and facilities, the school is affiliated with more than a dozen major Southern California health care institutions.

Degrees

The Geffen School of Medicine offers an MD degree program and postgraduate medical training programs; its
faculty members participate in the Graduate Programs in Bioscience. Additional master’s and doctorate degrees are offered through the UCLA Division of Graduate Education.

- Biomathematics MS, PhD
- Clinical Research MS
- Data Science in Biomedicine MS
- Doctor of Medicine
- Genetic Counseling MS
- Human Genetics MS, PhD
- Microbiology, Immunology, and Molecular Genetics MS, PhD
- Molecular and Medical Pharmacology MS, PhD
- Molecular, Cellular, and Integrative Physiology PhD
- Neuroscience PhD
- Physics and Biology in Medicine MS, PhD
- Psychiatry and Biobehavioral Sciences Clinical Psychology Internship Certificate

### Articulated Degree Programs

- Doctor of Medicine/Clinical Research MS
- Doctor of Medicine/Division of Graduate Education health science major PhD
- Doctor of Medicine/Education MA
- Doctor of Medicine/Master of Legal Studies
- Doctor of Medicine/Master of Public Health

### Concurrent Degree Programs

- Doctor of Medicine/Master of Business Administration
- Doctor of Medicine/Master of Public Policy

### MD Degree Program

The Doctor of Medicine (MD) degree program is a four-year medical curriculum that prepares students broadly for careers in research, practice, and teaching in the medical field of their choice. For details on the MD curriculum, see the current curriculum. For information about applying to the program, see the application web page or contact the David Geffen School of Medicine Admissions Office, Suite 305 Geffen Hall, Los Angeles, CA 90095-7035.

### Articulated Degree Programs

An articulated program with the Fielding School of Public Health allows students to earn both the MD and MPH degrees in five years. The program includes four years of medical school and one year plus one additional quarter at the Fielding School of Public Health. Separate application must be made to the Fielding School of Public Health during the second year of medical school. For more information on applying to the MPH, see the Fielding School admissions web page.

### Concurrent Degree Programs

Concurrent programs with the Anderson Graduate School of Management and Luskin School of Public Affairs allow UCLA medical students to earn both the MD and MBA degrees, or MD and MPP degrees, over five years by following a designated course of study and some shared coursework. Separate application must be made to the Anderson Graduate School of Management or Luskin School of Public Affairs during the second year of medical school.

### Special Programs

### Partnerships

Extending medical education to a broader segment of tomorrow’s physicians and researchers, the Geffen School of Medicine admits a select group of students into two innovative partnership programs. In addition to completing the requirements for the MD degree, students engage in specialized coursework and/or projects designed to fulfill the mission of each program.

#### Charles Drew/UCLA Medical Education Program

The mission of the Charles Drew University (CDU)/UCLA Medical Education Program is to train students to practice medicine with competence and compassion in disadvantaged rural and urban communities. Each year 24 students are admitted to the program. Students complete their pre-clerkship training at the UCLA campus, and complete their clinical work in specially designated training centers in medically underserved communities and at UCLA and affiliated hospitals.

#### UCLA PRIME Program

The UCLA PRIME Program is a five-year, dual-degree program to develop leaders in medicine who address policy, care, and research issues in health care for underserved populations. A commitment to serve and experience in working with diverse medically disadvantaged populations is paramount. The program leads to the MD and a master’s degree in areas that complement the mission of the pro-
Postgraduate Medical Training

Postgraduate medical training programs, including residencies, are offered through all the clinical departments at UCLA and the affiliated training hospitals such as Harbor-UCLA, Cedars-Sinai, and Greater Los Angeles VA System. Programs at the affiliated institutions broaden the scope of the teaching programs by offering extensive clinical facilities, special population settings, and diverse practice modes. Information about these programs is available from the individual clinical departments of the Geffen School of Medicine or the affiliated hospitals.

Semel Institute for Neuroscience and Human Behavior

The Semel Institute is one of the world’s leading interdisciplinary research and education institutes devoted to the understanding of complex human behavior. Fourteen research centers ranging from genetics to human culture, together with research initiatives distributed widely across the academic departments of the Geffen School of Medicine and the College of Letters and Science, offer a comprehensive and outstanding research and training environment for the study of neuroscience and behavior.

The research portfolio of the 400 faculty members, graduate students, and fellows who work in the institute spans behavioral genetics, developmental neurobiology, cognitive neuroscience, neuropharmacology, brain imaging, clinical research, health policy, and sociocultural studies of human behavior and its disorders.

Henry Samueili School of Engineering and Applied Science

Ah-Hyung Alissa Park, PhD, Dean

United States Department of Education

6426 Boelter Hall
310-825-2826

The Henry Samueli School of Engineering and Applied Science has seven departments that offer study in aerospace engineering, bioengineering, chemical engineering, civil engineering, computer engineering, computer science, computer science and engineering, electrical and computer engineering, electrical engineering, manufacturing engineering, materials engineering, and mechanical engineering. Undergraduate programs in aerospace engineering, bioengineering, chemical engineering, civil engineering, computer science and engineering, electrical engineering, materials engineering, and mechanical engineering are accredited by the Engineering Accreditation Commission of ABET. The computer science and computer science and engineering programs are accredited by the Computing Accreditation Commission of ABET. The undergraduate program in computer engineering, established in fall 2017, will be submitted to ABET for accreditation during the next ABET visit in 2024.

For more information, please visit the official website of the Henry Samueli School of Engineering and Applied Science.
Degrees
The Henry Samueli School of Engineering and Applied Science offers the following degrees and undergraduate minors:

- Aerospace Engineering BS, MS, PhD
- Bioengineering BS, MS, PhD
- Chemical Engineering BS, MS, PhD
- Civil Engineering BS, MS, PhD
- Computer Engineering BS
- Computer Science BS, MS, PhD
- Computer Science and Engineering BS
- Electrical and Computer Engineering MS, PhD
- Electrical Engineering BS
- Engineering online MS
- Engineering – Aerospace online MS
- Engineering – Computer Networking online MS
- Engineering – Electrical online MS
- Engineering – Electronic Materials online MS
- Engineering – Integrated Circuits online MS
- Engineering – Manufacturing and Design online MS
- Engineering – Materials Science online MS
- Engineering – Mechanical online MS
- Engineering – Signal Processing and Communications online MS
- Engineering – Structural Materials online MS
- Engineering and Applied Science Graduate Certificate of Specialization
- Manufacturing Engineering MS
- Master of Engineering
- Materials Engineering BS
- Materials Science and Engineering MS, PhD
- Mechanical Engineering BS, MS, PhD

Concurrent Degree Program
- Computer Science MS/Master of Business Administration

Undergraduate Minors
- Bioinformatics
- Data Science Engineering

Environmental Engineering

Undergraduate Admission
Applicants for admission to the school must satisfy the UC admission requirements as outlined in the Undergraduate Admission section of Undergraduate Study. Students must apply directly to the Henry Samueli School of Engineering and Applied Science by selecting one of the majors within the school or the undeclared engineering option (only available to freshmen). In the selection process, many elements are considered including grades, academic preparation, achievement and ability in science, technology, engineering, and mathematics (STEM), ability to succeed in a rigorous program, demonstrated interest in STEM, and the potential to become a supportive member of an inclusive community that values diversity and welcomes members from all genders and all ethnic, religious, and economic backgrounds.

Applicants are accepted at either the freshman or junior level.

Admission as a Freshman
Freshman applicants must meet the UC subject and scholarship requirements described on undergraduate admission. UC requirements specify a minimum of three years of mathematics, including the topics covered in elementary and advanced algebra and two- and three-dimensional geometry. Additional study in mathematics, concluding with calculus or precalculus in the senior year, is strongly recommended and typical for applicants to UCLA Samueli.

Credit for Advanced Placement Examinations
Students may fulfill part of the school requirements with credit allowed at the time of admission for College Board Advanced Placement (AP) Examinations with scores of 3, 4, or 5. Students with AP Examination credit may exceed the 213-unit maximum by the amount of this credit. AP Examination credit for freshmen entering in fall quarter fulfills requirements as published on the school AP table.

Students who have completed 36 quarter units after high school graduation at the time of the examination receive no AP Examination credit.

Admission as a Junior
Students who begin their college work at a California community college are expected to remain at the community college to complete the lower-division requirements in chemistry, computer programming, English composition, mathematics, physics, and the recommended engineering courses before transferring to UCLA. Transfer students who have completed the recommended lower-division program in engineering at California community colleges normally
can complete the remaining requirements for one of the BS degrees in two to three academic years of full-time study. Students who select certain majors, such as Computer Science and Engineering or Chemical Engineering, may be required to complete additional lower-division courses for the major sequence.

Lower-Division Requirements
Applicants to the school in junior standing should have completed 90 quarter units (60 semester units) in good standing, including the following lower-division minimum subject requirements:

1. Chemistry courses equivalent to Chemistry and Biochemistry 20A, 20B, 20L at UCLA (only Chemistry and Biochemistry 20A is required for the Electrical Engineering major; the Bioengineering and Chemical Engineering curricula also require Chemistry and Biochemistry 30A, 30AL, 30B). The Computer Engineering, Computer Science, and Computer Science and Engineering majors do not require chemistry.
3. Physics courses equivalent to Physics 1A, 1B, 1C, 4AL, 4BL at UCLA, depending on curriculum selected.
4. Computer programming: applicants to the Computer Engineering, Computer Science, Computer Science and Engineering, and Electrical Engineering majors may take any C++, C, or Java course to meet the admission requirement, but to be competitive the applicant must take a C++ course equivalent to Computer Science 31 at UCLA. Applicants to Chemical Engineering may take any C++, C, Java, or MATLAB course to satisfy the admission requirement, but lack of a MATLAB course equivalent to Mechanical and Aerospace Engineering M20 or Civil and Environmental Engineering M20 at UCLA will delay time to graduation. Applicants to all other engineering majors may take any C++, C, Java, or MATLAB course to satisfy the admission requirement, but the MATLAB course equivalent to Mechanical and Aerospace Engineering M20 or Civil and Environmental Engineering M20 is preferred.
5. At least one general education (GE) course in the arts, humanities, or social sciences as required to be UC eligible.

Transfer students must also complete a course equivalent to English Composition 3 at UCLA and a second UC-transferable English composition course.

All lower-division requirements should be completed by the end of the spring term prior to anticipated enrollment at UCLA.

Transfer Credit
Students transferring to the school from institutions that offer instruction in engineering subjects in the first two years, particularly California community colleges, may be given credit for certain engineering core requirements.

Many sophomore courses in circuit analysis, strength of materials, and properties of materials may satisfy Civil and Environmental Engineering 108, Electrical and Computer Engineering 100, and Materials Science and Engineering 104 requirements respectively. Students should check with the Office of Academic and Student Affairs, 6426 Boelter Hall.

Undergraduate Degree Requirements
Students must satisfy UC requirements, school requirements, and department requirements for the Bachelor of Science degree.

University Requirements
The University of California has two requirements that undergraduate students must satisfy in order to graduate: Entry-Level Writing or English as a Second Language, and American History and Institutions. See Degree Requirements in Undergraduate Study for details.

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Courses that do not satisfy specific UC, school, or department requirements are referred to as electives and can be used to meet the minimum unit requirement for graduation.
School Requirements

There are seven requirements that must be satisfied for award of a degree.

Unit Requirement

The minimum units allowed for students is between 180 and 185, depending on the program. The maximum allowed is 213 units.

After 213 quarter units, enrollment may not normally be continued in the school without special permission from the associate dean. This regulation does not apply to Departmental Scholars.

Scholarship Requirement

Students must earn at least a 2.0 (C) grade-point average in all courses taken at any UC campus. In addition, at least a 2.0 grade-point average must be achieved in total upper-division required courses and total upper-division engineering courses. See a counselor in 6426 Boelter Hall for details.

Academic Residence Requirement

Of the last 48 units completed for the BS degree, 36 must be earned in residence at the Samueli School of Engineering and Applied Science on this campus. No more than 16 of the 36 units may be completed in summer sessions at UCLA.

Writing Requirement

Students must complete the UC Entry-Level Writing or English as a Second Language (ESL) requirement prior to completing the school writing requirement.

Students admitted to the school are required to complete a two-term writing requirement—Writing I and Engineering Writing. Both courses must be taken for a letter grade, and students must receive a C or better grade in each (a C– grade is not acceptable).

Writing I

The Writing I requirement must be satisfied by the end of the second year of enrollment by completing English Composition 3, 3D, 3DX, 3E, or 3SL with a C or better grade (a C– or Passed grade is not acceptable). The Writing I requirement may also be satisfied by scoring 4 or 5 on one of the College Board Advanced Placement Examinations in English; completing a course equivalent to English Composition 3 with a C or better grade (a C– or Passed grade is not acceptable) taken at another institution; or scoring 5, 6, or 7 on an International Baccalaureate Higher Level Examination.

Students whose native language is not English may need to take English Composition 1A, 1B, and 2I before enrolling in a Writing I course. All courses in the sequence must be passed with a C or better grade (a C– or Passed grade is not acceptable).

Engineering Writing

The Engineering Writing requirement is satisfied by selecting one approved engineering writing (EW) course from the school writing course list or by selecting one approved Writing II (W) course. The course must be completed with a C or better grade (a C– or Passed grade is not acceptable). Writing courses are published in the Schedule of Classes.

Applicable writing courses also approved for general education credit may fulfill the relevant general education foundational area.

Technical Breadth Requirement

The technical breadth requirement consists of a set of three courses providing sufficient breadth outside the student’s core program. A list of school Faculty Executive Committee-approved technical breadth requirement courses is available in the Office of Academic and Student Affairs, 6426 Boelter Hall, and deviations from that list are subject to approval by the associate dean for Academic and Student Affairs. None of the technical breadth requirement courses selected by students can be used to satisfy other major course requirements.

Ethics Requirement

The ethics and professionalism requirement is satisfied by completing one course from Engineering 181EW, 182EW, 183EW, or 185EW with a C or better grade (a C– or Passed grade is not acceptable). The course may be applied toward the Engineering Writing requirement.

General Education Requirements

General education (GE) is more than a checklist of required courses. It is a program of study that reveals to students the ways that research scholars in the arts, humanities, social sciences, and natural sciences create and evaluate new knowledge; introduces students to the important ideas and themes of human cultures; fosters appreciation for the many perspectives and diverse voices that may be heard in a democratic society; and develops the intellectual skills that give students the dexterity they need to function in a rapidly changing world.

This entails the ability to make critical and logical assessments of information, both traditional and digital; deliver reasoned and persuasive arguments; and identify, acquire, and use the knowledge necessary to solve problems.

Students may take one GE course per term on a Passed/Not Passed (P/NP) basis if they are in good academic standing.
and are additionally enrolled in nine letter-graded units. For details on P/NP grading, see Grades in Policies and Regulations or consult with a counselor in the Office of Academic and Student Affairs.

GE courses used to satisfy the engineering writing and/or ethics requirements must be taken for a letter grade.

Foundations of Knowledge

General education courses are grouped into three foundational areas: Foundations of the Arts and Humanities, Foundations of Society and Culture, and Foundations of Scientific Inquiry.

Five courses (24 units minimum) are required. Engineering writing requirement courses also approved for GE credit may be applied toward the relevant GE foundational areas.

Students must meet with a counselor in the Office of Academic and Student Affairs to determine the applicability of GE cluster courses toward the engineering writing or GE requirements.

Courses listed in more than one category can fulfill GE requirements in only one of the categories.

Foundations of the Arts and Humanities

Two 5-unit courses selected from two different subgroups:

- Literary and Cultural Analysis
- Philosophical and Linguistic Analysis
- Visual and Performance Arts Analysis and Practice

Courses in this area supply perspectives and intellectual skills necessary to comprehend and think critically about our situation in the world as human beings. In particular, courses furnish the basic means to appreciate and evaluate the ongoing efforts of humans to explain, translate, and transform their diverse experiences of the world through such media as language, literature, philosophical systems, images, sounds, and performances. The courses introduce students to the historical development and fundamental intellectual and ethical issues associated with the arts and humanities and may also investigate the complex relations between artistic and humanistic expression and other facets of society and culture.

Foundations of Society and Culture

Two 5-unit courses, one from each subgroup:

- Historical Analysis
- Social Analysis

Courses in this area introduce students to the ways in which humans organize, structure, rationalize, and govern their diverse societies and cultures over time. Courses focus on a particular historical question, societal problem, or topic of political and economic concern in an effort to demonstrate how issues are objectified for study, how data is collected and analyzed, and how new understandings of social phenomena are achieved and evaluated.

Foundations of Scientific Inquiry

One course (4 units minimum) from the Life Sciences subgroup or one course from Bioengineering CM145/Chemical Engineering CM145, Chemistry and Biochemistry 153A, or Civil and Environmental Engineering M166/Environmental Health Sciences M166:

- Life Sciences

This requirement is automatically satisfied for Bioengineering and Chemical Engineering majors. The requirement is satisfied for Civil Engineering majors by the natural science requirement.

Courses in this area ensure that students gain a fundamental understanding of how scientists formulate and answer questions about the operation of both the physical and biological world. Courses also deal with some of the most important issues, developments, and methodologies in contemporary science, addressing such topics as the origin of the universe, environmental degradation, and the decoding of the human genome. Through lectures, laboratory experiences, writing, and intensive discussions, students consider the important roles played by the laws of physics and chemistry in society, biology, Earth and environmental sciences, and astrophysics and cosmology.

Foundations Course Lists

Creating and maintaining a general education curriculum is a dynamic process; consequently, courses are frequently added to the list. For the most current list of approved
courses that satisfy the Foundations of Knowledge GE plan, consult with an academic counselor or see the master list.

**Intersegmental General Education Transfer Curriculum**

Transfer students from California community colleges have the option to fulfill UCLA lower-division GE requirements by completing the Intersegmental General Education Transfer Curriculum (IGETC) prior to transfer. The curriculum consists of a series of subject areas and types of courses that have been agreed on by the University of California and the California community colleges. Although GE or transfer core courses are degree requirements rather than admission requirements, students are advised to fulfill them prior to transfer. The IGETC significantly eases the transfer process, as all UCLA GE requirements are fulfilled when students complete the IGETC courses. Students who select the IGETC must complete it entirely before enrolling at UCLA. Otherwise, they must fulfill the Henry Samueli School of Engineering and Applied Science GE requirements. The school does not accept partial IGETC.

**Department Requirements**

Departments generally set two types of requirements that must be satisfied for award of a degree: preparation for the major (lower-division courses) and the major (upper-division courses). Preparation for the major courses should be completed before beginning upper-division work.

**Preparation for the Major**

A major requires completion of a set of courses known as preparation for the major. Each department sets its own preparation for the major requirements; see Curricula and Courses.

**The Major**

Students must complete their major with a scholarship grade-point average of at least 2.0 (C) in all courses in order to remain in the major. Each course in the major department must be taken for a letter grade. See Curricula and Courses for details on each major.

**Minors and Double Majors**

Students in good academic standing may be permitted to have a minor or double major. The second major must be outside the school (e.g., Electrical Engineering major and Economics major). If approved, no more than 20 upper-division units may be shared by both majors. Students are not permitted to have a double major with two school majors (e.g., Chemical Engineering and Civil Engineering). Students may file an Undergraduate Request to Double Major or Add Minor form at the Office of Academic and Student Affairs. The school determines final approval of a minor or double major request; review is done on a case-by-case basis, and filing the request does not guarantee approval. Students interested in a minor or double major should meet with their counselor in 6426 Boelter Hall. While minor and double major requests are considered, specializations are not considered.

**Policies and Regulations**

Degree requirements are subject to policies and regulations, including the following:

**Student Responsibility**

Students should take advantage of academic support resources, but they are ultimately responsible for keeping informed of and complying with the rules, regulations, and policies affecting their academic standing.

**Study List**

The study list is a record of classes that a student is taking during a particular term. It is the student’s responsibility to present a study list that reflects satisfactory progress toward the degree. Study lists or programs of study that do not comply with the standards set by the faculty may result in enforced withdrawal from UCLA or other academic action. Study lists require approval of the dean of the school or a designated representative.

Undergraduate students in the school are expected to enroll in at least 12 units each term. Students enrolling in fewer than 12 units must obtain approval by petition to the dean before enrolling in classes. The normal program is 16 units per term. Students may not enroll in more than 21 units per term unless an Excess Unit Petition is approved in advance by the dean.

**Minimum Progress**

Full-time undergraduate students must complete a minimum of 36 units in three consecutive terms in which they are registered.

**Concurrent Enrollment**

Concurrent enrollment—defined as taking courses during regular sessions (fall, winter, and spring quarters) for credit at UCLA and, at the same time, at a non-UC institution, including UCLA Extension—is not permitted except in extraordinary circumstances; and no credit is given for such
courses unless the approval of UCLA Samueli has been obtained by petition prior to enrollment.

Special concurrent enrollment programs with other UC campuses, and intersegmental enrollment programs with California State University (CSU) or California Community College (CCC) schools, are available to eligible students.

Credit Limitations

The following credit limitations apply to all undergraduate students enrolled in the school:

Advanced Placement Examinations

Some portions of Advanced Placement (AP) Examination credit are evaluated by corresponding UCLA course number. If students take the equivalent UCLA course, a deduction of UCLA unit credit is made prior to graduation. See the school AP table.

College Level Examination Program

Credit earned through the College Level Examination Program (CLEP) may not be applied toward the bachelor’s degree.

Community College/Lower Division Transfer Limitation

After completing 105 lower-division quarter units toward the degree in all institutions attended, students are allowed no further unit credit for courses completed at a community college or for lower-division courses completed at any institution outside of the University of California. The University of California does not grant transfer credit for community college or lower-division courses beyond 105 quarter units, but students may still receive subject credit for this coursework to satisfy lower-division requirements. Units earned through Advanced Placement (AP), International Baccalaureate (IB), and/or A-Level examinations are not included in the limitation. Units earned at any UC campus (through extension, summer, cross-campus, UCEAP, Intercampus Visitor Program, and regular academic year enrollment) are not included in the limitation. To convert semester units into quarter units, multiply the semester units by 1.5; for example, 12 semester units x 1.5 = 18 quarter units. To convert quarter units into semester units, multiply the quarter units by .666; for example, 12 quarter units x .666 = 7.99 or 8 semester units.

Foreign Language

No credit is granted toward the bachelor’s degree for college foreign language courses equivalent to quarter levels one and two if the equivalent of level two of the same language was completed with satisfactory grades in high school.

Repetition of Courses

For undergraduate students who repeat a total of 16 or fewer units, only the most recently earned letter grades and grade points are computed in the grade-point average (GPA). After repeating 16 units, the GPA is based on all letter grades assigned and total units attempted. The grade assigned each time a course is taken is permanently recorded on the transcript.

1. To improve the grade-point average (GPA), students may repeat only those courses in which they receive a C– or lower grade; NP or U grades may be repeated to gain unit credit. Courses in which a letter grade is received may not be repeated on a P/NP or S/U basis. Courses originally taken on a P/NP or S/U basis may be repeated on the same basis or for a letter grade.

2. Repetition of a course more than once requires the approval of the College or school or the dean of the Division of Graduate Education and is granted only under extra-ordinary circumstances.

3. Degree credit for a course is given only once, but the grade assigned each time the course is taken is permanently recorded on the transcript.

4. There is no guarantee that in a later term a course can be repeated (such as in cases when a course is deleted or no longer offered). In these cases, students should consult with their academic counselor to determine if there is an alternate course that can be taken to satisfy a requirement. The alternate course would not count as a repeat of the original course.

Counseling Services

Academic counselors in the Office of Academic and Student Affairs assist students with UCLA procedures and answer questions related to general requirements.

New undergraduate students must have their course of study approved by an academic counselor. After the first term, curricular and career advising is accomplished on a formal basis. First-year students are assigned a faculty adviser in their particular specialization.

In addition, undergraduate students are assigned, by major, to an academic counselor in the Office of Academic and Student Affairs who provides them with advice regarding general requirements for degrees, and UC, UCLA, and school regulations and procedures. It is the student’s responsibility to periodically meet with their academic counselor, as well as with their faculty adviser, to discuss curriculum requirements, programs of study, and any other academic matters of concern.
Students normally follow the curriculum in effect when they enter the school. California community college transfer students may also select the curriculum in the catalog in effect at the time they began their community college work in an engineering program, provided attendance has been continuous since that time.

Students admitted to UCLA in fall quarter 2012 and thereafter use the Degree Audit system, which can be accessed through MyUCLA. Students should contact their academic counselor in 6426 Boelter Hall with any questions.

Undergraduate students admitted to UCLA prior to fall quarter 2012, and beginning their upper-division major field coursework, are advised to meet with their academic counselor in 6426 Boelter Hall to review their degree requirements.

**Honors**

Undergraduate students who achieve scholastic distinction may qualify for the following honors and programs:

**Dean’s Honors**

The Dean’s Honors list recognizes high scholastic achievement in any one term. The following criteria are used to note Dean’s Honors on student records: a 3.862 grade-point average (GPA) in any one term, with at least 15 units (12 units of letter grade). The minimum GPA required is subject to change on an annual basis. Students are not eligible for Dean’s Honors in any given term if they receive an Incomplete or a Not Passed (NP) grade, or repeat a course. Only courses applicable to an undergraduate degree are considered toward eligibility for Dean’s Honors. Dean’s Honors are automatically recorded on the transcript for the appropriate term.

**Latin Honors**

Students who have achieved scholastic distinction may be awarded the bachelor’s degree with honors. To be eligible, students must have completed 90 or more units for a letter grade at the University of California and must have attained a cumulative grade-point average (GPA) at graduation that places them in the top 20 percent of the school (GPA of 3.862 or better) for *cum laude*, the top 10 percent (GPA of 3.934 or better) for *magna cum laude*, and the top five percent (GPA of 3.972 or better) for *summa cum laude*. The minimum GPAs required are subject to change on an annual basis. Required GPAs in effect in the graduating year determine student eligibility.

Based on grades achieved in upper-division courses applied to a specific school degree requirement, engineering students must also have a 3.862 GPA for *cum laude*, 3.934 for *magna cum laude*, and 3.972 for *summa cum laude*. For all designations of honors, students must have a minimum 3.25 GPA in their major field upper-division courses. Upper-division courses that are not applied to a specific school BS degree requirement are excluded from these upper-division averages.

**Departmental Scholar Program**

Exceptionally promising juniors or seniors may be nominated as Departmental Scholars to pursue engineering bachelor’s and master’s degree programs simultaneously. Minimum qualifications include the completion of 24 courses (96 quarter units) at UCLA, or the equivalent at a similar institution; a minimum 3.7 grade-point average (GPA) in the major field upper-division courses and a minimum 3.7 cumulative GPA; and the requirements in preparation for the major. To obtain both the bachelor’s and master’s degrees, Departmental Scholars fulfill the requirements for each program. Students may not use any one course to fulfill requirements for both degrees.

For details, contact the Office of Academic and Student Affairs in 6426 Boelter Hall well in advance of application dates for admission to graduate standing.

**Exceptional Student Admissions Program**

There is an Exceptional Student Admissions Program (ESAP) for outstanding Samueli School undergraduates who wish to enter the school graduate program upon completion of the BS degree. ESAP is an alternative to the Departmental Scholar Program. In contrast to that program, an ESAP-admitted student would be an enrolled graduate student and would be eligible for consideration of graduate fellowships and teaching assistant positions if available.

**Special Programs**

**Extracurricular Activities**

Students are encouraged to participate in UCLA extracurricular activities, especially those relevant to engineering such as the student engineering society (Engineering Society, University of California), student publications, and programs of the technical and professional engineering societies in the Los Angeles area.

The student body takes an active part in shaping policies of the school through elected student representatives on the school Faculty Executive Committee.
Women in Engineering

Among UCLA engineering students, women make up approximately 30 percent of the undergraduate and 25 percent of the graduate enrollment. Today’s opportunities for women in engineering are excellent, as both employers and educators try to change the image of engineering as a males-only field. Women engineers are in great demand in all fields of engineering.

The Society of Women Engineers (SWE) is a not-for-profit educational and service organization that empowers underrepresented groups to succeed and advance in the field of engineering. Its objective is to promote diversity in engineering and provide professional, outreach, advocacy, and technical opportunities for its members. It hosts many flagship events including the Evening with Industry networking event; WOW That’s Engineering Day, at which girl scouts are taught about engineering on campus; Engineers for Professionals Inclusions Conference (EPIC), at which a panel of industry speakers discusses ways to combat prejudice in the workplace; and QWER Hacks, which is an LGBTQ+ friendly beginner hackathon. It also provides various technical workshops, mentorship programs, and socials to build a community.

Continuing Education

Continuing education in engineering is developed and administered by the UCLA Extension (UNEX) Engineering and Technology Department in close cooperation with Henry Samueli School of Engineering and Applied Science. The department offers evening classes, short courses, certificate programs, special events, and education and training at the workplace.

Graduate Study

Admission

In addition to meeting the requirements of the Division of Graduate Education, applicants to graduate programs for some departments in the Samueli School of Engineering and Applied Science are required to take the General Test of the Graduate Record Examination (GRE). Specific information about the GRE may be obtained from the department of interest.

Students entering the PhD program are normally expected to have completed the requirements for the master’s degree with at least a 3.25 grade-point average and to have demonstrated creative ability. Check with the department of interest for specific GPA requirements. Usually the MS degree is required for admission to the PhD program. Exceptional students, however, may be admitted directly to the PhD program upon receiving their BS degree. In most cases, the applicant is expected to obtain their MS degree along the way.

For information on proficiency in English requirements for international graduate students, see Graduate Admission in Graduate Study.

To submit a graduate application, see application for graduate admission.

Master of Science in Engineering Online Degree

The Master of Science in Engineering online self-supporting degree program enables employed engineers and computer scientists to augment their technical education beyond the Bachelor of Science degree, and enhances their value to the technical organizations by which they are employed.

Master of Engineering Degree

The one-year Master of Engineering (MEng) is a self-supporting, professional degree designed to develop future engineering leaders. Tailored to those who wish to pursue technical management positions, the degree addresses the needs of both students and industry with high-tech skill set and management savvy. Students in the program develop technical mastery in emerging research areas, learning business and technology management skills while creating real-world projects with industry input.

Concurrent Degree Program

A concurrent degree program between the Henry Samueli School of Engineering and Applied Science and the Anderson Graduate School of Management allows students to earn two master’s degrees simultaneously: the MBA and the MS in Computer Science. Students should contact the Office of Academic and Student Affairs for details.

PhD Degrees

The PhD programs prepare students for advanced study and research in the major areas of engineering and computer science. All candidates must fulfill the minimum requirements of the Division of Graduate Education. Major and minor fields may have additional course and examination requirements. For more information, contact the individual department.

Fields of Study

Established fields of study for the PhD are listed below. With the support of an adviser, students may propose any other
field of study to their department. Instructions on the definition of acceptable ad hoc fields and procedures for their approval are available in each department office.

**Bioengineering Department**
Biomedical data sciences; biomedical devices and instrumentation; biomedical image processing (biomedical imaging hardware development and biomedical signal and image processing; molecular, cellular, and tissue engineering; neuroengineering

**Chemical and Biomolecular Engineering Department**
Chemical engineering

**Civil and Environmental Engineering Department**
Civil engineering materials, environmental engineering, geotechnical engineering, hydrology and water resources engineering, structures (structural mechanics and earthquake engineering), transportation engineering

**Computer Science Department**
Artificial intelligence, computational systems biology, computer networks, computer science theory, computer system architecture, data science computing, graphics and vision, software systems

**Electrical and Computer Engineering Department**
Circuits and embedded systems, physical and wave electronics, signals and systems

**Materials Science and Engineering Department**
Ceramics and ceramic processing, electronic and optical materials, structural materials

**Mechanical and Aerospace Engineering Department**
Applied plasma physics, applied mathematics, and data science and machine learning (established minors fields only); design, robotics, and manufacturing; fluid mechanics; micro-nano engineering; structural and solid mechanics; systems and control; thermal science and engineering

**Graduate Certificate of Specialization**
The school offers a Certificate of Specialization in all areas, except computer science. Requirements for admission are the same as for the MS degree.

Each graduate certificate program consists of five 100- or 200-series courses, at least two of which must be at the graduate level. No work completed for any previously awarded degree or credential may be applied toward the certificate. Successful completion of a certificate program requires an overall minimum 3.0 (B) grade-point average in all courses applicable to the certificate. In addition, graduate certificate candidates are required to maintain a minimum 3.0 (B) grade-point average in 200-series courses used in the program. A minimum of three terms of academic residence is required. The time limitation for completing the requirements of a certificate program is two calendar years. Details about certificate programs may be obtained from each department office.

Courses completed in the school for a Certificate of Specialization may subsequently be applied toward master’s and/or doctorate degrees.

**Graduate Degree Requirements**
Graduate degree information is updated annually in program requirements for UCLA graduate degrees.

Lower-division courses may not be applied toward graduate degrees. In addition, most departments do not allow courses that are required for a BS degree in engineering to count toward a graduate degree. Consult the departmental graduate affairs office for more information.

Individual departments may impose certain restrictions on the applicability of other undergraduate courses toward graduate degrees. Consult with the graduate adviser on departmental requirements and restrictions.

**Major Fields or Subdisciplines**
The MS program focuses on one major field. The major fields and subdisciplines offered at the MS level in most cases parallel those listed for the PhD program. There are some differences (for example, manufacturing engineering in the Department of Mechanical and Aerospace Engineering is offered only at the MS level). Students should contact the specific department regarding possible differences between the MS and PhD fields and subdisciplines. Students are free to propose to the school any other field of study, with the support of their adviser.

**Course Requirements**
A total of nine courses is required for an MS degree, including a minimum of five graduate courses. (Some fields require more than five; obtain specific information from the department of interest.) A majority of the total formal course requirement and of the graduate course requirement must consist of school courses. In the thesis plan, seven of the nine courses must be formal courses, including at least four from the 200 series. The remaining two courses may be 598 courses involving work on the thesis. In the comprehensive examination plan, at least five of the nine courses must be in the 200 series; the remaining four courses may be either 200-series graduate or upper-division undergraduate courses. No 500-series courses may be applied toward the comprehensive examination plan requirements.

**Thesis Plan**
The thesis must either describe some original piece of research that students have done, usually but not necessar-
Comprehensive Examination Plan

For information on the comprehensive examination plan for each department, see program requirements for UCLA graduate degrees.

Herb Alpert School of Music

Eileen L. Strempel, DM, Dean

Herb Alpert School of Music
2539 Schoenberg Music Building
310-825-4761

First of its kind in the UC system, the UCLA Herb Alpert School of Music focuses on scholarship, performance, composition, pedagogy, and understanding of music in all its contemporary and historical diversity.

With its three outstanding departments of Ethnomusicology, Music, and Musicology—and interdepartmental programs for Global Jazz Studies and Music Industry—the Herb Alpert School of Music aspires to educate the whole student through productive collaboration between performance and scholarship; a cross-cultural, global understanding of the art of music; and preparatory training for a broad range of careers in music after graduation.

Public concerts, lectures, symposia, master classes, and musical theater and opera productions are hallmarks of the school. Each department hosts a calendar of events open to the entire community, enriching the lives of both those on stage and those in the audience, and contributing to the quality of life in Los Angeles and beyond.

Schoenberg Music Building includes the Lani Hall (recital hall) and Schoenberg Hall (main concert hall), both fully equipped for audio recording. The building also houses the Music Library, Ethnomusicology Archive, Ethnomusicology Laboratory, Henry Mancini Media Laboratory, World Instrument Collection, and Herbie Hancock Institute of Jazz Performance, as well as numerous classrooms, practice rooms, orchestra room, band room, choral room, organ studio, and ethnomusicology performance rooms.

The Evelyn and Mo Ostin Music Center includes a high-technology recording studio, spaces for rehearsal and teaching, a café and social space for students, and an Internet-based music production center.

Departments and Programs

Students in the Ethnomusicology Department study the performance and context of music-making from a global perspective. The Music Department offers majors in Music Composition, Music Education, and Music Performance. The Musicology Department offers students a broad understanding of the history and culture of music.

The school is also home to four undergraduate minors. The Musicology minor offers undergraduates an overview of music history and the study of music. Students may select from a wide variety of undergraduate courses that range through the history of European and American music. The Music Industry minor introduces students to critical perspectives on the formative effects the music industry and music technology have on musical practices around the world. The Ethnomusicology minor gives students who are interested in the culture of music a unique opportunity to participate in a hands-on educational experience. Students perform in ensembles, explore the world’s instruments, and study global traditions. The Iranian Music minor introduces students to the rich variety of musical expressions in Iran and the Iranian diaspora by combining hands-on musical experiences with academic study. Students take advantage of three ensembles to study the performative, improvisatory, and experimental aspects of Iranian traditional and popular music.

Information regarding academic programs is available from the Office of Student Affairs, 1642 Schoenberg Music Building.

Teaching Credentials

Students interested in obtaining instructional credentials for California elementary and secondary schools should contact the Teacher Education Program, 1009 Moore Hall.

Degrees

The Herb Alpert School of Music offers the following degrees and undergraduate minors:

- Ethnomusicology BA, MA, CPhil, PhD
- Global Jazz Studies BA
- Master of Music
- Music BA, MA, MM, CPhil, DMA, PhD
- Music Composition BA
- Music Education BA
- Music History and Industry BA
- Music Industry BA
- Music Performance BM
- Musicology BA, MA, CPhil, PhD
Undergraduate Minors

- Ethnomusicology
- Iranian Music
- Music Industry
- Musicology

Undergraduate Admission

In addition to the UC undergraduate application, some departments require auditions, interviews, portfolios, or evidence of creativity. Information regarding departmental requirements is available on each department website; see the school undergraduate admission web page. After the UC application has been submitted, applicants need to submit supplemental application material and should consult the individual department website for details.

Undergraduate Degree Requirements

Students must satisfy UC requirements, school requirements, and department requirements for the Bachelor of Arts and Bachelor of Music degrees.

Degree Requirements

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<tr>
<th>University Requirements</th>
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<tr>
<td>1. Entry-Level Writing or English as a Second Language</td>
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<td>2. American History and Institutions</td>
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<tr>
<th>School Requirements</th>
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<tr>
<td>1. Unit</td>
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<td>2. Scholarship</td>
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<td>3. Academic Residence</td>
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<td>4. Writing Requirement</td>
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<td>Writing I</td>
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<td>Writing II</td>
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<tr>
<td>5. Quantitative Reasoning</td>
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<td>6. Foreign Language</td>
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<td>7. Diversity</td>
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<td>8. General Education</td>
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<tr>
<td>Foundations of Arts and Humanities</td>
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<tr>
<td>Foundations of Society and Culture</td>
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<td>Foundations of Scientific Inquiry</td>
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<tr>
<th>Department Requirements</th>
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<tbody>
<tr>
<td>1. Preparation for the Major</td>
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<tr>
<td>2. The Major</td>
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Courses that do not satisfy specific UC, school, or department requirements are referred to as electives and can be used to meet the minimum unit requirement for graduation.

University Requirements

The University of California has two requirements that undergraduate students must satisfy in order to graduate:

- Entry-Level Writing or English as a Second Language, and American History and Institutions. See Degree Requirements in Undergraduate Study for details.

Students enrolled in English Composition 1A, 1B, and 2I must take each course for a letter grade.

School Requirements

There are eight requirements that must be satisfied for award of a degree.

Unit Requirement

Students must complete for credit, with a passing grade, no fewer than 180 units and no more than 216 units, of which at least 60 units must be upper-division courses (numbered 100 through 199). Credit for upper-division tutorials numbered 195 through 199 is limited to a maximum of 24 units total for a letter grade, 8 of which may be applied toward the major.

Scholarship Requirement

A 2.0 (C) grade-point average is required in all work attempted at the University of California, exclusive of courses in UCLA Extension and those graded Passed/Not Passed. A 2.0 (C) grade-point average is also required in all upper-division courses in the major taken at the University of California, as well as in all courses applied toward the general education and UC requirements.

Academic Residence Requirement

Students are in residence while enrolled and attending classes at UCLA with a declared major in the Herb Alpert School of Music. Of the last 45 units completed for the bachelor’s degree, 35 must be earned while in residence at the school. No more than 18 of the 35 units may be completed in UCLA summer sessions.

Courses offered by UCLA Extension may not be applied toward any part of the residence requirement.

Writing Requirement

Students must complete the UC Entry-Level Writing or English as a Second Language (ESL) requirement prior to completing the school writing requirement.

Students admitted to the school are required to complete a two-term writing requirement—Writing I and Writing II. The courses must be taken for letter grades, and students must
receive a C or better grade in each (a C– grade is not acceptable).

Writing I
The Writing I requirement must be satisfied within the first three terms of enrollment by completing English Composition 3, 3D, 3DX, 3E, or 3SL with a C or better grade (a C– or Passed grade is not acceptable).

The Writing I requirement may also be satisfied by scoring 4 or 5 on one of the College Board Advanced Placement Examinations in English; completing a course equivalent to English Composition 3 with a C or better grade (a C– or Passed grade is not acceptable) taken at another institution; or scoring 5, 6, or 7 on an International Baccalaureate Higher Level Examination.

Students whose native language is not English may need to take English Composition 1A, 1B, and 2I before enrolling in a Writing I course. All courses in the sequence must be passed with a C or better grade (a C– or Passed grade is not acceptable).

Writing II
The Writing II requirement must be satisfied within the first seven terms of enrollment by completing one course from a faculty-approved list of Writing II courses and available on the student Degree Audit; see the Registrar’s Writing II requirement web page for details. Courses that satisfy the requirement are denoted by a W suffix and are impacted.

The course must be completed with a C or better grade (a C– or Passed grade is not acceptable).

Applicable Writing II courses may also fulfill preparation for the major or minor requirements and, if approved for general education (GE) credit, may also fulfill a GE requirement.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the Writing I, Writing II, and reciprocity requirements. No transfer student is admitted to the school without completing, with a C or better grade (a C– grade is not acceptable), a college-level writing course that Undergraduate Admission accepts as equivalent to English Composition 3.

Quantitative Reasoning Requirement
Students must demonstrate basic skills in quantitative reasoning. The requirement may be satisfied by completing one approved UCLA course (see list below) for a C or Passed or better grade (a C– or Not Passed grade is not acceptable).

The quantitative reasoning requirement may also be satisfied by achieving an SAT Reasoning Test Mathematics section score of 600 or better for exams taken January 2016 or earlier, or achieving an SAT Mathematics section score of 620 or better for exams taken March 2016 or later, or an SAT Subject Test in Mathematics score of 550 or better.

If approved for general education (GE) credit, applicable courses may also fulfill a GE requirement. Approved courses include

- Biostatistics 100A, 100B
- Life Sciences 20, 30A, 30B, 40
- Mathematics 3A, 31A, 31AL
- Philosophy 31
- Political Science 6, 6R
- Program in Computing 10A, 10B, 10C
- Public Affairs 60
- Statistics 10, 12, 13

Foreign Language Requirement
Students may meet the foreign language requirement by scoring 3, 4, or 5 on the College Board Advanced Placement (AP) foreign language examination in Chinese, French, German, Italian, Japanese, or Spanish, or scoring 4 or 5 on the AP foreign language examination in Latin; presenting a UCLA foreign language proficiency examination score indicating competency through level three; or completing one college-level foreign language course equivalent to level three or above or American Sign Language 1, 2, and 3, or 8 at UCLA with a C or Passed or better grade. The foreign language requirement must be completed within the first six terms of enrollment.

International students may petition to use an advanced course in their native language for this requirement. Students whose entire secondary education has been completed in a language other than English may petition to be exempt from the foreign language requirement.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the foreign language and reciprocity requirements.

Courses that may be used to fulfill this requirement are published on the Registrar’s foreign language requirement web page.

Diversity Requirement
The diversity requirement is predicated on the notion that students in music must be trained to understand the local, national, and global realities in which they make, understand, interpret, and teach music. Those realities include the multicultural, transnational, and global nature of contemporary society. To satisfy the requirement, students
must complete one course from the faculty-approved list of diversity courses (available in the Schedule of Classes, through degree audits, or in the Office of Student Affairs). The course must be taken for a letter grade, and students must receive a C or better grade (a C– or Passed grade is not acceptable).

Applicable courses may also fulfill major, minor, or elective requirements and, if approved for general education (GE) credit, may fulfill a GE requirement. As such, students are not required to complete an additional course to satisfy the diversity requirement.

**General Education Requirements**

**General education (GE)** is more than a checklist of required courses. It is a program of study that reveals to students the ways that research scholars in the arts, humanities, social sciences, and natural sciences create and evaluate new knowledge; introduces students to the important ideas and themes of human cultures; fosters appreciation for the many perspectives and diverse voices that may be heard in a democratic society; and develops the intellectual skills that give students the dexterity they need to function in a rapidly changing world.

This entails the ability to make critical and logical assessments of information, both traditional and digital; deliver reasoned and persuasive arguments; and identify, acquire, and use the knowledge necessary to solve problems.

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<tr>
<th>General Education Requirements</th>
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<tbody>
<tr>
<td><strong>Foundations of the Arts and Humanities</strong></td>
</tr>
<tr>
<td>Literary and Cultural Analysis ............... 1 course</td>
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<tr>
<td>Philosophical and Linguistic Analysis ............ 1 course</td>
</tr>
<tr>
<td>Visual and Performance Arts Analysis and Practice 1 course</td>
</tr>
<tr>
<td><strong>Total = 15 units minimum</strong></td>
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<tr>
<td><strong>Foundations of Society and Culture</strong></td>
</tr>
<tr>
<td>Historical Analysis .................................... 1 course</td>
</tr>
<tr>
<td>Social Analysis ........................................ 1 course</td>
</tr>
<tr>
<td>Third course from either subgroup ............ 1 course</td>
</tr>
<tr>
<td><strong>Total = 15 units minimum</strong></td>
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<tr>
<td><strong>Foundations of Scientific Inquiry</strong></td>
</tr>
<tr>
<td>Life Sciences/Physical Sciences .................. 2 courses</td>
</tr>
<tr>
<td>Two courses from either subgroup. If both courses are selected from the same subgroup, they must be from different departments.</td>
</tr>
<tr>
<td><strong>Total = 8 units minimum</strong></td>
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</tbody>
</table>

**Total GE ........................ 8 courses/38 units minimum**

A Writing II course also approved for general education may be applied toward the relevant general education foundational area.

**Foundations of Knowledge**

General education courses are grouped into three foundational areas: Foundations of the Arts and Humanities, Foundations of Society and Culture, and Foundations of Scientific Inquiry.

Eight courses (38 units minimum) are required. A Writing II course also approved for general education may be applied toward the relevant general education foundational area.

Students who successfully complete a year-long GE cluster series fulfill the Writing II requirement and complete nearly 50 percent of their general education requirements. Students who do not complete the year-long GE cluster series must meet with a counselor in the Office of Student Services and Enrollment Management to determine applicable GE credit.

Courses listed in more than one category can fulfill GE requirements in only one of the categories.

**Foundations of the Arts and Humanities**

Three 5-unit courses, one from each subgroup. Courses required to satisfy the major or other courses taken in the major field may be used to satisfy this GE requirement:

- Literary and Cultural Analysis
- Philosophical and Linguistic Analysis
- Visual and Performance Arts Analysis and Practice

Courses in this area supply perspectives and intellectual skills necessary to comprehend and think critically about our situation in the world as human beings. In particular, courses furnish the basic means to appreciate and evaluate the ongoing efforts of humans to explain, translate, and transform their diverse experiences of the world through such media as language, literature, philosophical systems, images, sounds, and performances. The courses introduce students to the historical development and fundamental intellectual and ethical issues associated with the arts and humanities and may also investigate the complex relations between artistic and humanistic expression and other facets of society and culture.

**Foundations of Society and Culture**

Three 5-unit courses, one from each subgroup and a third course from either subgroup:

- Historical Analysis
- Social Analysis

Courses in this area introduce students to the ways in which humans organize, structure, rationalize, and govern their diverse societies and cultures over time. Courses focus on a particular historical question, societal problem, or topic of political and economic concern in an effort to demonstrate how issues are objectified for study, how data is collected
and analyzed, and how new understandings of social phenomena are achieved and evaluated.

**Foundations of Scientific Inquiry**

Two courses from either subgroup. If both courses are selected from the same subgroup, they must be from different departments:

- Life Sciences
- Physical Sciences

Courses in this area ensure that students gain a fundamental understanding of how scientists formulate and answer questions about the operation of both the physical and biological world. Courses also deal with some of the most important issues, developments, and methodologies in contemporary science, addressing such topics as the origin of the universe, environmental degradation, and the decoding of the human genome. Through lectures, laboratory experiences, writing, and intensive discussions, students consider the important roles played by the laws of physics and chemistry in society, biology, Earth and environmental sciences, and astrophysics and cosmology.

**Foundations Course Lists**

Creating and maintaining a general education curriculum is a dynamic process; consequently, courses are frequently added to the list. For the most current list of approved courses that satisfy the Foundations of Knowledge GE plan, consult with an academic counselor or see the master list.

**Reciprocity with Other UC Campuses**

Students who transfer to UCLA from other UC campuses and have met all GE requirements prior to enrolling at UCLA are not required to complete the Herb Alpert School of Music GE requirements. Written verification from the dean at the other UC campus is required. Verification letters should be sent to UCLA Herb Alpert School of Music, Office of Student Affairs, Box 957234, Los Angeles, CA 90095-7234.

**Intersegmental General Education Transfer Curriculum**

Transfer students from California community colleges have the option to fulfill UCLA lower-division GE requirements by completing the Intersegmental General Education Transfer Curriculum (IGETC) prior to transfer. The curriculum consists of a series of subject areas and types of courses that have been agreed on by the University of California and the California community colleges. Although GE or transfer core courses are degree requirements rather than admission requirements, students are advised to fulfill them prior to transfer. The IGETC significantly eases the transfer process, as all UCLA GE requirements are fulfilled when students complete the IGETC courses. Students who select the IGETC must complete it entirely before enrolling at UCLA. Otherwise, they must fulfill the Herb Alpert School of Music GE requirements.

**Department Requirements**

Departments generally set two types of requirements that must be satisfied for award of a degree: preparation for the major (lower-division courses) and the major (upper-division courses). Preparation for the major courses should be completed before beginning upper-division work.

**Preparation for the Major**

A major requires completion of a set of courses known as preparation for the major. Each department sets its own preparation for the major requirements; see Curricula and Courses.

**The Major**

A major is composed of at least 36 units.

Students must complete their major with a grade-point average of at least 2.0 (C) in all courses in order to remain in the major. Each course in the major department must be taken for a letter grade.

As changes in major requirements occur, students are expected to satisfy the new requirements insofar as possible. Hardship cases should be discussed with the department adviser, and petitions for adjustment should be submitted to the dean of the school when necessary.

**Minors and Double Majors**

Students may petition for a minor and/or double major on an individual basis. Students should contact the Office of Student Affairs for an outline of criteria required for the petition.

**Policies and Regulations**

Degree requirements are subject to policies and regulations, including the following:

**Student Responsibility**

Students should take advantage of academic support resources, but they are ultimately responsible for keeping informed of and complying with the rules, regulations, and policies affecting their academic standing.

**Study List**

Each term the study list must include from 12 to 20 units. The school has no provision for part-time enrollment. After
the first term, students may petition to carry more than 20 units if they have an overall grade-point average of 3.0 (B) or better and have attained at least a 3.0 (B) average in the preceding two terms with all courses passed. Students should contact the Office of Student Affairs no later than the end of the second week of instruction to petition for more than 20 units.

**Minimum Progress**

Students are expected to complete satisfactorily at least 40 units during any three consecutive terms in residence; they are placed on probation if they fail to pass these units. Students are subject to disqualification if they fail to pass at least 32 units in three consecutive regular terms in residence.

**Changing a Major**

Students in good academic standing who wish to change their major may petition to do so, provided they can complete the new major within the 216-unit limit and normal time to degree (12 terms for students who entered as freshmen; six terms for students who entered as transfers). Petitions must be submitted to and approved by the department or committee in charge of the new major. Admission to certain majors may be closed or restricted; changes are normally not permitted if students are on probation or have begun their last term.

**Concurrent Enrollment**

Enrollment at a non-UC institution or at UCLA Extension while enrolled at UCLA is not permitted.

**Credit Limitations**

The following credit limitations apply to all undergraduate students enrolled in the school:

**Advanced Placement Examinations**

Credit earned through the College Board Advanced Placement (AP) Examinations may be applied toward certain UC/school requirements. Consult with a counselor in the Office of Student Affairs to determine applicable credit. Portions of AP Examination credit may be evaluated by corresponding UCLA course numbers (e.g., French 4). If students take the equivalent UCLA course, unit credit for such duplication is deducted before graduation. See the school AP table for UCLA course equivalents.

**Graduate Courses**

Undergraduate students who wish to take courses numbered in the 200 series for credit toward a specific degree requirement must petition for advance approval of the department chair and dean of the school, and must meet specific qualifications. Courses numbered in the 400 and 500 series may not be applied toward the degree.

**Counseling Services**

The school offers advising, program planning in the major and general education requirements, and individual meetings with school and departmental counselors. For counseling information, contact the Office of Student Affairs, 1642 Schoenberg Music Building, 310-825-4761.

**Honors**

Undergraduate students who achieve scholastic distinction may qualify for the following honors and programs:

**Dean’s Honors**

The Dean’s Honors list recognizes high scholastic achievement in any one term. The following criteria are used to note Dean’s Honors on student records: a 3.948 grade-point average (GPA), with at least 12 letter-graded units. The minimum GPA required is subject to change on an annual basis. Students are not eligible for Dean’s Honors in any given term if they receive an Incomplete or a Not Passed (NP) grade, change a grade, or repeat a course. Dean’s Honors are automatically recorded on the transcript for the appropriate term.

**Latin Honors**

Latin Honors are awarded at graduation to students with superior grade-point averages. To be eligible, students must have completed 90 or more units for a letter grade at the University of California and must have attained an overall grade-point average (GPA) at graduation that places them in the top 20 percent of the school (GPA of 3.948 or better) for *cum laude*, the top 10 percent (GPA of 3.988 or better) for *magna cum laude*, or the top five percent (GPA of 3.994 or better) for *summa cum laude*. The minimum GPAs required are subject to change on an annual basis. Required GPAs in effect in the graduating year determine student eligibility. Students should contact the Office of Student Affairs or see the Registrar’s honors web page for the most current Latin honors calculations.

**Graduate Study**

The advanced degree programs offer graduate students unique research opportunities when combined with special resources, such as Young Research Library, Music Library special collections, and UCLA performance halls.
Fellowships, grants, and assistantships are available through the departments and the dean of the Division of Graduate Education.

**Admission**

In addition to requiring that applicants hold a bachelor’s degree from an accredited U.S. institution or an equivalent degree of professional title from an international institution, each department in the school has limitations and additional requirements. In general, samples of creative work (auditions, portfolios, computer programs, etc.) are required. Detailed information is available on individual department websites and on program requirements for UCLA graduate degrees.

For information on proficiency in English requirements for international graduate students, see Graduate Admission in Graduate Study.

**Degree Requirements**

Requirements to fulfill each degree objective vary according to the degree and the department. For complete degree requirements, see program requirements for UCLA graduate degrees.

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**John E. Anderson Graduate School of Management**

Antonio E. Bernardo, PhD, Dean

Anderson Graduate School of Management
G415 Marion Anderson Hall
310-825-7982

In today’s rapidly changing global marketplace, it is essential that professional managers be conversant with the latest concepts and principles of management. At the UCLA John E. Anderson Graduate School of Management, which is consistently ranked among the best such schools in the nation, students prepare to become first-rate managers with both specialized skills and broad understanding of the general economic, business, and managerial environment. This background enables them to become effective and efficient directors of organizations and people whether they are in the private, public, or not-for-profit sector.

Specifically, the Anderson Graduate School of Management offers the business community a wide range of higher education programs that furnish state-of-the-art information in a variety of fields. Through its faculty, the school advances the art and science of management by engaging in fundamental and cutting-edge research in all fields of management, and by educating scholars who can continue to create this new knowledge.

Students come from diverse professional and educational backgrounds and seek equally diverse personal and professional goals. Whether they pursue the professional MBA or a PhD in Management, they graduate with a broad understanding of people and organizations and with a sound technical background in the economic and mathematical concepts of management planning and decision making.

The school offers a variety of programs leading to graduate degrees at the master’s and doctorate levels. These include a professional Master of Business Administration (MBA), Master of Science (MS) in Business Analytics, and a Master of Financial Engineering (MFE); as well as three Master of Business Administration (MBA) programs for working professionals: the Fully Employed MBA program for mid-level and emerging senior leaders, and the 22-month Executive MBA program and the UCLA-NUS Global Executive MBA program in partnership with the National University of Singapore (NUS) Business School designed for senior-level managers and executives. A PhD in Management is also offered, as are certificate executive programs, research conferences, and seminars for experienced managers.

The school offers an undergraduate minor in Accounting. It also offers an interdisciplinary undergraduate minor in Entrepreneurship in conjunction with the College of Letters and Science, designed for students interested in new business ventures, business development, and entrepreneurial ideas; see the Entrepreneurship minor for details. Several undergraduate courses in management are also offered. Enrollment in these courses, although open to all UCLA students who have completed the requisites, is limited.

**Degrees and Programs**

The Anderson Graduate School of Management offers the following degrees and undergraduate minors:

- Master of Business Administration
- Executive Master of Business Administration
- Fully Employed Master of Business Administration
- Global Executive Master of Business Administration for Asia Pacific GEMBA—dual degree program with National University of Singapore
- Business Analytics MS
- Management MS, CPhil, PhD
- Master of Financial Engineering

**Concurrent Degree Programs**

Master of Business Administration/Computer Science MS
Master of Business Administration/Doctor of Dental Surgery
Master of Business Administration/Doctor of Medicine
Master of Business Administration/Juris Doctor
Master of Business Administration/Latin American Studies MA
Master of Business Administration/Master of Library and Information Science
Master of Business Administration/Master of Science in Nursing
Master of Business Administration/Master of Public Health
Master of Business Administration/Master of Public Policy
Master of Business Administration/Master of Urban and Regional Planning

Undergraduate Minors
Accounting
Entrepreneurship

Executive Education

Founded in 1954, UCLA Anderson Executive Education offers innovative learning solutions that focus on leadership, management, and strategy to meet the unique business objectives of individual executives and leading organizations worldwide. A wide array of custom and open-enrollment programs are offered annually to leaders of today across all delivery platforms including in-person, live-online, and blended formats.

Research Centers

Eight interdisciplinary research centers supply valuable resources that support school programs: Center for Global Management (CGM); Center for Management of Enterprise in Media, Entertainment, and Sports (MEMES); Easton Technology Management Center; Harold and Pauline Price Center for Entrepreneurship and Innovation; Laurence and Lori Fink Center for Finance; Morrison Center for Marketing and Data Analytics; UCLA Anderson Forecast; and Ziman Center for Real Estate.

Outreach Programs

A wide range of outreach programs—such as the Entrepreneurship Bootcamp for Veterans with Disabilities; Leaders in Sustainability Certificate Program; Management Development for Entrepreneurs (MDE); Impact@Anderson; Office of Equity, Diversity, and Inclusion; and Riordan Programs—offer many teaching, research, and service resources to UCLA, Los Angeles, and beyond.

Jonathan and Karin Fielding School of Public Health

Ronald S. Brookmeyer, PhD, Dean

Fielding School of Public Health
16-035 Center for Health Sciences
310-825-5524
Student Services e-mail

The UCLA Jonathan and Karin Fielding School of Public Health is home to one of the brightest and most diverse public health student bodies in the U.S., with over 800 students hailing from 27 countries. The Fielding School of Public Health has five academic departments—Biostatistics, Community Health Sciences, Environmental Health Sciences, Epidemiology, and Health Policy and Management—and offers the Bachelor of Arts, Bachelor of Science, Doctor of Philosophy, Master of Data Science in Health, Master of Healthcare Administration, Master of Public Health, and Master of Science degrees. Additionally, concurrent and articulated degree programs and certificates enable students to gain specialized knowledge in areas such as global health, population and reproductive health, environmental health, and health care management and leadership. Students also have access to a wide range of local and global hands-on training opportunities that provide the skills needed to move public health evidence to action. The mission of the Fielding School of Public Health is to enhance the public’s health by training future leaders and health professionals from diverse backgrounds, conducting innovative research, translating research into policy and practice, and serving local communities and those of the nation and the world.

The Fielding School of Public Health is among the top ten public health schools in the country, and offers superior public health training and real-world experience. School classrooms and laboratories are located in the Center for Health Sciences (CHS) shared with the Geffen School of Medicine, School of Dentistry, and School of Nursing, and just steps away from its science facilities and schools of engineering, law, management, and public affairs.

Los Angeles is a unique setting to address public health challenges confronting the global community. Los Angeles County has the largest population of any county in the U.S., and is one of the most populous metropolitan areas in the world. Its nearly 10 million residents represent more than 140 cultures and speak an estimated 224 languages.
Students at the Fielding School of Public Health learn from and collaborate with around 200 faculty members who are renowned leaders, experts and innovators in our community and at the state, national, and international level. The faculty not only teach tomorrow’s public health practitioners and educators, but they create new knowledge in the field, contribute their expertise to legislators and public health leaders, prevent disease, and create programs that save millions of lives worldwide.

Departments
The school offers graduate programs leading to both academic and professional degrees in five departments. The Department of Biostatistics develops statistical and analytical techniques for public health use. The Department of Community Health Sciences addresses behaviors that prevent disease and enhance health; health problems of high-risk groups (women, children, the aged, the poor, the disadvantaged, and racial and ethnic minorities); health education and promotion; public health policy; community nutrition; and international health. The Department of Environmental Health Sciences elucidates health hazards in the general environment and in the workplace. The Department of Epidemiology is concerned with the nature, extent, and distribution of disease and health in populations. The Department of Health Policy and Management deals with the organization, financing, delivery, quality, and distribution of health care services. The school also administers an interdepartmental degree program in molecular toxicology. See Curricula and Courses for more information on each department.

Degrees and Programs
The Fielding School of Public Health offers the following degrees and undergraduate minor:

- Biostatistics MPH, MS, PhD
- Community Health Sciences MPH, MS, PhD
- Environmental Health Sciences MPH, MS, PhD
- Epidemiology MPH, MS, PhD
- Executive Master of Public Health
- Health Management MPH
- Health Policy MPH
- Health Policy and Management MS, PhD
- Master of Data Science in Health
- Master of Healthcare Administration
- Master of Public Health
- Master of Public Health for Health Professionals
- Molecular Toxicology PhD

Public Health BA, BS

Articulated Degree Programs
- Master of Public Health/Doctor of Medicine
- Master of Public Health/Latin American Studies MA

Concurrent Degree Programs
- Community Health Sciences MPH/Master of Urban and Regional Planning
- Environmental Health Sciences MPH/Master of Urban and Regional Planning
- Master of Public Health/African Studies MA
- Master of Public Health/Asian American Studies MA
- Master of Public Health/Juris Doctor
- Master of Public Health/Master of Business Administration
- Master of Public Health/Master of Public Policy
- Master of Public Health/Master of Social Welfare

Undergraduate Minor
- Public Health

Undergraduate Admission

Admission as a Freshman
Freshmen are admitted with a declared pre-major in the College of Letters and Science. See Undergraduate Majors under Public Health in Curricula and Courses for information on applying to the major.

Admission as a Junior
Transfer students are admitted directly to the Fielding School of Public Health.

Undergraduate Degree Requirements
Students must satisfy UC requirements, school requirements, and major requirements for the Bachelor of Arts or Bachelor of Science degree.

University Requirements
The University of California has two requirements that undergraduate students must satisfy to graduate: Entry-Level Writing or English as a Second Language, and American History and Institutions. Students who do not satisfy the Entry-Level Writing requirement prior to enrollment must pass an approved course or other program prescribed
by their UC campus of residence. Only after satisfying the Entry-Level Writing requirement can they take an English composition course for transfer credit after enrolling at UCLA. See Degree Requirements in Undergraduate Study for details.

School Requirements

There are seven requirements that must be satisfied for award of a degree.

Unit Requirement

Students must satisfactorily complete for credit a minimum of 180 units for the bachelor’s degree. At least 60 of the 180 units must be upper-division courses numbered 100 through 199. A maximum of 216 units is permitted.

Advanced Placement Examination and International Baccalaureate Examination (transfer) credits are not counted toward the unit maximum.

Scholarship Requirement

Students must earn at least a 2.0 (C) grade-point average (GPA) in all courses undertaken at UCLA to receive a bachelor’s degree. Students must earn a cumulative 2.0 GPA as well as a 2.0 GPA in preparation for the major and the major.

Academic Residence Requirement

Thirty-five of the final 45 units completed for the bachelor’s degree must be earned while in residence at the school.

Students enrolled in the Education Abroad Program (EAP) must satisfy the residence requirement by earning 35 of their final 90 units in residence at the school.

Writing Requirement

Students must complete the UC Entry-Level Writing or English as a Second Language (ESL) requirement prior to completing the school writing requirement.

Students admitted to the school are required to complete a two-term writing requirement—Writing I and Writing II. Two courses in English composition are required for graduation. Both courses must be taken for letter grades, and students must receive a C or better grade in each (a C– grade is not acceptable).

Writing I

The Writing I requirement must be satisfied within the first three terms of enrollment by completing English Composition 3, 3D, 3DX, 3E, or 3SL with a C or better grade (a C– or Passed grade is not acceptable).

The Writing I requirement may also be satisfied by scoring 4 or 5 on one of the College Board Advanced Placement Examinations in English; completing a course equivalent to English Composition 3 with a C or better grade (a C– or Passed grade is not acceptable) taken at another institution; or scoring 5, 6, or 7 on an International Baccalaureate Higher Level Examination.

Students whose native language is not English may need to take English Composition 1A, 1B, and 2I before enrolling in a Writing I course. All courses in the sequence must be passed with a C or better grade (a C– or Passed grade is not acceptable).

Qualifying examination scores and courses are determined by the school Faculty Executive Committee.

Writing II

The Writing II requirement must be satisfied within seven terms of enrollment by completing one course from a faculty-approved list of Writing II courses; see the Registrar’s Writing II requirement web page for details. Courses that satisfy the requirement are denoted by a W suffix and are impacted. The course must be completed with a C or better grade (a C– or Passed grade is not acceptable).

Applicable Writing II courses may also fulfill preparation for the major requirements and, if approved for general education (GE) credit, may also fulfill a GE requirement.

Degree Requirements

<table>
<thead>
<tr>
<th>University Requirements</th>
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<tbody>
<tr>
<td>1. Entry-Level Writing or English as a Second Language</td>
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<tr>
<td>2. American History and Institutions</td>
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<table>
<thead>
<tr>
<th>School Requirements</th>
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</thead>
<tbody>
<tr>
<td>1. Unit</td>
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<tr>
<td>2. Scholarship</td>
</tr>
<tr>
<td>3. Academic Residence</td>
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<tr>
<td>4. Writing Requirement</td>
</tr>
<tr>
<td>Writing I</td>
</tr>
<tr>
<td>Writing II</td>
</tr>
<tr>
<td>5. Quantitative Reasoning</td>
</tr>
<tr>
<td>6. Diversity</td>
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<tr>
<td>7. General Education</td>
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<tr>
<td>Foundations of Arts and Humanities</td>
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<tr>
<td>Foundations of Society and Culture</td>
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<tr>
<td>Foundations of Scientific Inquiry</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Major Requirements</th>
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</thead>
<tbody>
<tr>
<td>1. Preparation for the Major</td>
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<tr>
<td>2. The Major</td>
</tr>
</tbody>
</table>

Courses that do not satisfy specific UC, school, or major requirements are referred to as electives and can be used to meet the minimum unit requirement for graduation.
Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the Writing I, Writing II, and reciprocity requirements. No transfer student is admitted to the school without completing, with a C or better grade (a C– grade is not acceptable), a college-level writing course that Undergraduate Admission accepts as equivalent to English Composition 3.

**Quantitative Reasoning Requirement**

The quantitative reasoning requirement may be satisfied by completing one approved UCLA course (see list below) or an equivalent course within the first seven terms of enrollment. The course must be taken for a letter grade, and students must receive a C or better grade (a C– grade is not acceptable).

The requirement may also be satisfied by achieving an SAT Reasoning Test Mathematics Section score of 600 or better for exams taken January 2016 or earlier, or achieving an SAT Mathematics section score of 620 or better for exams taken March 2016 or later, or an SAT Subject Test in Mathematics score of 550 or better, or an ACT Mathematics Test score of 26 or better. Approved UCLA courses and examinations, and qualifying scores, are determined by the school Faculty Executive Committee.

Applicable courses may also fulfill preparation for the major requirements and, if approved for general education (GE) credit, may fulfill a GE requirement. Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the quantitative reasoning and reciprocity requirements. No transfer student is admitted to the school without completing, with a C or better grade (a C– grade is not acceptable), a college-level quantitative reasoning course that Undergraduate Admission accepts as equivalent to those approved by the school Faculty Executive Committee.

Diversity Requirement

The diversity requirement may be satisfied by completing one course from the faculty-approved list of courses. The course must be taken for a letter grade, and students must receive a C or better grade (a C– grade is not acceptable). Applicable courses may also fulfill major, minor, or elective requirements, and if approved for general education (GE) credit, may fulfill a GE requirement. A list of approved courses is available in the Schedule of Classes.

General Education Requirements

**General education** (GE) is more than a checklist of required courses. It is a program of study that reveals to students the ways that research scholars in the arts, humanities, social sciences, and natural sciences create and evaluate new knowledge; introduces students to the important ideas and themes of human cultures; fosters appreciation for the many perspectives and diverse voices that may be heard in a democratic society; and develops the intellectual skills that give students the dexterity they need to function in a rapidly changing world.

This entails the ability to make critical and logical assessments of information, both traditional and digital; deliver reasoned and persuasive arguments; and identify, acquire, and use the knowledge necessary to solve problems.

Applicable courses may also fulfill major, minor, or elective requirements and, if approved for diversity or writing, may fulfill the diversity requirement and/or Writing II requirement.

<table>
<thead>
<tr>
<th>General Education Requirements</th>
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<tbody>
<tr>
<td><strong>Foundations of the Arts and Humanities</strong></td>
<td></td>
</tr>
<tr>
<td>Literary and Cultural Analysis</td>
<td>1 course</td>
</tr>
<tr>
<td>Philosophical and Linguistic Analysis</td>
<td>1 course</td>
</tr>
<tr>
<td>Visual and Performance Arts Analysis and Practice</td>
<td>1 course</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15 units minimum</td>
</tr>
<tr>
<td><strong>Foundations of Society and Culture</strong></td>
<td></td>
</tr>
<tr>
<td>Historical Analysis</td>
<td>1 course</td>
</tr>
<tr>
<td>Social Analysis</td>
<td>1 course</td>
</tr>
<tr>
<td>Third course from either subgroup</td>
<td>1 course</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15 units minimum</td>
</tr>
<tr>
<td><strong>Foundations of Scientific Inquiry</strong></td>
<td></td>
</tr>
<tr>
<td>Life Sciences</td>
<td>2 courses</td>
</tr>
<tr>
<td>Physical Sciences</td>
<td>2 courses</td>
</tr>
<tr>
<td>One of the four courses must be 5 units and carry laboratory credit. Other courses in the subgroups may be 4 units.</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>17 units minimum</td>
</tr>
<tr>
<td><strong>Total GE</strong></td>
<td>10 courses/47 units minimum</td>
</tr>
</tbody>
</table>

- Biostatistics 100A, 100B
- Life Sciences 20, 30A, 30B, 40
- Mathematics 3A, 31A, 31AL
- Philosophy 31
- Political Science 6, 6R
- Program in Computing 10A, 10B, 10C
- Public Affairs 60
- Statistics 10, 12, 13
Foundations of Knowledge

General education courses are grouped into three foundational areas: Foundations of the Arts and Humanities, Foundations of Society and Culture, and Foundations of Scientific Inquiry.

Ten courses (47 units minimum) are required. GE-approved Writing II courses may fulfill an appropriate foundational area. See the foundational area descriptions below for a breakdown of courses required.

Students who successfully complete a year-long GE cluster series fulfill the Writing II requirement, complete 40 percent of their general education requirements, and receive laboratory/demonstration credit where appropriate.

Courses listed in more than one category can fulfill GE requirements in only one of the categories.

Foundations of the Arts and Humanities

Three 5-unit courses, one from each subgroup:

- Literary and Cultural Analysis
- Philosophical and Linguistic Analysis
- Visual and Performance Arts Analysis and Practice

Courses in this area supply perspectives and intellectual skills necessary to comprehend and think critically about our situation in the world as human beings. In particular, courses furnish the basic means to appreciate and evaluate the ongoing efforts of humans to explain, translate, and transform their diverse experiences of the world through such media as language, literature, philosophical systems, images, sounds, and performances. Courses introduce students to the historical development and fundamental intellectual and ethical issues associated with the arts and humanities, and may also investigate the complex relations between artistic and humanistic expression and other facets of society and culture.

Foundations of Society and Culture

Three 5-unit courses, one from each subgroup and a third course from either subgroup:

- Historical Analysis
- Social Analysis

Courses in this area introduce students to the ways in which humans organize, structure, rationalize, and govern their diverse societies and cultures over time. Courses focus on a particular historical question, societal problem, or topic of political and economic concern in an effort to demonstrate how issues are objectified for study, how data is collected and analyzed, and how new understandings of social phenomena are achieved and evaluated.

Foundations of Scientific Inquiry

Four courses, two from each subgroup. One 5-unit course from either subgroup must include laboratory credit. Other courses in the subgroups may be 4 units:

- Life Sciences
- Physical Sciences

Courses in this area ensure that students gain a fundamental understanding of how scientists formulate and answer questions about the operation of both the physical and biological world. Courses also deal with some of the most important issues, developments, and methodologies in contemporary science, addressing such topics as the origin of the universe, environmental degradation, and the decoding of the human genome. Through lectures, laboratory experiences, writing, and intensive discussions, students consider the important roles played by the laws of physics and chemistry in society, biology, Earth and environmental sciences, and astrophysics and cosmology.

Foundations Course Lists

Creating and maintaining a general education curriculum is a dynamic process; consequently, courses are frequently added to the list. For the most current list of approved courses that satisfy the Foundations of Knowledge GE plan, contact an academic adviser or see the master list.

Reciprocity with Other UC Campuses

Students who transfer to UCLA from other UC campuses and have met all GE requirements prior to enrolling at UCLA are not required to complete the school GE requirements. Written verification from the dean at the other UC campus is required. Consult with a school adviser regarding eligibility for this option.

Intersegmental General Education Transfer Curriculum

Transfer students from California community colleges have the option to fulfill UCLA lower-division GE requirements by completing the Intersegmental General Education Transfer Curriculum (IGETC) prior to transfer. The curriculum consists of a series of subject areas and types of courses that have been agreed on by the University of California and the California community colleges. Although GE or transfer core courses are degree requirements rather than admission requirements, students are advised to fulfill them prior to transfer. The IGETC significantly eases the transfer process, as all GE requirements are fulfilled when students complete the IGETC courses.
Major Requirements
Two types of requirements must be satisfied for the award of a degree: preparation for the major (lower-division courses) and the major (upper-division courses).

Preparation for the Major
Admission to the majors requires an application with documented progress toward completing preparation for the major requirements. Students may elect to declare a Public Health pre-major in preparation for an application for admission to the program. See Undergraduate Majors under Public Health in Curricula and Courses for details.

The Major
Major in the school consist of a group of coordinated upper-division courses of at least 40 units, but no more than 72 units.

Double Majors
Double majors in the Fielding School and other academic units are not permitted.

Minors
Students admitted to the Public Health majors may petition to add a minor provided they can complete the requirements within 216 units.
See Undergraduate Minors and Specializations in Majors and Degrees; descriptions are in Curricula and Courses.

Policies and Regulations
Degree requirements are subject to policies and regulations, including the following:

Student Responsibility
Students should take advantage of academic support resources, but they are ultimately responsible for keeping informed of and complying with the rules, regulations, and policies affecting their academic standing.

Study List
The study list is a record of classes that a student is taking for a particular term. Each term the study list must include from 15 to 20 units. The school has no provision for part-time enrollment. After the first term, students may petition to enroll in more than 20 units (up to 30 units maximum) if they have an overall grade-point average of 3.0 (B) or better and have attained at least a 3.0 (B) grade-point average in the preceding term with all courses passed. Excess units petitions must be filed and approved by the Undergraduate Student Services Office no later than the end of the third week of instruction.

Minimum Progress
Students are expected to complete satisfactorily at least 36 units in any three consecutive terms while in residence; they are placed on probation if they fail to pass these units. They are subject to dismissal if they fail to pass at least 32 units in three consecutive regular terms while in residence.

Changing a Major
Admitted Public Health majors may petition to change from the BA to the BS (or BS to BA). Petitions must be submitted to the Undergraduate Student Services Office for consideration. Public Health majors in good academic standing who wish to change to a major outside the school must consult with the department or committee in charge of the desired major. Admission to certain majors may be closed or restricted. Changes are not normally permitted if students are not in good academic standing or have begun their last term.
Students who fail to attain a grade-point average of 2.0 (C) in preparation for the major or major courses may be denied the privilege of entering or continuing in that major.

Re-entering Students and Their Majors
Students returning to UCLA to resume their studies after an absence must consult with an academic adviser for assistance.

Concurrent Enrollment
Enrollment at a non-UC institution or UCLA Extension while enrolled at UCLA is not permitted except in extraordinary circumstances. No credit is given for courses taken concurrently elsewhere without the approval of the school.

Credit Limitations
The following credit limitations apply to all undergraduate students. In many cases, units are not deducted until the final term before graduation. Students with questions should consult with an academic adviser.
Transfer students with credit from other institutions (advanced standing credit) receive a Degree Audit from Undergraduate Admission indicating the transferable units from former institutions; however, the following credit limitations may reduce the total number of transferred units that apply toward the degree in the school. Consult with an adviser about these limitations.
Community College/Lower Division Transfer Limitation
After completing 105 quarter units toward the degree, students are allowed no further unit credit for courses completed at a community college.

Physical Education
No more than 4 units in physical education activities courses may be applied toward the bachelor’s degree.

Upper-Division Tutorials
No more than 8 units of credit may be taken per term in upper-division tutorials numbered 195 through 199, and a maximum of 32 units may be applied toward the degree. All courses numbered 199 must be taken for a letter grade.

Graduate Courses
Undergraduate students who wish to take courses numbered in the 200 series for credit toward a specific degree requirement must petition for advance approval of the program chair. Courses numbered in the 300, 400, and 500 series are not open for credit to undergraduate students.

Academic Advising Services
The Fielding School of Public Health offers advising, program planning in the major and general education requirements, and individual meetings with school advisers. For advising information, contact the Undergraduate Student Services Office.

Honors
School undergraduate students who achieve scholastic distinction may qualify for the following honors and programs.

School Honors
The highest academic recognition the Fielding School confers on its undergraduate students is School Honors, which is awarded to graduating seniors who successfully complete the School Honors program. Students are awarded School Honors or School Highest Honors at graduation.

Dean’s Honors
The Dean’s Honors list recognizes high scholastic achievement in any one term. The following criteria are used to note Dean’s Honors on student records: a 3.915 grade-point average (GPA), with at least 12 letter-graded units. The minimum GPA required is subject to change on an annual basis. Students are not eligible for Dean’s Honors in any given term if they receive an Incomplete or a Not Passed (NP) grade, change a grade, or repeat a course. Dean’s Honors are automatically recorded on the transcript for the appropriate term.

Latin Honors
Students who have achieved scholastic distinction may be awarded the bachelor’s degree with Latin honors. To be eligible, students must have completed 90 or more units for a letter grade at the University of California and must have attained an overall grade-point average (GPA) at graduation that places them in the top 20 percent of school graduates (GPA of 3.915 or better) for cum laude, the top 10 percent (GPA of 3.965 or better) for magna cum laude, or the top five percent (GPA of 3.985 or better) for summa cum laude. Coursework taken on the Education Abroad Program is applied toward Latin honors at graduation. The minimum GPAs required are subject to change on an annual basis. Required GPAs in effect in the graduating year (fall, winter, spring, summer) determine student eligibility. Students should consult their Degree Audits, or the Registrar’s honors web page, for the most current Latin honors calculations.

Graduate Study
Admission
The admissions criteria established by the university requires that an applicant hold a bachelor’s degree from a regionally accredited institution, comparable in standard and content to a bachelor’s degree from the University of California, with an overall scholastic average of B (3.0 on a 4.0 scale) or better—or its equivalent if the letter grade system is not used.

An international student whose post-secondary education is completed outside of the U.S. is expected to hold a degree with above-average scholarship from a university or university-level institution.

Applicants must submit their application to both the centralized Schools of Public Health Application Service (SOPHAS) and UCLA Division of Graduate Education. For additional admission requirements, see the school application web page.

Degree Requirements
Specific degree requirements vary according to the department and program. Refer to program requirements for UCLA graduate degrees.

Research Centers
The field of public health addresses a wide range of issues, making it a natural for interdisciplinary collaboration. UCLA faculty members and students reach beyond traditional
academic boundaries to promote cooperative exchange across disciplines. The following interdisciplinary centers are sponsored by or associated with the Fielding School of Public Health.

**Biobehavioral Assessment and Research Center**
The Biobehavioral Assessment and Research Center (BARC) promotes research on high impact science that the National Institute of Health (NIH) has identified as high-priority areas of public health research. With a team of multidisciplinary investigators, BARC utilizes and develops innovative biobehavioral and technological approaches that integrate behavioral measures/markers into intervention studies, prevention trials, and clinical science. BARC also supports incorporation of clinical and basic biomarkers into behavioral research and prevention science.

**Bixby Center on Population and Reproductive Health**
The Bixby Center on Population and Reproductive Health was established in 2001 at the Fielding School as the result of a generous gift from the Fred H. Bixby Foundation, and has grown since then with the support from additional Bixby Foundation gifts. The center promotes and supports research, training, and applied public health in the areas of population, reproductive health, and family planning. The principal focus is on reproductive health issues in developing countries, where population growth rates remain high and reproductive health services are poor or inaccessible. The center also works in reproductive health-related issues in the U.S.

**Center for Cancer Prevention and Control Research**
The Center for Cancer Prevention and Control Research is a joint program of the Fielding School and the Geffen School of Medicine’s Jonsson Comprehensive Cancer Center. Since its inception in 1976, the center has been recognized in Los Angeles community, nationally, and internationally. It conducts rigorous peer-reviewed research in three major program areas—the Healthy and At-Risk Populations Program, the Molecular Epidemiology Program, and the Patients and Survivors Program.

The Healthy and At-Risk Populations Program focuses on research in primary prevention and screening/early detection among healthy populations and persons at increased risk for developing cancer. Its research portfolio includes cancer epidemiology; gene-environment interaction; tobacco control; nutrition and exercise; and breast, cervix, prostate, and colon cancer screenings; as well as risk counseling and genetic testing of high-risk populations.

The Molecular Epidemiology Program focuses on primary prevention: examining environmental exposure (smoking, diet, infection, air pollution, etc.) and genetic susceptibility and cancer risk, as well as exploring gene-environmental interactions in cancer risk; secondary prevention: evaluating biological markers (somatic mutations and hypermethylation of tumor suppressor genes and oncogenes, gene copy numbers, etc.) for early detection, as well as intermediate markers as surrogate end-points for chemoprevention; and tertiary prevention: assessing blood and tissue-based biological markers (tumor markers, single nucleotide polymorphisms, etc.) for cancer prognosis and survival prediction.

The Patients and Survivors Program has as its major goal the reduction in avoidable morbidity and mortality among adult and pediatric patients with cancer and long-term survivors of cancer.

**Center for Global and Immigrant Health**
The last several years have seen major transformations in global public health, requiring major expansion and reconstruction of the international public health work force. Many emerging health problems require timely and sustained research efforts and require application of the best scientific knowledge and focused training and continuing education for the global public health work force.

The UCLA Center for Global and Immigrant Health was established in 2008. The center includes faculty from all of the departments in the Fielding School of Public Health as well as the schools of medicine, dentistry, and nursing, and the California Center for Population Research, all of whom have research or teaching interests in global and/or immigrant health. Participating faculty have active research collaborations in more than 50 countries throughout the world, and several work both with immigrant communities in California and in the countries of origin of these communities. The center offers a Certificate in Global Health available to students in any UCLA degree-granting graduate and professional program.

**Center for Health Advancement**
The UCLA Center for Health Advancement supplies enhanced analysis and evidence-based information to help policymakers decide which policies and programs can best improve health and reduce health disparities. The center analyzes a wide range of timely health improvement opportunities, identifying those supported by strong evidence. It presents and disseminates the results of these analyses in plain language to those who make and influence public- and private-sector policies and programs, and offers training and technical assistance to facilitate implementation of recommended approaches.
The center brings together faculty from multiple departments of the Fielding School and other UCLA schools with a wide range of subject matter and methodological expertise, including expertise in nonhealth sectors such as education, transportation, housing, environmental protection, community planning, agriculture, public welfare, and economics. It has strong collaborations with government public health agencies, foundations, academic institutions, and other not-for-profit organizations. Within the health sector, its work is focused on how alternative investments to wasteful expenditures in health care can yield greater returns.

Center for Health Policy Research

The UCLA Center for Health Policy Research is one of the nation’s leading health policy research centers and the premier source of health policy information for California. It was established in 1994 to apply the expertise of UCLA faculty members and researchers to meet national, state, and local community needs for health-policy-related research and information, and to accomplish three missions: conduct research on national, state, and local health policy issues; offer public service to policymakers and community leaders; and offer educational opportunities for graduate students and postdoctoral fellows.

Sponsored by the Fielding School and the Luskin School of Public Affairs, the center offers a collaborative health policy research environment for the leading professional schools and academic departments of UCLA. One major project is the California Health Interview Survey (CHIS), one of the largest health surveys in the nation. The center also sponsors major public service programs supported by extramural grants.

Center for Healthcare Management

The Center for Healthcare Management brings together academic researchers, students, seasoned executives, practitioners, and other health experts, as well as interdisciplinary academic health care management resources to advance health care management. The center is committed to accomplish its mission to unite, inspire, and enrich interdisciplinary leadership that progresses health care management by pulling together the best minds from UCLA and from the broader community to improve the current state of applied research, knowledge, and practice; jointly exploring critical issues in the management of health care organizations; providing an academic home for leaders in the field to contribute career experience and mentorship; producing research that influences management practices and seeks on-the-ground health care management expertise to inform research questions; and creating a library of health care management cases, generated internally and fielded from outside UCLA, as a repository for internal use and external licensing.

Center for Healthier Children, Families, and Communities

The Center for Healthier Children, Families, and Communities (CHCFC) was established in 1995 to address some of the most challenging health and social problems facing children and families. The center’s mission is to improve society’s ability to provide children with the best opportunities for health and well-being, and the chance to assume productive roles within families and communities. Through a unique interdisciplinary partnership—between UCLA departments including Psychology; schools including education, law, medicine, nursing, public affairs, and public health; and providers, community agencies, and affiliated institutions—a critical mass of expertise has been assembled. This allows CHCFC to conduct activities in five major areas: child health and social services; applied research; health and social service provider training; public policy research and analysis; and technical assistance and support to community providers, agencies, and policymakers.

Center for Healthy Climate Solutions

The UCLA Center for Healthy Climate Solutions focuses on protecting people and communities from the effects of climate change. The center equips decision makers with solutions that reduce inequities and benefit their economy, environment, and health. With their partners, the center uses evidence-based best practices that improve health and resilience, now and for generations to come. Under the leadership of Dr. Jonathan Fielding and Professor Michael Jerrett, the C-Solutions team provides public health expertise to help communities put leading research and best practices to work. The center works with communities to implement solutions that provide health, economic, and environmental benefits. The center prioritizes those with highest need to help reduce health disparities and promote climate justice. C-Solutions works with local stakeholders, conduct in-depth interviews with policy leaders, and share their findings with partner communities. Through these methods, the center is fortifying its collective ability to adapt and respond to the dangers of climate change.

Center for LGBTQ Advocacy Research and Health

The UCLA Center for LGBTQ Advocacy, Research and Health, or C-LARAH (LARAH is derived from the Latin word hilaris, meaning cheerful), is dedicated to improving the health and well-being of sexual and gender minorities, and is committed to sharing expertise in public health, including epidemiological methods, developing and testing biobehavioral interventions, education and research training, program design and analysis, health policy initiatives and implementation science. The center works directly with
members of the lesbian, gay, bisexual, transgender, and queer (LGBTQ) community, and is able to draw upon expansive local and national relationships with state and local public health departments, academic researchers, health-care providers, community-based organizations, consumer groups, advocacy foundations, and funding agencies. Its familiarity and experience working with the LGBTQ community and allied organizations well-equiips it to inform policymakers of the most effectual ways to reach members of this historically marginalized population and how to serve them holistically through all social determinants of health and justice.

Center for Occupational and Environmental Health

The California State Legislature mandated that the Center for Occupational and Environmental Health (COEH) be formed in 1978, when a group of chemical workers became sterile from exposure to the pesticide DBCP, a known carcinogen and reproductive toxin. With branches in northern and southern California, COEH trains occupational and environmental health professionals and scientists, conducts research, and offers services through consultation, education, and outreach. The centers constitute the first state-supported institutions to develop new occupational and environmental health leadership in the U.S.

The UCLA COEH branch is housed in the Center for Health Sciences and involves the schools of Public Health, Medicine, and Nursing. Specific COEH programs within the Fielding School include environmental chemistry, occupational/environmental epidemiology, occupational/environmental medicine, occupational ergonomics, occupational hygiene, toxicology, gene-environment interactions, psychosocial factors in the work environment, occupational health education, and pollution prevention.

Center for Public Health and Disasters

The Center for Public Health and Disasters was established in 1997 to address critical issues faced when a disaster impacts a community. The center promotes interdisciplinary efforts to reduce the health impacts of domestic, international, natural, and human-induced disasters. It facilitates dialog between public health and medicine, engineering, physical and social sciences, and emergency management. This unique philosophy is applied to the education and training of practitioners and researchers, collaborative interdisciplinary research, and service to the community. The multidisciplinary center staff and participating faculty members have backgrounds that include emergency medicine, environmental health sciences, epidemiology, gerontology, health services, social work, sociology, urban planning, and public health.

The center is one of 15 Academic Centers for Public Health Preparedness funded by the Centers for Disease Control and Prevention. The goal of these national centers is to improve competencies of front-line workers in public health to respond to public health threats.

Center for the Study of Racism, Social Justice, and Health

The Center for the Study of Racism, Social Justice, and Health is a multidisciplinary, collaborative research center housed in the Community Health Sciences Department leading the nation in conducting rigorous, community-engaged research to identify, investigate, and explain how racism and other social inequalities may influence the health of diverse local, national, and global populations.

The center is distinguished from other disparities-related research units at UCLA by its primary focus on the health implications of racism for diverse populations. Public health is both an academic discipline and an applied one. Therefore, the center encourages the translation of research findings for use by public health professionals, community organizations, and policy makers in their ongoing health equity efforts. Many center affiliates are working to identify, investigate, and explain the specific mechanisms by which various forms of racism may produce local, national, or global health inequities. Others are advancing critical racial theories or building community partnerships to guide their anti-racism, health-equity work. The center supports a community of scholars engaged in cutting-edge research, scholarship, public health practice, and community engagement to tackle questions such as how racism affects the physical and mental health of diverse populations, what tools are available to improve the rigor with which researchers study racism and its relationship to health inequities, which intervention strategies most effectively address contribution of racism to specific health inequities, and what are effective ways to teach public health students about racism. Affiliates represent disciplines of public health, history, medicine, urban planning, sociology, and other areas.

Southern California NIOSH Education and Research Center

The purposes of the Region IX Southern California NIOSH Education and Research Center are to educate professionals in the various disciplines of occupational health and safety; offer continuing education for professionals and others in occupational safety and health fields; proliferate occupational health and safety activity through outreach to regional institutions and organizations; foster research on issues important to occupational health and safety; be an occupational health and safety resource to organizations and agencies that need its expertise; facilitate marshaling of
community resources to address and solve occupational health and safety problems; respond through educational programs and research to the changing range of occupational safety and health problems; and educate nonacademic stakeholders including business, labor, and vulnerable worker populations.

The characteristics of the center are embodied in a coordinated, interdisciplinary set of professional education, continuing education, research, and outreach activities that have a positive impact on the regional and national occupational health and safety practice.

The center has five programs at UCLA, one at UC Irvine, and two centerwide programs. The UCLA programs are Industrial Hygiene, Occupational and Environmental Health Nursing, Center Administration and Planning, Continuing Education, and Outreach. UC Irvine hosts the Occupational Medicine Program.

UCLA Kaiser Permanente Center for Health Equity

Academic studies and current events have converged to highlight the magnitude of potentially preventable health disparities among various population groups, and the urgency of addressing these disparities. The UCLA Kaiser Permanente Center for Health Equity identifies, investigates, and addresses these differences in health status and disease burden. A key feature of the center is its heavy focus on community-based intervention research to mitigate observed disparities.

The center aims to advance understanding of health disparities across the lifespan and to foster multidisciplinary research to improve the health of underserved communities. With focus on Los Angeles county, the center facilitates community and academic partnerships in research, trains new investigators in health disparities research, and assists community partners in implementing effective programs and advocating for effective policies to reduce disparities. The center also endeavors to erode the barriers preventing more effective collaboration with local health departments and other key community partners engaged in the practice of public health. It is a collaborative center without walls that includes associates from academia, government, foundations, and private/nonprofit organizations.

World Policy Analysis Center

The World Policy Analysis Center aims to improve the quantity and quality of comparative data available to policymakers, citizens, civil society, and researchers around the world on policies affecting human health, development, well-being, and equity. To date, the research team has gathered detailed information on public policies in all UN member states—including labor laws, poverty reduction policies, education policies, and constitutional rights—with the goals of increasing access to this data and translating research findings into policies and programs at the global, national, and local levels. The center is committed to enhancing global health and public policy research—and policy capacity—across universities, governments, and international organizations.

Meyer and Renee Luskin School of Public Affairs

Anastasia Loukaitou-Sideris, PhD, Interim Dean

Luskin School of Public Affairs
3250 Public Affairs Building
310-206-8858

Founded in 1994, the UCLA Meyer and Renee Luskin School of Public Affairs incorporates best practices in scholarship, research, and teaching in the fields of policymaking, social work, and urban and regional planning. The unique intersection of these disciplines within one school allows for academic cross-collaboration, and a graduate and undergraduate education that values perspectives at both the macro- and micro-organizational levels. Graduates of the master’s and doctorate degree programs are well prepared to take leadership roles and effect change as practitioners, researchers, and policymakers in public, private, and nongovernmental sectors. The undergraduate major offers students a rigorous conceptual and empirical foundation that prioritizes capacity for action by students exhibiting high motivations for public service and social change. Faculty members are actively engaged in research that addresses pressing national and regional issues including immigration, drug policy, prison reform, health care financing, transportation and the environment, national security, economic development, and the aging U.S. and world population.

Departments

The school comprises three academic departments—Public Policy, Social Welfare, and Urban Planning—and faculty members from such diverse disciplines as economics, geography, history, law, management, and political science. The school trains policy professionals, planners, and social workers for public, private, and nongovernment service; conducts research on significant regional, national, and international issues with a strong interdisciplinary and cross-cultural focus; and acts as a convener and catalyst for public dialog that engages people locally, nationally, and internationally.
Degrees and Programs

The Luskin School of Public Affairs offers the following degrees and undergraduate minors:

- Master of Public Policy
- Master of Social Welfare
- Master of Urban and Regional Planning
- Public Affairs BA
- Social Welfare PhD
- Urban Planning PhD

Concurrent Degree Programs

- Master of Public Policy/Doctor of Medicine
- Master of Public Policy/Juris Doctor
- Master of Public Policy/Master of Business Administration
- Master of Public Policy/Master of Public Health
- Master of Public Policy/Master of Social Welfare
- Master of Social Welfare/Asian American Studies MA
- Master of Social Welfare/Juris Doctor
- Master of Social Welfare/Master of Public Health
- Master of Urban and Regional Planning/Juris Doctor
- Master of Urban and Regional Planning/Latin American Studies MA
- Master of Urban and Regional Planning/Master of Architecture
- Master of Urban and Regional Planning/Master of Business Administration
- Master of Urban and Regional Planning/Master of Public Health

Undergraduate Minors

- Gerontology
- Public Affairs
- Urban and Regional Studies

Obtain brochures about the school undergraduate programs from the department office, 3343 Public Affairs Building, or see school minors.

The school also offers a wide array of undergraduate courses in public affairs. Enrollment in these courses is open to all undergraduate students during the second enrollment pass. Most classes are restricted to students pursuing the BA in Public Affairs during the first pass.

Undergraduate Admission

Admission as a Freshman

Freshmen are admitted with a declared pre-major in the College of Letters and Science. See Public Affairs BA in Curriculum and Courses for information on applying to the major.

Admission as a Junior

Transfer students are admitted directly to the Luskin School of Public Affairs.

Undergraduate Degree Requirements

Students must satisfy UC requirements, school requirements, and major requirements for the Bachelor of Arts degree.

University Requirements

The University of California has two requirements that undergraduate students must satisfy to graduate: Entry-Level Writing or English as a Second Language, and American History and Institutions. Students who do not satisfy the Entry-Level Writing requirement prior to enrollment must pass an approved course or other program prescribed by their UC campus of residence. Only after satisfying the Entry-Level Writing requirement can they take an English composition course for transfer credit after enrolling at UCLA. See Degree Requirements in Undergraduate Study for details.

School Requirements

There are eight requirements that must be satisfied for the award of the degree.

Unit Requirement

Students must satisfactorily complete for credit a minimum of 180 units for the bachelor’s degree. At least 60 of the 180 units must be upper-division courses numbered 100 through 199. A maximum of 216 units is permitted. Students with Advanced Placement Examination or International Baccalaureate Examination (transfer) credit may exceed the unit maximum by the amount of that credit.

After 216 quarter units, enrollment may not normally be continued in the school without special permission from the dean.
Scholarship Requirement

Students must earn at least a 2.0 (C) grade-point average (GPA) in all courses undertaken at UCLA to receive a bachelor’s degree.

Students must also earn a 2.0 GPA in the major and satisfy both the course and scholarship requirements for the major, including preparation for the major.

Academic Residence Requirement

Students are in residence while enrolled and attending classes at UCLA with a declared major in the Luskin School of Public Affairs. Of the last 45 units completed for the bachelor’s degree, 35 units must be earned while in residence at the school. A minimum of 24 upper-division units must be completed in the major while in residence at the school.

Students enrolled in the Education Abroad Program (EAP) must satisfy the residence requirement by earning 35 of their final 90 units, including the final 12 units, in residence at the school.

Writing Requirement

Students must complete the UC Entry-Level Writing or English as a Second Language (ESL) requirement prior to completing the school writing requirement.

Students admitted to the school are required to complete a two-term writing requirement—Writing I and Writing II. Two courses in English composition are required for graduation. Both courses must be taken for letter grades, and students must receive a C or better grade in each (a C– grade is not acceptable).

Writing I

The Writing I requirement must be satisfied within the first three terms of enrollment by completing English Composition 3, 3D, 3DX, 3E, or 3SL with a C or better grade (a C– or Passed grade is not acceptable).

The Writing I requirement may also be satisfied by scoring 4 or 5 on one of the College Board Advanced Placement Examinations in English; completing a course equivalent to English Composition 3 with a C or better grade (a C– or Passed grade is not acceptable) taken at another institution; or scoring 5, 6, or 7 on an International Baccalaureate Higher Level Examination.

Students whose native language is not English may need to take English Composition 1A, 1B, and 2I before enrolling in a Writing I course. All courses in the sequence must be passed with a C or better grade (a C– or Passed grade is not acceptable).

Qualifying examination scores and courses are determined by the school Faculty Executive Committee.

Writing II

The Writing II requirement must be satisfied within seven terms of enrollment by completing one course from a faculty-approved list of Writing II courses; see the Registrar’s Writing II requirement web page for details. Courses that satisfy the requirement are denoted by a W suffix and are impacted. The course must be completed with a C or better grade (a C– or Passed grade is not acceptable).

Applicable Writing II courses may also fulfill preparation for the major requirements and, if approved for general education (GE) credit, may also fulfill a GE requirement.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the Writing I, Writing II, and reciprocity requirements. No transfer student is admitted to the school without completing, with a C or better grade (a C– grade is not acceptable), a college-level writing course that Undergraduate Admission accepts as equivalent to English Composition 3.

Quantitative Reasoning Requirement

The quantitative reasoning requirement may be satisfied by completing one approved UCLA course (see list below) or
an equivalent course within the first seven terms of enrollment. The course must be taken for a letter grade, and students must receive a C or better grade (a C– grade is not acceptable).

The requirement may also be satisfied by achieving an SAT Reasoning Test Mathematics Section score of 600 or better for exams taken January 2016 or earlier, or achieving an SAT Mathematics section score of 620 or better for exams taken March 2016 or later, or an SAT Subject Test in Mathematics score of 550 or better, or an ACT Mathematics Test score of 26 or better. Approved UCLA courses and examinations, and qualifying scores, are determined by the school Faculty Executive Committee.

Applicable courses may also fulfill preparation for the major requirements and, if approved for general education (GE) credit, may fulfill a GE requirement.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the quantitative reasoning and reciprocity requirements. No transfer student is admitted to the school without completing, with a C or better grade (a C– grade is not acceptable), a college-level quantitative reasoning course that Undergraduate Admission accepts as equivalent to those approved by the school Faculty Executive Committee. Approved courses include

- Biostatistics 100A, 100B
- Life Sciences 20, 30A, 30B, 40
- Mathematics 3A, 31A, 31AL
- Philosophy 31
- Political Science 6, 6R
- Program in Computing 10A, 10B, 10C
- Public Affairs 60
- Statistics 10, 12, 13

Foreign Language Requirement

The foreign language requirement may be satisfied by one of the following methods: scoring 3, 4, or 5 on the College Board Advanced Placement (AP) foreign language examination in Chinese, French, German, Italian, Japanese, or Spanish, or scoring 4 or 5 in Latin; presenting a UCLA foreign language departmental examination score indicating competency through level three; or completing a college-level foreign language course equivalent to level three or above at UCLA with a C or Passed or better grade.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the foreign language and reciprocity requirements.

Courses that may be used to fulfill this requirement are published on the Registrar’s foreign language requirement web page.

Diversity Requirement

The diversity requirement may be satisfied by completing one course from the faculty-approved list of courses. Courses used to satisfy the diversity requirement are approved by the school Faculty Executive Committee. The course must be taken for a letter grade, and students must receive a C or better grade (a C– grade is not acceptable). Applicable courses may also fulfill major, minor, or elective requirements and, if approved for general education (GE) credit, may fulfill a GE requirement. A list of approved courses is available in the Schedule of Classes.

General Education Requirements

General education (GE) is more than a checklist of required courses. It is a program of study that reveals to students the ways that research scholars in the arts, humanities, social sciences, and natural sciences create and evaluate new knowledge; introduces students to the important ideas and themes of human cultures; fosters appreciation for the many perspectives and diverse voices that may be heard in a democratic society; and develops the intellectual skills that give students the dexterity they need to function in a rapidly changing world.

This entails the ability to make critical and logical assessments of information, both traditional and digital; deliver reasoned and persuasive arguments; and identify, acquire, and use the knowledge necessary to solve problems.

Applicable courses may also fulfill major, minor, or elective requirements and, if approved for diversity or writing, may fulfill the diversity requirement and/or Writing II requirement.

Foundations of Knowledge

General education courses are grouped into three foundational areas: Foundations of the Arts and Humanities, Foundations of Society and Culture, and Foundations of Scientific Inquiry.

/ten courses (47 units minimum) are required. GE-approved Writing II courses may fulfill an appropriate foundational area. See the foundational area descriptions below for a breakdown of courses required.

Students who successfully complete a year-long GE cluster series fulfill the Writing II requirement, complete 40 percent of their general education requirements, and receive laboratory/demonstration credit where appropriate.
Courses listed in more than one category can fulfill GE requirements in only one of the categories.

**Foundations of the Arts and Humanities**
Three 5-unit courses, one from each subgroup:
- Literary and Cultural Analysis
- Philosophical and Linguistic Analysis
- Visual and Performance Arts Analysis and Practice

Courses in this area supply perspectives and intellectual skills necessary to comprehend and think critically about our situation in the world as human beings. In particular, courses furnish the basic means to appreciate and evaluate the ongoing efforts of humans to explain, translate, and transform their diverse experiences of the world through such media as language, literature, philosophical systems, images, sounds, and performances. Courses introduce students to the historical development and fundamental intellectual and ethical issues associated with the arts and humanities, and may also investigate the complex relations between artistic and humanistic expression and other facets of society and culture.

**Foundations of Society and Culture**
Three 5-unit courses, one from each subgroup and a third course from either subgroup:
- Historical Analysis
- Social Analysis
- Third course from either subgroup

Courses in this area introduce students to the ways in which humans organize, structure, rationalize, and govern their diverse societies and cultures over time. Courses focus on a particular historical question, societal problem, or topic of political and economic concern in an effort to demonstrate how issues are objectified for study, how data is collected and analyzed, and how new understandings of social phenomena are achieved and evaluated.

**Foundations of Scientific Inquiry**
Four courses, two from each subgroup. One 5-unit course from either subgroup must include laboratory credit. Other courses in the subgroups may be 4 units:
- Life Sciences
- Physical Sciences

Courses in this area ensure that students gain a fundamental understanding of how scientists formulate and answer questions about the operation of both the physical and biological world. Courses also deal with some of the most important issues, developments, and methodologies in contemporary science, addressing such topics as the origin of the universe, environmental degradation, and the decoding of the human genome. Through lectures, laboratory experiences, writing, and intensive discussions, students consider the important roles played by the laws of physics and chemistry in society, biology, Earth and environmental sciences, and astrophysics and cosmology.

**Foundations Course Lists**
Creating and maintaining a general education curriculum is a dynamic process; consequently, courses are frequently added to the list. For the most current list of approved courses that satisfy the Foundations of Knowledge GE plan, contact an academic adviser or see the master list.

**Reciprocity with Other UC Campuses**
Students who transfer to UCLA from other UC campuses and have met all GE requirements prior to enrolling at UCLA are not required to complete the school GE requirements. Written verification from the dean at the other UC campus is required. Consult with a school counselor regarding eligibility for this option.

**Intersegmental General Education Transfer Curriculum**
Transfer students from California community colleges have the option to fulfill UCLA lower-division GE requirements by completing the Intersegmental General Education Transfer Curriculum (IGETC) prior to transfer. The curriculum consists of a series of subject areas and types of courses that have been agreed on by the University of California and the California community colleges. Although GE or transfer core courses are degree requirements rather than admission requirements, students are advised to fulfill them prior to transfer. The IGETC significantly eases the transfer process, as all GE requirements are fulfilled when students complete the IGETC courses.
Major Requirements

Two types of requirements must be satisfied for the award of a degree: preparation for the major (lower-division courses) and the major (upper-division courses). Departments set requirements for minors.

Preparation for the Major

Admission to the major requires completion of a set of courses known as preparation for the major. Applicants are admitted to pre-major status until requisite courses are satisfactorily completed. See the Public Affairs BA in Curricula and Courses.

The Major

A major consists of a group of coordinated upper-division courses and shall be designated as schoolwide, departmental, interdepartmental, or individual. Each course applied toward the major and preparation for the major must be taken for a letter grade unless otherwise stipulated.

A major consists of a minimum of 40 upper-division units. Students must complete their major with a scholarship grade-point average of at least 2.0 (C) in all courses in order to remain in the major.

As changes in major requirements occur, students are expected to satisfy the new requirements insofar as possible. Petitions for adjustment should be submitted to the dean of the school in hardship cases.

See the Public Affairs BA in Curricula and Courses for more details.

Minors

Students may petition for a minor offered by the school or one offered outside the school, provided they can complete the requirements within 216 units and are on track to graduate on time.

As changes in minor requirements occur, students are expected to satisfy the new requirements insofar as possible unless they have completed 50 percent of the required coursework for the minor at the time the new requirements go into effect. Petitions for adjustment should be submitted to the undergraduate program chair for a departmental minor and to the dean for a schoolwide minor.

For a list of minors and specializations, see Undergraduate Minors and Specializations; descriptions are in Curricula and Courses.

Policies and Regulations

Degree requirements are subject to policies and regulations, including the following:

Student Responsibility

Students should take advantage of academic support resources, but they are ultimately responsible for keeping informed of and complying with the rules, regulations, and policies affecting their academic standing.

Study List

The study list is a record of classes that a student is taking during a particular term. Each term, the study list must include from 12 to 19 units. After the first term, students may petition to enroll in more than 19 units if they have an overall grade-point average of 3.0 (B) and attained at least a 3.0 (B) grade-point average the preceding term with all courses passed.

First-term transfer students from any other UC campus may carry excess units on the same basis as students who have completed one or more terms at UCLA; however, they are not encouraged to do so.

Minimum Progress

Students are expected to complete satisfactorily at least 36 units in any three consecutive terms while in residence; they are placed on probation if they fail to pass these units. They are subject to dismissal if they fail to pass at least 32 units in three consecutive regular terms while in residence.

Changing a Major

Students in good academic standing who wish to change their major may petition to do so provided they can complete the new major within the 216-unit limit and are on track to graduate on time. Petitions must be submitted to and approved by the department or committee in charge of the new major. Admission to certain majors may be closed or restricted; changes are normally not permitted if students are on probation or have begun their last term.

Students who fail to attain a grade-point average of 2.0 (C) in preparation for the major or major courses may be denied the privilege of entering or continuing in that major.

Re-entering Students and Their Majors

Students returning to UCLA to resume their studies after an absence of several years may find their previous major area of study is no longer available. They must select a current
major in which to complete their studies. Consult with an academic adviser for assistance.

Concurrent Enrollment
Enrollment at a non-UC institution or UCLA Extension while enrolled at UCLA is not permitted except in extraordinary circumstances. No credit is given for courses taken concurrently elsewhere without the approval of the school.

Credit Limitations
The following credit limitations apply to all undergraduate students. In many cases, units are not deducted until the final term before graduation. Students with questions should consult with an academic adviser.

Transfer students with credit from other institutions (advanced standing credit) receive a Degree Audit from Undergraduate Admission indicating the transferable units from former institutions; however, the following credit limitations may reduce the total number of transferred units that apply toward the degree in the school. Consult with an adviser about these limitations.

Upper-Division Tutorials
No more than 8 units of credit may be taken per term in upper-division tutorials numbered 195 through 199. The total number of units allowed in such courses for a letter grade is 32; see the specific restrictions of each department.

Graduate Courses
Undergraduate students who wish to take courses numbered in the 200 series for credit toward a specific degree requirement must petition for advance approval of the department chair and the dean of the school. Courses numbered in the 300, 400, and 500 series may not be applied toward the degree.

Academic Counseling Services
The Luskin School of Public Affairs offers advising, program planning in the major and general education requirements, and individual meetings with school and departmental counselors. For counseling information, contact the Undergraduate Program Student Services Office, 3343 Public Affairs Building.

Honors
Undergraduate students who achieve scholastic distinction may qualify for the following honors and programs:

Dean’s Honors
The Dean’s Honors list recognizes high scholastic achievement in any one term. The following criteria are used to note Dean’s Honors on student records: a 3.938 grade-point average (GPA), with at least 12 letter-graded units. The minimum GPA required is subject to change on an annual basis. Students are not eligible for Dean’s Honors in any given term if they receive an Incomplete or a Not Passed (NP). Dean’s Honors are automatically recorded on the transcript for the appropriate term.

Latin Honors
Students who have achieved scholastic distinction may be awarded the bachelor’s degree with Latin honors. To be eligible, students must have completed 90 or more units for a letter grade at the University of California and must have attained an overall grade-point average at graduation that places them in the top 20 percent of the school graduates (GPA of 3.938 or better) for cum laude, the top 10 percent (GPA of 3.974 or better) for magna cum laude, or the top five percent (GPA of 3.993 or better) for summa cum laude. Coursework taken on the Education Abroad Program is applied toward Latin honors at graduation. The minimum GPAs required are subject to change on an annual basis. Required GPAs in effect in the graduating year (fall, winter, spring, summer) determine student eligibility. Students should consult their Degree Audits, or the Registrar’s Latin honors web page for the most current Latin honors calculations.

Graduate Study
Admission
In addition to requiring that applicants hold a bachelor’s degree from an accredited U.S. institution or an equivalent degree or professional title from an international institution, each department in the school has limitations and additional requirements. Individuals interested in concurrent degrees must be admitted to both programs. Detailed information can be found in program requirements for UCLA graduate degrees.

For information on proficiency in English requirements for international graduate students, see Graduate Admission in Graduate Study.

Degree Requirements
Requirements to fulfill each degree objective vary according to the degree and the department. For complete degree requirements, see program requirements for UCLA graduate degrees.
Research Centers

The school houses a number of research centers where faculty members from across campus pursue issues of mutual interest. In addition to their focus on practical policy problems, the research centers also offer opportunities for student financial aid in the form of research assistant positions, grants, and fellowships.

Center for Neighborhood Knowledge

The Center for Neighborhood Knowledge is dedicated to translating its research to inform actionable neighborhood-related policies and programs that contribute to positive social change. It specializes in empirical spatial analysis and emphasizes the study of diversity, differences, and disparities among neighborhoods; and explicitly covers immigrant enclaves, low-income neighborhoods, and minority communities. In response to the current public health crisis and racial climate, the center launched the COVID-19 Equity Research Initiative in March 2020 to analyze systemic inequality and the pandemic’s impact on the way we live, work, learn, shop, and socialize. One of the Initiative’s objectives is to produce timely research briefs, publicly accessible data, and mapping tools, all to inform public discussion on critical policy issues. The goal is to provide timely insights to policymakers, community stakeholders, and others who are addressing economic, social, and political disruptions, with the ultimate goal of ensuring a fair and just recovery for the most impacted communities.

Center for Policy Research on Aging

The Center for Policy Research on Aging (CPRA) was formed to address the significant issues of an aging society through policy analysis, dissemination of information, and technical assistance to the public and private sectors. The demographic challenges of a nation growing older and living longer force society to confront the roles of government and the private sector in serving the increasing number of elderly and their families. The center’s mission is to conduct research; inform policymakers; link communities to local, state, and federal governments; and foster collaboration among UCLA faculty members.

Institute of Transportation Studies

The UCLA Institute of Transportation Studies (ITS), one of the leading transportation policy research centers in the U.S., was created in 1992 to conduct research and furnish professional education on the social, economic, environmental, and cultural aspects of transportation policy. Each year ITS faculty members, students, and research staff collaborate on a wide array of transportation policy and planning studies, ranging from an analysis of the travel trends and transportation needs of immigrants and low-income workers to the testing and evaluation of innovative fare programs to increase public transit use.

Institute on Inequality and Democracy

The Institute on Inequality and Democracy, organized in 2016, advances radical democracy in an unequal world through research, critical thought, and alliances with social movements and racial justice activism. Institute programs and projects convene multiple disciplines, narrative forms, and styles of scholarship and practice, while focusing on four research priorities: housing justice, predatory financialization, policing and incarceration, and decolonizing the university. The Institute aims to analyze and transform the divides and dispossessions of our times, in the university and in our cities, across the global south and global north.

Latino Policy and Politics Institute

The Latino Policy and Politics Institute (LPPI) is a comprehensive think tank that addresses the most critical domestic policy challenges facing Latinos and other communities of color in states and localities across the U.S. The initiative leverages UCLA’s cross-disciplinary strengths to create an enterprise-wide home for Latino social policy with expertise in over a dozen issue areas including civil rights, criminal justice, educational equity, health access, and voting and civic participation. The initiative fosters innovative research, leverages policy-relevant expertise, drives civic engagement, and nurtures a leadership pipeline to propel viable policy reforms that expand opportunity for all Americans.

Luskin Center for Innovation

The Luskin Center for Innovation (LCI) conducts rigorous research and timely outreach that informs environmental policies for the health of people and the planet. Center faculty, staff, and graduate student researchers evaluate existing and proposed environmental policies to assess their effectiveness, equity impacts, and potential to spur innovation. The center then shares research findings with community leaders and policymakers, who use LCI research to design evidence-based environmental policies. The center often focuses on California, the world’s fifth-largest economy, to support a model of environmental leadership that is relevant globally. Research programs include climate, energy, environmental equity, transportation, urban greening, and water—all linked by the theme of informing effective and equitable solutions to the environmental challenges of our time.
Ralph and Goldy Lewis Center for Regional Policy Studies

The Lewis Center for Regional Policy Studies was founded in 1989, with a $5 million endowment from Ralph and Goldy Lewis, to promote the multidisciplinary study, understanding, and solution of regional policy issues in California. Research projects cover welfare reform, housing, immigration, environment, health insurance, labor and employment, and transportation—with a specific interest on the policy impact on vulnerable populations as a through line.

UCLA Hub for Health Intervention, Policy and Practice

The UCLA Hub for Health Intervention, Policy and Practice (HHIPP) connects the academy, community, and policymakers to address health disparities among diverse communities in Los Angeles and beyond. UCLA HHIPP engages community members in impactful, theory-driven and sustainable research that informs high-level policy and street-level social justice health outcomes. UCLA HHIPP’s work situates health policy within a social welfare and social justice framework. It espouses a broad definition of health and wellness with special consideration given to adverse social conditions, stigma, discrimination, poverty, racism, and homophobia.

School of the Arts and Architecture

Brett B. Steele, AA Dipl, Dean
School of the Arts and Architecture
8260 Broad Art Center
310-206-6465

The UCLA School of the Arts and Architecture plays a vital role in the cultural and artistic life of the campus and community. Courses and degree programs in four departments—Architecture and Urban Design, Art, Design|Media Arts, and World Arts and Cultures/Dance—offer students unparalleled opportunities to learn from faculty members who rank among the most innovative artists, designers, ethnographers, choreographers, architects, and arts culture and performance scholars of today.

Combining opportunities for hands-on study of creative practice with an academic foundation of the liberal arts, the school offers students the chance to develop an integrated and encompassing understanding of human creativity, the arts, and architecture. Its mission is to educate, empower, and inspire the next generation of citizens to serve as cultural and artistic leaders of the twenty-first century.

The School of the Arts and Architecture includes three public arts units, including the Center for the Art of Performance at UCLA, one of the largest and most diverse performing arts presenters in the nation; and two world-class museums: the UCLA Hammer Museum, which focuses on contemporary and emerging artists; and the Fowler Museum at UCLA, which focuses on tradition-based and contemporary arts of Africa, the Americas, Asia, and the Pacific. School teaching, learning, and public activities are organized across nine buildings and sites at the UCLA campus and beyond.

Departments and Programs

The four departments of the school are integral to the rich and varied cultural life of the UCLA campus. The Architecture and Urban Design Department offers students the opportunity to interrogate contemporary architectural and urban issues in one of the most culturally diverse cities in the world, and to propose possible futures with equal measures of expertise, optimism, and vision. The Art Department offers courses in the history, theory, and practice of visual art across a wide range of media, preparing students for a life of creative making and critical thinking in contemporary art and related fields. The Design|Media Arts Department focuses on digital media and offers a comprehensive, multidisciplinary approach that emphasizes individual exploration. The World Arts and Cultures/Dance Department offers innovative curricula focusing on the arts as expressions of culture, on the creation of dance and performance, and on fostering relationships between critical theory, activism, and artistic practice.

The school is also home to one undergraduate minor. Through its innovative interdisciplinary coursework and community arts programs, the Visual and Performing Arts Education (VAPAE) minor provides students with experiential opportunities to develop into teaching artists, introducing them to a range of possible careers in the arts while also bringing much needed arts education curricula to students throughout Los Angeles.

Information about academic programs is available from the Office of Student Services.

Teaching Credentials

Students interested in obtaining instructional credentials for California elementary and secondary schools should contact the Teacher Education Program, 1009 Moore Hall.
Degrees

The School of the Arts and Architecture offers the following degrees and undergraduate minor:

- Architectural Studies BA
- Architecture MA, PhD
- Architecture and Urban Design MS
- Art BA, MFA
- Choreographic Inquiry MFA
- Culture and Performance MA, PhD
- Dance BA
- Design|Media Arts BA, MFA
- Individual Field BA
- Master of Architecture
- World Arts and Cultures BA

Undergraduate Minor

Visual and Performing Arts Education

Undergraduate Admission

In addition to the UC undergraduate application, departments require a supplemental application that involves auditions, portfolios, or evidence of creativity. Information about departmental requirements is available on the school prospective students web page.

Undergraduate Degree Requirements

Students must satisfy UC requirements, school requirements, and department requirements for the Bachelor of Arts degree.

University Requirements

The University of California has two requirements that undergraduate students must satisfy in order to graduate: Entry-Level Writing or English as a Second Language, and American History and Institutions. See Degree Requirements in Undergraduate Study for details.

Students enrolled in English Composition 1A, 1B, and 2I must take each course for a letter grade.

School Requirements

There are nine requirements that must be satisfied for award of a degree.

Degree Requirements

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Courses that do not satisfy specific UC, school, or department requirements are referred to as electives and can be used to meet the minimum unit requirement for graduation.

Unit Requirement

Students must complete for credit, with a passing grade, no fewer than 180 units and no more than 216 units, of which at least 64 units must be upper-division courses (numbered 100 through 199). Credit for upper-division tutorials numbered 195 through 199 is limited to a maximum of 8 units in a single term, and a maximum of 32 units total for a letter grade. Each major may have limitations on the number of upper-division tutorials and/or units that may be applied toward degree requirements.

Scholarship Requirement

A 2.0 (C) average is required in all work attempted at the University of California, exclusive of courses in UCLA Extension and those graded Passed/Not Passed. A 2.0 (C) grade-point average is also required in all upper-division courses in the major taken at the University of California, as well as in all courses applied toward the general education and UC requirements.

Academic Residence Requirement

Students are in residence while enrolled and attending classes at UCLA with a declared major in the School of the Arts and Architecture. Of the last 45 units completed for the
 bachelor’s degree, 35 must be earned while in residence at the school. No more than 18 of the 35 units may be completed in UCLA Summer Sessions.

Courses offered by UCLA Extension may not be applied toward any part of the residence requirements.

**Writing Requirement**

Students must complete the UC Entry-Level Writing or English as a Second Language (ESL) requirement prior to completing the school writing requirements.

Students admitted to the school are required to complete a two-term writing requirement—Writing I and Writing II. The courses must be taken for a letter grade, and students must receive a C or better grade in each (a C– grade is not acceptable).

**Writing I**

The Writing I requirement must be satisfied within the first three terms of enrollment by completing English Composition 3, 3D, 3DX, 3E, or 3SL with a C or better grade (a C– or Passed grade is not acceptable).

The Writing I requirement may also be satisfied by scoring 4 or 5 on one of the College Board Advanced Placement Examinations in English; completing a course equivalent to English Composition 3 with a C or better grade (a C– or Passed grade is not acceptable) taken at another institution; or scoring 5, 6, or 7 on an International Baccalaureate Higher Level Examination.

Students whose native language is not English may need to take English Composition 1A, 1B, and 2I before enrolling in a Writing I course. All courses in the sequence must be passed with a C or better grade (a C– or Passed grade is not acceptable).

**Writing II**

The Writing II requirement must be satisfied within the first six terms of enrollment by completing one course from a faculty-approved list of Writing II courses and available on the student Degree Audit; see the Registrar’s Writing II requirement web page for details. Courses that satisfy the requirement are denoted by a W suffix and are impacted. The course must be completed with a C or better grade (a C– or Passed grade is not acceptable).

Applicable Writing II courses also approved for general education may fulfill the relevant general education foundational area.

**Quantitative Reasoning Requirement**

Students must demonstrate basic skills in quantitative reasoning. The requirement may be satisfied by completing one approved UCLA course (see list below) for a C or Passed or better grade (a C– or Not Passed grade is not acceptable), or an equivalent transfer course.

The quantitative reasoning requirement may also be satisfied by achieving an SAT Reasoning Test Mathematics section score of 600 or better for exams taken January 2016 or earlier, or achieving an SAT Mathematics section score of 620 or better for exams taken March 2016 or later, or an SAT Subject Test in Mathematics score of 550 or better, or an ACT mathematics exam score of 26 or better. Approved courses include

- Biostatistics 100A, 100B
- Life Sciences 20, 30A, 30B, 40
- Mathematics 3A, 31A, 31AL
- Philosophy 31
- Political Science 6, 6R
- Program in Computing 10A, 10B, 10C
- Public Affairs 60
- Statistics 10, 12, 13

**Foreign Language Requirement**

Students may meet the foreign language requirement by scoring 3, 4, or 5 on the College Board Advanced Placement (AP) foreign language examination in Chinese, French, German, Italian, Japanese, or Spanish, or scoring 4 or 5 on the AP foreign language examination in Latin; for languages other than Spanish and Portuguese, presenting a UCLA foreign language proficiency examination score indicating competency through level two; or completing one college-level foreign language course equivalent to level two or above at UCLA with a grade of Passed or C or better. Students who want to meet the foreign language requirement with Spanish, and do not have a qualifying AP score, must enroll in Spanish 2. Students who want to meet the foreign language requirement with Portuguese, and do not have a qualifying AP score, must enroll in Portuguese 2. The foreign language requirement must be completed within the first six terms of enrollment.

International students may petition to use an advanced course in their native language for this requirement. Students whose entire secondary education has been completed in a language other than English may petition to be exempt from the foreign language requirement.

Courses that may be used to fulfill this requirement are published on the Registrar’s foreign language requirement web page and are available on the student Degree Audit.
Upper-Division Nonmajor Requirement

Students are required to complete a minimum of 12 units of upper-division (100-level) nonmajor courses. Graduate (200-, 400-, and 500-level) courses may not be applied toward this requirement.

Diversity Requirement

The diversity requirement is predicated on the notion that students in the arts must be trained to understand the local, national, and global realities in which they make, understand, interpret, and teach the arts. Those realities include the multicultural, transnational, and global nature of contemporary society. The requirement may be satisfied by taking courses in any of three parts of the student’s overall program: general education courses, courses in the major, or upper-division nonmajor elective courses. As such, students are not required to complete an additional course to satisfy the diversity requirement. Courses satisfying this requirement consider intergroup dynamics along with such social dimensions as race, ethnicity, gender, socioeconomic background, religion, sexual orientation, age, and disability; and are relevant to the understanding of these dynamics in contemporary society and culture in the U.S. and around the world.

General Education Requirements

General education (GE) is more than a checklist of required courses. It is a program of study that reveals to students the ways that research scholars in the arts, humanities, social sciences, and natural sciences create and evaluate new knowledge; introduces students to the important ideas and themes of human cultures; fosters appreciation for the many perspectives and diverse voices that may be heard in a democratic society; and develops the intellectual skills that give students the dexterity they need to function in a rapidly changing world.

This entails the ability to make critical and logical assessments of information, both traditional and digital; deliver reasoned and persuasive arguments; and identify, acquire, and use the knowledge necessary to solve problems.

Foundations of Knowledge

General education courses are grouped into three foundational areas: Foundations of the Arts and Humanities, Foundations of Society and Culture, and Foundations of Scientific Inquiry.

Eight courses (38 units minimum) are required. A Writing II or diversity course also approved for general education may be applied toward the relevant general education foundational area.

Students who successfully complete a year-long GE cluster series fulfill the Writing II requirement and complete nearly 50 percent of their general education requirements. Students who do not complete the year-long GE cluster series must meet with an adviser in the Student Services Office to determine applicable GE credit.

Courses listed in more than one category can fulfill GE requirements in only one of the categories.

Foundations of the Arts and Humanities

Three 5-unit courses, one from each subgroup:

- Literary and Cultural Analysis
- Philosophical and Linguistic Analysis
- Visual and Performance Arts Analysis and Practice

Courses in this area supply perspectives and intellectual skills necessary to comprehend and think critically about our situation in the world as human beings. In particular, courses furnish the basic means to appreciate and evaluate the ongoing efforts of humans to explain, translate, and transform their diverse experiences of the world through such media as language, literature, philosophical systems, images, sounds, and performances. The courses introduce students to the historical development and fundamental intellectual and ethical issues associated with the arts and humanities and may also investigate the complex relations...
between artistic and humanistic expression and other facets of society and culture.

Foundations of Society and Culture
Three 5-unit courses, one from each subgroup and a third course from either subgroup:
- Historical Analysis
- Social Analysis
Courses in this area introduce students to the ways in which humans organize, structure, rationalize, and govern their diverse societies and cultures over time. Courses focus on a particular historical question, societal problem, or topic of political and economic concern in an effort to demonstrate how issues are objectified for study, how data is collected and analyzed, and how new understandings of social phenomena are achieved and evaluated.

Foundations of Scientific Inquiry
Two courses from either subgroup. If both courses are selected from the same subgroup, they must be from different departments:
- Life Sciences
- Physical Sciences
Courses in this area ensure that students gain a fundamental understanding of how scientists formulate and answer questions about the operation of both the physical and biological world. Courses also deal with some of the most important issues, developments, and methodologies in contemporary science, addressing such topics as the origin of the universe, environmental degradation, and the decoding of the human genome. Through lectures, laboratory experiences, writing, and intensive discussions, students consider the important roles played by the laws of physics and chemistry in society, biology, Earth and environmental sciences, and astrophysics and cosmology.

Foundations Course Lists
Creating and maintaining a general education curriculum is a dynamic process; consequently, courses are frequently added to the list. For the most current list of approved courses that satisfy the Foundations of Knowledge GE plan, consult with an academic adviser in the Office of Student Services, 2200 Broad Art Center, or see the master list.

Reciprocity with Other UC Campuses
Students who transfer to UCLA from other UC campuses and have met all GE requirements prior to enrolling at UCLA are not required to complete the School of the Arts and Architecture GE requirements. Written verification from the dean at the other UC campus is required. Verification letters should be sent to the UCLA School of the Arts and Architecture, Office of Student Services, Box 951620, Los Angeles, CA 90095-1620.

Intersegmental General Education Transfer Curriculum
Transfer students from California community colleges have the option to fulfill UCLA lower-division GE requirements by completing the Intersegmental General Education Transfer Curriculum (IGETC) prior to transfer. The curriculum consists of a series of subject areas and types of courses that have been agreed on by the University of California and the California community colleges. Although GE or transfer core courses are degree requirements rather than admission requirements, students are advised to fulfill them prior to transfer. The IGETC significantly eases the transfer process, as all UCLA GE requirements are fulfilled when students complete the IGETC courses. Students who select the IGETC must complete it entirely before enrolling at UCLA. Otherwise, they must fulfill the School of the Arts and Architecture GE requirements.

Department Requirements
Departments generally set two types of requirements that must be satisfied for award of a degree: preparation for the major (lower-division courses) and the major (upper-division courses). Preparation for the major courses should be completed before beginning upper-division work.

Preparation for the Major
A major requires completion of a set of courses known as preparation for the major. Each department sets its own preparation for the major requirements; see Curricula and Courses.

The Major
A major is composed of no fewer than 56 units, including at least 36 units of upper-division courses.
Students must complete their major with a scholarship grade-point average of at least 2.0 (C) in all courses in order to remain in the major. Each course in the major department must be taken for a letter grade.
As changes in major requirements occur, students are expected to satisfy the new requirements insofar as possible. Hardship cases should be discussed with the department adviser, and petitions for adjustment should be submitted to the dean of the school when necessary.
Any department offering a major may require a general final examination.

Individual Majors
Highly motivated students who believe that no single major accommodates their specific interests and goals may pro-
pose designing their own major. Proposals are prepared with faculty guidance and sponsorship, and must explain the intent concerning the anticipated program of study and reasons why the academic goals cannot be achieved within an existing major. Proposals must be submitted no later than the end of the sophomore year. Transfer students must complete at least one term of residency at UCLA before proposing an individual major. Students interested in designing an individual major should consult with the school director of student services, 2200 Broad Art Center.

**Minors and Double Majors**

Students may petition for a minor and/or double major on an individual basis. It is strongly recommended that students pursuing a minor or double major enroll in 15 to 20 units per term. Students should contact the Student Services Office for an outline of criteria required for the petition.

**Policies and Regulations**

Degree requirements are subject to policies and regulations, including the following:

**Student Responsibility**

Students should take advantage of academic support resources, but they are ultimately responsible for keeping informed of and complying with the rules, regulations, and policies affecting their academic standing.

**Study List**

Each term the study list must include from 12 to 20 units. The school has no provision for part-time enrollment. After the first term, students may petition to carry more than 20 units if they have an overall grade-point average of 3.0 (B) or better and have attained at least a 3.0 (B) grade-point average in the preceding term with all courses completed and passed. Students should contact the Student Services Office no later than the end of the second week of instruction to request additional units.

**Minimum Progress**

Students are expected to complete satisfactorily at least 36 units during any three consecutive terms in residence; they are placed on probation if they fail to pass these units. Students are subject to dismissal if they fail to pass at least 32 units in three consecutive regular terms in residence. In addition, students are held to the minimum grade-point average and progress toward degree policies described in Policies and Regulations.

**Changing a Major**

Students in good academic standing who wish to change their major may petition to do so, provided they can complete the new major within the 216-unit limit and normal time to degree (12 terms for students who entered as freshmen; six terms for students who entered as transfers). Petitions must be submitted to and approved by the department or committee in charge of the new major. Admission to certain majors may be closed or restricted. Changes are normally not permitted if students are on probation or have begun their last term.

**Concurrent Enrollment**

Enrollment at a non-UC institution or at UCLA Extension while enrolled at UCLA is not permitted.

**Credit Limitations**

The following credit limitations apply to all undergraduate students enrolled in the school:

**Advanced Placement Examinations**

Credit earned through the College Board Advanced Placement (AP) Examinations may be applied toward certain UC/school requirements. Consult with an adviser in the Student Services Office to determine applicable credit. Portions of AP Examination credit may be evaluated by corresponding UCLA course numbers. If students take the equivalent UCLA course, unit credit for such duplication is deducted before graduation. See the school AP table for UCLA course equivalents.

**Graduate Courses**

Undergraduate students who wish to take courses numbered in the 200 series for credit toward a specific degree requirement must petition for advance approval of the department chair and the dean of the school and must meet specific qualifications. Courses numbered in the 400 and 500 series may not be applied toward the degree.

**Academic Counseling Services**

The school offers advising, program planning in the major and general education requirements, and individual meetings with school and departmental advisers from matriculation through graduation. For academic counseling information, contact the Student Services Office, 2200 Broad Art Center.

**Honors**

Undergraduate students who achieve scholastic distinction may qualify for the following honors and programs:
Dean’s Honors

The Dean’s Honors list recognizes high scholastic achievement in any one term. The following criteria are used to note Dean’s Honors on student records: a 3.913 grade-point average (GPA), with at least 12 letter-graded units. The minimum GPA required is subject to change on an annual basis. Students are not eligible for Dean’s Honors in any given term if they receive an Incomplete or a Not Passed (NP) grade, change a grade, or repeat a course. Dean’s Honors are automatically recorded on the transcript for the appropriate term.

Latin Honors

Latin honors are awarded at graduation to students with superior grade-point averages. To be eligible, students must have completed 90 or more units for a letter grade at the University of California and must have attained an overall grade-point average at graduation that places them in the top 20 percent of the school (GPA of 3.913 or better) for cum laude, the top 10 percent (GPA of 3.955 or better) for magna cum laude, or the top five percent (GPA of 3.973 or better) for summa cum laude. The minimum GPAs required are subject to change on an annual basis. Required GPAs in effect in the graduating year determine student eligibility. Students should contact the Student Services Office or see the Registrar’s honors web page for the most current calculations of Latin honors.

Departmental Scholar Program

Exceptionally promising juniors or seniors may be nominated as Departmental Scholars to pursue bachelor’s and master’s degree programs simultaneously. Qualifications include completion of 24 courses (96 quarter units) at UCLA or the equivalent at a similar institution and the requirements in preparation for the major. Students must also have at least one term of coursework remaining at UCLA. To obtain both the bachelor’s and master’s degrees students must be provisionally admitted to the Division of Graduate Education, fulfill requirements for each program, and maintain a minimum 3.0 (B) average. No course may be used to fulfill requirements for both degrees. Interested students should consult their department well in advance of application dates for graduate admission. Students should contact the Student Services Office in 2200 Broad Art Center for details.

Graduate Study

The advanced degree programs offer graduate students unique research opportunities when combined with special resources, such as the Young Research Library, Arts Library special collections, and UCLA exhibit venues.

Fellowships, grants, and assistantships are available through the departments and the dean of the Division of Graduate Education.

Admission

In addition to requiring that applicants hold a bachelor’s degree from an accredited U.S. institution or an equivalent degree of professional title from an international institution, each department in the school has limitations and additional requirements. In general, samples of creative work (auditions, portfolios, computer programs, etc.) are required. Detailed information is available on individual department websites and in program requirements for UCLA graduate degrees.

For information on proficiency in English requirements for international graduate students, see Graduate Admission in Graduate Study.

Degree Requirements

Requirements to fulfill each degree objective vary according to the degree and the department. For complete degree requirements, see program requirements for UCLA graduate degrees.

Research Centers

Ten interdisciplinary research centers—the Art and Global Health Center, Art|Sci Center, cityLAB, Conditional Space Studio, Counterforce Lab, Experiential Technologies Center, Game Lab, Grunwald Center for the Graphic Arts, and xLAB—as well as the renowned Murphy Sculpture Garden—are part of the school. They offer students the opportunity to broaden and deepen their experience of the arts and architecture while at UCLA.

In addition to offering a rich and diverse environment on campus, the school encourages students to participate in community outreach programs designed around concerts, exhibitions, symposia, and dance productions presented in cooperation with groups throughout the greater Los Angeles area.

School of Dentistry

Paul H. Krebsbach, DDS, PhD, Dean

School of Dentistry
53-038 Dentistry
310-206-6063

The UCLA School of Dentistry has a national and international reputation for its teaching, research activities, and public service that prepare dental students for professional
careers dedicated to patient care, leadership, and service. The curriculum prepares students for changes in treatment modalities and health care delivery systems. From the moment training begins, students actively participate in preventive and clinical dental care and soon make valuable contributions to the clinical health team. Clinical instruction emphasizes the comprehensive care of patients. Students interact with their colleagues, faculty members, and dental auxiliary personnel in much the same way as they later will interact in a private or group practice.

Students may undertake programs designed to meet their special interests; mandatory selectives encourage advanced training in an area of particular interest and service learning. In addition to basic and applied research programs within the school, students participate in community service programs such as the Wilson-Jennings-Bloomfield UCLA Venice Dental Center. Graduate programs and resident specialty programs foster new lines of research that lead to better treatment options. An active continuing education program, directed by UCLA faculty members, offers a variety of hands-on courses for members of the dental profession and their auxiliaries.

Degrees and Programs
The School of Dentistry offers the following degrees:

- Doctor of Dental Surgery
- Oral Biology MS, PhD

Articulated Degree Programs

- Oral Biology MS/Dentistry Certificate
- Oral Biology MS/Doctor of Dental Surgery
- Oral Biology PhD/Dentistry Certificate
- Oral Biology PhD/Doctor of Dental Surgery

Concurrent Degree Programs

- Doctor of Dental Surgery/Master of Business Administration

In addition, the school has a Professional Program for International Dentists (PPID) and a number of dental specialty residency programs. For information on the MS and PhD programs in Oral Biology, for which admission to the School of Dentistry is not required, see program requirements for UCLA graduate degrees.

Pre-Dental Programs

For details on pre-dental programs, see the school website.

DDS Degree

The UCLA dental curriculum leading to the degree of Doctor of Dental Surgery (DDS) is based on the quarter system. The course of study usually takes four academic years of approximately nine months each, with three required summer quarters between the first/second, second/third, and third/fourth years. The curriculum is designed to give students experience in all phases of clinical dentistry.

The dental curriculum consists of three principal areas: basic health sciences courses, didactic dental courses, and clinical experience. The first two years of the curriculum are chiefly devoted to didactic, laboratory, and general clinical coursework. The final two years emphasize training and instruction in clinical fields, including endodontics, fixed prosthodontics, operative dentistry, oral diagnosis and treatment planning, oral radiology, oral and maxillofacial surgery, anesthesiology, orthodontics, pediatric dentistry, periodontics, and removable prosthodontics.

Postgraduate Programs

Opportunities for postgraduate study include a one-year general practice residency program; a one-year advanced education in general dentistry program; a one-year residency in maxillofacial prosthodontics; a six-year oral and maxillofacial surgery residency training program; three-year prosthodontics, periodontics, orthodontics, and dental anesthesiaology programs; two-year programs in the specialties of endodontics, oral radiology, and orofacial pain and dysfunction; and a 26-month program in pediatric dentistry. Information on postgraduate programs can be obtained by visiting the school post-DDS programs web page.

School of Education and Information Studies

Christina A. Christie, PhD, Dean

School of Education and Information Studies
1009 Moore Hall
310-825-8326
School e-mail

The School of Education and Information Studies (SE&IS) at UCLA is dedicated to inquiry, advancement of knowledge, improvement of professional practice, and service to the education and information professions. SE&IS develops future generations of scholars, teachers, information professionals, and institutional leaders. Its work is guided by the principles of individual responsibility and social justice, an ethic of caring, and commitment to the communities it serves.
Faculty members and students of SE&IS combine a passion and skill for cutting-edge research with an appreciation for its application in the widely diverse cultures and communities in which it exists. These communities serve as fertile training ground for students in all programs, through internships, research projects, summer placements, and teaching opportunities.

SE&IS is committed to the highest-quality professional education, and to the application of research and scholarship to the challenges facing a diverse and increasingly urbanized world.

**Departments and Programs**

The school consists of two departments—the Department of Education and the Department of Information Studies. Both have a clear and strong commitment to the pursuit of excellence in their research-oriented and professional degree programs.

Research-oriented master’s and doctoral programs prepare top scholars in their respective fields; while future librarians, archivists, information professionals, teachers, student affairs practitioners, school administrators, transformative coaches, and superintendents are prepared in the various professional master’s and doctorate degree programs. The UCLA Lab School (Corinne A. Seeds campus) and the UCLA Community School offer innovative educational programs for pre-K-6 and K-12 students, respectively. The Horace Mann UCLA Community School brings together resources to help young people thrive in the South Los Angeles area.

**Degrees**

The School of Education and Information Studies offers the following degrees and undergraduate minors:

- Doctor of Education
- Education MA, PhD
- Educational Administration Joint EdD with UC Irvine
- Education and Social Transformation BA
- Information Studies PhD
- Master of Education
- Master of Library and Information Science, accredited by American Library Association
- Special Education Joint PhD with California State University, Los Angeles

**Articulated Degree Programs**

- Master of Education/Latin American Studies MA
- Master of Library and Information Science/Latin American Studies MA

**Concurrent Degree Programs**

- Doctor of Education/Juris Doctor
- Education MA/Juris Doctor
- Education MA/Doctor of Medicine
- Education PhD/Juris Doctor
- Master of Education/Juris Doctor
- Master of Library and Information Science/Master of Business Administration

**Credential Programs**

The school offers two credential programs accredited by the California Commission on Teacher Credentialing:

- Preliminary Administrative Services Credential
- Teacher Credential

**Undergraduate Minors**

- Education Studies
- Information and Media Literacy

**Undergraduate Admission**

Students are admitted with a declared pre-major in the College of Letters and Science. See **Entry to the Major** under Education in Curricula and Courses for information on applying to the major.

**Undergraduate Degree Requirements**

Students must satisfy UC requirements, school requirements, and major requirements for the Bachelor of Arts degree.

**University Requirements**

The University of California has two requirements that undergraduate students must satisfy to graduate: Entry-Level Writing or English as a Second Language, and American History and Institutions. Students who do not satisfy the Entry-Level Writing requirement prior to enrollment must pass an approved course or other program prescribed by their UC campus of residence. Only after satisfying the Entry-Level Writing requirement can they take an English composition course for transfer credit after enrolling at UCLA. See **Degree Requirements** in Undergraduate Study for details.
School Requirements
There are eight requirements that must be satisfied for the award of the degree.

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Courses that do not satisfy specific UC, school, or major requirements are referred to as electives and can be used to meet the minimum unit requirement for graduation.

Unit Requirement
Students must satisfactorily complete for credit a minimum of 180 units for the bachelor’s degree. At least 60 of the 180 units must be upper-division courses numbered 100 through 199. A maximum of 216 units is permitted. Students with Advanced Placement Examination or International Baccalaureate Examination (transfer) credit may exceed the unit maximum by the amount of that credit.

After 216 quarter units, enrollment may not normally be continued in the school without special permission from the dean.

Credit for upper-division tutorials numbered 195 through 199 is limited to 16 units taken for a letter grade. No more than eight units of freshman seminars may be applied toward the degree.

Scholarship Requirement
Students must earn at least a 2.0 (C) grade-point average (GPA) in all courses undertaken at UCLA to receive a bachelor’s degree.

Students must also earn a 2.0 GPA in the major and satisfy both the course and scholarship requirements for the major, including preparation for the major.

Academic Residence Requirement
Students are in residence while enrolled and attending classes at UCLA with a declared major in the School of Education and Information Studies. Thirty-five of the final 45 units completed for the bachelor’s degree must be earned in residence at the school.

For students who transfer from another institution, from UCLA Extension, or from another College or school with senior standing, of the 35 units earned while in residence, 28 must be upper-division units, including 16 upper-division units in the major department. Courses in UCLA Extension may not be offered as part of this residence requirement.

Students enrolled in the Education Abroad Program (EAP) must satisfy the residence requirement by earning 35 of their final 90 units in residence at the school.

Writing Requirement
Students must complete the UC Entry-Level Writing or English as a Second Language (ESL) requirement prior to completing the school writing requirement.

Students admitted to the school are required to complete a two-term writing requirement—Writing I and Writing II. Two courses in English composition are required for graduation. Both courses must be taken for letter grades, and students must receive a C or better grade in each (a C– grade is not acceptable).

Writing I
The Writing I requirement must be satisfied within the first three terms of enrollment by completing English Composition 3, 3D, 3DX, 3E, or 3SL with a C or better grade (a C– or Passing grade is not acceptable).

The Writing I requirement may also be satisfied by scoring 4 or 5 on one of the College Board Advanced Placement Examinations in English, or completing a course equivalent to English Composition 3 with a C or better grade (a C– or Passing grade is not acceptable) taken at another institution.

Students whose native language is not English may need to take English Composition 1A, 1B, and 2I before enrolling in a Writing I course. All courses in the sequence must be passed with a C or better grade (a C– or Passing grade is not acceptable).

Qualifying examination scores and courses are determined by the school Faculty Executive Committee.
Writing II

The Writing II requirement must be satisfied within seven terms of enrollment by completing one course from a faculty-approved list of Writing II courses; see the Registrar’s Writing II requirement web page for details. Courses that satisfy the requirement are denoted by a W suffix and are impacted. The course must be completed with a C or better grade (a C– grade is not acceptable).

Applicable Writing II courses may also fulfill preparation for the major requirements and, if approved for general education (GE) credit, may also fulfill a GE requirement.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the Writing I, Writing II, and reciprocity requirements. No transfer student is admitted to the school without completing, with a C or better grade (a C– grade is not acceptable), a college-level writing course that Undergraduate Admission accepts as equivalent to English Composition 3.

Quantitative Reasoning Requirement

The quantitative reasoning requirement may be satisfied by completing one approved UCLA course (see list below) or an equivalent course within the first seven terms of enrollment. The course must be taken for a letter grade, and students must receive a C or better grade (a C– grade is not acceptable).

The requirement may also be satisfied by achieving an SAT Reasoning Test Mathematics Section score of 600 or better for exams taken January 2016 or earlier, or achieving an SAT Mathematics section score of 620 or better for exams taken March 2016 or later, or an SAT Subject Test in Mathematics score of 550 or better, or an ACT Mathematics Test score of 26 or better. Approved UCLA courses and examinations, and qualifying scores, are determined by the school Faculty Executive Committee.

Applicable courses may also fulfill preparation for the major requirements and, if approved for general education (GE) credit, may fulfill a GE requirement.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the quantitative reasoning and reciprocity requirements. No transfer student is admitted to the school without completing, with a C or better grade (a C– grade is not acceptable), a college-level quantitative reasoning course that Undergraduate Admission accepts as equivalent to those approved by the school Faculty Executive Committee. Approved courses include

- Mathematics 3A, 31A, 31AL
- Philosophy 31
- Political Science 6, 6R
- Program in Computing 10A, 10B, 10C
- Public Affairs 60
- Statistics 10, 12, 13

Foreign Language Requirement

The foreign language requirement may be satisfied by one of the following methods: scoring 3, 4, or 5 on the College Board Advanced Placement (AP) foreign language examination in Chinese, French, German, Italian, Japanese, or Spanish, or scoring 4 or 5 in Latin; presenting a UCLA foreign language departmental examination score indicating competency through level three; or completing a college-level foreign language course equivalent to level three or above at UCLA with a C or Passed or better grade.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the foreign language and reciprocity requirements.

International students may petition to use an advanced course in their native language for this requirement. Students whose entire secondary education has been completed in a language other than English may petition to be exempt from the foreign language requirement.

Courses that may be used to fulfill this requirement are published on the Registrar’s foreign language requirement web page.

Diversity Requirement

The diversity requirement may be satisfied by completing one course from the faculty-approved list of courses. Courses used to satisfy the diversity requirement are approved by the school Faculty Executive Committee. The course must be taken for a letter grade, and students must receive a C or better grade (a C– grade is not acceptable). Applicable courses may also fulfill major, minor, or elective requirements and, if approved for general education (GE) credit, may fulfill a GE requirement. A list of approved courses is available in the Schedule of Classes.

General Education Requirements

General education (GE) is more than a checklist of required courses. It is a program of study that reveals to students the ways that research scholars in the arts, humanities, social sciences, and natural sciences create and evaluate new knowledge; introduces students to the important ideas and themes of human cultures; fosters appreciation for the
many perspectives and diverse voices that may be heard in a democratic society; and develops the intellectual skills that give students the dexterity they need to function in a rapidly changing world.

This entails the ability to make critical and logical assessments of information, both traditional and digital; deliver reasoned and persuasive arguments; and identify, acquire, and use the knowledge necessary to solve problems.

Applicable courses may also fulfill major, minor, or elective requirements and, if approved for diversity or writing, may fulfill the diversity requirement and/or Writing II requirement.

Foundations of Knowledge

General education courses are grouped into three foundational areas: Foundations of the Arts and Humanities, Foundations of Society and Culture, and Foundations of Scientific Inquiry.

Ten courses (47 units minimum) are required. GE-approved Writing II courses may fulfill an appropriate foundational area. See the foundational area descriptions below for a breakdown of courses required.

Students who successfully complete a year-long GE cluster series fulfill the Writing II requirement, complete 40 percent of their general education requirements, and receive laboratory/demonstration credit where appropriate.

Courses listed in more than one category can fulfill GE requirements in only one of the categories.

Foundations of the Arts and Humanities

Three 5-unit courses, one from each subgroup:
- Literary and Cultural Analysis
- Philosophical and Linguistic Analysis
- Visual and Performance Arts Analysis and Practice

Courses in this area supply perspectives and intellectual skills necessary to comprehend and think critically about our situation in the world as human beings. In particular, courses furnish the basic means to appreciate and evaluate the ongoing efforts of humans to explain, translate, and transform their diverse experiences of the world through such media as language, literature, philosophical systems, images, sounds, and performances. Courses introduce students to the historical development and fundamental intellectual and ethical issues associated with the arts and humanities, and may also investigate the complex relations between artistic and humanistic expression and other facets of society and culture.

Foundations of Society and Culture

Three 5-unit courses, one from each subgroup and a third course from either subgroup:
- Historical Analysis
- Social Analysis

Courses in this area introduce students to the ways in which humans organize, structure, rationalize, and govern their diverse societies and cultures over time. Courses focus on a particular historical question, societal problem, or topic of political and economic concern in an effort to demonstrate how issues are objectified for study, how data is collected and analyzed, and how new understandings of social phenomena are achieved and evaluated.

Foundations of Scientific Inquiry

Four courses, two from each subgroup. One 5-unit course from either subgroup must include laboratory credit. Other courses in the subgroups may be 4 units:
- Life Sciences
- Physical Sciences

Courses in this area ensure that students gain a fundamental understanding of how scientists formulate and answer questions about the operation of both the physical and biological world. Courses also deal with some of the most important issues, developments, and methodologies in contemporary science, addressing such topics as the origin of the universe, environmental degradation, and the decoding of the human genome. Through lectures, laboratory experiences, writing, and intensive discussions, students consider the important roles played by the laws of physics and chemistry in society, biology, Earth and environmental sciences, and astrophysics and cosmology.
Foundations Course Lists
Creating and maintaining a general education curriculum is a dynamic process; consequently, courses are frequently added to the list. For the most current list of approved courses that satisfy the Foundations of Knowledge GE plan, contact an academic adviser or see the master list.

Reciprocity with Other UC Campuses
Students who transfer to UCLA from other UC campuses and have met all GE requirements prior to enrolling at UCLA are not required to complete the school GE requirements. Written verification from the dean at the other UC campus is required. Consult with a school counselor regarding eligibility for this option.

Intersegmental General Education Transfer Curriculum
Transfer students from California community colleges have the option to fulfill UCLA lower-division GE requirements by completing the Intersegmental General Education Transfer Curriculum (IGETC) prior to transfer. The curriculum consists of a series of subject areas and types of courses that have been agreed on by the University of California and the California community colleges. Although GE or transfer core courses are degree requirements rather than admission requirements, students are advised to fulfill them prior to transfer. The IGETC significantly eases the transfer process, as all GE requirements are fulfilled when students complete the IGETC courses. Two types of requirements must be satisfied for the award of a degree: preparation for the major (lower-division courses) and the major (upper-division courses). Departments set requirements for minors.

Major Requirements

Preparation for the Major
Admission to the major requires completion of a set of courses known as preparation for the major. Applicants are admitted to pre-major status until requisite courses are satisfactorily completed. See Education and Social Transformation BA in Curricula and Courses.

The Major
A major consists of a group of coordinated upper-division courses and shall be designated as schoolwide, departmental, interdepartmental, or individual. Each course applied toward the major and preparation for the major must be taken for a letter grade unless otherwise stipulated.

A major consists of a minimum of 40 upper-division units. Students must complete their major with a scholarship grade-point average of at least 2.0 (C) in all courses in order to remain in the major.

See Education and Social Transformation BA in Curricula and Courses for more details.

Double Majors
Double majors between the school and other academic units are permitted. Students must be able to complete the proposed double major within the 216-unit limit.

Minors
Students may choose to pursue a minor to complement their major program of study. Minors consist of no fewer than seven courses (28 units) and no more than nine courses (36 units). Some minors also have admission requirements. For a list of minors and specializations, see Undergraduate Minors and Specializations; descriptions are in Curricula and Courses.

Policies and Regulations
Degree requirements are subject to policies and regulations, including the following:

Student Responsibility
Students should take advantage of academic support resources, but they are ultimately responsible for keeping informed of and complying with the rules, regulations, and policies affecting their academic standing.

Study List
The study list is a record of classes that a student is taking during a particular term. Each term the study list must include from 12 to 20 units. After the first term, students may petition to enroll in more than 20 units if they have an overall grade-point average of 3.0 (B) and attained at least a 3.0 (B) grade-point average the preceding term with all courses passed.

First-term transfer students from any other UC campus may carry excess units on the same basis as students who have completed one or more terms at UCLA; however, they are not encouraged to do so.

Minimum Progress
Students are expected to complete satisfactorily at least 36 units in any three consecutive terms while in residence; they are placed on probation if they fail to pass these units. They are subject to dismissal if they fail to pass at least 32 units in three consecutive regular terms while in residence.
Changing a Major

Students in good academic standing who wish to change their major may petition to do so provided they can complete the new major within the 216-unit limit and are on track to graduate on time. Petitions must be submitted to and approved by the department or committee in charge of the new major. Admission to certain majors may be closed or restricted; changes are normally not permitted if students are on probation or have begun their last term.

Students who fail to attain a grade-point average of 2.0 (C) in preparation for the major or major courses may be denied the privilege of entering or continuing in that major.

Re-entering Students and Their Majors

Students returning to UCLA to resume their studies after an absence of several years may find their previous major area of study is no longer available. They must select a current major in which to complete their studies. Consult with an academic adviser for assistance.

Concurrent Enrollment

Enrollment at a non-UC institution or UCLA Extension while enrolled at UCLA is not permitted except in extraordinary circumstances. No credit is given for courses taken concurrently elsewhere without the approval of the school.

Credit Limitations

The following credit limitations apply to all undergraduate students. In many cases, units are not deducted until the final term before graduation. Students with questions should consult with an academic adviser.

Transfer students with credit from other institutions (advanced standing credit) receive a Degree Audit from Undergraduate Admission indicating the transferable units from former institutions; however, the following credit limitations may reduce the total number of transferred units that apply toward the degree in the school. Consult with an adviser about these limitations.

Upper-Division Tutorials

No more than 8 units of credit may be taken per term in upper-division tutorials numbered 195 through 199. The total number of units allowed in such courses for a letter grade is 16; see the specific restrictions of each department.

Graduate Courses

Undergraduate students who wish to take courses numbered in the 200 series for credit toward a specific degree requirement must petition for advance approval of the department chair and the dean of the school. Courses numbered in the 300, 400, and 500 series may not be applied toward the degree.

Academic Advising Services

The school offers advising, program planning in the major and general education requirements, and individual meetings with school and departmental counselors. For counseling information, contact the Office of Student Services, 1002 Moore Hall.

Honors

Undergraduate students who achieve scholastic distinction may qualify for the following honors and programs:

Dean’s Honors

The Dean’s Honors list recognizes high scholastic achievement in any one term. The following criteria are used to note Dean’s Honors on student records: a 3.915 grade-point average (GPA) in any one term, with at least 12 graded units. The minimum GPA required is subject to change on an annual basis. Students are not eligible for Dean’s Honors in any given term if they receive an Incomplete. Dean’s Honors are automatically recorded on the transcript for the appropriate term.

Latin Honors

Students who have achieved scholastic distinction may be awarded the bachelor’s degree with Latin honors. To be eligible, students must have completed 90 or more units for a letter grade at the University of California and must have attained an overall grade-point average at graduation that places them in the top 20 percent of the school (GPA of 3.915 or better) for cum laude, the top 10 percent (GPA of 3.965 or better) for magna cum laude, or the top five percent (GPA of 3.985 or better) for summa cum laude. Coursework taken on the Education Abroad Program is applied toward Latin honors at graduation. The minimum GPAs required are subject to change on an annual basis. Required GPAs in effect in the graduating year (fall, winter, spring, summer) determine student eligibility. Students should consult their Degree Audits, or the Registrar’s Latin honors web page for the most current Latin honors calculations.

Graduate Study

Admission

Admission criteria established by the UCLA Division of Graduate Education require a bachelor’s degree from a
regionally accredited institution comparable in standards and content to a bachelor’s degree from the University of California. A cumulative scholastic grade-point average of B (3.0 on a 4.0 scale) or better—or its equivalent if the letter grade system is not used—is required for undergraduate study and in any postbaccalaureate study. Additional requirements for international applicants are explained in Graduate Study. See the Division of Graduate Education admissions website.

Departments and programs in the school set additional admission requirements. See the school admissions web page.

Degree Requirements
Specific degree requirements vary according to the department and program. Refer to program requirements for UCLA graduate degrees.

Research Centers and Institutes
The centers and institutes below furnish SE&IS with valuable resources that support school programs and research. See research centers.

Black Male Institute
The Black Male Institute (BMI) is a cadre of scholars, practitioners, community members, and policymakers dedicated to improving the educational experiences and life chances of black males. Educational settings are considered to be critical spaces for developing informed action to address black male persistence in schooling, recognizing that the challenges that impact the academic success of black males are manifold, be they economic, social, legal, or health-related.

Center for Community Schooling
The Center for Community Schooling is a campus-wide initiative to advance university-assisted community schools. As stable anchor institutions, universities play a unique role as K-12 community school partners. Its research, teaching, and service missions inform and are informed by the work of local schools and communities.

Center for Critical Internet Inquiry
The work of the Center for Critical Internet Inquiry (C2i2) explores interdisciplinary intersections of digital technologies and society, with the goal of creating fairness, justice, equity, and sustainability in relationship to our technological engagements.

Center for Critical Race Studies in Education
The Center for Critical Race Studies in Education (CCRSE) along with the staff, visiting scholars, and invited authors are dedicated to producing and publishing research with the goal of exploring questions related to theoretical frameworks, methodology, methods, conceptual tools, and practice associated with critical race studies.

Center for Dyslexia, Diverse Learners and Social Justice
The Center's aim is to provide local, state, national, and global leadership in the field, leveraging groundbreaking advances in cognitive and neurosciences, linguistics, and education to inform and transform K-12 teaching and learning.

Center for Information as Evidence
The Center for Information as Evidence (CIE) is an interdisciplinary forum to address the ways in which information objects and systems are created, used, and preserved as legal, administrative, scientific, social, cultural, and historical evidence. CIE is committed to incorporating perspectives from ethnic communities around the world, to sustain the diversity within indigenous cultural heritages and broaden methods of information analysis and conservation.

Center for Knowledge Infrastructures
The Center for Knowledge Infrastructures (CKI) conducts research on scientific data practices and policy, scholarly communication, and sociotechnical systems. It explores methods of data collection, innovations in scaling and workflows, and multidisciplinary approaches to complex problems.

Center for Research and Innovation in Elementary Education
The Center for Research and Innovation in Elementary Education, also known as CONNECT, links nationally recognized researchers with teachers and administrators at UCLA Lab School and public schools in Southern California to investigate central issues in education. Programs examine children’s learning and development from preschool to sixth grade; investigate teaching diverse student populations; encourage exchange of ideas among scholars, practitioners, and policymakers concerned with child development and school reform; and disseminate effective educational approaches and research.
Center for Research on Evaluation, Standards, and Student Testing

The Center for Research on Evaluation, Standards, and Student Testing (CRESST) is devoted to educational research, development, training, and dissemination. CRESST supplies leadership in these areas by creating new methodologies for evaluating educational quality, creating new designs for assessing student learning, promoting the sound use of assessment data, setting the national research agenda, and influencing practice.

Center for the Transformation of Schools

The Center for the Transformation of Schools (CTS) conducts research and develops tools to help education systems place a commitment to equity at the center of their work.

Center X

Center X offers a unique setting where researchers and practitioners collaborate to design and conduct programs that prepare and support K-12 education professionals committed to social justice, instructional excellence, the integration of research and practice, and caring in low-income urban schools.

Children’s Understanding of Economic and Social Inequality Lab

The Children’s Understanding of Economic and Social Inequality (CUESI) Lab examines children’s experiences of social inequality, and its influence on their academic and social outcomes. The lab’s research examines the extent to which contextual factors such as poverty, immigration, and social policies, influence family dynamics and, in turn, children’s developmental outcomes.

Civil Rights Project/Proyecto Derechos Civiles

The Civil Rights Project/Proyecto Derechos Civiles (CRP) research center is dedicated to creating a new generation of research in social sciences and law on the critical issues of civil rights and equal opportunity for racial and ethnic groups in the U.S. It has commissioned more than 400 studies, published 14 books, been cited in major Supreme Court decisions on affirmative action, and issued numerous reports from authors at universities and research centers across the country.

Community Archives Lab

The Community Archives Lab at UCLA explores the ways that independent, identity-based memory organizations document, shape, and provide access to the histories of minoritized communities.

Higher Education Research Institute

The Higher Education Research Institute (HERI) conducts research, evaluation, information, policy studies, and research training in postsecondary education. The HERI research program includes the outcomes of postsecondary education, leadership development, institutional transformation, faculty performance, federal and state policy, and educational equity; and houses the Cooperative Institutional Research Program (CIRP), the largest ongoing national study of college students in the U.S.

Institute for Democracy, Education, and Access

The Institute for Democracy, Education, and Access (IDEA) seeks to understand and challenge pervasive racial and social class inequalities in education. In addition to conducting research and policy analysis, IDEA supports educators, public officials, advocates, community activists, and young people as they design, conduct, and use research to make high-quality public schools and successful college participation routine occurrences in all communities. IDEA also studies how research combines with strategic communications and public engagement to promote widespread participation in civic life.

Institute for Immigration, Globalization, and Education

The Institute for Immigration, Globalization, and Education (IGE) conducts multidisciplinary and comparative research engaging policymakers, practitioners, and institutional leaders. The research informs efforts to expand opportunities, reduce barriers, and improve the well-being of diverse, vulnerable, and marginalized students. The work is timely in the context of globalization, which is profoundly changing the developmental contexts, educational trajectories, and life courses of children, adolescents, and young adults.

Momentum: Accelerating Equity in Computing and Technology

Momentum employs mixed-methods approaches to conduct cutting-edge research on efforts to diversity computing and technology fields.
Paulo Freire Institute
The Paulo Freire Institute (PFI) seeks to gather scholars and critics of Freire’s pedagogy in permanent dialog to foster the advancement of new pedagogical theories and concrete interventions in the real world. PFI brings together research, teaching, and technology while concentrating on five major areas: studies of globalization and education, teacher education, a comparative perspective on Latin American education, the politics of education, and Paulo Freire’s political philosophy and critical pedagogy.

Pritzker Center for Strengthening Children and Families
The UCLA Pritzker Center for Strengthening Children and Families is focused on the needs of children and youth who are disconnected from traditional pathways to success, in particular foster youth.

Sudikoff Family Institute for Education and New Media
The Sudikoff Family Institute for Education and New Media utilizes the popular press and other media to disseminate the work of SE&IS scholars to policymakers, educators, and the general public. Sudikoff Fellows are selected each year from SE&IS faculty members to enhance awareness of critical issues related to education and information studies, by contributing to a variety of media that reach a lay audience or serve the public interest in some manner.

UC/CSU California Collaborative for Neurodiversity and Learning
The UC/CSU California Collaborative for Neurodiversity and Learning believes that improving literacy is one of the great civil rights issues of this generation. Californians must work together to secure equal access to quality literacy instruction for all their children. Doing so is key not only to children’s literacy and well-being, but also to communities, democracy, and economy. The collaborative was established in June 2019 by Assembly Bill AB 1703. The collaborative represents a historic and critical investment in the state’s children with dyslexia and other literacy challenges.

School of Law
Michael E. Waterstone, JD, Dean
School of Law
1242 Law Building
310-825-4841
By any standard, UCLA School of Law is recognized as one of the nation’s great law schools. Each year a lively, talented, and diverse law student population assembles in a rigorous, innovative, and supportive environment. Faculty members frequently receive awards for teaching excellence, and are highly regarded University-wide and nationally. They also are recognized worldwide for their scholarship in a broad spectrum of fields that dramatically affect the world—constitutional law, environmental law and policy, human rights, criminal law, corporate law, corporate governance, employment law, international law, immigration law, and intellectual property, to name a few. The structure of U.S. democracy; the underpinnings of individual liberties and regulation of business; the powerless; the many permutations of a race-conscious society—all are subjects of investigation and study. Faculty members are committed to being intellectually and professionally demanding of students and supportive at the same time, encouraging and fostering a genuine spirit of collaboration and community.

Law students select courses from an intellectually rich curriculum. Courses are taught in both traditional and clinical settings, with some offered as part of coordinated concurrent degree programs or specializations in business law and policy; critical race studies; environmental law and policy; international and comparative law; law and philosophy; media, entertainment, technology, and sports law; technology, law, and policy; and public interest law and policy. Situated at a major gateway to the Pacific Rim, and part of an outstanding research university, UCLA School of Law affords law students myriad interdisciplinary opportunities in the classroom and through independent research.

The school’s nationally recognized experiential education program offers sophisticated courses that help students develop core lawyering skills, implement integrated advocacy strategies to solve clients’ problems, and gain from their UCLA education a deeper understanding of what it means to be a lawyer. The experiential education curriculum includes courses that help students develop expertise in client interviewing and counseling, negotiation, business transactions, trial advocacy, community lawyering, environmental law, human rights, and criminal justice. Law clinics offer students opportunities to provide direct representation and policy advocacy to clients in areas including immigration law, veterans advocacy, and prisoners’ rights. Their client communities span a broad spectrum, from artists pursuing film careers to incarcerated individuals seeking pardons.
The technologically advanced, spacious, and comfortable Hugh and Hazel Darling Law Library—replete with natural lighting and views—houses an extensive collection of legal materials.

Successful professional placement of graduates is a hallmark of the law school. Approximately 400 interviewers from law firms, corporations, government agencies, and public interest organizations across the country participate in campus events annually. More than 18,000 UCLA graduates work in coveted positions in California and around the world, serving in law firms and government agencies and working as in-house counsel, business executives, law professors, judges, and lawmakers.

Degrees
The School of Law offers the following degrees:
- Doctor of Juridical Science
- Juris Doctor
- Master of Laws
- Master of Legal Studies

Articulated Degree Programs
Master of Legal Studies/Doctor of Medicine

Concurrent Degree Programs
- Juris Doctor/African American Studies MA
- Juris Doctor/American Indian Studies MA
- Juris Doctor/Doctor of Education
- Juris Doctor/Education MA
- Juris Doctor/Education PhD
- Juris Doctor/Master of Business Administration
- Juris Doctor/Master of Education
- Juris Doctor/Master of Public Health
- Juris Doctor/Master of Public Policy
- Juris Doctor/Master Social Welfare
- Juris Doctor/Master Urban and Regional Planning
- Juris Doctor/Philosophy PhD

In addition to the concurrent programs above, students may design a tailored program from other disciplines in the UCLA curriculum or from another high-quality institution; this must be arranged in consultation with the School of Law and the other selected program.

Detailed information about academic programs, course titles and descriptions, fees, and the semester-system calendar are available on degrees and specializations.

Doctor of Juridical Science Degree
The Doctor of Juridical Science (SJD) degree program is designed for those seeking to pursue careers as teachers and scholars of law. The highly selective program is open only to applicants who possess a distinguished prior academic record in law, show promise of outstanding scholarship, and demonstrate a high potential for completing a scholarly dissertation of required quality. Applicants must hold a JD degree or foreign equivalent and an LLM degree (or be enrolled in a program leading to an LLM degree).

Juris Doctor Degree
UCLA School of Law has as one of its central purposes the training of attorneys who attain high levels of professional excellence and integrity, and who exercise civic responsibility in myriad ways over long careers.

Admission
By the time of enrollment, UCLA Law applicants must have a bachelor’s degree that has been awarded by an institution that is accredited by an accrediting agency recognized by the U.S. Department of Education. For students educated outside of the U.S., the undergraduate degree must be from an institution that is equivalent in quality to that of institutions accredited by an accrediting agency recognized by the U.S. Department of Education. UCLA requires students take a standardized test for admission—either the Law School Admission Test (LSAT) or the Graduate Record Examinations (GRE). For questions about UCLA Law’s admissions requirements, see information for first-year applicants or send e-mail the school admissions office.

UCLA Law seeks to admit students of outstanding intellectual ability who will bring a wide range of backgrounds, experiences, and perspectives to the classroom and the legal profession. Through long experience, the faculty has concluded that the quality of the education of each student is affected in significant ways by the presence of vital diverse viewpoints. Students of all backgrounds choose to come to UCLA in significant part because of UCLA Law’s outstanding achievements in creating a highly diverse educational environment.

In evaluating each applicant, the school places substantial weight on traditional measures of academic ability, namely grades and standardized test scores—specifically LSAT and GRE scores. It also recognizes that other factors and attributes contribute greatly to a person’s ability to succeed as a law student and lawyer including economic, physical, or other challenges that have been overcome; scholarly achievements such as graduate study, awards, and publications; the rigor of the undergraduate educational program undertaken; and letters of recommendation.
The school places special emphasis on socioeconomic disadvantage in the evaluation. The school also considers work experience and career achievement, community or public service, career goals, the ability to contribute to law school programs and specializations, evidence of and potential for leadership, language ability, unusual life experiences, and any other factors (except those deemed inadmissible by the Regents or by other applicable law) that indicate the applicant may make a distinctive contribution to UCLA Law or the legal profession.

**Residence and Unit Requirements**
Candidates for the Juris Doctor degree must pursue resident law school study for six semesters and successfully complete 87 units, at least 64 of which must be earned in regularly scheduled law class sessions. The residence requirements may be satisfied as follows: six semesters in regular session in this school; or two semesters in regular session (or equivalent) in a school that is accredited by the American Bar Association, coupled with four semesters in regular session (or equivalent) in this school.

Every first-year student must take the full schedule of required courses; second- and third-year students are required to take a minimum of 12 units and may not take more than 16 units each semester. Students complete a mandatory course in professional responsibility, a substantial analytical writing requirement, and six units of experiential coursework. In addition to the courses in the regular law school curriculum, students may take two courses for credit in other UCLA disciplines. Graduate students may enroll in upper-division law courses on a limited basis. Law courses are not open to non-UCLA students. Auditing of law courses is not permitted.

**Attendance and Grades**
The right to take examinations and the privilege of continuing as a student in the school are conditioned on regular classroom attendance. Information on the grading system, which is based on a letter-grade scale of A+ to F, and standards for satisfactory performance and for graduation may be obtained from the assistant dean for academic affairs.

**Curriculum**
Courses of instruction are offered within the school and supervised educational experiences outside it in an effort to enable students to think in new and clarifying ways and to prepare them for careers of practice and public service. To this end, the school employs several instructional techniques in a variety of subject areas.

In the first year of their legal education, students undertake intensive study of legal reasoning in fields that have historically dominated legal thought. Students begin with a pio-

neering week-long orientation program that immerses them in the fundamentals of the law school learning process. From there they embark on a formative first year of courses that historically have laid the foundation for law of all kinds: civil procedure, constitutional law, contracts, and torts. In addition, an opportunity to enroll in two electives in the second semester serves as a gateway to the upper-division curriculum.

In the second and third years, students have an opportunity to engage in a number of different fields of law and law-related study. All of the courses in the second- and third-year curricula are elective, with the exception of a mandatory course in criminal law, professional responsibility, and property; a substantial analytical writing requirement; and six units of experiential coursework.

**Master of Laws Degree**
The School of Law offers a Master of Laws (LLM) degree program for international and domestic law school graduates who wish to pursue a year of graduate legal education. The program allows students to specialize their studies in fields such as entertainment law, international and comparative law, and four separate business law subjects; or to design their own specialization in a field of their choice.

**Master of Legal Studies Degree**
The Master of Legal Studies (MLS) degree program is designed for non-lawyer professionals in business, government, and the nonprofit sector who seek to advance their careers and capabilities by obtaining an advanced degree and a deep understanding of the legal and regulatory issues that impact their industry or field of interest. Full-time students can finish the degree in one academic year, part-time students may take as many as four years. An MLS degree does not entitle the holder to sit for the bar exam or become a licensed lawyer.

**Academic Specializations for Juris Doctor Degree**

**Business Law and Policy**
The Business Law and Policy specializations are designed for students who wish to focus their schooling in a particular area of business law and ultimately earn a certificate of completion with their degree. Students may choose from two specializations: business law and taxation. Approximately 70 courses and seminars are offered. In addition, there are two recommended tracks: corporate law and bankruptcy and commercial law, which offer additional guidance to students in course selection for the business law specializations.
Business law materials are integrated to varying degrees in the law school’s first-year curriculum, typically in property, contracts, and torts. The second- and third-year curricula in the specialization include courses covering a wide variety of legal and business issues, ranging from regulation of markets to the design of business transactions.

Critical Race Studies

UCLA School of Law is the only American law school to offer an advanced curriculum that fosters students’ systematic and rigorous study in the area of critical race studies. With many faculty members who have been instrumental in pioneering and advancing critical race theory, the Critical Race Studies specialization is essential to promoting insightful, intelligent public conversation about race relations. It is appropriate for law students who seek advanced study and/or practice in race and the law, critical race theory, civil rights, public policy, and other legal practice areas that are likely to involve working with racial minority clients and communities or working to combat racial inequality.

Environmental Law

UCLA School of Law is home to the Emmett Institute on Climate Change and the Environment, a national leader in scholarship and advocacy and home to top professors who are on the legal front lines. These scholars teach the intricacies of environmental law, provide students with invaluable mentorship and offer them a substantial boost into impactful careers as drivers of law and policy at all levels of government. Students participate in a wide array of cutting-edge courses and experiential programs. These include the Frank G. Wells Environmental Law Clinic and the California Environmental Legislation and Policy Clinic, where students work directly with state lawmakers to address specific problems confronting the environment. Through the Emmett Institute, students travel to high-level meetings in California and a variety of overseas destinations where they confer with experts in the field. Students also write and edit the Journal of Environmental Law and Policy, complete externships at organizations including the Natural Resources Defense Council and collaborate on campus-wide symposia and initiatives to confront one of the biggest challenges of our time.

International and Comparative Law

The International and Comparative Law program is one of the best in the nation. An expansive law faculty, course offerings, colloquia and symposia, student-edited journals, externships, foreign exchange offerings, and a broad community of interested students from around the world constitute a rich milieu in which to learn about the field. The International and Comparative Law specialization builds on these strengths, and directs students to coursework that may range from international business to comparative constitutional law to international human rights.

Law and Philosophy

The Law and Philosophy specialization is designed for students who want to supplement their legal studies by exploring more theoretical issues concerning the philosophical foundations of law. It is invaluable to those students interested in attending graduate programs or exploring a career in academia. The specialization exposes students to material on the nature of law and legal systems, legal methodologies, and the theoretical underpinnings and justifications of particular doctrinal areas such as constitutional law, criminal law, and contract. Students need not have any prior background in philosophy, but a strong interest in the subject is recommended.

Media, Entertainment, Technology, and Sports Law and Policy

Los Angeles is the center of the entertainment industry. The Media, Entertainment, Technology, and Sports Law and Policy specialization is the most comprehensive, advanced, and innovative approach to the study of entertainment and media law in the country. Students who fulfill the requirements have a solid grounding in the law, customs, theory, and policy in the motion picture, television, music, and other industries involved in creative and artistic matters. The program also prepares students who choose to work in nonprofit institutions, government, or academia in the area of entertainment, media, and intellectual property law.

Public Interest Law and Policy

Recognizing the considerable debate about the proper role of the law in creating and sustaining a just society, the David J. Epstein Program in Public Interest Law and Policy specialization strives to offer its students an innovative and intellectually ambitious curriculum that prepares them to engage in sophisticated representation of traditionally underserved clients and interests. The specialization, one of the nation’s top such programs, has a competitive admissions process. Graduates have received prestigious public interest law fellowships, including the Skadden and Equal Justice Works postgraduate fellowships, and work in a variety of settings, including nonprofit organizations, government agencies, think tanks, and private public interest firms. Graduates work throughout the world in a broad range of social justice issues such as homelessness prevention; immigrants’ rights; health-care access; poverty; workers’ rights; international human rights; criminal justice;
lesbian, gay, bisexual, transgender, and queer rights; and more. Faculty members are leaders in their respective fields, and have distinguished themselves by the quality of their practical legal experience, scholarship, and teaching.

Technology Law

Technology law is a field of growing importance across the legal profession, and an area of increasing interest to students. In practical terms, law and technology practitioners engage across a range of different doctrinal areas including patent law, trademark law, copyright law, privacy law, anti-trust, etc. These diverse fields have begun to coalesce into a distinct thematic area of scholarship and practice, as evidenced by the propagation of specialized law and technology journals (including at UCLA), and an expanding number of law firms which bill themselves as focusing on technology law. This specialization aims to support students’ entry into career tracks related to technology, and provides a distinct home to students interested in this space, as well as career development, mentorship, and educational opportunities aimed at cultivating a mastery over this exciting and emerging field.

Academic Specializations for LLM Degree

Business Law

The Business Law specialization is designed to allow students to focus in one of four tracks: business law, bankruptcy, securities regulation, and taxation. Approximately 70 courses and seminars are offered in the specialization. The four tracks are designed to offer guidance to students in course selection, as well as highlight the specialization’s curricular strengths. The advanced curricula include courses covering a wide variety of legal and business issues, ranging from regulation of markets to the design of business transactions. The Lowell Milken Institute for Business Law and Policy prepares students for outstanding careers and leadership in business law; as well as in business, the nonprofit sector, and philanthropy. The institute simultaneously serves as a dynamic hub of research and strategy for practitioners, scholars, and experts across a variety of disciplines.

Critical Race Studies

UCLA School of Law is the only American law school to offer an advanced curriculum that fosters students’ systematic and rigorous study in the area of critical race studies. With many faculty members who have been instrumental in pioneering and advancing critical race theory, the Critical Race Studies specialization is essential to promoting insightful, intelligent public conversation about race relations. It is appropriate for law students who seek advanced study and/or practice in race and the law, critical race theory, civil rights, public policy, and other legal practice areas that are likely to involve working with racial minority clients and communities or working to combat racial inequality.

Environmental Law

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The International and Comparative Law program is one of the best in the nation. An expansive law faculty, course offerings, colloquia and symposia, student-edited journals, externships, foreign exchange offerings, and a broad community of interested students from around the world constitute a rich milieu in which to learn about the field. The International and Comparative Law specialization builds on these strengths, and directs students to coursework that may range from international business to comparative constitutional law to international human rights.

Law and Sexuality

The Law and Sexuality specialization builds on the role of the school as a leader in the field of sexual orientation and gender identity law and scholarship. The goal of the specialization is to expand the quality and extent of legal knowledge and public discourse on issues related to sexuality and law. It is affiliated with the Williams Institute, a national think tank dedicated to conducting rigorous, independent research on sexual orientation and gender identity law and
public policy. Students can take classes offered by faculty members and scholars associated with the institute, and participate in a range of institute activities including the speaker series and annual conference, moot court competition, and the Dukeminier Awards journal. Staff from the institute work with LLM students to secure internships in the Los Angeles area and to establish connections between LLM students and international experts and organizations working in their geographic or topic area. The specialization involves coursework on comparative and/or international law with focus on sexuality issues.

**Media, Entertainment, and Technology Law and Policy**

Los Angeles is the center of the entertainment industry. The specialization offers the most comprehensive, advanced, and innovative approach to the study of entertainment and media law in the world. Students who fulfill the requirements have a solid grounding in the law, custom, theory, and policy in the motion picture, television, music, and other industries involved in creative and artistic matters. The program also prepares students who choose to work in nonprofit institutions, government, or academia in the area of entertainment, media, and intellectual property law.

**Public Interest Law**

Exploring the proper role of the law in creating and sustaining a just society, the Public Interest Law specialization strives to offer its students an innovative and intellectually ambitious curriculum that prepares them to engage in sophisticated representation of traditionally underserved clients and interests. The specialization, one of the nation’s top such programs, has a competitive admissions process. Students represent a broad range of political and ideological perspectives. Graduates’ impact is far reaching as they work on a broad range of social justice issues such as women’s rights; immigrants’ rights; poverty; health-care access; international human rights; criminal justice; lesbian, gay, bisexual, transgender, and queer rights; and more.

**Research Centers, Institutes, and Programs**

**A. Barry Cappello Program in Trial Advocacy**

The A. Barry Cappello Program in Trial Advocacy provides comprehensive training in the strategies and techniques required to be a successful trial lawyer. Through courses, clinical opportunities, and one of the best competition programs in the country, students learn how to prepare for and conduct jury selection, opening statements, direct and cross examinations, and closing arguments, as well as how to make and respond to evidentiary objections. Award-winning faculty, experienced trial lawyers, and nationally successful mock trial coaches lead the program.

**Animal Law and Policy Program**

The Animal Law and Policy Program is an institutional umbrella for various courses in animal law, including a clinical or simulation course through which students can learn practical legal skills in the role of hearing examiners in potentially dangerous dog disputes, and also includes a small grants program designed to encourage qualitative and quantitative empirical research that advances animal law and policy reform.

**Center for Immigration Law and Policy**

Founded in 2020, the Center for Immigration Law and Policy (CILP) at the UCLA School of Law expands the law school’s role as a national leader in immigration law and policy. CILP generates innovative ideas at the intersection of immigration scholarship and practice; serves as a hub for transforming those ideas into meaningful changes in immigration policy at the local, state, and national level; and empowers students with unique opportunities for experiential learning through work with academics, practitioners, policymakers, and activists. CILP pursues those goals by supporting faculty performing cutting-edge work in immigration law and policy; bolstering initiatives for student engagement including the Immigrant Family Legal Clinic, the Immigrants’ Rights Policy Clinic and service-learning trips for UCLA Law students to border regions; engaging in strategic litigation; publishing briefings and reports on immigration policy; and hosting conferences and symposia featuring top national scholars.

**Center for Law and Economics**

The mission of the Center for Law and Economics is to foster academic scholarship exploring how economics can help us better understand and improve our laws. UCLA has one of the richest law and economics traditions in the world, and many of the founders of law and economics have made UCLA their academic home. The center, along with the Anderson Graduate School of Management and School of Law Lowell Milken Institute for Business Law and Policy, sponsors the UCLA Law, Economics, and Organization Workshop, where speakers present their latest works-in-progress in the broad area of law and economics as it relates to business organizations.
Criminal Justice Program

The Criminal Justice Program (CJP) serves as a central hub for UCLA Law’s work in the area of criminal and juvenile law. Through CJP, students interested in criminal law may engage directly in a wide range of specialized courses, and also have opportunities to engage in research, policy advocacy, and client representation. Research undertaken by CJP faculty and staff help to inform criminal law and policy at both the national and local levels. This research has several key areas of focus including police brutality and accountability, criminal law and immigration enforcement, pretrial detention and bail policy, collateral consequences of criminal convictions, youth justice and the family regulation system, restorative and transformative justice, and alternatives to policing and prosecution.

Critical Race Studies Program

Throughout American history, race has profoundly affected the lives of individuals, growth of social institutions, substance of culture, and workings of our political economy. Not surprisingly, this impact has been substantially mediated through the law and legal institutions. To understand the deep interconnections between race and law and, particularly the ways in which race and law are mutually constitutive, is an extraordinary intellectual challenge with substantial practical implications. In a nation that is becoming more racially diverse and finds global issues at the forefront of political debate, these issues promise to remain central to the work of law practitioners and the research of legal scholars. The only one of its kind in the U.S., the Critical Race Studies Program is proud that some of the original architects of critical race theory are faculty members. Established in 2000, the program is a training ground for a new generation of practitioners, scholars, and advocates committed to racial justice theory and practice; and is a multifaceted program that augments a rigorous course of study with research colloquia, symposia, interdisciplinary collaborations, and community partnerships in order to integrate theory and practice.

David J. Epstein Program in Public Interest Law and Policy

The school’s highly selective David J. Epstein Program in Public Interest Law and Policy was established in 1997 in response to the need to better train public-interest lawyers. It quickly became one of the nation’s most innovative and successful law school public-interest programs, engaging students in an array of social justice issues. The program strives to ensure that its students pursue an innovative and intellectually ambitious curriculum, and extracurricular involvement that best prepares them to engage in sophisticated representation of traditionally underserved clients and interests. Beyond the formal coursework, the program offers an array of opportunities for students to hear from leading public-interest practitioners and scholars, work on current policy problems, and become involved in public-interest activities within and outside the School of Law. The program also sponsors a series of forums, symposia, and activities that focus on social justice issues in which all students, faculty, alumni, and the broader community participate.

Emmett Institute on Climate Change and the Environment

The Emmett Institute on Climate Change and the Environment is the leading law-school center focused on climate change and other critical environmental issues. Founded in 2008, the institute works across disciplines to develop and promote research and policy tools useful to decision makers locally, statewide, nationally, and beyond. The institute houses the school’s leading environmental programs, including the Frank G. Wells Environmental Law Clinic, a vital training ground for environmental lawyering. Taking advantage of its home at one of California’s top law schools, the institute has particular expertise in the cutting-edge steps taken by California to lead the way toward meaningful reductions of greenhouse gas emissions. Lawmakers, the broader legal community, business leaders, academics, and the media rely on the institute as a trusted resource to analyze and answer questions about policy and law issues related to climate change and other environmental challenges.

Empirical Research Group

UCLA School of Law is one of the few law schools in the country to offer its faculty and researchers the support of trained methodologists to support empirical research. The Empirical Research Group (ERG) specializes in the design and execution of quantitative research in law, the social sciences, and public policy. ERG enables faculty members to include robust empirical analysis in their legal scholarship and promotes interdisciplinary collaboration. ERG has been involved in research across a wide range of topics including bankruptcy, criminal justice, criminal and civil procedure, education, environmental policy, gender and sexual identity, housing, law and economics, tax policy, and voting rights. ERG trains and supervises law students and research assistants in research methods and works closely with law students who conduct their own empirical research.

Experiential Education Program

The School of Law has long been recognized for its innovative approach to experiential teaching that transforms the classroom into a real-world laboratory through the integra-
tion of theory and practice. It has been a national leader in clinical teaching since the early 1970s, and continues to offer rigorous practical training across a wide range of practice areas. Students gain crucial firsthand experience that prepares them for future careers, learning from faculty members whose knowledge and expertise place them at the forefront of experiential education.

From the first year, students have opportunities to receive training and hands-on experience by participating in the El Centro Legal Clinics. El Centro places students with public-interest legal services organizations to provide legal assistance to underserved individuals, families, and communities. Second- and third-year students can participate in a broad array of clinical and experiential courses that encompass all areas of legal practice—litigation, transactional, and public interest. In addition, second- and third-year students can do part-time and full-time externships, working for judges, government agencies, public interest law firms, and nonprofit organizations.

The experiential education program is led by exceptional faculty members—visionary scholars who have contributed the cornerstone ideas that form the basis of clinical training, as well as a new generation of leaders who are bringing experiential education into areas of the legal profession that have long remained outside the scope of hands-on training.

Externships and Field Placements

Through the School of Law’s extensive and diversified externship program, students can work in a supervised environment with a wide variety of employers and in a diverse range of practice areas. Students are able to extern with judges, government agencies, nonprofit organizations, or in some circumstances, entertainment and other in-house placements. They also may participate in the UCDC Law Program, a full-time externship program in Washington, DC. The field placement program brings together faculty members, students, and practicing lawyers to collaborate and connect classroom learning with practice opportunities.

Institute for Technology, Law and Policy

The UCLA Institute for Technology, Law and Policy is a collaboration between the UCLA School of Law and the Samueli School of Engineering whose mission is to foster research and analysis to ensure that new technologies are developed, implemented, and regulated in ways that are socially beneficial, equitable, and accountable. The institute brings together faculty and students from the law and engineering schools to conduct research, convene events, and engage the wider academic community and the public about the benefits and risks of technologies including artificial intelligence and machine learning, extended reality, cybersecurity, and digital media and communications.

International and Comparative Law Program

The International and Comparative Law Program offers a wealth of courses, seminars, and clinics, prominent symposia, international moot court opportunities, and highly regarded student-edited journals that address the emerging challenges of a globalized world. Permanent faculty members offer numerous international and comparative law courses such as international business transactions, national security law, international environmental law, international criminal law, European Union law, and Islamic law. The study of international and comparative law is further strengthened by the opportunity to take courses in other UCLA departments. Some of the country’s best work in international economics, politics, and business occurs at UCLA, and many law students find it valuable to complement their law school work with coursework in other departments. Students may also pursue joint degrees with other departments with the approval of the law school administration.

Law and Philosophy Program

The School of Law and the Philosophy Department offer an exciting program in law and philosophy that takes advantage of the law faculty’s strength and depth in the subject, and the school’s close relationship to the Philosophy Department. The program has many dimensions, including a wide range of courses at the intersection of law and philosophy and a legal theory workshop, open to all members of the law school and Philosophy Department, in which leading scholars present works in progress.

Lowell Milken Institute for Business Law and Policy

The central mission of the Lowell Milken Institute for Business Law and Policy is to influence national legal and policy debate over critical issues affecting the regulation and governance of business. The institute seeks to fulfill this mission by promoting innovative research at the intersection of law and business, by a highly respected and widely recognized business law faculty; by offering a unique blend of policy and practice-oriented courses designed to prepare law students to be leaders in the new economy; and by hosting timely conferences and scholarly events on matters that advance the public discussion.
Native Nations Law and Policy Center

The Native Nations Law and Policy Center supports Native nations to enhance their governmental institutions and laws, strengthen their cultural resource protections, and address critical public policy issues by bringing together UCLA academic resources and the knowledge and experience of tribal leaders and knowledge-holders. The center serves as the home for the concurrent Juris Doctor/American Indian Studies MA program; the Richard M. Milanovich Fellowship in Law, the first-of-its kind fellowship supported by the Agua Caliente Band of Mission Indians devoted to the promotion of Native American legal scholarship; the Graton Scholarship, a three-year, full tuition scholarship for five UCLA Law students annually seeking legal careers in Native American law; numerous courses devoted to the study of Native American law, tribal law, and Indigenous rights; and the Tribal Legal Development Clinic, a year-round legal clinic that connects Native nations with law students in projects such as code development and serving as law clerks for tribal courts.

Office of Public Interest Programs

UCLA School of Law has a long-standing commitment to public service, and is committed to cultivating an environment that encourages all of its students and alumni to better serve society in myriad ways. Students gain significant exposure and experience in public service through clinical courses, a pro bono program, an externship program, extensive public interest advising and informational programming, and numerous student organizations. The Office of Public Interest Programs, hub of the school’s public interest efforts, hosts a variety of career-oriented programs and relevant public interest forums and events in which students, faculty, alumni, and the broader community participate. The office also hosts the annual Southern California Public Interest Career Day, which attracts more than 110 public service employers and some 1,000 students from around the region.

Prison Law and Policy Program

The Prison Law and Policy Program serves as a hub connecting students and faculty committed to understanding and challenging the American carceral system. Through a focus on prisons and jails, it aims to shed light on the way the law structures all aspects of the contemporary experience of criminal punishment in the U.S. Its main goals are to train the next generation of prisoners’ rights lawyers and to expose the broader law school community to the practices of American penalty and the issues of law, policy, justice, and morality these practices raise. Program initiatives include the Incarcerated Persons Correspondence Project, the Incarcerated Persons Pen Pal Project, the Prison Accountability Project, and the Behind Bars Data Project.

Program on Legal Ethics and the Profession

The Program on Legal Ethics and the Profession provides students with a foundation in legal ethics through classes and events focused on the ethical responsibilities of counsel and the legal profession’s commitment to public service and access to justice. By fostering discussion and the practical and scholarly exchange on the central challenges of contemporary legal practice, the program trains the next generation of lawyers and professional leaders to identify solutions to resolve complex ethical problems.

Program on Understanding Law, Science, and Evidence

Founded in 2009, the Program on Understanding Law, Science, and Evidence (PULSE) explores the many connections between law and science, technology, and evidence. PULSE engages in interdisciplinary research, discussion, and programming to examine how basic facts about our world, furnished through science and credited as evidence, influence various venues of law and policymaking.

The Promise Institute for Human Rights

The Promise Institute for Human Rights is the innovative center for human rights education, research, and impact at UCLA School of Law. Leveraging the creativity and dynamism of Los Angeles, the institute seeks to reimagine the potential of human rights to address some of the most pressing issues of our time.

The institute brings together leading experts in international law and human rights. From its rich curriculum to our broad array of focus areas and projects, it empowers the next generation of human rights lawyers and leaders.

Resnick Center for Food Law and Policy

The Resnick Center for Food Law and Policy is dedicated to studying and advancing law and policy solutions to improve the modern food system. A national think tank at the school, the program develops key legal and policy research and tools to foster a food system, from farm to fork, that is healthy both for consumers and the environment.
Transnational Program on Criminal Justice

The Transnational Program on Criminal Justice seeks justice across borders through examination of the principles, practices, and social conditions of criminal justice systems across the world. The program produces timely, collaborative research to improve understanding on diverse topics at the intersection of criminal justice, comparative and international law, and human rights law.

UCLA Institute for Technology, Law, and Policy

The UCLA Institute for Technology, Law, and Policy performs cross-disciplinary research on the ways that new and emerging technologies affect society, privacy, law, and public policy. The institute is a collaboration between UCLA School of Law and the UCLA Samueli School of Engineering. The institute brings together faculty and students from the law and engineering schools to conduct research, convene events, and engage the wider academic community and the public about the benefits and risks of technologies including artificial intelligence and machine learning, robotics, cybersecurity, and digital media and communications.

UCLA-RAND Center for Law and Public Policy

The UCLA-RAND Center for Law and Public Policy is a unique partnership of UCLA Law and the RAND Corporation. The center promotes collaborative legal and policy research grounded in multidisciplinary empirical analysis to guide legal and public policymakers in the 21st century.

The center addresses topics as varied as medical malpractice, class actions, employment discrimination, and institutional reform. One of the center’s largest ongoing projects is a large-scale data collection and analysis project on civil justice in Los Angeles Superior Courts. The center has expanded curricular offerings such as courses on policy analysis and advocacy, gerrymandering, and other law and policy topics.

Williams Institute

The Williams Institute is the only think tank of its kind dedicated to the field of sexual orientation and gender identity law and public policy. The institute supports legal scholarship, legal research, policy analysis, and education regarding sexual orientation, gender identity discrimination, and other legal issues that affect lesbian, gay, bisexual, transgender, queer, and other persons. The institute began with the recognition that issues central to sexual orientation and gender identity law have profound implications for the development of the law and public policy in general. Drawing on the intellectual and material resources of UCLA, the institute serves as a national center for the interdisciplinary exploration of these issues by scholars, judges, practitioners, advocates, and students.

Ziffren Institute for Media, Entertainment, Technology and Sports Law

The Ziffren Institute for Media, Entertainment, Technology and Sports Law supports and expands the curricular offerings of the Media, Entertainment, Technology and Sports Law and Policy specialization. The program helps students interested in learning more about entertainment law to earn externships with entertainment-related businesses, brings influential speakers to campus, and sponsors the industry’s top legal conference on entertainment issues, the annual UCLA Entertainment Symposium. Students run an entertainment-related journal, the UCLA Entertainment Law Review; and the student organization, the Entertainment Law Association.

Ziman Center for Real Estate

Reflecting a growing interdisciplinary focus at UCLA, the School of Law formed a partnership in 2005 with the Anderson Graduate School of Management to create the Ziman Center for Real Estate. The center is firmly grounded in the scholarship and teaching missions of both schools, and offers practical application principles that help real estate industry professionals, public officials, and business people make critical policy and business decisions. The center truly bridges the divide between research and practice, and offers students a full range of coursework that supplies a holistic view of real estate issues.

School of Nursing

Lin Zhan, RN, PhD, FAAN, Dean
School of Nursing
2-147 Factor Building
310-825-7181
Student Affairs e-mail

The UCLA School of Nursing enjoys a national and international reputation for excellence in teaching, research, and clinical practice.

A strong scientific basis underlies the teaching of nursing practice, leadership, and research. Related clinical experiences are arranged within the Ronald Reagan UCLA Medical Center, its affiliates, and in selected community sites.
The bachelor’s degree program prepares nurses as generalists with special skills in primary, secondary, and tertiary prevention and care within a population-based context; leadership; and evidence-based practice. The master’s degree program prepares nurses as generalists in hospital-based care or for advanced nursing practice as nurse practitioners or clinical specialists in a variety of settings and specialized areas of health care. The PhD program prepares scholars who conduct original research, generate new theories, and build the scientific basis for professional nursing practice. Research is both basic and applied. The DNP program prepares nurses who are currently functioning at an advanced level of practice as nurse practitioners or clinical nurse specialists. The professional practice doctorate is designed to develop competencies for advanced clinical and leadership roles beyond the master’s degree necessary for the higher levels of patient safety and quality of patient care. Leadership, health system knowledge, and quality—as well as health care policy and critical content—are emphasized in the curriculum.

The school has an exceptionally qualified faculty; many members have national and international reputations for excellence. The school is consistently ranked high for its teaching and research programs. The innovative curriculum is responsive to national needs in health care and the diversity of the patient population. Graduates of the program are sought by health care institutions and educational programs, and many alumni have become leaders in the field. Education in this research university, with its full range of academic disciplines, offers a rich environment for preparation in the health sciences.

History and Accreditation

In 1949, the Regents of the University of California authorized the School of Nursing as one of the professional schools of the UCLA Center for Health Sciences. This action paved the way in 1950 for the opening of an undergraduate traditional program in nursing leading to the Bachelor of Science (BS) degree. In 1997, the original traditional BS program curriculum was revised to meet the educational needs of students who are registered nurses with Associate Degrees or diplomas in nursing. In 2006, the school reinstated a traditional/prelicensure BS program with admission at the freshman level. In 2010, the BS (Generic/Prelicensure) program was renamed to the BS (Prelicensure) program.

In 1951, a graduate program leading to the Master of Science (MS) degree in Nursing was established to prepare baccalaureate graduates for advanced practice nursing roles. In 1966, the Master of Nursing (MN) degree was established as an alternate to the MS degree, which was discontinued in 1969. In 1996, the master’s degree designation was changed from MN to Master of Science in Nursing (MSN), which is still awarded to graduates prepared as nurse practitioners and clinical nurse specialists. In 2006, the school launched the master’s entry clinical nurse (MECN)/prelicensure option within the MSN degree program, which is designed for prelicensure students with bachelor’s degrees or higher education in another discipline.

In 1986, the Doctor of Nursing Science (DNSc) degree program was approved, and in 1987 the first doctoral students were admitted. In 1995, the doctorate degree designation was changed from DNSc to PhD in Nursing. In 2013, an en-route MS option was established within the existing PhD program. In 2015, UCLA approved conversion of the DNSc degree to a PhD for former DNSc graduates.

In 2018, the Doctor of Nursing Practice (DNP) program was approved. Graduates of the DNP program will be the leaders for the translation of research into practice. The DNP degree is designed to meet the dynamic needs of the national health care system to improve quality of care, promote patient safety, and reduce cost.

The prelicensure (BS and MECN) and advanced practice master’s programs are approved by the California Board of Registered Nursing. In 2020, the Commission on Collegiate Nursing Education (CCNE) renewed that accreditation for an additional 10 years.

Degrees

The School of Nursing offers the following degrees:

- Doctor of Nursing Practice
- Master of Science in Nursing
- Nursing BS, MS, PhD

Concurrent Degree Program

- Master of Science in Nursing/Master of Business Administration

Admission is currently suspended to the Nursing and Management concurrent degree.

School Philosophy

The School of Nursing is guided by a philosophy that embodies the mission and goals of the University of California. The philosophy addresses nursing, the clients of nursing, and nursing students. The school is committed to an interdisciplinary learning environment.

Nursing encompasses clinical practice, education, research, consultation, leadership, management, and service to the profession; and to the local and global community. It involves individuals, families, groups, organizations, and communities as clients. The profession must consider the human and physical environments that interact with these
clients who may have health conditions that range from wellness to illness. Nursing activities must therefore include health promotion and maintenance, intervention and treatment, rehabilitation and restoration, and palliation. At an advanced-practice level, nursing involves comprehensive health care that encompasses the responsibility and accountability for continuity of care across the health-illness spectrum.

Nursing research is both applied and basic; it has as its core actual or potential human responses to illness, and as its goal the development of nursing science. Guided by ethical standards that consider the perspectives of the client, the health care provider, and the larger society, nursing has a social mission that encompasses the right and responsibility to provide leadership in health policy and health care to all its clients regardless of disease status, gender, race, or culture.

People who receive client-centered nursing care are complex individuals who exist in relationship to others in their family and community. This complexity of person involves biological, behavioral, emotional, sociocultural, and spiritual dimensions. Each individual reflects a unique combination of these dimensions that interact dynamically with the environment. The clients of nursing are autonomous decision makers who have certain values and knowledge about themselves that are relevant and essential to successful health care outcomes. As a result, persons have a right and a responsibility to participate collaboratively in their care with the nurse and other health professionals.

Successful nursing students are active learners who bring unique gender, cultural, and ethnic life experiences to the professional practice of nursing. Students at all levels learn relevant theory, acquire practice skills, and are socialized into the profession of nursing. Increasing levels of complexity and sophistication of learning and socialization are expected of students in the different programs. Whether at the beginning practice, advanced practice, or scholar level, nursing students learn to apply knowledge, skills, and professional attitudes in their practice that may include education, administration, and research. While students have the right and responsibility to participate in their own learning, faculty members have the right and responsibility to structure the teaching/learning environment to facilitate learning. Individual academic counseling and a variety of one-on-one, small-group, and interactive learning formats assist students to meet program and individual learning goals.

Undergraduate Admission

New undergraduate students are admitted in fall quarter only. BS (Prelicensure) freshman students are admitted at the freshman level, and transfer students are admitted at the sophomore level. See Nursing prelicensure Entry to the

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Major in Curricula and Courses for additional admission requirements.

Undergraduate Degree Requirements

Students must satisfy UC requirements, school requirements, and major requirements for award of a Bachelor of Science degree.

University Requirements

The University of California has two requirements that undergraduate students must satisfy in order to graduate: Entry-Level Writing or English as a Second Language, and American History and Institutions. See Degree Requirements in Undergraduate Study for details.

Students enrolled in English Composition 1A, 1B, and 2I must take each course for a letter grade.

School Requirements

There are six requirements that must be satisfied for award of a degree.

Unit Requirement

Students must complete with a passing grade a minimum of 180 units. At least 83 of the 180 units must be upper-division courses numbered 100 through 199. A maximum of 216 units
is permitted. Students with advanced placement or international baccalaureate credit may exceed the unit maximum by the amount of that credit.

Scholarship Requirement

A 2.0 (C) grade-point average is required in all work attempted at the University of California, exclusive of courses in UCLA Extension and those graded Passed/Not Passed. A 2.0 (C) grade-point average is also required in all upper-division courses in the major taken at the University of California, as well as in all courses applied toward the general education and UC requirements. Each required nursing course in the school must be completed with a C or better grade (a C– grade is not acceptable). Elective courses may be taken on a Passed/Not Passed basis with prior approval, according to the policy stated in Policies and Regulations.

Academic Residence Requirement

Students are in residence while enrolled and attending classes at UCLA with a declared major in the School of Nursing, and must complete all units in the junior and senior years in residence at the school.

Writing Requirement

Students must complete the UC Entry-Level Writing or English as a Second Language (ESL) requirement prior to completing the school writing requirement.

Students admitted to the school are required to complete a two-term writing requirement—Writing I and Writing II. Two courses in English composition are required for graduation. Both courses must be taken for letter grades, and students must receive a grade of C or better in each (a C– grade is not acceptable).

Writing I

The Writing I requirement must be satisfied within the first three terms of enrollment by completing English Composition 3, 3D, 3DX, 3E, or 3SL with a C or better grade (a C– or Passed grade is not acceptable).

The Writing I requirement may also be satisfied by scoring 4 or 5 on one of the College Board Advanced Placement Examinations in English; completing a course equivalent to English Composition 3 with a C or better grade (a C– or Passed grade is not acceptable) taken at another institution; or scoring 5, 6, or 7 on an International Baccalaureate Higher Level Examination.

Students whose native language is not English may need to take English Composition 1A, 1B, and 2I before enrolling in a Writing I course. All courses in the sequence must be passed with a C or better grade (a C– or Passed grade is not acceptable).

Qualifying examination scores and courses are determined by the school Faculty Executive Committee.

Writing II

The Writing II requirement must be satisfied within seven terms of enrollment by completing one course from a faculty-approved list of Writing II courses and available in the Student Affairs Office; see the Registrar’s Writing II requirement web page for details. Courses that satisfy the requirement are denoted by a W suffix and are impacted. The course must be completed with a C or better grade (a C– or Passed grade is not acceptable).

Applicable Writing II courses also approved for general education credit may fulfill the relevant general education foundational area.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the Writing I and Writing II requirements. No transfer student is admitted to the school without completing, with a C or better grade (C– grade is not acceptable), a college-level writing course that Undergraduate Admission accepts as equivalent to English Composition 3.

Quantitative Reasoning Requirement

Students must demonstrate basic skills in quantitative reasoning. The requirement may be satisfied by completing one approved UCLA course (see list below) or an equivalent course within the first seven terms of enrollment. The course must be taken for a letter grade, and students must receive a C or better grade (a C– grade is not acceptable).

The requirement may also be satisfied by achieving an SAT Reasoning Test Mathematics Section score of 600 or higher or an SAT Subject Test in Mathematics score of 550 or higher. Approved UCLA courses and examinations, and qualifying scores, are determined by the school Student Affairs Committee. Approved courses are listed below.

If approved for general education (GE) credit, applicable courses may also fulfill a GE requirement.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the quantitative reasoning requirement. No transfer student is admitted to the school without completing, with a C or better grade (a C– grade is not acceptable), a college-level quantitative reasoning course that Undergraduate Admission accepts as equivalent to those approved by the Faculty Executive Committee. Approved courses include
General Education Requirements

Foundations of the Arts and Humanities
- Literary and Cultural Analysis ................... 1 course
- Philosophical and Linguistic Analysis ........... 1 course
- Visual and Performance Arts Analysis and Practice 1 course
Total = 15 units minimum

Foundations of Society and Culture
- Historical Analysis .................................... 1 course
- Social Analysis ......................................... 1 course
- Third course from either subgroup ............... 1 course
Total = 15 units minimum

Foundations of Scientific Inquiry
- Life Sciences ............................................ 2 courses
- Physical Sciences ..................................... 2 courses
Total = 18 units minimum

Total GE .......................... 10 courses/48 units minimum

One of the 10 courses may be a GE-approved Writing II course in an appropriate foundational area selected from a list published in the Schedule of Classes and available in the Student Affairs Office.

Preparation for the major courses may overlap with GE foundation courses.

- Biostatistics 100A, 100B
- Life Sciences 20, 30A, 30B, 40
- Mathematics 3A, 31A, 31AL
- Philosophy 31
- Political Science 6, 6R
- Program in Computing 10A, 10B, 10C
- Public Affairs 60
- Statistics 10, 12, 13

General Education Requirements

General education (GE) is more than a checklist of required courses. It is a program of study that reveals to students the ways that research scholars in the arts, humanities, social sciences, and natural sciences create and evaluate new knowledge; introduces students to the important ideas and themes of human cultures; fosters appreciation for the many perspectives and diverse voices that may be heard in a democratic society; and develops the intellectual skills that give students the dexterity they need to function in a rapidly changing world.

This entails the ability to make critical and logical assessments of information, both traditional and digital; deliver reasoned and persuasive arguments; and identify, acquire, and use the knowledge necessary to solve problems.

Foundations of Knowledge

General education courses are grouped into three foundational areas: Foundations of the Arts and Humanities, Foundations of Society and Culture, and Foundations of Scientific Inquiry.

Ten courses (48 units minimum) are required. A course taken to meet the Writing II requirement may also be applied toward a GE requirement. Preparation for the major courses may overlap with the foundation courses.

Students must meet with the student affairs officer in the Student Affairs Office to determine the applicability of GE cluster courses toward Writing II or GE requirements.

Courses listed in more than one category can fulfill GE requirements in only one of the categories.

Foundations of the Arts and Humanities
Three 5-unit courses, one from each subgroup:

- Literary and Cultural Analysis
- Philosophical and Linguistic Analysis
- Visual and Performance Arts Analysis and Practice

Courses in this area supply perspectives and intellectual skills necessary to comprehend and think critically about our situation in the world as human beings. In particular, courses furnish the basic means to appreciate and evaluate the ongoing efforts of humans to explain, translate, and transform their diverse experiences of the world through such media as language, literature, philosophical systems, images, sounds, and performances. The courses introduce students to the historical development and fundamental intellectual and ethical issues associated with the arts and humanities and may also investigate the complex relations between artistic and humanistic expression and other facets of society and culture.

Foundations of Society and Culture
Three 5-unit courses, one from each subgroup and a third course from either subgroup:

- Historical Analysis
- Social Analysis

Courses in this area introduce students to the ways in which humans organize, structure, rationalize, and govern their diverse societies and cultures over time. Courses focus on a particular historical question, societal problem, or topic of political and economic concern in an effort to demonstrate how issues are objectified for study, how data is collected and analyzed, and how new understandings of social phenomena are achieved and evaluated. Because communication skills are essential in the nursing profession, Communication 10 is recommended for this foundational area.
Foundations of Scientific Inquiry
Four courses, two from each subgroup:
  • Life Sciences
  • Physical Sciences
Courses in this area ensure that students gain a fundamental understanding of how scientists formulate and answer questions about the operation of both the physical and biological world. Courses also deal with some of the most important issues, developments, and methodologies in contemporary science.

Foundations Course Lists
Creating and maintaining a general education curriculum is a dynamic process; consequently, courses are frequently added to the list. For the most current list of approved courses that satisfy the Foundations of Knowledge GE plan, consult with an academic counselor or see the master list.

Intersegmental General Education Transfer Curriculum
Transfer students from California community colleges must fulfill UCLA lower-division GE requirements by completing the Intersegmental General Education Transfer Curriculum (IGETC) prior to transfer. The curriculum consists of a series of subject areas and types of courses that have been agreed on by the University of California and the California community colleges. Because of course sequencing and the rigor of the program, students must fulfill the general education requirements prior to transfer.

Additional requirements are listed under Admission and Preparation for the Major in Curricula and Courses.

Major Requirements
There are two types of requirements that must be satisfied for award of a degree: preparation for the major and the major. See Nursing prelicensure major Requirements in Curricula and Courses for details.

Policies and Regulations
Degree requirements are subject to policies and regulations, including the following:

Student Responsibility
Students should take advantage of academic support resources, but they are ultimately responsible for keeping informed of and complying with the rules, regulations, and policies affecting their academic standing.

Study List
The presentation of study lists by the students and their acceptance by the school evidences an obligation on the part of the students to faithfully perform the designated work to the best of their ability. Withdrawal from, or neglect of, any course entered on the study list—or a change in program could lead to a delay in degree completion.

Students are expected to follow the course sequence specified for their program. After the first term, they may petition to carry a study list exceeding 20 units, provided they have an overall grade-point average of 3.0 (B) or better and have attained at least a 3.0 (B) grade-point average in the preceding term with all courses passed.

Minimum Progress
Students are expected to complete satisfactorily at least 36 units during any three consecutive terms in residence; they are placed on probation if they fail to pass these units. Students are subject to dismissal if they fail to pass at least 32 units in three consecutive regular terms in residence.

Concurrent Enrollment
Enrollment at a non-UC institution or UCLA Extension while enrolled at UCLA is not permitted except in extraordinary circumstances. No credit is given for courses taken concurrently elsewhere without the approval of the school.

Credit Limitations
The following credit limitations apply to all undergraduate students enrolled in the school:

Advanced Placement Examinations
Credit earned through the College Board Advanced Placement (AP) Examinations may not be applied toward the general education requirements. Portions of AP Examination credit may be evaluated by corresponding UCLA course numbers (e.g., History 1C). If students take the equivalent UCLA course, unit credit for such duplication is deducted before graduation. See the school AP table for UCLA course equivalents.

Counseling Services
The school gives direction and furnishes information to interested potential applicants to the BS program through admissions information sessions. The schedule for these sessions, program information, and applications are available on the school website.

On entry, students are assigned a faculty adviser to aid in planning their total program. Advisers and student affairs
officers continue meeting with students each term to evaluate progress, identify academic and personal needs and match them with available school and UCLA resources, confirm UC and course requirements, and maximize the students’ abilities to reach educational and professional goals. Due to the heavy course load that school programs require, students are advised against working full time.

**Honors**

Undergraduate students who achieve scholastic distinction may qualify for the following honors:

**Dean’s Honors**

The Dean’s Honors list recognizes high scholastic achievement in any one term. The following criteria are used to note Dean’s Honors on student records: a 3.915 grade-point average (GPA) in any one term, with at least 12 letter-graded units. The minimum GPA required is subject to change on an annual basis. Students are not eligible for Dean’s Honors in any given term if they receive an Incomplete or a Not Passed (NP) grade. Dean’s Honors are automatically recorded on the transcript for the appropriate term.

**Latin Honors**

Students who have achieved scholastic distinction may be awarded the bachelor’s degree with Latin honors. To be eligible, students must have completed 98 or more units for a letter grade at the University of California and must have attained an overall grade-point average at graduation that places them in the top 20 percent of the school graduates (GPA of 3.915 or better) for *cum laude*, the top 10 percent (GPA of 3.965 or better) for *magna cum laude*, or the top five percent (GPA of 3.985 or better) for *summa cum laude*. Coursework taken on the Education Abroad Program is applied toward Latin honors at graduation. The minimum GPAs required are subject to change on an annual basis. Required GPAs in effect in the graduating year (fall, winter, spring, summer) determine student eligibility. Students should consult their Degree Audits, or the Registrar’s honors web page, for the most current calculations of Latin honors.

**Graduate Study**

The Master of Science in Nursing (MSN) degree program offers prelicensure and postlicensure options. The master’s entry clinical nurse (MECN)/prelicensure program is designed for students with a bachelor’s degree in another discipline who wish to become registered nurses. The advanced practice registered nurse (APRN)/postlicensure program is for registered nurses with a bachelor’s degree in nursing who wish to prepare for an advanced practice role, such as nurse practitioner or clinical nurse specialist.

The PhD program, which includes an en-route MS option, prepares scholars who do original research, generate new theories, and build the scientific basis for professional nursing practice. Research is both basic and applied.

The DNP program prepares nurses who are currently functioning at an advanced level of practice as nurse practitioners, clinical nurse specialists, or nurse administrators. Leadership, health system knowledge, quality, and health care policy are critical content emphasized in the curriculum. The DNP degree is designed to meet the dynamic needs of the national health care system to improve quality of care, promote patient safety, and reduce cost.

**Admission**

Detailed information about the graduate academic programs is included in program requirements for UCLA graduate degrees.

For information on proficiency in English requirements for international graduate students, see Graduate Admission in Graduate Study.

**Degree Requirements**

For complete degree requirements, see program requirements for UCLA graduate degrees.

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**School of Theater, Film, and Television**

Brian E. Kite, MFA, *Interim Dean*

**School of Theater, Film, and Television**

102 East Melnitz Building
310-825-5761

**Information e-mail**

The UCLA School of Theater, Film, and Television consists of the Department of Theater and the Department of Film, Television, and Digital Media. Both are recognized national centers for higher education in production and performance as well as history, theory, and criticism.

Whether exploring the ancient and sacred roots of theater or the latest secular rituals enacted by popular film, creating a dramatic character for the bare stage or a dramatic narrative on screen, writing scripts or scholarly articles, or making digital movies or designing websites, all students in the school study both the aesthetics and cultural significance of theater, film, and television.
Through an intensive multidisciplinary curriculum, the school defines the inherent differences of theater, film, television, and new media; affirms their similarities; and encourages their interaction. As expressive art forms, modes of communication, and cultural interventions, theater, film and television, and digital media have in common the ability and power to reflect and shape perception of a complex, diverse, and ever-changing world. As artists and scholars, faculty believe that the school has an obligation to reflect on this power and to use it responsibly.

Situated in the diverse and culturally rich environment of Los Angeles—and drawing on the many resources of the campus at large (including the Center for the Art of Performance at UCLA, Geffen Playhouse, and UCLA Film and Television Archive)—the school offers the ideal setting for students to engage in the study and practice of art forms essential to a healthy and dynamic society.

**Departments and Programs**

The Theater Department and the Film, Television, and Digital Media Department are essential components of the rich intellectual, cultural, and professional life of UCLA. Depending on the degree involved, school programs are either strongly professional in nature, or oriented toward advanced scholarly study and research in an atmosphere that recognizes and often draws on studio practice.

Students in undergraduate courses receive a broadly based, liberal arts education within the context of either theater or film and television.

The Master of Fine Arts (MFA) degree programs prepare talented and highly motivated students for careers in the worlds of theater, film, television, and digital production. The MA and PhD programs engage students in critical study and research of these media, including their history, aesthetics, and theory; and they prepare students for advanced research within the context of college and university teaching, as well as for writing and research in a variety of media-related professions.

In the Theater Department, approximately 300 undergraduate and 80 graduate students interact with over 18 faculty members, outstanding guests of national and international standing, and a professional staff of 35 in an exciting artistic community of theater production and study. The theater and performance studies program offers PhD degrees for advanced theater and performance. Resources include four Macgowan Hall complex theaters with the technologies needed for creation, control, and integration of scenery, lighting, and sound. Areas of emphasis in the Master of Fine Arts program include acting, design, directing, and playwriting.

The Film, Television, and Digital Media Department includes both production and critical studies programs, with approximately 275 graduate and 100 undergraduate students. Its 23 faculty members include leading scholars as well as members of the Los Angeles and international film and television professional communities. In production, graduate specializations are offered in the areas of film and television production, screenwriting, animation, and producing. The cinema and media studies program offers MA and PhD degrees for advanced scholarly study of film, television, and digital media. Department resources in Melnitz Hall include three sound stages; three television studios; extensive editing, scoring, and viewing facilities; a complete animation laboratory for traditional, stop-motion, and computer-generated animation; and a laboratory and research facility for digital media.

The MA and PhD programs are supported by UCLA library collections and the UCLA Film and Television Archive, the largest in the U.S. outside the Library of Congress. This archive forms a unique and priceless resource for research and classroom instruction. MA and PhD faculty members and students also participate in various campus organized research units.

**Teaching Credentials**

Students interested in obtaining instructional credentials for California elementary and secondary schools should contact the Teacher Education Program, 1009 Moore Hall.

**Degrees**

The School of Theater, Film, and Television offers the following degrees and undergraduate minors:

- Film and Television BA, MA, MFA, CPhil, PhD
- Individual Field BA
- Theater BA, MFA
- Theater and Performance Studies CPhil, PhD

**Undergraduate Minors**

- Film, Television, and Digital Media
- Theater

**Undergraduate Admission**

In addition to the UC undergraduate application, departments require applicants to submit additional supporting materials. Information on departmental requirements is available on the school admissions web page.
Undergraduate Degree Requirements

Students must satisfy UC requirements, school requirements, and department requirements for a Bachelor of Arts degree.

University Requirements

The University of California has two requirements that undergraduate students must satisfy in order to graduate: Entry-Level Writing or English as a Second Language, and American History and Institutions. See Degree Requirements in Undergraduate Study for details.

Students enrolled in English Composition 1A, 1B, and 2I must take each course for a letter grade.

School Requirements

There are seven requirements that must be satisfied for award of a degree.

Unit Requirement

Students must satisfactorily complete for credit a minimum of 180 units for the bachelor’s degree. At least 64 of the 180 units must be upper-division courses numbered 100 through 199. A maximum of 216 units is permitted. Students with Advanced Placement Examination or International Bac-
caulearete Examination (transfer) credit may exceed the unit maximum by the amount of that credit.

Scholarship Requirement

Students must earn at least a 2.0 (C) grade-point average in all courses undertaken at the University of California for receipt of the bachelor’s degree, and in all upper-division courses in the major, and in all courses applied toward the general education requirements.

Academic Residence Requirement

Students are in residence while enrolled and attending classes at UCLA with a declared major in the School of Theater, Film, and Television. Of the last 45 units completed for the bachelor’s degree, 35 must be earned in residence at the school. No more than 18 of the 35 units may be completed in UCLA summer sessions.

Courses offered by UCLA Extension may not be applied toward any part of the residence requirements.

Writing Requirement

Students must complete the UC Entry-Level Writing or English as a Second Language (ESL) requirement prior to completing the school writing requirement.

Students admitted to the school are required to complete a two-term writing requirement—Writing I and Writing II. Two courses in English composition are required for graduation. Both courses must be taken for a letter grade, and students must receive a C or better grade in each (a C– grade is not acceptable).

Writing I

The Writing I requirement must be satisfied within the first three terms of enrollment by completing English Composition 3, 3D, 3DX, 3E, or 3SL with a C or better grade (a C– or Passed grade is not acceptable).

The Writing I requirement may also be satisfied by scoring 4 or 5 on one of the College Board Advanced Placement Examinations in English; completing a course equivalent to English Composition 3 with a C or better grade (a C– or Passed grade is not acceptable) taken at another institution; or scoring 5, 6, or 7 on an International Baccalaureate Higher Level Examination.

Students whose native language is not English may need to take English Composition 1A, 1B, and 2I before enrolling in a Writing I course. All courses in the sequence must be passed with a C or better grade (a C– or Passed grade is not acceptable).
Writing II
The Writing II requirement must be satisfied within the first six terms of enrollment by completing one course from a faculty-approved list of Writing II courses; see the Registrar’s Writing II requirement web page for details. Courses that satisfy the requirement are denoted by a W suffix and are impacted. The course must be completed with a C or better grade (a C– or Passed grade is not acceptable). Applicable Writing II courses may also fulfill the upper-division nonmajor requirement and, if approved for general education (GE) credit, may also fulfill a GE requirement.
Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the Writing I and Writing II requirements. No transfer student is admitted to the school without completing, with a C or better grade (a C– grade is not acceptable), a college-level writing course that Undergraduate Admission accepts as equivalent to English Composition 3.

Foreign Language Requirement
Students may meet the foreign language requirement by scoring 3, 4, or 5 on the College Board Advanced Placement (AP) foreign language examination in Chinese, French, German, Italian, Japanese, or Spanish, or scoring 4 or 5 on the AP foreign language examination in Latin; presenting a UCLA foreign language proficiency examination score indicating competency through level three; or completing one college-level foreign language course equivalent to level three or above at UCLA with a grade of Passed or C or better.
Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the foreign language requirement.

International students may petition to use an advanced course in their native language for this requirement. Students whose entire secondary education has been completed in a language other than English may petition to be exempt from the foreign language requirement.

Courses that may be used to fulfill this requirement are published on the Registrar’s foreign language requirement web page.

Upper-Division Nonmajor Requirement
Students must complete at least three upper-division nonmajor courses (100-level) for a minimum of 12 units. Graduate (200-level) courses may not be applied toward this requirement.

A course used to satisfy the upper-division nonmajor requirement may also be used to satisfy the Writing II requirement.

A course used to satisfy the upper-division nonmajor requirement may not also be applied toward a foundation area in general education.

General Education Requirements
General education (GE) is more than a checklist of required courses. It is a program of study that reveals to students the ways that research scholars in the arts, humanities, social sciences, and natural sciences create and evaluate new knowledge; introduces students to the important ideas and themes of human cultures; fosters appreciation for the many perspectives and diverse voices that may be heard in a democratic society; and develops the intellectual skills that give students the dexterity they need to function in a rapidly changing world.

This entails the ability to make critical and logical assessments of information, both traditional and digital; deliver reasoned and persuasive arguments; and identify, acquire, and use the knowledge necessary to solve problems.

Foundations of Knowledge
General education courses are grouped into three foundational areas: Foundations of the Arts and Humanities, Foundations of Society and Culture, and Foundations of Scientific Inquiry.

Ten courses (48 units minimum) are required. GE-approved Writing II courses may fulfill an appropriate foundational area. See the foundational area descriptions below for a breakdown of courses required.

Courses listed in more than one category can fulfill GE requirements in only one of the categories. A course used to satisfy a major requirement may not also be applied toward a GE requirement.

Students who successfully complete a year-long GE cluster series fulfill the Writing II requirement and complete 40 percent of their general education requirements.

Foundations of the Arts and Humanities
Five 5-unit courses, with no more than two from any one subgroup:

- Literary and Cultural Analysis
- Philosophical and Linguistic Analysis
- Visual and Performance Arts Analysis and Practice

Courses in this area supply perspectives and intellectual skills necessary to comprehend and think critically about our situation in the world as human beings. In particular, courses furnish the basic means to appreciate and evaluate
the ongoing efforts of humans to explain, translate, and transform their diverse experiences of the world through such media as language, literature, philosophical systems, images, sounds, and performances. The courses introduce students to the historical development and fundamental intellectual and ethical issues associated with the arts and humanities and may also investigate the complex relations between artistic and humanistic expression and other facets of society and culture.

Foundations of Society and Culture
Three 5-unit courses, one from each subgroup and a third course from either subgroup:

- Historical Analysis
- Social Analysis
- Third course from either subgroup

Total = 15 units minimum

Foundations of Scientific Inquiry
Two courses (8 units minimum), one from each subgroup:

- Life Sciences
- Physical Sciences

Total = 8 units minimum

Total GE = 10 courses/48 units minimum

A course taken to meet the Writing II requirement may not also be applied toward a GE requirement.

Courses in this area ensure that students gain a fundamental understanding of how scientists formulate and answer questions about the operation of both the physical and biological world. Courses also deal with some of the most important issues, developments, and methodologies in contemporary science, addressing such topics as the origin of the universe, environmental degradation, and the decoding of the human genome. Through lectures, laboratory experiences, writing, and intensive discussions, students consider the important roles played by the laws of physics and chemistry in society, biology, Earth and environmental sciences, and astrophysics and cosmology.

Foundations Course Lists
Creating and maintaining a general education curriculum is a dynamic process; consequently, courses are frequently added to the list. For the most current list of approved courses that satisfy the Foundations of Knowledge GE plan, consult with an academic counselor or see the master list.

Reciprocity with Other UC Campuses
Students who transfer to UCLA from other UC campuses or who change their major from the College or another UCLA school and have met all GE requirements prior to attending UCLA or changing their UCLA major are not required to complete the School of Theater, Film, and Television GE requirements. Written verification from the dean at the other UC campus or UCLA College or school is required. Verification letters should be sent to UCLA School of Theater, Film, and Television, Director of Student Services, Box 951622, Los Angeles, CA 90095-1622.

Intersegmental General Education Transfer Curriculum
Transfer students from California community colleges have the option to fulfill UCLA lower-division GE requirements by completing the Intersegmental General Education Transfer Curriculum (IGETC) prior to transfer. The curriculum consists of a series of subject areas and types of courses that have been agreed on by the University of California and the California community colleges. Although GE courses are degree requirements rather than admission requirements, students are advised to fulfill them prior to transfer. The IGETC significantly eases the transfer process, as all UCLA GE requirements are fulfilled when students complete the IGETC courses. Students who select the IGETC must complete it entirely before enrolling at UCLA. Otherwise, they must fulfill the School of Theater, Film, and Television GE requirements.

Department Requirements
Departments generally set two types of requirements that must be satisfied for award of a degree: preparation for the
major (lower-division courses) and the major (upper-division courses). Preparation for the major courses should be completed before beginning upper-division work.

**Preparation for the Major**

A major requires completion of a set of courses known as preparation for the major, which should be completed before upper-division work is undertaken. Each department sets its own preparation for the major requirements; see Film, Television, and Digital Media or Theater in Curricula and Courses.

**The Major**

A major is composed of no fewer than 56 units, including at least 36 units of upper-division courses.

Students must complete their major with a scholarship grade-point average of at least 2.0 (C) in all courses in order to remain in the major. Each course in the school must be taken for a letter grade.

As changes in major requirements occur, students are expected to satisfy the new requirements insofar as possible. Hardship cases should be discussed with the department adviser, and petitions for adjustments should be submitted to the dean of the school when necessary.

Any department offering a major may require a general final examination.

**Double Majors**

Double majors in the School of Theater, Film, and Television and other academic units are not permitted.

**Policies and Regulations**

Degree requirements are subject to policies and regulations, including the following:

**Student Responsibility**

Students should take advantage of academic support resources, but they are ultimately responsible for keeping informed of and complying with the rules, regulations, and policies affecting their academic standing.

**Study List**

The study list is a record of classes that a student is taking for a particular term. Each term the study list must include from 12 to 19 units. The school has no provision for part-time enrollment. After the first term, students may petition to enroll in more than 19 units (up to 22 units maximum) if they have an overall grade-point average of 3.0 (B) or better and have attained at least a 3.0 (B) grade-point average in the preceding term with all courses passed. Excess units petitions must be filed and approved by the Student Services Office no later than the end of the third week of instruction.

First-term transfer students from any other UC campus may carry excess units on the same basis as students who have completed one or more terms at UCLA; however, they are not encouraged to do so.

**Minimum Progress**

During a regular term of enrollment, undergraduate students are required to enroll in a minimum of 12 units.

Students are expected to complete satisfactorily at least 36 units during any three consecutive terms in residence; they are placed on probation if they fail to pass these units. Students are subject to dismissal if they fail to pass at least 32 units in three consecutive regular terms in residence.

**Changing a Major**

Students in good academic standing who wish to change their major may petition to do so, provided they can complete the new major within the 216-unit limit. Petitions must be submitted to and approved by the department or committee in charge of the new major. Admission to certain majors may be closed or restricted; changes are normally not permitted if students are on probation or have begun their last term.

Students in the Theater major are not allowed to change their major to Film and Television at the end of their sophomore year.

**Concurrent Enrollment**

Enrollment at a non-UC institution or UCLA Extension while enrolled at UCLA is not permitted except in extraordinary circumstances. No credit is given for courses taken concurrently elsewhere without the approval of the school.

**Credit Limitations**

The following credit limitations apply to all undergraduate students enrolled in the school:

**Advanced Placement Examinations**

Credit earned through the College Board Advanced Placement (AP) Examinations may be applied toward certain UC/school requirements. Consult with a counselor in the Student Services Office to determine applicable credit. Portions of AP Examination credit may be evaluated by corresponding UCLA course numbers. If students take the equivalent UCLA course, unit credit for such duplication is
deducted before graduation. See the school AP table for UCLA course equivalents.

**Graduate Courses**
Undergraduate students who wish to take graduate courses (200 level) for credit toward the bachelor’s degree must petition for advance approval of the department chair and the dean of the school, and must meet specific qualifications. Courses numbered in the 300, 400, and 500 series are not open for credit to undergraduate students.

**UCLA Extension**
Extension courses with the prefix X on those numbered in the 1 through 199, 200, 300, 400, or 800 series may not be applied toward the degree.

**Upper-Division Tutorials**
Credit for upper-division tutorials numbered 195 through 199 is limited to a maximum of 8 units in a single term, and a maximum of 32 units total for a letter grade.

**Academic Advising Services**
The school offers advising, program planning in the major and general education requirements, and individual meetings with departmental counselors, including a yearly degree check. Prior to enrollment in classes, each new student is assigned to a counselor in the major department. For additional counseling information, contact the Student Services Office, 103 East Melnitz Building.

**Honors**
Undergraduate students who achieve scholastic distinction may qualify for the following honors and programs:

**Dean’s Honors**
The Dean’s Honors list recognizes high scholastic achievement in any one term. The following criteria are used to note Dean’s Honors on student records: a 3.937 grade-point average (GPA) in any one term, with at least 12 letter-graded units. The minimum GPA required is subject to change on an annual basis. Dean’s Honors are automatically recorded on the transcript for the appropriate term.

**Latin Honors**
Students who have achieved scholastic distinction may be awarded the bachelor’s degree with Latin honors. To be eligible, students must have completed 90 or more units for a letter grade at the University of California and must have attained an overall grade-point average (GPA) at graduation that places them in the top 20 percent of the school graduates (GPA of 3.937 or better) for *cum laude*, the top 10 percent (GPA of 3.972 or better) for *magna cum laude*, or the top five percent (GPA of 3.987 or better) for *summa cum laude*. Coursework taken on the Education Abroad Program is applied toward Latin honors at graduation. The minimum GPAs required are subject to change on an annual basis. Required GPAs in effect in the graduating year (fall, winter, spring, summer) determine student eligibility. Students should consult their Degree Audits, or the Registrar’s honors web page, for the most current calculations of Latin honors.

**Graduate Study**
The advanced degree programs offer graduate students with unique research opportunities when combined with special resources such as the Young Research Library, UCLA Film and Television Archive, Geffen Playhouse, Arts Library special collections, and UCLA exhibit and performance venues. Fellowships, grants, and assistantships are available through the dean of the Division of Graduate Education. Student scholarship awards are available through the School of Theater, Film, and Television.

**Admission**
In addition to requiring that applicants hold a bachelor’s degree from an accredited U.S. institution or an equivalent degree of professional title from an international institution, each department in the school has limitations and additional requirements. Detailed information can be found in program requirements for UCLA graduate degrees.

For information on proficiency in English requirements for international graduate students, see Graduate Admission in Graduate Study.

**Degree Requirements**
Requirements to fulfill each degree objective vary according to the degree and the department. For complete degree requirements, see program requirements for UCLA graduate degrees.
Curricula and Courses

Course Information

Departments and programs are listed alphabetically, with the College or school administering the program identified in the program heading. Curricula and courses are listed under each program. Every effort has been made to ensure the accuracy of the information presented. However, all courses, course descriptions, instructor designations, and curricular degree requirements described herein are subject to change or deletion without notice. Changes to course descriptions are available at the Registrar’s course descriptions web page. For current class offerings by term, see the Schedule of Classes.

For complete graduate degree requirements, see program requirements for UCLA graduate degrees.

Undergraduate Course Numbering

Undergraduate courses are classified as lower division and upper division. Lower-division courses numbered 1–99 are often surveys offering preliminary introduction to the subject field. They are designed primarily for freshmen and sophomores, though upper-division students may enroll for unit and grade credit. Lower-division courses may not be applied toward graduate degrees.

Upper-division courses numbered 100–199 are open to all students who have met the prerequisites stated in department requirements or the course description. Preparation generally includes at least one lower-division course in the subject or two years of college work. With approval of the major department, graduate students may take 100-series courses toward satisfaction of master’s degree requirements.

Undergraduate Seminars and Tutorials

Fiat Lux freshman seminars (numbered 19) are taught by faculty in areas of their expertise. They introduce first-years to topics of intellectual importance and enable them to participate in critical discussion of these topics with a small group of peers. The seminar series takes its name from the motto of the University of California: Fiat Lux—Let There be Light!

Sophomore seminars (numbered 88) are department-sponsored courses designed to provide sophomores with the opportunity to participate in small seminars to enhance writing, verbal, and analytical skills.

Honors seminars and tutorials (numbered 89/189 and 89HC/189HC) are primarily designed for students in the College Honors Program. They are adjunct to lecture courses and explore lecture topics in more depth through supplemental readings, papers, or other activities.

Student Research Program tutorials (numbered 99) offer students entry-level research experiences. Students serve as apprentices working with an individual faculty member or in a research group. Students are graded on a Passed/Not Passed (P/NP) basis.

Upper-division seminars (numbered 190–194) are small seminars with between 15 and 20 students that focus on research practice or issues. Many are designed to be taken along with a tutorial course in the 195–199 series.

Upper-division tutorials (numbered 195–199) offer advanced opportunities for research through faculty-supervised internships and apprenticeships as well as honors research, directed research, and senior projects. Courses are structured by the instructor and student at the time they are initiated and are open to juniors (with a minimum 3.0 grade-point average in the major field), seniors, and graduate students. To enroll, students submit a contract (through MyUCLA) and have it approved by both the instructor and department chair.

Note: For current course descriptions, see the Registrar’s course descriptions web page.

Graduate Course Numbering

Graduate courses numbered 200–299 are generally open only to graduate students who have completed basic undergraduate courses in the subject. Courses and seminars in the 200 series can fulfill the minimum graduate course requirement for any advanced degree.

With departmental and instructor consent, and subject to requirements in the appropriate College or school, undergraduate students may enroll in 200-series courses for unit credit toward the bachelor’s degree. If students take a graduate course as an undergraduate, they may not apply that same course later toward a higher degree.

Graduate courses numbered 300–399 are highly specialized teacher-training courses that are not applicable toward UC minimum requirements for graduate degrees. They are acceptable toward the bachelor’s degree only at the discretion of the individual College or school.

Graduate courses numbered 400–499 are designed for professional programs leading to graduate degrees other than the MA, MS, and PhD. These courses may not be used to satisfy minimum graduate course requirements for the MA or MS degree but may apply as electives.

Individual study and research courses numbered 500–599 are reserved for advanced study and are not open to undergraduate students. Courses are numbered as follows: 595/596, directed individual study or research; 597, preparation for master’s comprehensive or doctoral qualifying examination; 598, master’s thesis research and preparation; and 599, doctoral dissertation research and preparation.

Courses numbered 501 are not individual study and research but are cooperative programs held in conjunction with USC. See individual department sections for specific limitations on 500-series courses.

Note: These definitions do not apply to courses in the School of Law, which maintains its own course numbering system.

Temporary Course Offerings

Courses that are temporary in nature, such as one-term-only or one-year-only, are not in the catalog. Their descriptions can be found in the Schedule of Classes.

Concurrent and Multiple-Listed Courses

Concurrently-scheduled courses (identified by a capital C before the course number) are pairs of courses, usually within a single department or program, for which credit is given at two levels—undergraduate and graduate. Concurrently-scheduled courses are offered at the same time and place with the same instructor, but work levels and performance standards are evaluated differently for students at each level. (Concurrently-scheduled courses as described here should not be confused with concurrent courses offered through UCLA Extension.)

Multiple-listed courses (identified by a capital M before the course number) are courses offered jointly by more than one department and/or subject area. They need not have identical course numbers, but all other aspects of the course—such as title, units, requisites, format, and level—must be the same. For example, Language in Culture is offered by the Anthropology Department (Anthropology M150) and the Linguistics Department (Linguistics M146). The course is listed under both departments.

Foreign Literature in English Translation

A list of courses offered by language and literature departments, that do not require reading knowledge of any foreign language, is available on the Registrar’s website.

UCLA Extension Courses

In general, students may not attend UCLA Extension for degree credit if they are enrolled in UCLA regular session at the same time. However, certain Extension courses (numbered 1–199), prefixed by XL or XLC in the Extension catalog, yield credit toward the bachelor’s degree. For details, see UCLA Extension in Policies and Regulations. Graduate students may petition to apply up to two XLC courses toward the master’s degree.
AEROSPACE STUDIES — AIR FORCE ROTC
College of Letters and Science
218 Student Activities Center
Box 951611
Los Angeles, CA 90095-1611
Aerospace Studies — Air Force ROTC
310-825-1742
AFROTC e-mail
Mae-Li A. Allison, MA, Lieutenant Colonel, Chair

Faculty Roster

Professor
Mae-Li A. Allison, MA, Lieutenant Colonel

Adjunct Assistant Professors
Robert V. Everhart, MA, Major
Morgan B. Malone, MBV, Captain
Keikaikuimaloa Nuuhiwa, BS, Captain

Overview
In accordance with the National Defense Act of 1920 and with the concurrence of the Regents of the University of California, a unit of the Army Senior Division Reserve Officers’ Training Corps (ROTC) was established on the Los Angeles campus of the University of California in July 1920. Navy and Air Force units were established in 1938 and 1949 respectively.

This voluntary training in the Air Force ROTC program allows students to qualify for an officer’s commission in the Air Force or Space Force while completing their college education. The ROTC curricula are not considered academic majors, but ROTC courses may be taken as free electives and applied toward the total course requirements of a major. For students who entered in the Aerospace Studies Department, 36 units of aerospace studies credit may be applied toward the requirements for the bachelor’s degree. The ROTC program is also available through UCLA Extension.

All three ROTC departments offer voluntary four- and three-year programs for first-years and sophomores. All have leadership laboratories that teach leadership and management skills. All commissions are reserve commissions. Active duty obligation following commissioning varies depending on branch of service and designated career field or occupational specialty.

Scholarships
ROTC scholarships are awarded on a competitive basis to U.S. citizens regardless of parents’ income. Scholarships cover tuition, a book allowance, fees, and a tax-free monetary allowance during the academic year. Applications for scholarships may be obtained online or by calling 310-825-1742. Completed applications should be submitted prior to August 15 for early consideration and no later than December 1 of the year preceding college matriculation.

Air Force ROTC Program
Air Force ROTC offers selected students the opportunity to develop those attributes essential to positions of high responsibility as commissioned officers in the U.S. Air Force or Space Force. This includes understanding Air Force history, doctrine, operating principles, and national security policies; demonstrating the ability to apply modern principles of management and human relations in the Air Force environment; and mastering of leadership theory and techniques. Students must demonstrate dedication to their assignments, willingness to accept responsibility, and the ability to think critically and communicate with clarity and precision.

Undergraduate Study
The Air Force ROTC program is available to full-time students with at least three years of undergraduate and/or graduate study remaining and consists of one to two years of the General Military Course, or GMC (Aerospace Studies 1A, 1B, 1C; 20A, 20B, and 20C), followed by a two-year Professional Officer Course, or POC (Aerospace Studies 130A, 130B, 130C, 140A, 140B, and 140C). For students completing the program in four years, GMC participation requires one hour of academic class and two hours of leadership laboratory each week during the academic year. For students completing the program in three years, GMC participation requires taking one course from Aerospace Studies 1A, 1B, or 1C; one course from 20A, 20B, or 20C; and two hours of leadership laboratory each week during the academic year. Students incur no military obligation for GMC participation unless they qualify and accept an Air Force ROTC scholarship during or after their sophomore year.

Students who complete the GMC and wish to enter the POC attend a field training course the summer following GMC completion. There is no obligation to apply. U.S. citizenship is required. Students are selected on a competitive basis with consideration given to academic major, grade-point average, aptitude examination scores, performance during an officer board interview, and a physical fitness test. Students selected for summer field training are given meals, quarters, clothing, and travel and incidental expenses. Subjects covered at field training include junior officer training, aircraft and aircrew orientation, career orientation, survival training, basic functions, Air Force environment, and physical training.

POC participation requires three hours of academic class and two hours of leadership laboratory each week during the academic year. Students enrolled in the POC incur a military obligation and are paid a monthly stipend during the academic year. Graduation and successful completion of the POC leads to a commission as a second lieutenant. Cadets then report to one of the challenging assignments in the Air Force or Space Force.

Aerospace Studies
Lower-Division Courses

Freshman Year
A. Leadership Laboratory. (No credit) Laboratory, three hours. Mandatory for and limited to Air Force ROTC cadets. Provides cadets with practical command and staff leadership experiences through performance of various tasks within framework of organized cadet corps. As integral part of aerospace studies curriculum, provides experiences designed to develop leadership potential and serves as orientation to active duty. P/NP grading.

1A-1B-1C. Heritage and Values. (2-2-2) Lecture, one hour. Introduction to U.S. Air Force. Examination of general aspects of Department of Air Force, leadership, benefits, and opportunities for officers. Foundation for becoming airmen by outlining heritage and values. Provides historical perspective through lessons on war and U.S. military, Air Force operations, principles of war, and airpower. Provides students with understanding for employment of air and space power, from institutional, doctrinal, and historical perspective. Students are introduced to Air Force way of life and gain knowledge on what it means to be airmen. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

Sophomore Year
20A-20B-20C. Team and Leadership Fundamentals. (2-2-2) Lecture, one hour. Designed to provide fundamental understanding of both leadership and team building. Cadets are taught many layers of leadership, including listening, understanding themselves, being good follower and efficient problem solving. Students apply understanding of leadership perspectives when completing team building activities and discussing conflict management. Demonstration of basic verbal and written communication skills. P/NP or letter grading.

Upper-Division Courses
130A-130B-130C. Air Force Leadership Studies. (4–4–4) Lecture, three hours. Requisites: courses 1A, 1B, 1C, 20A, 20B, 20C. Designed to provide cadets with leadership overview. Basic leadership skills for cadets beginning leadership role in detachment. Lessons on military relationships and rules that military members must follow when interacting with enlisted members and officers. Continuation of advanced skills and ethics training in preparation for becoming officer and supervisor. Introduction to variety of leadership topics in preparation to be effective leaders. P/NP or letter grading.

140A-140B-140C. National Security Affairs/Preparation for Active Duty. (4–4–4) Lecture, three hours. Requisites: courses 1A, 1B, 1C, 20A, 20B, 20C. Study of national security processes, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics focus on military as profession, officership, military justice, civilian control of military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis on refining communication skills. P/NP or letter grading.

197. Individual Studies in Aerospace Studies. (2 or 4) Tutorial, three hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.
AFRICAN AMERICAN STUDIES

College of Letters and Science
1308 Rolfe Hall
Box 951545
Los Angeles, CA 90095-1545

African American Studies
310-825-9821
Department e-mail
Cheryl L. Keyes, PhD, Chair

Faculty Roster

Professors
Walter R. Allen, PhD (Allan Murray Carter Professor of Higher Education)
Devon W. Carbado, JD (Honorable Harry Pregerson Endowed Professor of Law)
Yogita Goyal, PhD
Cheryl I. Harris, JD (Rosalinde and Arthur Gilbert Foundation Endowed Professor of Civil Rights and Civil Liberties)
Tyrone C. Howard, PhD (Pritzker Family Endowed Professor of Education to Strengthen Families)
Darnell M. Hunt, PhD
Marcus A. Hunter, PhD
Robin D.G. Kelley, PhD
Safiya U. Noble, PhD
Kathleen A. Lytle Hernández, PhD
Cheryl L. Keyes, PhD

Associate Professors
Bryonn R. Bain, JD
Sobukwe O. Odinga, PhD

Assistant Professors
Justin P. Dunnivant, PhD
Ugo F. Edu, PhD

Overview
The Department of African American Studies offers a Bachelor of Arts (BA) degree, an under-graduate African American Studies minor, a Master of Arts (MA) degree, and a concurrent degree program (African American Studies MA/Juris Doctor). A major or minor in this field offers a broadening of cultural experiences and perspectives for those seeking more information about African Americans and the African diaspora. Career-wise, all students profit from African American studies courses in an era when employers and academic institutions are actively seeking those with multicultural and interdisciplinary skills and backgrounds.

Mission
The fundamental goal of the African American Studies curriculum is to offer students a comprehen-sive and multidisciplinary introduction to the crucial sociocultural and social justice issues facing African Americans and their counterparts in other areas of the African diaspora today. The curriculum is designed to meet this goal in two primary ways. First, it offers students an interdisciplinary exposure to particular features of the African American experience. Core courses offer an in-depth understanding of historical, anthropological, sociological, psycho-logical, economic, and political aspects of African America. The curriculum also offers opportunities to study the literary, musical, and artistic heritage of peoples of African descent. Second, students analyze key issues through additional courses that bring to bear concepts, theories, and methods of traditional academic disciplines in areas such as cultural analysis and production, social justice, and public policy. Students may also do individualized study with a professor and/or an internship for course credit.

Undergraduate Major

African American Studies BA

Students are encouraged to engage in a culmi-nating activity, such as an internship, independent study, honors thesis, service learning course, Center for American Politics and Public Policy program, University of California Center Sacramento program, Education Abroad Program, or other African American studies-related project or performance course.

Learning Outcomes
The African American Studies major has the following learning outcomes:

• Critical understanding of key historical moments in the field
• Critical engagement with humanistic and social-scientific approaches to the study of the African American experience
• Ability to perform research and use critical writing skills
• Critical understanding of the concepts of race and racism, and their relationship to other identities such as class, gender, and sexual orientation
• Knowledge of key African American aesthetic, literary, musical, and other cultural traditions
• Knowledge of key social-scientific theories that explain and describe the African American experience

Admission
To be admitted to the major, students must have completed African American Studies 1, be in good standing, and formally register with the department. Students are encouraged to declare their major as early as possible and discuss their proposed course plan with the department undergraduate adviser.

Transfer Students
Transfer applicants to the African American Studies major with 90 or more units must complete the following introductory courses if possible prior to admission to UCLA: one African American studies or civilizations of Africa course or equivalent.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required:
African American Studies 1, 96W, and one course selected from 2A, 2B, 2C, M5, 6, M116A, or M116B.

The Major

Required:
Eleven upper-division courses as follows: (1) four courses in one area of concentration; (2) four courses, two from each area, selected from the two areas not selected in (1); (3) two additional upper-division elective courses in African American studies (minimum 4 units) excluding 188SA, 188SB, 188SC, 189, 189HC, and 195; (4) one senior capstone seminar: African American Studies C191.

Cultural Production:

Political Economy:

Power and Ideology:

Honors Program
Students must take three-quarter African American Studies 198A, 198B, 198C (independent study courses) with an approved professor who oversees the thesis requirement.

Policies

The Major
No more than 8 graded units of African American Studies 195, 198A, 198B, 198C, and 199 may be applied toward the major.

Students must have an overall grade-point average of 2.0 or better.
Undergraduate Minor
African American Studies Minor

The African American Studies minor is designed for students who wish to augment their major program of study with courses from various disciplines germane to African American studies.

Admission
To enter the minor, students must be in good academic standing (2.0 grade-point average), have completed 45 units, and file a petition with the African American Studies student affairs officer.

The Minor
Required Lower-Division Courses (9 to 10 units): Two courses from African American Studies 1, 2A, 2B, 2C, M5, 6, M10A.

Required Upper-Division Courses (20 to 25 units): Five upper-division African American studies courses.

Policies
No more than 4 graded units of African American Studies 195, 197, and 199 may be applied toward the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor, and at least 16 units applied toward the minor must be taken in residence at UCLA. Transfer credit for any of the above is subject to program approval; consult with the student affairs officer before enrolling in any courses for the minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Major
African American Studies MA

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Concurrent Degree Program
Concurrent degree programs allow students to reduce the number of courses required for two degrees, since some courses may apply to both degrees.

• African American Studies MA/Juris Doctor

African American Studies
Lower-Division Courses

1. Introduction to Black Studies. (5) Lecture, three hours; discussion, one hour. Introduction to methods, theories, conceptual frameworks, and key debates in black studies. Interrogation of how race structures notions of identity and meaning of blackness in relation to class, gender, and sexuality; essential role of African people in development of capitalism, liberal thought, and democracy; what various disciplinary lenses and epistemologies (history, literature, sociology, geography, cultural studies, political theory, philosophy, etc.) reveal about experiences of black people in modern world. Key thinkers and ideas from across humanities and social sciences are highlighted. P/NP or letter grading.

2. Africa and Middle East. (4) Lecture, three hours; discussion, one hour. Exploration of historical connections between Africa and Middle East as concepts, geographic expressions, homelands, and sites of diaspora. Examination of changing definitions and connections between Africa and Middle East from ancient world until present. Students learn how concepts have changed and are constantly changing over time. Study of how Africa and Middle East fit into alternative concepts such as ancient world, Islamic world, Muslim world, or Third World. Examination of Legacies of earlier trade networks, particularly slave trade, on these regions. Examination of role countries like Egypt, situation on African continent but considered Middle Eastern, play in African-Arab or African/Middle Eastern culture. In-depth exploration of how European imperialism impacted these worlds, and how process of decolonization united them. Examination of processes of immigration and emigration across these regions. P/NP or letter grading.


2C. Black Folks Kung Fu Fighting’ Black America, Martial Arts, and Popular Culture. (5) Lecture, three hours; discussion, one hour. Exploration of longer history of Black Americans and their relationship to martial arts; who some of key players are; how Black folks’ engagement with martial arts has been represented in popular culture; connections of race, class, and gender through martial arts. Analysis of history of martial arts in Black America from post-WWII era to present. Using books and articles, movies and television shows, and other popular cultural venues, students develop critical analytical skills to understand how race, gender, expressive culture, and martial arts operate together to form understanding of Black American experience. P/NP or letter grading.

5M. Social Organization of Black Communities. (5) (Same as Social Policy 5M) Lecture, four hours; discussion, one hour; field trips. Analysis and interpretation of social organization of black communities, with focus on origins and development of black communities, competing theories and research findings, defining characteristics and contemporary issues. Letter grading.

6. Trends in Black Intellectual Thought. (5) Lecture, three hours; discussion, one hour. Overview of major intellectual trends that have shaped ways in which African Americans think about the experiences of blacks in U.S., drawing from such fields as history, philosophy, and literature. Letter grading.

M7A-M7B-M7C. Elementary Yoruba. (4-4-4) (Same as International and Area Studies M7A-M7B-M7C.) Lecture, five hours. Course M7A is requisite to M7B, which is requisite to M7C. Introduction to Yoruba, one of major languages of West Africa, which is spoken widely throughout southwest Nigeria, Benin, and Togo. Coverage of basic Yoruba grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

M9A-M9B-M9C. Elementary Amharic. (4-4-4) (Same as International and Area Studies M9A-M9B-M9C.) Lecture, five hours. Course M9A is requisite to M9B, which is requisite to M9C. Introduction to Amharic, Semitic language that is official language of Ethiopia. Coverage of basic Amharic grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

M10A. History of Africa to 1800. (5) (Same as History M10A.) Lecture, three hours; discussion, one hour. Exploration of development of African societies from earliest times to late 18th century. P/NP or letter grading.

M18. Leadership and Student-Initiated Retention. (2) (Same as American Indian Studies M18, Asian American Studies M18, and Chicana/o and Central American Studies M18.) Seminar, two hours. Limited to freshmen/sophomores/first-year transfer students. Not open for credit to students with credit for course M118. Exploration of issues in retention at UCLA through lens of student-initiated study and student programs, efforts, activities, and services. Focus on populations with historically low graduation rates targeted by Campus Retention Committee. May not be applied toward departmental major or minor elective requirements. May be repeated once for credit. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per quarter unit. Entry-level research for general division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses
M102. Culture, Media, and Los Angeles. (6) (Same as Asian American Studies M160 and Honors College M102.) Lecture, four hours; screenings, two hours. Designed for juniors/seniors. Role of media in society and its influence on contemporary cultural environment, specifically in Los Angeles; issues of representation as they pertain to race, ethnicity, gender, and sexuality. P/NP or letter grading.
M103A. African American Theater History: Slavery to Mid-1800s. (4) (Same as Theater M103A.) Lecture, three hours. Designed for juniors/seniors. Exploration of early history and literature of the African American theater and how it developed and performed by African American artists in America from slavery to mid-1800s. Letter grading.

M103B. African American Theater History: Minstrel Stage to Rise of American Musical. (4) (Same as Theater M103B.) Lecture, three hours. Designed for juniors/seniors. Exploration of extant materials on history and literature of theater as developed and performed by African American artists in America from slavery to mid-1800s. Letter grading.

M103E. Modern African American Drama: Harlem Renaissance to Black Lives Matter and Beyond. (4) (Same as Theater M103E.) Lecture, three hours. Survey and examination of African American plays from 1920s until birth of modern civil rights era. Examination of socio-historical context out of which plays were created and critical essays that illustrate development of African American playwrights and their significant involvement in creation of diversified American theatrical tradition. Letter grading.

M103G. Contemporary Black Theater: Modern Civil Rights Era to Black Lives Matter. (4) (Same as English M103G.) Lecture, four hours; discussion, one hour (when scheduled). Exploration of Black theater from mid-20th century to present day, focusing on social, economic, and political implications of work, and aesthetic experimentation of contemporary African American playwrights and movements. Letter grading.

M104A. Early African American Literature. (5) (Same as English M104A.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Introduction to African American literature from its origins in 19th century. Critical reading of biographical and autobiographic texts to deepen understanding of major themes and critiques of Pan-African thought, including those of race and racial formation, gender and sexuality, capitalism and labor exploitation, and nationalism and state repression. Application of history and critical readings to students’ own lives and family history through research and writing short autobiographical text. Students gain experience in conducting interviews and oral histories and genealogical and archival research. P/NP or letter grading.

M105A. Afro-African American Intellectual History of Capitalism. (4) Lecture, three hours; discussion, one hour. Examination of role of African descent people have had in history and political economy of capitalist since its origins in institutions of slavery and transatlantic trade. Addresses relationship between capitalism and slavery, and issues including incorporation of free Black labor into post-slavery regimes of capital accumulation, development, and Black reparations; impact of emancipation on imperialism in Africa; role of land, labor, and resources in history of colonization; Black labor migration in early-20th century U.S. Worked ideas of worker self-management as Black critique of capitalism; neocolonialism and reorganization of capital accumulation in Caribbean and Africa; and Reconstitution of race under neoliberalism. P/NP or letter grading.


M106A. Africa and World. (4) Lecture, four hours; discussion, one hour. Introduction to historical and contemporary Africa, with focus on modern history, politics, and culture of Africa. Survey of key African authors may include Toni Morrison, August Wilson, Octavia Butler, Anna Deavere Smith, June Jordan, Charles Johnson, and Rita Dove. P/NP or letter grading.

M106E. Topics in African American Literature and Culture 181. (4) (Same as English M106E.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Variable topics lecture course that provides opportunity to cover African American literature from wide range of theoretical, historical, formal, and thematic perspectives. Topics may include African American autobiographies, African American film, black diaspora literature, postmodern African American fiction, Afro-Futurism, and African American satire. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M106F. Black Diaspora in Literature and Film. (4) Lecture, three hours; discussion, one hour. How do we know what we know? Why do we think what we think? Where does our knowledge of self come from? Introduction to the development of the minstrel stage to rise of American musical. P/NP or letter grading.

M107. Cultural History of Race. (5) (Same as Ethnomusicology M110 and Global Jazz Studies M110.) Lecture, four hours; discussion, one hour. Introduction to development of rap music and hip-hop culture, with emphasis on musical and verbal qualities, philosophical and political ideologies, gender representation, and influences on cinema and popular culture. P/NP or letter grading.

M108. Jazz and Political Imagination. (4) Lecture, three hours; discussion, one hour. How has jazz come to symbolize so many different political tendencies—from tolerance and democratic expression to order and civil society, possibility of integration and racial harmony, Black liberation and nationalism, conservatism, surrealism, socialism, etc., throughout 20th century? Why does jazz enable political and ideological aspirations and hopes in what is primarily instrumental, improvised music? Exploration of history of ideas about jazz, specifically how writers, activists, musicians, and musicians understood politics of jazz. Exploration of political imaginations—here and abroad—in particular in jazz and question of freedom—social freedom, political freedom, cultural, and artistic freedom. P/NP or letter grading.

M109. Women in Jazz. (4) (Same as Ethnomusicology M110, Gender Studies M110, and Global Jazz Studies M110.) Lecture, four hours; discussion, one hour. Socio-cultural and personal histories of women and musical traditions from 1880s to present. Survey of women vocalists, instrumentalists, composers/arrangers, and producers and their impact on development of jazz. P/NP or letter grading.

CM110. Bibliography and Research Methods in Rap Music/Hip-Hop Studies. (4) (Same as Ethnomusicology CM120.) Seminar, three hours. Requisite: course M106. Designed for juniors/seniors conducting research on rap music and hip-hop, hip-hop projects such as honors or senior thesis. In-depth examination of intellectual history of rap music/hip-hop studies scholarship. Examination of readings related to intellectual history of rap music/hip-hop and allied traditions (including breakdance and graffiti). Exploration of broad range of research methods and archival/library centers specific to hip-hop studies. Concurrently scheduled with course CM120. Letter grading.

110A. Race, Science, and Society. (4) Lecture, three hours; discussion, one hour. Idea that races reflect inherent biological differences between social groups has been prominent aspect of European and American thought since at least Enlightenment. While there have been moments of refuting this way of thinking—most notably, social constructivism—thesis emerging as dominant framework in aftermath of WWII—fixed biological conceptions of race haunt contemporary bio-medical research, where race continues to be measured at nearly every scale of human biology; from molecules up to intelligence and health. Exploration of reasons for this persistence through engagement with theory and in-depth analysis of biological research. Close attention to relationship between developments within American history and production of scientific knowledge about race; for it is in this relationship that perils and promise of science reveal themselves. P/NP or letter grading.

110B. Reproducing While Black: Politics of Black Reproduction. (4) Seminar, three hours. Interdisciplinary exploration of experiences of Black reproduction, globally. Investigation of stakes of Black repro-

CM110D. Posthumanities. (4) Same as Society and Genetics M110D.) Seminar, three hours. Denaturalization of concepts: how unique and western epistemological commitments that sustain imagined boundaries between human and non-human, modern and pre-modern, male and female, abled and disabled, chosen and condemned, indigenous and European, African and whiteness, religious and secular. Exploration of formation of human throughout long course of Euro-American intellectual history and its contemporary political significance. Analysis of diverse and growing body of work on systems of justice through research, writing, work with communities, and organizing. Critical texts, collaborative work, and other forms of agency engaging school-to-prison pipeline. Concurrently scheduled with course CM213XP. P/NP or letter grading.

M114C. African American Political Thought. (4) Same as Labor Studies M114C and Political Science M116.) Lecture, three hours; discussion, one hour. Exploration of diverse and growing body of work on systems of justice through research, writing, work with communities, and organizing. Critical texts, collaborative work, and other forms of agency engaging school-to-prison pipeline. Concurrently scheduled with course CM213XP. P/NP or letter grading.

M115. We Gone Be Alright: Developing Next Generation of Black Organizers. (4) Same as Labor Studies M115.) Seminar, three hours; discussion, one hour. Examination of policies and practices, art and activism, and other forms of agency engaging school-to-prison pipeline. Concurrently scheduled with course CM213S. P/NP or letter grading.

M116A-M116B. African American Musical Heritage. (4–5) (Formerly numbered CM116.) CM116A. African American Music of South America; and music of black Los Angeles. Lecture, four hours; discussion, one hour. Exploration of diversity of musical expressions that formed part of radical black utopian art forms like Afro-Futurism. Consideration of music of black Los Angeles; black music of Caribbean and Central and South America; and music of black Los Angeles. Socio-cultural history and survey of African American music covering blues, pre-1947 jazz styles, rhythm ‘n’ blues, soul, funk, disco, hip-hop, and symbolic relationships between recording industry and effects of cultural politics on black popular music productions. Concurrently scheduled with course CM213S. P/NP or letter grading.

M116B. African American Musical Heritage. (4–5) (Formerly numbered M116A-M116B.) Same as Ethnomusicology M110A-M110B and Global Jazz Studies M110A-M110B.) Lecture, four hours; discussion, one hour. Exploration of diversity of musical expressions that formed part of radical black utopian art forms like Afro-Futurism. Consideration of music of black Los Angeles; black music of Caribbean and Central and South America; and music of black Los Angeles. Socio-cultural history and survey of African American music covering blues, pre-1947 jazz styles, rhythm ‘n’ blues, soul, funk, disco, hip-hop, and symbolic relationships between recording industry and effects of cultural politics on black popular music productions. Concurrently scheduled with course CM213S. P/NP or letter grading.
as well as black women’s participation in and challenge to social movements, including suffrage, women’s lib-
eration, civil rights, and black power. Examination of Afro-American history, including their cul-
tural productions. Letter grading.

M142. Race, Gender, and Punishment. (4) Same as Lesbian, Gay, Bisexual, Transgender, and Queer Studies M142) Seminar, four hours. Interdisciplinary examination of the empirical explo-
dition of modern prison industrial complex in U.S., with attention to the impact of prison industrial complex on im-
migrants, including undocumented residents, home-
less people, African-Americans, transgray nonconforming and lesbian, gay, bi-
sexual, and transgender communities. Why does U.S. have the largest prison population in world? What histori-
cal conditions and social forces have led to rise of pris-
sion expiration in U.S. prison population? What poli-
cies have fueled mass imprisonment? Who is impris-
one? How have politicians used imprisonment as a response to economic transformations and perceived social disorders? How is current crisis analogous to or distinct from regimes of racialized punishment in prior historical moments? Letter grading.

M144. Ethnic Politics: African American Politics. (4) (Same as History M150D.) Lecture, three hours; discussion, one hour (when scheduled). Preparation: one 140-level political science course or one upper-division course on race or ethnicity from history, African American studies, International relations, Political Science 40. Designed for juniors/seniors. Emphasis on dynamics of minority group politics in U.S., touching on conditions facing racial and ethnic groups in the states facing primordial case for analysis. Three primary objectives: (1) to provide de-
scriptive information about social, political, and eco-
nomic conditions of black community, (2) to analyze important political issues facing black Americans, (3) to sharpen students’ analytical skills. P/NP or letter grading.

M148. Politics of Struggle: Race, Solidarity, and Re-
istance. (Same as Gender Studies and Central Amer-
ican Studies M148.) Lecture, four hours. Examination of Chicana/Chicano intergroup relations and political coalitions with other Latinos, African Americans, Asian and Pacific Islanders, and Euro-Americans, especially in communities undergoing rapid changes in demo-
graphic composition. Letter grading.

M150D. Recent African American Urban History: Funk Music and Politics of Black Popular Culture. (4) (Same as Anthropology M150D.) Lecture, three or four hours; discussion, one hour (when scheduled). Funk music as a genre emerged in late 1960s as a spontaneous musical form among young black, funk was a highly sophisticated musical form that evolved during the 1970s. Funk, fusion of gospel, blues, jazz, rhythm and blues, soul, rock, and many other musical styles, offers students unique window into recent Af-
rican American history. P/NP or letter grading.

M154C. Black Experience in Latin America and Ca-
ribbean I. (4) (Same as Political Science M154A.) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Exploration of musical genres as funk that emerged in its popular form during late 1960s and early 1970s. Funk music was a highly sophisticated musical form that evolved during the 1970s. Funk, fusion of gospel, blues, jazz, rhythm and blues, soul, rock, and many other musical styles, offers students unique window into recent Af-
rican American history. P/NP or letter grading.

M154G. Black Experience in Latin America and Ca-
ribbean II. (4) (Same as Political Science M154B.) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examina-
tion of issues regarding race and ethnicity in Latin America, with emphasis on comparisons to U.S. and within Latin America. Covers populations of Af-
erican blacks, Afro-Latinos, with emphasis on former incarcerated. P/NP or letter grading.

M155. Afro-Latino/a Experience(s) in U.S. (4) (Same as Chicana/o and Central American Studies M154B.) Lecture, four hours; discussion, one hour (when scheduled). Afro-Latino/a experience in U.S. through exploration of its historical roots and contempor-
ary forms. How colorism in Latin America and U.S. influence Afro-Latino/a identity. Regional differences and different types of Afro-Latino/a that include Blaxicans, Nuyoricans, Afro-Cubans, and others are taken into account. Discussion of themes that include feminism, politics, culture, music, and identities in order to analyze Afro-Latino/a experience of African Americans in U.S. yesterday and today. P/NP or letter grading.

M158A. Comparative Slavery Systems. (4) (Same as History M150A.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of historical slavery experiences in various New World slave societies, with emphasis on outlining sim-
ilarities and differences among legal status, treatment, and slave cultures of North American, Caribbean, and Latin American slave societies. P/NP or letter grading.

M158B-M158C. Introduction to Afro-American His-
tory. (4-4) (Same as History M150B-M150C.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of Afro-American experience, with emphasis on three great transitions of Af-
ro-American life: transition from Africa to New World slavery; transition from slavery to freedom, and transition from rural to urban milieus. P/NP or letter grading.

M158E. African American Nationalism in First Half of 20th Century. (4) (Same as History M150E.) Le-
ture, three hours; discussion, one hour (when sched-
duled). Designed for juniors/seniors. Critical examina-
tion of African American search in first half of 20th century for national/group cohesion through collect-
ively built institutions, associations, organized protest movements, and ideological self-definition. P/NP or letter grading.

M159P. Constructing Race. (4) (Same as Anthro-
pology M144P and African American Studies M169.) Lecture, three hours; discussion, one hour (when scheduled). Emphasis on socially constructed category, from anthropological perspective. Consider-
ation of development of racial categories over time and in different regions, racial passing, multiracial identity in U.S., whiteness, race in popular culture, and race and identity. P/NP or letter grading.

M164. Afro-American Experience in U.S. (4) (Same as Anthropology M144Q.) Lecture, three hours. Pro-
mates understanding of contemporary sociocultural forms among African Americans in U.S. by presenting comparative and diachronic perspective on Afro-
american experience in New World. Emphasis on utili-
zation of anthropological concepts and methods in understanding origins and maintenance of particular patterns of adaptation among black Americans. P/NP or letter grading.

M165. Sociology of Race and Labor. (4) (Same as Labor Studies M165 and Sociology M165.) Lecture, three hours; discussion, one hour (when limited to juniors/seniors). Exploration of relationship between race/eth-
icity, employment, and U.S. labor movement. Anal-
ysis of underlying racial divisions in workforce and how these divisions impact and are reflected in cir-
cumstances under which workers and unions have ex-
cluded people of color from jobs and unions, as well as circumstances under which workers and unions have organized people of color into unions in efforts to improve their wages and working conditions. Impact of globalization on these dynamics. P/NP or letter grading.

CM166B. Future of Work in Decarcerated California II: Applied Research and Policy Analysis for Imple-
mentation of Justice Transformation. (4) (Same as Labor Studies M124B.) Seminar, three hours. Limited to 15 students. In consultation with community partners, students will conduct applied research on policy issues to create a space for students to contribute to development of community policy platform that centers recommen-
dations of formerly employed and formerly incarcer-
ated people in broader community vision for transi-
tion to decarcerated workforce. Concurrently scheduled with course CM166B. P/NP or letter grading.

M167.) Seminar, three hours. Development of theoret-
ical and practical understanding of worker center
movement, with focus on historical factors that have led to emergence and growth of worker centers. Role of worker centers in protesting multitechnic and multi-
racial campaigns for workplace and economic justice. Transnational cross-border solidarity issues and rights of undocumented workers. P/NP or letter grading.

M170A. Diasporic Nonfiction: Media Engagements with Race, Memory and Diaspora. (4) (Same as Chi-
cana/o and Central American Studies M170A.) Sem-
inar, three hours. Video production course, with em-
phasis on autobiographical, critical, and performance-based writing of nonfiction media in U.S. drawing on practices of diasporic filmmakers who have grappled with suppressed collective memories of displacement, trauma, exile, and migration. What does it mean to make videos about memory in contexts where direct cues to remembering cannot be seen? Introduction to concepts from films and readings. Production assign-
ments and screenings, with focus on questions of how to use video history, narrative, and practice in a lived experience according to perspectives and inter-
ests of diasporic subjects. In progress grading (credit to be given only on completion of course M170B).

M170B. Diasporic Nonfiction: Media Engagements with Memory and Decarcerated California II: (4) (Same Chi-
cana/o and Central American Studies M170B) Sem-
inar, three hours. Enforced requisite: course M170A. Students complete 20- to 30-minute video projects about issues or experiences central to everyday lives of collectives of diasporic peoples. They learn to pro-
pose, record, edit, and distribute one socially engaged narrative video, one hour to juniors/seniors. Environ-
course M170A in writing voiceover, choreographing dances, designing public performances, interviewing, and recording everyday life. P/NP or letter grading.

M172. Afro-American Woman in U.S. (4) (Same as Gender Studies M172 and Psychology M172) Le-
ture, two and one half hours. Designed for juniors/se-
niors. Impact of social, psychological, political, and eco-
omic forces which impact on interpersonal rela-
tionships of Afro-American women as members of large society and as members of their biological and ethnic group. P/NP or letter grading.

M173. Nonviolence and Social Movements. (4) (Same as Chicana/o and Central American Studies M173 and Labor Studies M173) Seminar, three hours; discussion, one hour. Overview of nonviolence and its impact on social movements both historically and in its present context in contemporary society, featuring lectures, conversations, films, readings, and guest speakers. Exploration of some historic contributions of civil rights struggles and role of nonviolent action throughout recent U.S. history. Examination of partic-
ular lessons of nonviolent movements as they impact social change organizing in Los Angeles. P/NP or letter grading.

174. Intraracial Differences in 20th-Century Black American Literature. (4) Lecture, four hours of evolu-
tion of black divergence within African American com-
munity by focusing on evolution of differences—spe-
cifically class differences—that have minimized black progress when compared with other races and cul-
tures like Asians and Jews. Examination of origins and
Graduate Courses

M200A. Advanced Historiography: Afro-American. (4) (Same as History M200V) Seminar, three hours. May be repeated for credit. S/U or letter grading.

M200B. Political Economy of Race. (4) (Same as History M200B) Seminar, four hours. Exploration of the historiography of history of capitalism and history of African diaspora, especially in their overlapping concerns with organization of race and racial states in contemporary history of modern imperialism and—emergence of global Black resistance to both. Topics and themes considered may include capitalism and question of slavery; law, regulations, and legal preservation of organization of markets and nations; uneven development and nature of Black sovereignty; history of regimes of gender and sexuality in social and capital reproduction; modalities of capital accumulation and production of space; racial violence and territorial expansion; emancipation and growth of empire; history of finance capital and its discourses of debt; capitalism and history of anti-Blackness; racism, neoliberalism, and governmentality; and emergence and content of Black radical tradition and its critiques of racial capitalism. S/U or letter grading.

M200C. Black Families and Relationships. (4) (Same as Sociology M200C) Seminar, three hours. Evaluations of social, cultural, and historical forces that affect socialization, stability, and interaction in black intimate relationships, beginning with theoretical framework from analysis of economic and social conditions and other expectations for partners in cohabiting and other types of unions. Examination of family life for both middle-class and low-income populations. Exploration of notions of black sexuality, including images of hyper-masculinity and femininity within black body and critical interrogation of notions of blackness and authenticity in racial identification. Contribution to greater understanding of black intimate relationships in different contexts, including lesbian and gay identities, Caribbean and other ethnic identities, and inter-racial intimacies. S/U or letter grading.

200D. African American Women’s History. (4) Seminar, four hours. Historical examination of black women’s experiences in U.S. from antebellum era to present. Exploration of key themes, including gender formation, sexuality, labor and class, collective action, understanding of black female consciousness, and role of law. How have intersecting forms of oppression impacted black women’s historical lives? How is difference constructed through the lens of race, gender, class, sexual orientation, and other identities? How do histories and legacies cover black women’s historical lives and what are challenges to such discoveries? Examination of black women’s individual and collective struggles for freedom, political empowerment, and agency, as well as black women’s participation in and challenge to social movements, including suffrage, women’s liberation, civil rights, and black power. Letter grading.


M200G. Race, Class, and Gender: Constructing Black Womanhood and Black Manhood in America. (4) (Same as Sociology M200G) Seminar, four hours. Race, class, gender, and sexual identity axes are axes of stratification, identity, and experience. They are not merely identities but structural locations that are often taken for granted and re-presented, challenged, or contested. Many times one or more of these go unrecognized. Exploration of multiple and intersecting ways these concepts shape society, individual life chances, and daily life for African Americans. Examination of race, class, and gender inequalities as individual aspects of social life. How race, class, gender, and sexual identity shape societies and individual experience differently for each other. How does class, gender, and sexuality shape and are shaped by social institutions, including cultural institutions, economy, and family, within context of experiences of black women and black men in contemporary U.S. Letter grading.

200H. Social Politics of Recent African American Music and Popular Culture. (4) Seminar, four hours. Predominant trend in research in African American music heightens awareness of social and political movements, contextual socioeconomic realities, and cultural politics of identity. Civil rights, black power, feminism, sexual revolution, and anti-war were movements that shaped and were shaped by music of the 1960s and 1970s. This seminar will also examine questions pertaining to intra-African American politics of community: grappling with issues such as differential political economy, landscape, male privilege, and marginalization of creative artists. Examination of critical nexus between music and myriad of issues unearthed by this trend in scholarly study of black music. Letter grading.

201A. Survey of Black Studies Research: Themes, Issues, and Concepts. (4) Seminar, three hours. Exploration of selected theoretical constructs, conceptual frameworks, and methodological approaches in discipline of African American studies. Interrogation of some of more significant debates in field as students consider how to engage and utilize these ideas—and epistemological debates around them—in their own work. Students think critically about different forms of intellectual production and scholastic inquiry in field that is now quite broad and interdisciplinary. Letter grading.

201B. Survey of African American Studies Research Part II: Introduction to Research Methods. (4) Seminar, three hours. Requisite: course 201A. Research methods and techniques speak to manner of collecting data and carrying out investigations. Research methodologies are groupings of procedures and practices used to illuminate and organize data and phenomena. Exploration of range of research methodologies prominent in Black/Africana studies. Students engage uses of archival research, textual analysis, oral history sources, sound analysis, digital media studies, and quantitative and qualitative approaches to data collection and interpretation. Instructor operates primarily as coordinator, arranging guest presentations and recorded lectures by departmental faculty. Letter grading.

201C. Research Proposal Writing Seminar. (4) Seminar, three hours. Requisites: courses 201A, 201B. Designed for first-year African American Studies graduate students. Students are assisted in conceptualizing, designing, and writing research proposals. Introduction to various methods through which students can help themselves prepare for graduate study, academics, and/or research according to their respective areas of interest. Skills include Institutional Review Boards (IRB) or other institutional subject review; acquiring research grants; funding and understanding their criteria; and writing statements of purpose and personal statements as students. Demyystifies thesis writing process; focuses on teaching basic skills for writing successful and highly publishable research essay or thesis. Letter grading.

M202. Critical Theory of African Diaspora. (4) (Same as Anthropology M202.) Seminar, four hours. Introduces to variety of ideas that underlie articulation of concept of African diaspora. Structured through understanding of African diaspora as historical formation, with focus on African diaspora as distinct intellectual project. Enriches students with preconceived and theorized diasporic condition of Black people. Consideration of who belongs to African diaspora community, and how this community is imagined. S/U or letter grading.

203A. Pan-Africanism: History and Historiography, 1804-1974. (4) (Seminar, three hours. Pan-Africanism is among most contested, misunderstood, and misrepresented political theories and social movements to emerge in late 19th and early 20th century Black world. It is arguably also one among most influential generations of Black intellectuals and activists who played major role in process of decolonization and African and Caribbean independence. Study of history and ideas of pan-African thought from its origins in 19th century to moment of its existential crisis in 1970s. S/U or letter grading.

203B. Readings in African Political Economy. (4) Seminar, three hours. Multidisciplinary approach to study of African political economy. While grounded in discipline of history, study prepares students to analyze and understand wealth of political economies, political science, and anthropology. Study of Africa’s economic past from initial scholarship in 1960s and 1970s on questions such as how Africa was integrated into world economy, and causes of its wealth and prosperity; to questions of governance in 1990s. S/U or letter grading.


C210D. Posthumans. (4) Seminar, three hours. Denaturalization of concept of human and with it uniquely western epistemological frameworks that sustain imagined boundaries between human and non-human, modern and pre-modern, male and female, able and disabled, chosen and condemned, indigeneous and European, African and whiteness, religious and secular. Exploration of formation of human throughout long course of Euro-American intellectual history and its contemporary posthuman formations. Study is informed by research that covers meaning of modernity, liberalist, inter-species relationships, critical race theory, conceptual problems in evolutionary biology, and public health. Concurrently scheduled with course CM110D. S/U or letter grading.


CM213XP. Narratives of Justice: Disrupting School-to-Prison Pipeline—Arts, Activism, and Agency. (4) (Formerly numbered CM213.) Lecture, four hours; discussion, one hour. Exploration of policies and practices, art and activism, and other forms of agency engaging school-to-prison pipeline. Concurrently scheduled with course CM113XP. S/U or letter grading.

CM213B. Legislative Theater for Race and Gender Justice. (5) (Same as World Arts and Cultures CM213B.) Lecture, three hours; discussion, one hour (when scheduled). Exploration and application of range of interactive methods and arts-based strategies with participants from UCLA and broader Los Angeles community in order to research and influence policy and legislative change. Students and campus partners create and perform legislative theater addressing issues of race, gender, and criminal justice system. Critical texts, collaborative work, and creative methods are used to engage perspectives on justice. Analysis of diverse and growing body of work on systems of justice through research, writing, workshops, performances, and critiques of original writing and performances developed in response to visiting scholars and community partners. Concurrently scheduled with course CM113B. S/U or letter grading.

CM235A. African American Art before 1900. (4) (Same as Art History CM235A.) Lecture, three hours. Detailed inquiry into work to circa 1900 of African American artists whose works provide insightful and
critical commentary about major features of American life and society. Concurrently scheduled with course CM135A. S/U or letter grading.

M240. Assessment and Treatment of African American Families. (3) (Same as Psychiatry M240.) Seminar, two hours. Designed for graduate students. Course aids mental health professionals and trainees in evaluation and treatment of African American families in terms of their cultural milieu, historical background, and economic status. Didactic presentations by instructors and invited guests form basis for supervised evaluation and case management with African American children and families. Letter grading.

C241. Special Topics in Afro-American Studies. (4) Lecture, four hours; discussion, one hour. Intensive research and study of major themes and issues in various areas of Afro-American studies. S/U or letter grading.

M256. Topics in African American Art, (4) Same as Art History M236.) Seminar, three hours. Requisite: course CM235A or CM235B. Topics in African American art from 18th century to present. May be repeated for credit with consent of graduate advisor. S/U or letter grading.

C256. Future of Work in Decarcerated California. (4) Seminar, three hours. Limited to students in Community Scholars program. Exploration of scope of employment and nature of jobs that are attached to current system of mass incarceration in California, with focus on Los Angeles county. Study of history and evolution of carceral system and its relationship to oppression of black people, poor, and other stigmatized groups. Exploration of history of employment discrimination against Black workers and how successful demand for unionized government jobs (public sector work) evolved as anti-discrimination remedy. Investigation of work, especially by people of color, in existing carceral regimes, and its impact on individual worker wellness and community well-being. Examination of tension between racial justice agendas to decarcerate California and those to prevent downward mobility of workers of color recruited by state to carry out failed policies of war on drugs. Concurrently scheduled with course CM166. S/U or letter grading.

C256B. Future of Work in Decarcerated California II: Applied Research and Policy Analysis for Implementation of Justice Transformation. (4) Seminar, three hours. Limited to students in Community Scholars program. Requisite: course C256. Second course in two-quarter participatory action research program that partners students with community-based change agents. Study involves project-based learning in groups made up of undergraduate and graduate students and community members. Students contribute to development of collective policy platform that centers recommendations of formerly employed and formerly incarcerated people in broader community vision for transitioning to decarcerated workforce. Concurrently scheduled with course CM166B. S/U or letter grading.

C270A. Survey of Afro-American Research. (4) Seminar, three hours. Overview of research methodologies in humanities and social sciences, with firsthand reports from faculty in various fields. Introduction to research in and related to Afro-American studies and application of such research. Letter grading.


375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guid-

ance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

596. Directed Readings and Tutorials. (4) Tutorial, to be arranged. Provides students with umbrella under which they can pursue specialized interests from which there is insufficient demand to warrant offering formal courses. S/U or letter grading.

597. Preparation for MA Comprehensive Examination. (4 or 8) Tutorial, to be arranged. Limited to graduate students. May not be applied toward MA course requirements. S/U grading.

598. Research for and Preparation of MA Thesis. (4 or 8) Tutorial, to be arranged. Limited to graduate students. May not be applied toward MA course requirements. S/U grading.

AFRICAN STUDIES

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African Studies
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Jénima Pierre, PhD (African American Studies, Anthropology)
Stephanie B. Santana, PhD (Comparative Literature)
Paula A. Tavrow, PhD (Community Health Sciences)
Dominic R. Thomas, PhD (Comparative Literature, European Languages and Transcultural Studies)
W. Harold Torrence, PhD (Linguistics)
Hollian Wint, PhD (History)
Alden H. Young, PhD (African American Studies, Sociology)

Overview
The intellectual objective of the African Studies MA program is to provide graduate students with the opportunity to engage in intensive study and research on Africa on an interdisciplinary basis. The program offers African area courses in a wide range of disciplines, including the fine arts, social sciences, humanities, and professional fields. A concurrent degree program is also offered where students can work for the MA in African Studies and the Master of Public Health (MPH) at the same time. Academic flexibility draws many students to the program. Because there are more than 50 active faculty members on campus with African interest and experience in many disciplines, students have multiple options to design individualized programs suited to their specific interests. Information on the undergraduate major and minor in African and Middle Eastern Studies and the minor in African Studies can be found in the International and Area Studies section.

Graduate Major

African Studies MA

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Concurrent Degree Program
Concurrent degree programs allow students to reduce the number of courses required for two degrees, since some courses may apply to both degrees.

African Studies

Graduate Courses


201B. Africa and Professions. (4) Seminar, three hours. Exploration of key contributions and debates of academic disciplines in African studies, with emphasis on professional dimension. Review of discipline’s literature, resources, career opportunities, and professionals themselves. Letter grading.

296. Africanist Working Group. (1 to 2) Research group meeting, one hour per week per unit. Collaborative exploration and discussion of current research and literature on modern Africa. Specific projects determined by research being conducted by working group participants. Activities include designing and refining research proposals, gathering and analyzing data, and interpreting and reporting results, as well as presenting research to receive critical feedback from other class participants. May be repeated for credit. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. Limited to graduate African studies students. May be repeated, but only 4 units may be applied toward minimum graduate course requirement. S/U or letter grading.

597. Preparation for MA Comprehensive Examination. (4) Tutorial, to be arranged. Limited to graduate African studies students. May be repeated, but only 4 units may be applied toward minimum graduate course requirement. S/U grading.
Undergraduate Major

American Indian Studies BA

The American Indian Studies BA program is designed to offer a coherent and comprehensive curriculum in American Indian cultures, societies, and contemporary issues in addition to valuable background in more traditional disciplines such as anthropology, art history, economics, education, history, law, linguistics, literature, sociology, and world arts and cultures. Students acquire a critical knowledge of the concepts, theories, and methods that have produced knowledge about American Indians in the traditional disciplines. Students are encouraged to develop a concentration—or special expertise—in these fields to accompany the major.

The curriculum encompasses the cultural, historical, political, and social experiences of Native Americans in the Americas. Through courses on Native American literature, languages, theater, and contemporary societies and through more culturally specific courses on California Indians, cultures of the Pueblo southwest, and so on, the major offers an in-depth and broad knowledge on the experience of Native Americans not only in the U.S. and Canada but in Mexico and elsewhere in Latin America as well.

Given the increasingly multicultural society of the U.S. and the economic revitalization of many Native American communities, a knowledge of American Indian studies greatly enhances the professional and scholarly contributions attainable for those seeking postgraduate degrees in various related disciplines and fields.

Capstone Major

The American Indian Studies major is a designated capstone major. Seniors complete a research/service experience and participate in a tutorial where faculty members help them relate their course-derived academic experience to their original research/service efforts involving Native American communities. Through their capstone work, students demonstrate their skills at analyzing and synthesizing knowledge, show their capacity to work collaboratively with peers, and display their capacity to relate their academic research and discourse to Native American communities and society. Students present their work at the academic year-end Research Symposium sponsored by the American Indian Studies Interdepartmental Program.

Learning Outcomes

The American Indian Studies major has the following learning outcomes:

- Demonstrated analysis and knowledge-synthesis skills gained through completion of written capstone thesis
- Identification of a key idea or theme of interest drawn from coursework
- Effective public presentation of selected theme in final paper and/or project
- Relation of academic research and discourse to Native American communities’ needs and concerns
- Communication of statistical and quantitative information to appropriate communities
- Display capacity to work collectively with peers to effectively analyze and synthesize knowledge

Entry to the Major

Transfer Students

Transfer applicants to the American Indian Studies major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one introduction to American Indian studies course and two courses from culture and society, introduction to gender studies, introduction to American politics, or introduction to statistical methods.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: American Indian Studies M10 and two courses from Anthropology 3, Gender Studies 10, Political Science 40, Statistics 12.

The Major

Requirements are distributed according to certain categories to create a breadth of knowledge. Students are required to take a research methods course to become familiar with scholarly techniques of knowledge production and to critically regard academic research, as well as a course in either ethnic/race/gender relations or comparative indigenous studies. Additional courses are selected in the social sciences and humanities according to a distributional formula that encourages further specialization within either of these two broad areas while simultaneously adding additional breadth. Finally, American Indian Studies C122XP prioritizes the experiential dimension of involvement in Native American communities (either urban, reservation, or rancheria) through work that supplies service experience and/or supervised internship opportunities.

The 12 courses must fit one of the following regional emphasis patterns: (1) Native North America—eight courses, including those mentioned below and additional electives on Native North American topics or (2) indigenous peoples of the Americas—eight courses, including at least four dealing with indigenous people in Central America and/or South America.

Students must complete 12 upper-division courses (48 units) as follows, with no more than 32 units from American Indian studies courses:

- 1. Ten core courses (40 units), including (a) American Indian Studies M161, (b) two language courses from Anthropology M150, 155, Linguistics 114, (c) two history or law courses from American Indian Studies 140, 158, C170, History 149A, 149B, 157B, (d) one social sciences course from American Indian Studies C120, C121, C130, C175, C178, Anthropol-
ogy 160A, or 162. (e) two expressive culture courses from American Indian Studies 180, Art History 137, CM139A, C139B, English 106, Ethnomusicology 106A, 106B, Theater 103F, 107, (f) one methodology course from Anthropology 138P, Art History 100, Community Health Sciences 181, Comparative Literature 100, Linguistics 160, Political Science 170A, Sociology 106A, 113, or World Arts and Cultures 195, and (g) either one ethnic/race/ gender relations course (African American Studies M164, Anthropology M145Q, 145S, Asian American Studies 130A, M130B, M130C, 131A, 132A, 133, 134, Chicana/o and Central American Studies CM182, Film and Television 128, Gender Studies 130, 168, Sociology 154, 156, or M162) or one comparative indigenous studies course (Anthropology 143, Geography M126, History 135A, or Sociology 157).

2. American Indian Studies C122XP (experiential service learning or supervised internship)

3. American Indian Studies 199C (capstone course)

Honors Program

Students must take American Indian Studies 198A-198B-198C with a professor who agrees to mentor and guide them through the stages of senior essay design and development during their senior year. Completion of a senior thesis is required.

Policies

Preparation for the Major

Each course must be completed with a grade of C or better.

The Major

Each course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better. No more than two independent studies courses (199s) may be applied toward the degree.

Honors Program

All junior and senior American Indian Studies majors who have a cumulative grade-point average of 3.0 or better and at least a cumulative GPA of 3.5 in coursework in the major are eligible to apply. Consult the student affairs officer for more information.

To qualify for graduation with honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.5 or better in the major course requirements and an overall GPA of 3.0 or better, and (3) complete American Indian Studies 198A-198B-198C, taken with a professor who agrees to mentor and guide them through the stages of senior essay design and development during their senior year. Completion of a senior thesis is required.

Undergraduate Minor

American Indian Studies Minor

The American Indian Studies minor is designed for students who wish to augment their major program of study in the College of Letters and Science with a group of related courses from various disciplines germane to American Indian studies. The minor exposes students to Indian-related research and literature in a number of different disciplines such as American Indian studies, anthropology, economics, history, political science, sociology, and theater.

Admission

To enter the minor, students must be in good academic standing (2.0 grade-point average), have completed 45 units, and file a petition at the American Indian Studies Center, 3220 Campbell Hall. All degree requirements, including the specific requirements for this minor, must be fulfilled within the unit maximum set forth by the College of Letters and Science.

The Minor

Required Lower-Division Course (5 units): American Indian Studies M10 with a grade of C or better.

Required Upper-Division Courses (28 units): Seven courses selected from the following: (1) one American Indian languages and communication systems course (Anthropology 155 or Linguistics 114); (2) three history and social sciences courses from American Indian Studies C120, C121, C122XP, C130, 140, 158, C170, C175, C178, Anthropology 113Q, 113R, 114P, 114Q, Gender Studies 130, History 149A, 149B, 157B, Sociology M161; (3) three humanistic perspectives on language and expressive culture courses from American Indian Studies 180, Art History 137, CM139A, English 106, 180, Ethnomusicology 106A, 106B, Theater 103F.

Policies

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor, and at least 16 units applied toward the minor must be taken in residence at UCLA. Transfer credit for any of the above is subject to program approval; consult with the interdepartmental adviser before enrolling in any courses for the minor.

Each minor course must be taken for a letter grade, and students must have a minimum grade of C (2.0) in each and an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Major

American Indian Studies MA

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Concurrent Degree Program

Concurrent degree programs allow students to reduce the number of courses required for two degrees, since some courses may apply to both degrees.

- American Indian Studies MA/Juris Doctor

American Indian Studies

Lower-Division Courses

M10. Introduction to American Indian Studies. (5) (Same as World Arts and Cultures M23.) Lecture, three hours; discussion, one hour; activity, one hour. Survey of selected Native North American cultures from pre-Western contact to contemporary period, with particular emphasis on early cultural diversity and diverse patterns of political, linguistic, social, legal, and cultural change in postcontact period. P/NP or letter grading.

M18. Leadership and Student-Initiated Retention. (5) (Same as African American Studies M18, Asian American Studies M18, and Chicana/o and Central American Studies M18.) Seminar, two hours. Limited to freshmen/sophomores/first-year transfer students. Not open for credit to students with credit for course M118. Exploration of issues in retention at UCLA through lens of student-initiated and student-run programs, efforts, activities, and services. Focus on populations with historically low graduation rates targeted by Campus Retention Committee. May not be applied toward departmental major or minor elective requirements. May be repeated once for credit. Letter grading.

18. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.
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Upper-Division Courses
M118. Student-Initiated Retention and Outreach Issues in Higher Education. (4) (Same as African American Studies M118, Asian American Studies M168,
and Chicana/o and Central American Studies M118.)
Lecture, four hours. Exploration of issues in outreach
and retention of students in higher education, especially through student-initiated programs, efforts, activities, and services, with focus on UCLA as case.
May be repeated twice for credit. Letter grading.
C120. Working in Tribal Communities: Introduction.
(4) Lecture, four hours. Through readings, discussion,
and Native guest lecturers, students learn to participate within Native American communities engaged in
political, social, and cultural processes of change and
preservation. Development of proposal for Native nation-building project. Concurrently scheduled with
course C220. Letter grading.
C121. Working in Tribal Communities: Preparing for
Fieldwork. (4) Lecture, four hours. Through readings,
discussion, Native guest lecturers, and project participation, introduction to rules of conduct and skills necessary to successfully work or carry out community
service projects for Native American communities and
organizations. Concurrently scheduled with course
C221. Letter grading.
C122XP. Working in Tribal Communities: CommunityEngaged Learning. (4) (Formerly numbered C122SL.)
Seminar, one hour; fieldwork, four hours. Enforced
requisite: course C121. Recommended: course C120.
Participation in community service learning project
within Native American communities and organizations where students are mentored and supported by
faculty members, other students, and project directors
toward completing assigned service learning tasks
and contributing to project activities. May be repeated
with consent of instructor. Concurrently scheduled
with course C222XP. Letter grading.
M123. Afro-Indigenous History: from Enslavement
and Settlement to Black Lives Matter and Indigenous Sovereignty. (4) (Same as African American
Studies M121.) Lecture, four hours; discussion, one
hour. Examination of how race was developed through
experiences of African-descended peoples and indigenous people in U.S. and beyond. Examination of key
episodes in history. Using articles, books, documentaries, and contemporary popular culture, examination
of relationship between people of African descent and
indigenous people. Study takes broad, thematic approach. Topics include first encounters in Americas
and ideologies that led to enslavement and dispossession; period of enslavement and indigenous removal in 19th century; mid-20th-century social movements; and contemporary manifestations, especially
solidarity shown between Black Lives Matter and Dakota Access Pipeline protesters. P/NP or letter
grading.
M129. Participatory Action Research on Youth Organizing for Racial Justice. (4) (Same as African
American Studies M129B, Asian American Studies
M128, Chicana/o and Central American Studies, and
Public Affairs M122.) Lecture, four hours. Students are
trained to conduct participatory action research on
grassroots youth organizing across California. Students gain historical and theoretical background on
multi-racial and inclusive organizing. Students learn
how to collect and analyze data pertaining to pressing
organizing issues. Study and critical analysis of youth
organizing strategies. Weekly training modules on
data collection and grassroots organizing strategies
that prepare students for internships in grassroots
youth organizing groups serving Asian American,
Black, Latinx, and Native American communities.
P/NP or letter grading.
C130. California Indian Strategies for Contemporary
Challenges. (4) Seminar, three hours. Through readings, discussion, and Native guest lecturers, introduction to contemporary issues and processes of self-directed social change and political, cultural, legal, and
economic processes of nation building in contemporary California Native communities. Concurrently
scheduled with course C230. Letter grading.

140. Federal Indian Law and Policy. (4) Lecture, four
hours. Through readings, discussion, and Native guest
lecturers, introduction to fundamental concepts and
history of federal Indian law and policy. Investigation
of contemporary policies and legal issues and exploration of Native responses to policy and law. Letter
grading.
C145. Contemporary Indigenous Nations. (4) Seminar, three hours. Introduction to topics on contemporary indigenous nations, including social movements,
social and cultural change and continuity, nation
building, law and justice relations, economic development, education and socialization, international relations, comparative policy, colonialism, migration, national and social identities, and other issues and social
cultural processes, seen as distinct from ethnicity,
race, class, and nation, with focus on indigenous
communities that have maintained self-government,
territory, and culture. Investigation and search for analytic and policy patterns that give greater understanding and knowledge about current conditions and
social and cultural processes of indigenous nations.
Concurrently scheduled with course C245. Letter
grading.
158. Nation Building. (4) Lecture, three hours; fieldwork/research, nine hours. Limited to junior/senior
American Indian Studies majors. Examination of historical interplay of federal policies with tribal cultures
that has shaped political development of American Indian tribal nations. Current developments within Indian
nations, including restructuring government, developing economies, and asserting cultural sovereignty
to be subject of research, study, and required community-based projects. Letter grading.
M161. Comparative American Indian Societies. (4)
(Same as Sociology M161.) Lecture, three hours. Requisite: course M10 or Sociology 1. Comparative and
historical study of political, economic, and cultural
change in indigenous North American societies. Several theories of social change, applied to selected
case studies. Letter grading.
M162. Language Endangerment and Linguistic Revitalization. (4) (Same as Anthropology M156.) Lecture, three hours; activity, one hour. Requisites: course
M10, Anthropology 4. Examination of causes and consequences of current worldwide loss of linguistic diversity and revelation of kinds of efforts that members
of threatened heritage language communities have
produced in their attempt to revitalize these languages. Projected loss of as many as half of world’s
languages by end of 21st century can only be explained as outcome of such factors as nationalism,
global economic forces, language ideological change,
and language shift away from smaller indigenous and
tribal languages. Since loss of such languages means
both reduction of cultural as well as linguistic diversity,
many affected communities have engaged in various
language renewal practices. Examination of some diverse strategies that have been attempted, including
immersion, language and culture classes, master-apprentice, interactive multimedia, mass media approaches, and language policy-reform approaches.
Evaluation of effectiveness of these measures and of
very imagery used to discuss language endangerment. P/NP or letter grading.
CM168. Healthcare for American Indians. (4) (Same
as Health Policy M168.) Lecture, two hours; discussion, one hour. Identification of traditional health beliefs, health practices, and healthcare systems of
American Indian tribes to understand role of U.S. government in healthcare services for Indian people. Description of health problems that have affected American Indian people and definition of contemporary
health issues and measures taken to raise health
status of American Indian people. Concurrently
scheduled with course C268. Letter grading.
C170. California Indian History. (4) Lecture, four hours.
Introduction to overview of California Indian history,
specific tribal community histories, and/or contemporary California Indian history through readings, discussion, and Native guest lecturers. May be repeated for
credit with topic change and consent of interdepartmental chair. Concurrently scheduled with course
C270. Letter grading.

C175. Cultures of Native Southern California. (4)
Lecture, three hours. Introduction to Southern California indigenous societies through readings, discussion, guest lecturers, and direct community participation. May be repeated for credit with topic and/or instructor change and consent of interdepartmental
chair. Concurrently scheduled with course C275.
Letter grading.
C178. California Experiences in Native Cultural Resource Management. (4) Seminar, three hours. Exploration of creation and implementation of laws that affect cultural resource management in California, such
as California Environmental Quality Act (CEQA), Native
American Graves Protection and Repatriation Act
(NAGPRA), AB 978 (California NAGPRA), American Indian Religious Freedom Act, National Environmental
Policy Act (NEPA), and National Historic Preservation
Act (NHPA), from applied standpoint. To understand
goals and challenges of these laws, examination of
series of cases from California sites. Concurrently
scheduled with course C278. Letter grading.
180. Introduction to and Practicum in Native American Languages. (4) Lecture, three hours; laboratory,
one hour. Development of ability to converse, read,
and write at elementary level in Native American languages. Introduction to both phonological and grammatical structures, vocabulary, and cultural patterns of
using language as symbolic guide to culture. May be
repeated with language change and approval of interdepartmental chair. Letter grading.
M186. Indigenous Film. (5) (Same as World Arts and
Cultures M187.) Lecture, four hours; discussion, one
hour. Introduction to study of indigenous filmic images
and representations, with focus on selected ethnographic, documentary, animated, and feature films
ranging from 1920 to present. P/NP or letter grading.
187. Special Topics in American Indian Studies. (4)
Lecture, four hours. Variable topics selected from following: Myth and Folklore of Indian Societies; Contemporary American Indian Literature; Social Science
Perspectives of American Indian Life; Law and American Indian; History of American Indians (cultural area);
Dance and Music of American Indians (cultural area);
American Indian Policy. Consult Schedule of Classes
for topics and instructors. May be repeated twice for
credit. Letter grading.
M187A. Special Topics in American Indian and Gender Studies. (4) (Same as Gender Studies M185A.)
Lecture, three hours. Variable topics in American Indian and gender studies. May be repeated for credit
with topic and/or instructor change. P/NP or letter
grading.
189. Advanced Honors Seminars. (1) Seminar, three
hours. Limited to 20 students. Designed as adjunct to
undergraduate lecture course. Exploration of topics in
greater depth through supplemental readings, papers,
or other activities and led by lecture course instructor.
May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or
letter grading.
189HC. Honors Contracts. (1) Tutorial, three hours.
Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore
topics in greater depth through supplemental readings, papers, or other activities. May be repeated for
maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter
grading.
195. Community Internships in American Indian
Studies. (4) Tutorial, two hours; fieldwork, eight hours.
Requisite: course M10. Limited to juniors/seniors. Internship in supervised setting in community agency.
Students meet on regular basis with instructor and
provide periodic reports on their experience. Designed
to integrate theory and practice through experiential
learning to gain firsthand knowledge of diversity, complexity, and variety of needs of American Indian communities. May be repeated for maximum of 8 units.
Individual contract with supervising faculty member
required. P/NP grading.


search and teaching balance discipline and theoretical approaches with interdisciplinary approaches to American Indian studies and indigenous studies. S/U or letter grading.

202. Key Theories and Concepts in American Indian Studies. (4) Lecture, three hours. Addresses key intellectual movements and concepts (such as sovereignty, self-determination, colonialism, decolonization, etc.) in the study of American Indian societies as discipline. Research and collaboration with indigenous communities is highlighted as core methodological and ethical approach to knowledge construction, fieldwork, and their graduate student coordinator, and write final research paper. Faculty sponsor and graduate student coordinator construct series of reading assignments that examine issues related to the student's thesis area. Individual contract with supervising faculty member required. P/NP or letter grading.

197. Individual Studies in American Indian Studies. (2 to 4) Tutorial, three hours. Limit to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned readings and tangible evidence of mastery of subject matter required. May be repeated for maximum of 15 units. Individual contract required. P/NP or letter grading.

198A-198B-198C. Honors Research in American Indian Studies. (4-4-4) Tutorial, one hour; activity, three hours. Course 198A is enforced requisite to 198B, which is enforced requisite to 198C. Limited to senior honors program students. Development and completion of an honors thesis or comprehensive research project under direct supervision of faculty member. Each course may be repeated for credit. Individual contract required. Letter grading.

199. Directed Research or Senior Project in American Indian Studies. (2 to 8) Tutorial, one hour. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned readings and evidence of mastery of subject matter required. May be repeated for maximum of 16 units. Individual contract required. P/NP or letter grading.

199C. Individual Studies: Capstone Synthesis. (4) Tutorial, three hours. Preparation: successful completion of eight upper-division major courses. Limited to senior American Indian Studies majors. Faculty members help students relate their course-derived academic experience to their original research/service efforts involving Native American communities. Compilation of research paper and presentation of student work at year-end symposium required. Course may be taken in conjunction with American Indian Studies C122SL or an alternative upper-division course approved by program chair and academic coordinator. Individual contract required. Letter grading.

Graduate Courses

M200B. Cultural World Views of Native America. (4) (Same as English M266) Seminar, three hours. Exploration of written literary texts from oral cultures and other expressive cultural forms—dance, art, song, religion and Native American societies, as these traditional and tribal contexts have been translated into contemporary literary texts (fiction, poetry, essay, and drama). Survey, from secondary sources, of interdisciplinary methodologies and approaches taken from literary analysis, structural anthro- pology, folklore, linguistics, and ethnomusicology. May be repeated for credit with instructor and/or topic change. Limited to graduate students.

M200C. Contemporary Issues of American Indians. (4) (Same as Anthropology M244P and Sociology M275) Seminar, three hours. Introduction to most important issues facing American Indians as individuals, communities, tribes, and nations. Overview of American Indian contemporary world, building on historical background presented in course M200A and cultural and expressive experience of American Indians presented in course M200B. Limited to graduate students.

201. Introduction to Interdisciplinary Methods in American Indian and Indigenous Studies. (4) Lecture, three hours. Faculty present approaches to interdisciplinary studies and discuss their own research. Participants include wide range of faculty whose re- search and teaching balance discipline and theoretical approaches with interdisciplinary approaches to American Indian studies and indigenous studies. S/U or letter grading.

202. Key Theories and Concepts in American Indian Studies. (4) Lecture, three hours. Addresses key intellectual movements and concepts (such as sovereignty, self-determination, colonialism, decolonization, etc.) in the study of American Indian societies as discipline. Research and collaboration with indigenous communities is highlighted as core methodological and ethical approach to knowledge construction, fieldwork, and their graduate student coordinator, and write final research paper. Faculty sponsor and graduate student coordinator construct series of reading assignments that examine issues related to the student's thesis area. Individual contract with supervising faculty member required. P/NP or letter grading.

222A-222B. Tribal Legal Systems. (228A: 3 or 4/228B: 1 or 2) Seminar, two hours. Course 222A is enforced requisite to 222B. Study of traditional and contemporary tribal legal systems of Native American nations and tribes. Detailed examination of several different tribal systems, including Navajo, Cherokee, Iroquois, and Hopi, with emphasis on diversity of tribal legal re- gimes. Comparison of basic legal regimes of Native American nations and tribes. These basic legal regimes include sovereignty, self-determination, colonialism, decolonization, and economic processes of nation building in contemporary California Native communities. Concurrently scheduled with course C130. S/U or letter grading.

223A-223B. Tribal Legal Development Clinic. (238A: 3/238B: 1) Lecture, three hours. Course 238A is enforced requisite to 238B. Students provide nonlitiga- tion legal assistance to Indian nations. Projects include development and modification of tribal legal codes and constitutional provisions, creation of tribal dispute resolution processes, and drafting of intergov- ernmental agreements. Legislative drafting and cross- cultural legal analysis. These projects include research projects, students meet with tribal leaders to inform them of availability of clinic services and determine whether clinic could assist them with their legal development needs. Once students are assigned to project, they meet with relevant tribal officials and community groups with travel funds supplied. Students learn about tribal governments and legal systems, including federal constraints on activities of tribal legal institutions, and culture of tribe they are representing to be able to craft legislation and other documents that meet tribal intentions and needs. Concurrently scheduled with course C130. In Progress (238A) and S/U or letter (238B) grading.

224. Contemporary Indigenous Nations. (4) Seminar, three hours. Introduction to topics on contempo- rary indigenous nations, including social movements, social and cultural processes of change, and search for identity and recognition of tribal rights. Close reading and discussion of books and articles on topics relating to Native American languages and course 228A is enforced requisite to 228B. Students provide nonlitigation legal assistance to Indian nations. Projects include development and modification of tribal legal codes and constitutional provisions, creation of tribal dispute resolution processes, and drafting of intergov- ernmental agreements. Legislative drafting and cross- cultural legal analysis. These projects include research projects, students meet with tribal leaders to inform them of availability of clinic services and determine whether clinic could assist them with their legal development needs. Once students are assigned to project, they meet with relevant tribal officials and community groups with travel funds supplied. Students learn about tribal governments and legal systems, including federal constraints on activities of tribal legal institutions, and culture of tribe they are representing to be able to craft legislation and other documents that meet tribal intentions and needs. Concurrently scheduled with course C130. In Progress (238A) and S/U or letter (238B) grading.

224A. Cultural World Views of Native America. (4) (Same as English M266) Seminar, three hours. Exploration of written literary texts from oral cultures and other expressive cultural forms—dance, art, song, religion and Native American societies, as these traditional and tribal contexts have been translated into contemporary literary texts (fiction, poetry, essay, and drama). Survey, from secondary sources, of interdisciplinary methodologies and approaches taken from literary analysis, structural anthro- pology, folklore, linguistics, and ethnomusicology. May be repeated for credit with instructor and/or topic change. Limited to graduate students.

224B. Contemporary Issues of American Indians. (4) (Same as Anthropology M244P and Sociology M275) Seminar, three hours. Introduction to most important issues facing American Indians as individuals, communities, tribes, and nations. Overview of American Indian contemporary world, building on historical background presented in course M200A and cultural and expressive experience of American Indians presented in course M200B. Limited to graduate students.

225. Federal Indian Law I. (4 or 6) Lecture, three to four hours. Overview of federal Indian law, including nature and history of tribal federal legal and political relationships, including federal treaties, federal law (such as what is Indian country); equal protection issues posed by federal Indian legislation; canons of construction unique to Indian law, tribal sovereignty and its protection, basic questions of fed- eral and state authority within Indian country; and
tribal, federal, and state jurisdiction in Indian country according to default rules as well as special statutory regimes. May be concurrently scheduled with Law 267. S/U or letter grading.

M265A-265B. Federal Indian Law I. (1 to 4 each) (Same as Law M267.) Lecture, three hours. Course M265A is enforced requisite to 265B. Overview of federal Indian law through study of cases and historical and contemporary developments. Basic conflicts among sovereign governments that dominate this area of law, especially conflicts over criminal, civil adjudicative, and regulatory jurisdiction. Special attention to status and sovereignty issues as recognized under U.S. law, federal trust responsibility, and equal protection issues posed by federal and state legislation singling out Indian nations and tribal members. Federal and tribal regulatory tribal gaming and child welfare included. Students gain critical understanding of the federal enacts. M265A and 265B. Examination in-depth of principles and doctrines of federal Indian law as applied to property rights in land, cultural resources, hunting and fishing rights, water rights, and economic development. Special jurisdictional regimes established by federal statutes, such as Indian Child Welfare Act and Indian Gaming Regulatory Act, addressed. S/U or letter grading.

M267A-267B. Federal Indian Law II. (1 to 4 each) (Same as Law M282.) Lecture, three hours. Requisites: courses 238A and 238B, or M265A and 265B. Examination in-depth of principles and doctrines of federal Indian law as applied to property rights in land, cultural resources, hunting and fishing rights, water rights, and economic development. Special jurisdictional regimes established by federal statutes, such as Indian Child Welfare Act and Indian Gaming Regulatory Act, addressed. In Progress (M267A) and S/U or letter (267B) grading.

C268. Healthcare for American Indians. (4) Lecture, two hours; discussion, one hour. Identification of traditional health beliefs, health practices, and healthcare systems of American Indians to understand role of U.S. healthcare services for Indian people. Survey of Federal Indian Health programs and development of Indian Healthcare System and Tribal/Urban Indian Health programs to understand health problems faced by American Indians today and development and definition of contemporary health issues and measures taken to raise health status of American Indian people. Concurrently scheduled with course CM168. Letter grading.

C270. California Indian History. (4) Lecture, four hours. Introduction to overview of California Indian history, specific tribal community histories, and/or contemporary California Indian history through readings, discussion, and Native guest lecturers. May be repeated for credit with topic change and consent of interdepartmental chair. Concurrently scheduled with course C170. S/U or letter grading.

M272. Survey in Property Law. (3 or 4) (Same as Law M514.) Seminar, three hours. Exploration of identity, ownership, appropriation, and reparation of both tangible and intangible cultural property—those items that are of great significance to cultural heritage and cultural survival of people. Consideration of importance of preservation of cultural property as means of maintaining group identity, self-determination, and basic components of both national and domestic law governing these issues, addressing such questions as How should cultural property be defined? Can cultural property by protected under existing intangible and tangible property regimes? How can we balance protection of cultural property against need or desire for its use in creative expression or scientific advancement? Examination of cultural property of indigenous peoples, including folklore, traditional knowledge, burial grounds, sacred sites, and ancient ceremonies and traditions. S/U or letter grading.

274. Good Native Governance. (4 or 6) Seminar, three hours. Examination of legal issues integral to governance that Native American nations face in 21st century, including those that impact and shape political sovereignty, economic development, constitutional rights, natural resources, cultural property, protection, sacred sites, religious freedom, and safety and criminal law enforcement, among others. Emphasis on breadth of issues that lawyers working with Native American nations must confront. Integration and highlighting of legal issues unique to Native nations within California. Materials from traditional law review articles, books, and case studies derived from field research to engage students in multidimensional settings that confront Native societies. May be concurrently scheduled with Law 637. S/U or letter grading.

C275. Cultures of Native Southern California. (4) Lecture, three hours. Introduction to Southern California indigenous societies through readings, discussion, guest lecturers, and direct community participation. May be repeated for credit with topic and/or instructor change and consent of interdepartmental chair. Concurrently scheduled with course C175. S/U or letter grading.

M276. Seminar in Native Culture Resource Management. (4) Seminar, three hours. Exploration of creation and implementation of laws that affect cultural resource management in California, such as California Environmental Quality Act (CEQA), Native American Graves Protection and Repatriation Act (NAGPRA), AB 979 (California NAGPRA), American Indian Religious Freedom Act, National Environmental Policy Act (NEPA), and National Historic Preservation Act (NHPA), from applied standpoint. To understand goals and challenges of these laws, examination of series of cases from California sites. Concurrently scheduled with course C178. S/U or letter grading.

280A. Indigenous Peoples in International Law. (2) Lecture, four hours. Students become familiar with Indigenous peoples’ involvement in human rights movement and corresponding developments (drafting of instruments, claims, reports, hearings, and cases) in United Nations. Organization of American States, and other institutions. Particular attention is paid to U.N. General Assembly’s 2007 adoption of Declaration on the Rights of Indigenous Peoples, as well as to regional developments around world. Additional focus on Indigenous peoples’ rights system to address issues in self-governance and political participation. Concurrently scheduled with Law 444. In Progress grading. Credit to be given only on completion of course 268B.


375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.
Anesthesiology

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar; one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Course

199. Directed Research in Anesthesiology. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

ANTHROPOLOGY

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Anthropology

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Overview

Anthropology, the broadest of the social sciences, is the study of humankind. One of the strengths of anthropology as a discipline is its holistic or integrative approach; it links the life sciences and the humanities and has strong ties with disciplines ranging from biology and psychology to linguistics, political science, and the fine arts. Anthropological study is appropriate for people with a wide variety of interests: human cultures and civilizations both present and past, human and animal behavior, particular regions of the world such as Africa, Asia, Latin America, Oceania, etc.

Studies in anthropology are particularly valuable for students planning careers in which an understanding of human behavior and cultural diversity is desirable, such as business, education, law, medicine, nursing, public health, social welfare, and urban planning. Because of its breadth of outlook, anthropology also offers an ideal basis for those seeking a general education in our increasingly interdependent world.

Fields

The Department of Anthropology recognizes the following four fields in anthropology:

Archaeology is the study of human cultures and the natural, social, ideological, economic, and political environments in which they operated in the recent and distant past. The graduate and undergraduate programs focus on methods of discovery (field and laboratory courses), strategies of analysis pertaining to long-term cultural evolution (theory, analytic, and topical courses), and the unfolding of prehistory in many regions of the world, including North America, Mesoamerica, South America, and several parts of the Old World (regional courses). Faculty members have long-standing interests in the origins and evolution of complexity, including early human adaptations, the political organization of complex hunters/gatherers, the origins of early village life, and the emergence and florescence of ancient cities and states. Faculty members maintain programs of field research involving many students in North America, Mesoamerica, South America, and East and South Asia.

Biological anthropology is the study of humans and other primates from a Darwinian point of view. The program focuses on the evolutionary ecology of early hominids, extant primates, and contemporary humans and includes training in evolutionary theory, behavioral ecology, evolutionary psychology, paleoanthropology, paleoecology, primate behavior, and mathematical modeling. Faculty members associated with the program have engaged in fieldwork in Africa, Central America, and Southeast Asia where ongoing projects include work on primate behavior, hominid evolution, and evolutionary psychology.

Linguistic anthropology is an interdisciplinary field that addresses the manifold ways in which language, interaction, and culture mutually organize each other in different communities worldwide. Linguistic anthropologists at UCLA have a variety of backgrounds and research interests that include face-to-face communica-
tion, language contact and change, language and politics, language socialization across the lifespan, verbal art and performance, and the relation of language to ideology, mind, emotion, and identity. Courses are offered in ethnographic approaches to discourse analysis, field methods, language ideology, conversation analysis, language socialization, and communication in urban communities, as well as on cross-cultural language practices.

Sociocultural anthropology concerns the examination and understanding of social and cultural systems and processes, and the human capacities that enable them. Its goal is to understand their operation in specific settings and to understand the experience of individuals who live in these diverse systems. Faculty members have engaged in fieldwork in almost every area of the world, but most notably in Africa, Latin America, East and Southeast Asia, and Oceania. They have also engaged in ethnographic research among Americans with diverse ethnic identities and in various institutional settings.

Bridging the four primary subfields are several other dimensions of anthropological study, including psychocultural anthropology and medical anthropology. Courses are also offered in the history and theory of anthropology and a wide range of anthropological methods.

Undergraduate Majors

Anthropology BA

The major is designed for students interested in an anthropological understanding of human behavior. One of the strengths of anthropology is its cross-cultural holistic and integrative approach with many fields, such as biology, history, linguistics, the social sciences, and many of the humanities.

Learning Outcomes

The Anthropology major has the following learning outcomes:

- Broad knowledge of archaeological, biological, sociocultural, and linguistic anthropology
- Familiarity with the history, methods, and current theoretical debates in the field
- General knowledge of, and developed skills working with, empirical and anthropological evidence
- Proficiency in library research, data interpretation, synthesis, and writing
- Proficiency formulating and answering relevant questions through critical reasoning, making use of current primary scientific literature, database searches, identification of appropriate sources, reading and understanding of papers, and discriminating research quality

Anthropology BS

The major supplies an overview of human evolution and is designed to prepare students for careers in anthropology and the health sciences, including medicine, dentistry, public health, and nursing.

Learning Outcomes

The Anthropology major has the following learning outcomes:

- Broad knowledge of archaeological, biological, sociocultural, and linguistic anthropology
- Familiarity with the history, methods, and current theoretical debates in the field
- General knowledge of, and developed skills working with, empirical and anthropological evidence
- Proficiency in library research, interpreting data, synthesis, and writing
- Demonstrated knowledge and understanding of mathematics, physical sciences, and life sciences to meet pre-medical-school requirements
- Proficiency formulating and answering relevant questions through critical reasoning, making use of current primary scientific literature, database searches, identification of appropriate sources, reading and understanding of papers, and discriminating research quality

Entry to the Major

Transfer Students

Transfer applicants to the Anthropology BA major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one human evolution course, one archaeology course, one sociocultural anthropology course, and one culture and communication course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Anthropology 1, 2, 3, 4.

The Major

To gain a comprehensive understanding of the discipline as a whole, students must take two courses in the sociocultural anthropology field and one course in each of the other three fields (see Overview). Students may take any upper-division course in the given area to fulfill this requirement.

Students must complete 11 courses (44 to 52 units) as follows: (1) two upper-division courses in the sociocultural anthropology field (130–149) and one in each of the other three fields: archaeology (110–119), biological anthropology (120–129), and linguistic anthropology (150–159); (2) one upper-division regional cultures course (160); (3) one upper-division history/theory course selected from 100, 110, 111, 120, 124Q, 130, 131, 136A, 140, M150; (4) one upper-division methodology course selected from 110, CM110Q, C117, 126P, 135, 138P, M138Q, 151, 195CE; and (5) three additional upper-division anthropology courses.

Students are strongly encouraged to enroll in 3 to 4 units of 89 and/or 189 courses to gain small seminar experience. Ideally, at least one of the units should be at the upper-division level.

Honors Program

The honors program offers research-oriented students an opportunity to engage in original research and analysis under the close supervision of faculty members and culminates in an honors thesis. The proposal, research, analysis, and writing of the paper take place over four terms via Anthropology 191HA through 191HD. Course 191HA is taken in winter quarter, 191HB in spring quarter. Research should be done in summer, and courses 191HC and 191HD are taken in fall and winter quarters of the graduation year.

Policies

Preparation for the Major

Each course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

The Major

Each course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

Honors Program

To be admitted students should have a cumulative grade-point average of 3.5 overall and a 3.5 cumulative GPA in their upper-division Anthropology courses. The application for admission must be submitted during fall quarter. Ideal candidates should have junior or senior standing and have completed at least two upper-division anthropology courses. Students should contact the departmental honors adviser early in their studies for more information.

Anthropology BA

The major supplies an overview of human evolution and is designed to prepare students for careers in anthropology and the health sciences, including medicine, dentistry, public health, and nursing.

Learning Outcomes

The Anthropology major has the following learning outcomes:

- Broad knowledge of archaeological, biological, sociocultural, and linguistic anthropology
- Familiarity with the history, methods, and current theoretical debates in the field
- General knowledge of, and developed skills working with, empirical and anthropological evidence
- Proficiency in library research, interpreting data, synthesis, and writing
- Demonstrated knowledge and understanding of mathematics, physical sciences, and life sciences to meet pre-medical-school requirements
- Proficiency formulating and answering relevant questions through critical reasoning, making use of current primary scientific literature, database searches, identification of appropriate sources, reading and understanding of papers, and discriminating research quality

Entry to the Major

Transfer Students

Transfer applicants to the Anthropology BS major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one human evolution course, one archaeology course, one sociocultural anthropology course, and one culture and communication course, two general biology courses for majors, one year of calculus, one year of general physics with laboratory, one year of general chemistry with laboratory, and one lower-division organic chemistry course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Anthropology 1, 2, 3, 4; Chemistry and Biochemistry 14A, 14B, 14BL, and 14C, or 20A, 20B, 20L, 30A, and 30AL; Life Sciences 7A, 7B, 7C, 23L; Life Sciences 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, 3C, and Statistics 12, or Mathematics 31A, 31B, and Statistics 12; Physics 5A, 5B, and 5C.

The Major

Students must complete nine courses as follows: (1) two upper-division courses in the sociocultural anthropology field (130–149) and one in each of the other three fields: archaeol-
ogy (110–119), biological anthropology (120–129), and linguistic anthropology (150–159); (2) one upper-division regional cultures course (160–169); (3) one upper-division history/theory course selected from 100, 110, 111, 110, 120, 124Q, 130, 131, 136A, 140, M150; and (4) two additional upper-division anthropology courses. Students are strongly encouraged to enroll in 3 to 4 units of 89 and/or 189 courses to gain small seminar experience. Ideally, at least one of the units should be at the upper-division level.

Honors Program
The honors program offers research-oriented students an opportunity to engage in original research and analysis under the close supervision of faculty members and culminates in an honors thesis. The proposal, research, analysis, and writing of the paper take place over four terms via Anthropology 191HA through 191HD. Course 191HA is taken in winter quarter and 191HB in spring quarter. Research should be done in summer, and courses 191HC and 191HD are taken in fall and winter quarters of the graduation year.

Policies
Preparation for the Major
Each course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

The Major
Each course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

Honors Program
To be admitted students should have a cumulative grade-point average of 3.0 overall and a 3.5 cumulative GPA in their upper-division Anthropology courses. The application for admission must be submitted during fall quarter. Ideal candidates should have junior or senior standing and have completed at least two upper-division anthropology courses. Students should contact the departmental honors adviser early in their studies for more information.

Undergraduate Minor
Anthropology Minor
Students who wish to take a series of courses in anthropology, but major in another discipline, may be interested in the Anthropology minor. Students select courses from the four fields within anthropology (archaeology, biological anthropology, linguistic anthropology, sociocultural anthropology), although they are encouraged to focus the body of their coursework within one field.

Admission
To enter the minor, students must have an overall grade-point average of 2.0 or better.

The Minor
Required Lower-Division Courses (10 units): Two courses from Anthropology 1, 2, 3, 4.

Required Upper-Division Courses (20 units minimum): Core course (Anthropology 111, 120, 130, 140, or M150) from one of the four anthropology fields listed above; four additional courses. Students are encouraged to concentrate their upper-division coursework within one field and are required to consult with the undergraduate adviser in planning their program of study.

Policies
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Major
Anthropology MA, PhD Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Anthropology
Lower-Division Courses
1. Human Evolution. (5) Lecture, three hours; discussion, one hour. Required as preparation for both bachelor’s degrees. General survey of evolution, ethnology, and scientific method. P/NP or letter grading.
2. Archaeology: Introduction. (5) Lecture, three hours; discussion, one hour; one field trip. Required as preparation for both bachelor’s degrees. General survey of field and laboratory methods, theory, and major findings of anthropological archaeology, including case-study guest lectures presented by several campus archaeologists. P/NP or letter grading.
3. Culture and Society. (5) Lecture, three hours; discussion, one hour; fieldwork. Required as preparation for both bachelor’s degrees. Introduction to study of culture and society in comparative perspective. Examples from societies around world to illustrate basic principles of formation, structure, and distribution of human institutions. Of special concern is contribution and knowledge that cultural diversity makes toward understanding problems of modern world. P/NP or letter grading.
4. Culture and Communication. (5) Lecture, three hours; discussion, one hour. Required as preparation for both bachelor’s degrees. Introduction to study of communication from anthropological perspective. Formal linguistic methods compared with ethnographically oriented methods focused on context-bound temporal unfolding of communicative activities. Topics include language in everyday life and ritual events, socialization, literacy, multilingualism, miscommunication, political discourse, and art-making as cultural activity. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.
M67W. Making and Studying Modern Middle East. (5) Same as Middle Eastern Studies M505CW.) Lecture, three hours; discussion, one hour. Required: ENGLISH 3, 101, 102, 110, 119, 120. Developments in political, social, and cultural life of Middle East civilizations through readings and films from Middle East and North Africa. Satisfies Writing II requirement. Letter grading.
88. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designated as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.
88HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.
99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses
100. History of Anthropology. (4) Lecture, three hours; discussion, one hour (when scheduled). Brief survey of development of Western social science, particularly anthropology, from Greek and Roman thought to emergence of evolutionary theory and concept of culture in late 19th century. Root paradigm of Western social science and its influence on such notables as Durkheim, Freud, Hall, Lombraso, Marx, Piaget, Terman, and others. Consideration of how these influences ethnocentrism and Eurocentrism, sexism, racism, perception of deviance, and view of culture in general. P/NP or letter grading.

Archaeology
110. Principles of Archaeology. (4) Lecture, three hours; discussion, one hour (when scheduled). Required: course 2. Intended for students interested in conceptual structure of scientific archaeology. Archaeological method and theory with emphasis on what archaeologists do and how and why they do it. Consideration of field strategies, formation processes, chronological frameworks, and other crucial principles of archaeological analysis and interpretation. P/NP or letter grading.
CM110Q. Introduction to Archaeological Sciences. (4) Same as Ancient Near East CM116Q.) Lecture, three hours. Basic understanding of newly introduced methods and techniques throughout field of archaeology to implement them and to appreciate and evaluate results of their use by others who have em-beeded them in their scholarly publications or theoretical models. Systematic instruction in digital data management and mining, scientific analysis of materials (including geological and bioarchaeological techniques), and visual presentation of data and research results (ranging from simple graphs to virtual reality). Concurrently scheduled with course CM210Q. P/NP or letter grading.
111. Theory in Anthropological Archaeology. (4) Lecture, three hours. Required: course 2. Method and theory with emphasis on archaeology within context of anthropology. Themes include theoretical developments over last 50 years, structure of archaeological...
112P. Selected Topics in Historical Archaeology. (4) Lecture, three hours. Examination of selected case studies of historical archaeology. Consult Schedule of Classes for topics and instructors. May be repeated for credit with topic change. P/NP or letter grading.

112Q. Archaeology of Chiefdoms. (4) Same as Chinese M183. Lecture, three hours; discussion, one hour (when scheduled). Study of prehistory of American South and of Andean South America, as revealed by archaeology. P/NP or letter grading.

113Q. California Archaeology. (4) Lecture, three hours. From earliest Californians through 10,000 years of history, study of California’s original peoples. Aspects of technology, ideology, ecology, and social/political organization. Historic impacts on California Indians by Euro-Americans. P/NP or letter grading.

113R. Archaeological Landscapes of China. (4) Same as Chinese M183. Lecture, three hours; discussion, one hour (when scheduled). Declassified images, investigation of changing historical and archaeological landscape in China during last 5,000 years. Social processes and various scales of emergence of early cities to rise of metropolitan centers and formation of imperial landscapes. P/NP or letter grading.

113S. Politics of Past. (4) Lecture, three hours. Examination of current developments and key issues in archaeology of early Chinese civilizations. Consult Schedule of Classes for topics and instructors. May be repeated for credit with topic change. P/NP or letter grading.

114R. Archaeology of Egypt and Sudan. (4) (Same as Com 407R.) Lecture, one hour; laboratory, two hours. Special attention to the Neolithic and Predynastic periods. Early Egypt often made use of power of religion, with rulers and elites endowing religious architecture, and placing ritual centers at center of urban realm. In modern times, however, religious places have been treated more with much more conflicted identity in cities, retaining some of their prominence in spatial realm while less-articulated with political power given expectation of secularism as dominant public moral. Contrast countries. Examination of power of religion as social, organizational, and political principle in both ancient and modern cities, focusing on four of world’s dominant living ritual traditions (Buddhism, Christianity, Islam, Judaism). P/NP or letter grading.

119. Selected Topics in Archaeology. (4) Lecture, three hours; discussion, one hour (when scheduled). Study of selected topics in archaeology. Consult Schedule of Classes for topics and instructors. May be repeated for credit with topic change. P/NP or letter grading.


124P. Human Behavioral Ecology. (4) Lecture, three hours; discussion, one hour (when scheduled). Recommended requisite: courses 1 or 7B. Survey of research in human behavioral ecology. Review of natural and sexual selection, kin selection, and reciprocal altruism. Emphasis on current empirical studies of human behavior from evolutionary perspective, including social organization, sexual division of labor, parenting strategies, conflict, and cooperation. P/NP or letter grading.

124Q. Evolutionary Psychology. (4) Lecture, three hours; discussion, one hour (when scheduled). Recommended requisite: course 1. Survey of research in evolutionary psychology. Review of relevant theory in evolution and genetics. Emphasis on empirical studies of human behavior from evolutionary perspective, including social organization, sexual division of labor, parenting strategies, conflict, and cooperation. P/NP or letter grading.

124S. Evolution of Human Sexual Behavior. (4) Lecture, three hours; discussion, one hour (when scheduled). Evolutionary hypotheses for existence of human language, culture, and child development. P/NP or letter grading.

M124R. Evolution of Language. (4) (Same as Communication M124R.) Lecture, three hours; discussion, one hour (when scheduled). Recommended preparation: course 1 or 4 or Linguistics 1. Designed for juniors and seniors. How did human capacity for language evolve? Examination of origin of human language from biological, comparative, developmental, social and computational perspectives. Topics include evolutionary theory, linguistic structure, gesture and speech, animal communication, language learning, language disorders, and computational models of language emergence. P/NP or letter grading.

125S. Evolution of Human Sexual Behavior. (4) Lecture, three hours; discussion, one hour (when scheduled). Exploration of the origins and evolution of human sexual behavior. P/NP or letter grading.

127T. Evolution of Personality. (4) Lecture, three hours; discussion, one hour (when scheduled). Recommended requisite: courses 1 or Life Sciences 1 or Psychology 10. Evolutionary hypotheses for existence of stable differences among individuals in patterns of thought, emotion, and behavior. Descriptive accounts of the dynamics of personality structure. Models of causality that are explanatory models including balancing selection, facultative calibration, and mutation-selection balance. P/NP or letter grading.
125M. Molecular Anthropology. (4) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course 1. Introduction to ways in which molecular data are used to understand human evolutionary history. Topics include introduction to basic concepts and methods used to understand molecular evolution and origin and history of human species. Students learn principles of population genetics, molecular genetics, and how to apply these methods to human and non-human primate DNA sequence data. P/NP or letter grading.

M126N. Genes, Disease, and Culture. (Formerly numbered 126N.) (Same as Society and Genetics M126.) Lecture, three hours; discussion, one hour (when scheduled). Introduction to genes, disease, and culture. Introduces concepts in human genetics, expanding upon evolutionary genetic concepts learned in course 1, and survey of both inherited and infectious disease on global level. Wide range of topics include gene-culture co-evolution, niche construction theory, cultural perceptions of disease, cultural selection, biological and environmental determinism, and evolutionary origins of disease. Course is broken down into genes and genomes, Mendelian disease, complex disease, and infectious disease. Discussion of selected readings that integrate cultural perceptions with biological/genetic phenomena. P/NP or letter grading.


M128Q. Animal Communication. (4) Lecture, three hours. Designed for Anthropology and Communication majors. Evolution, functions, design, and diversity of animal communication systems such as bird song, dolphin communication, and human social signals, and human language. P/NP or letter grading.

M128S. Primate Genetics, Ecology, and Conservation. (4) (Same as Society and Genetics M142.) Seminar, three hours. Focus on genetic research on wild primates at different geographic scales, using readings from primary literature on primate genetics, ecology, and behavior. Study of paternity and kinship, intrapopulational variation, population genetics, bioinformatics, systems, phylogenetics/phylogenomics and comparative genetics. Utility and appropriateness of various markers considered for different research questions in primate models. Study of primates using modern DNA analysis methods, including satellite, nuclear genes, Y-chromosome, as well as GWAS and genomic/nex generation sequencing platforms, and epigenetic markers. Discussion of methods of fieldwork, including culture and societal signals, and human language. P/NP or letter grading.

130. Study of Culture. (4) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course 3. Designed for juniors/seniors. 20th-century elaboration and development of concept of culture. Examination of five major paradigms: culture as human creativity, as social behavior, as systems of meaning and cognition, as generative structure and semiotic system, as component in social action and reality construction. (Core course for cultural foundations and historical development of field.) P/NP or letter grading.


132. Anthropology of Environment. (4) Lecture, three hours; discussion, one hour (when scheduled). Environmental anthropology explores relationship between complex human systems and environments in which they are entangled. Examination of how people impact and are impacted by their environments, and how relationships between people are negotiated through management of place and space throughout time. Traces multiple theoretical lineages, beginning with early political ecology, environmental history, contested ontologies, and contemporary environmental justice. Through engagement with grounded, multimodal ethnographies, contemporary anthropological engagements with more-than-human worlds. P/NP or letter grading.

133. Anthropology of Food. (4) Lecture, three hours; discussion, one hour (when scheduled). Production, consumption, and distribution of food, with particular emphasis on culture of food. Exploration of ecological history, class, poverty, hunger, ethnicity, nationalism, capitalism, gender, race, and sexuality. Food that shapes social relations and needs in contemporary world. P/NP or letter grading.

134. Anthropology of Migration. (4) Lecture, three hours; discussion, one hour (when scheduled). Introductions to different views on population movement from refugee crisis and migration tendencies to policies concerning newcomers’ incorporation and anti-immigration political strategies. Examination of motivations for migration, both voluntary and involuntary movements (e.g., political, economic, or ethnic violence). P/NP or letter grading.


136A. Introduction to Psychological Anthropology: Historical Development. (4) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course 3. Limited to juniors/seniors. Survey of field of psychological anthropology, with emphasis on early foundations and historical development of field. Topics include study of psychoanalytic approach. P/NP or letter grading.

136B. Introduction to Psychological Anthropology: Foundations and Historical Development. (4) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course 3. Limited to juniors/seniors. Survey of field of psychological anthropology, with emphasis on current topics and research. Topics include study of psychoanalytic approach. P/NP or letter grading.

137P. Anthropology of Deviance and Abnormality. (4) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course 3. Relation between socio-cultural frameworks and deviant and abnormal behavior. P/NP or letter grading.

137I. Psychoanalysis and Anthropology. (4) Lecture, three hours; discussion, one hour (when scheduled). Exploration of mutual relations between anthropology and psychoanalysis, considering both theory and method. History of and current developments in psychoanalysis; anthropological critiques of psychoanalytic theory and method; focus on cross-cultural psychoanalytic approach. P/NP or letter grading.
138P. Field Methods in Cultural Anthropology. (5) Lecture, three hours; discussion, one hour. Designed for juniors/seniors. Introduction to skills and tools of cultural anthropology. Emphasis on techniques, methods, and concepts of ethnographic research and how basic observational information is systematized for presentation, analysis, and cross-cultural comparison. P/NP or letter grading.

M138Q. Fieldwork in Asian American and Pacific Islander Communities. (Same as Asian American Studies M143A.) Lecture, three hours; discussion, one hour. Introduction to qualitative research methods and applications of techniques in data collection, analysis, and reporting. Critical reflection of issues related to identity, migration, multiculturalism, tourism, and indigenous experiences and guest lectures from local community included. Given in Hawaii. P/NP or letter grading.

139. Selected Topics in Cultural Anthropology. (4) Lecture, three hours; discussion, one hour (when scheduled). Study of selected topics in cultural anthropology. Consult Schedule of Classes for topics and instructors. May be repeated for credit with topic change. P/NP or letter grading.

140. Study of Social Systems. (4) Lecture, three hours; discussion, one hour (when scheduled). Enforced requisites: course 3. Introduction to more specialized social anthropology courses. Evaluation of variation in sociocultural system with special emphasis for understanding of inequality. Basic frameworks of anthropological analysis; historical context and development of social anthropology discipline. P/NP or letter grading.

141. Careers in Anthropology. (4) Lecture, three hours. Overview of various career paths for students with degrees in anthropology. Helps students develop academic and professional skills in preparation for life after UCLA. Focus on ways in which one can apply anthropological knowledge, research methodologies, and analytical skills to range of careers. Guest speakers discuss how they have applied their anthropological degrees to their work outside of academia. P/NP or letter grading.

142P. Anthropology of Religion. (4) Lecture, three hours. Survey of various methodologies in comparative study of religious ideologies and action systems, including understanding particular religions through descriptive and structural approaches, and identification of social and psychological factors that may account for variation in religious systems cross-culturally. P/NP or letter grading.

142Q. Women in Non-Western Minorities. (4) Lecture, three hours. Analytical overview of ethnic and religious minorities in contemporary Middle East and North Africa structured around sociocultural experiences of ethnic and religious groups to understand political and economic realities. P/NP or letter grading.

143. Economic Anthropology. (4) Lecture, three hours. Requisite: course 3. Introduction to anthropological perspectives for interpretation of economic life and institutions. Economic facts to be presented in their larger social, political, and cultural contexts; examination of modes of production, distribution, and consumption of goods and services in their relation to social networks, power structures, and institutions of family, kinship, and class. P/NP or letter grading.

C144M. Multispecies Anthropology. (4) Lecture, three hours. Survey of human-animal relationships across history, from origins of domestication to present-day debates over animal rights, and very different ways societies distant in time and space from our own have construed inner lives of other species and their ties to human others. Concurrently scheduled with course C123P. P/NP or letter grading.

M144P. Constructing Race. (4) (Same as African American Studies M159P and Asian American Studies M169.) Lecture, three hours; discussion, one hour (when scheduled). Construction of race, socially constructed category, from anthropological perspective. Consideration of development of racial categories over time and in different regions, racial passing, mul- tiracial identity in U.S., whiteness, race in popular culture, and race and identity. P/NP or letter grading.


144S. Repatriation of Native American Human Remains and Cultural Objects. (4) Lecture, two hours; discussion, one hour. Native Americans have recently been successful in obtaining passage of federal and state laws repatriating human remains and cultural objects to which they are entitled. Course may be concurrently scheduled with course C244S. P/NP or letter grading.


M145Q. Selected Topics in Gender Systems. (4) (Same as Gender Studies M154Q.) Lecture, three hours. Requisite: course 3. Selected topics in gender anthropology or gender studies courses. Designed for junior/senior social sciences majors. Comparative study of women's lives and gender systems and cultures from anthropological and sociological perspectives. Review of theoretical issues using ethnography, case study, and presentations. Consult Schedule of Classes for topics and instructors. May be repeated for credit with topic change. P/NP or letter grading.


145S. Culture, Gender, Sexuality. (4) Lecture, three hours. Comparative analysis of role of environment, history, and culture in structuring of patterns of gender and sexuality. P/NP or letter grading.

M145T. Women's Voices: Their Critique of Anthropology. (4) (Same as Psychology M149.) Lecture, three hours; discussion, one hour (when scheduled). Exploration of processes through which women learn structures and practices of language and become competent participants in linguistic and social worlds around them. Examination of language use and socialization over childhood, across communities of practice, and among different ethnic and economic groups. Bridges work from anthropology, psychology, linguistics, and cognitive science. Topics include cross-cultural perspectives on child development and wide range of anthropological perspectives on language and language use can be critically examined as integral to interaction across various phases of life cycle from birth to old age, using videotaped interactions of naturally occurring activities. How language and interaction within specific contexts are used to constitute identity and how interaction order resulting from face-to-face interaction provides building blocks for larger formations that arise from such activities. P/NP or letter grading.

152R. Language, Culture and Education. (4) Lecture, three hours. Requisite: course 4. Examination of forms of participation and talk-in-interaction across various phases of life cycle from birth to old age, using videotaped interactions of naturally occurring activities. How language and interaction within specific contexts are used to constitute identity and how interaction order resulting from face-to-face interaction provides building blocks for larger formations that arise from such activities. P/NP or letter grading.

152S. Language, Culture, and Education. (4) Lecture, three hours. Requisite: course 4. Examination of forms of participation and talk-in-interaction across various phases of life cycle from birth to old age, using videotaped interactions of naturally occurring activities. How language and interaction within specific contexts are used to constitute identity and how interaction order resulting from face-to-face interaction provides building blocks for larger formations that arise from such activities. P/NP or letter grading.

154G. (When) Do Leaders Make Differences? (5) (Same as Geography M142 and Honors Collegium M152.) Lecture, two hours; discussion, two hours. Examination of leadership roles and whether they succeed or not, with the effects of change, as background to understanding conditions under which leaders can make differences. Comparison of political leaders, business chief executive officers, sports coaches, and religious leaders. Letter grading.

149. Selected Topics in Social Anthropology. (4) Lecture, three hours; discussion, one hour (when scheduled). Study of selected topics in social anthropology. Consult Schedule of Classes for topics and instructors. May be repeated for credit with topic change. P/NP or letter grading.

Linguistic Anthropology

1510. Language in Culture. (5) (Same as Linguistics M146.) Lecture, three hours; discussion, one hour; fieldwork, two hours. Requisite: course 4 or Linguistics 20. Study of language as aspect of culture; relations of mental thought to language, and language and classification of experience. Holistic approach to study of language, with emphasis on relations of linguistic anthropology to fields of biological, cultural, and social anthropology, as well as archeology. (Core course for linguistics field.) P/NP or letter grading.

151. Ethnography of Everyday Speech. (5) Lecture, three hours; fieldwork. Requisite: course 4. Designed for juniors/seniors. Course has two interrelated objectives: (1) to introduce students to ethnography of communication—description and analysis of situated communicative behavior—and social and cultural knowledge that it reflects and (2) to train students to recognize, describe, and analyze relevant linguistic, proxemic, and kinesic aspects of face-to-face interaction. P/NP or letter grading.

M152P. Language Development and Socialization. (4) (Same as Psychology M149.) Lecture, three hours; discussion, one hour (when scheduled). Exploration of processes through which children learn structures and practices of language and become competent participants in linguistic and social worlds around them. Examination of language use and socialization over childhood, across communities of practice, and among different ethnic and economic groups. Bridges work from anthropology, psychology, linguistics, and cognitive science. Topics include cross-cul- tural perspectives on child development and wide range of anthropological perspectives on language and language use can be critically examined as integral to interaction interface with culture, modality, inequality, education, and cognition. P/NP or letter grading.

152G. Language, Social Organization through Life Cycle. (4) Lecture, three hours. Requisite: course 4. Examination of forms of participation and talk-in-interaction across various phases of life cycle from birth to old age, using videotaped interactions of naturally occurring activities. How language and interaction within specific contexts are used to constitute identity and how interaction order resulting from face-to-face interaction provides building blocks for larger formations that arise from such activities. P/NP or letter grading.
154P. Multilingualism: Communities and Histories in Contact. (4) Lecture, three hours. Requisite: course 4. Examination of communicative, political, and poetic aspects of use of two or more languages (multilingualism) by individuals and by groups. Broader themes in social theory, anthropological inquiry, sociolinguistics, and literary studies in lectures to contextualize class readings. P/NP or letter grading.

154Q. Gender and Language Across Communities. (4) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course 4. Examination of role language plays in social construction of gender identities and ways in which individuals use language use and ideologies. P/NP or letter grading.

154SL Gender and Language across Communities. (4) Lecture, three hours; discussion, one hour. Requisite: course 4. Examination of how language practices contribute to expression of gendered identities in different social groups and situations. Completion of 20 hours of service learning in community service program coordinated through Center for Community Learning of causes and consequences of current world-wide loss of linguistic diversity and revelation of kinds of efforts that members of threatened heritage language communities have produced in their attempt to revitalize their languages and select loss of as many as half of world’s languages by end of 21st century can only be explained as outcome of such factors as nationalism, global economic forces, language ideological change, and the shift away from all indigenous and tribal languages. Since loss of such languages means both reduction of cultural as well as linguistic diversity, many affected communities have engaged in various language renewal practices. Examination of some diverse strategies that have been attempted, including immersion, language and culture classes, master-apprentice, interactive multimedia, mass media approaches, and language policy-reform efforts. Evaluation of effectiveness of these measures and of very imagery used to discuss language endangerment. P/NP or letter grading.

155. Native American Languages and Their Speakers. (4) Lecture, three hours; discussion, one hour. Requisites: course 4, American Indian Studies M10. Introduction and comparative analysis of sociocultural aspects of language ideologies and language use in indigenous speech communities. Examination of the cultural diversity of discourse practices for both everyday forms of speaking as well as special registers used in particular cultural contexts. Role of language and communication in American education. Texts is also examined. Considerable attention is paid to Native American verbal art because of its cultural importance. Examination also of language shift away and current efforts of various groups to reclaim and revitalize heritage languages. Role of linguistic racism directed at Native Americans and hegemonic influence of nation-states is also examined. P/NP or letter grading.

M156. Language Endangerment and Linguistic Revitalization. (4) (Same as American Indian Studies M162J.) Lecture, three hours; activity, one hour. Requisites: course 4, American Indian Studies M10. Examination of the consequences of current worldwide loss of linguistic diversity and revelation of kinds of efforts that members of threatened heritage language communities have produced in their attempt to revitalize their languages and select loss of as many as half of world’s languages by end of 21st century can only be explained as outcome of such factors as nationalism, global economic forces, language ideological change, and the shift away from all indigenous and tribal languages. Since loss of such languages means both reduction of cultural as well as linguistic diversity, many affected communities have engaged in various language renewal practices. Examination of some diverse strategies that have been attempted, including immersion, language and culture classes, master-apprentice, interactive multimedia, mass media approaches, and language policy-reform efforts. Evaluation of effectiveness of these measures and of very imagery used to discuss language endangerment. P/NP or letter grading.

158P. Global Hip Hop Culture(s): Hip Hop, Race, and Social Justice from South Central to South Africa. (4) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course 4. Focus on hip hop culture—movement that has captured minds of youth around world shaping youth identities, ideologies, styles, languages, fashions, and physical and political stances. Through documentaries, readings, and music listening sessions, exploration of various hip hop scenes that comprise global hip hop nation—multilingual, multietnic/multiethnic movement that often resists geopolitical status quo. P/NP or letter grading.

159. Selected Topics in Linguistic Anthropology. (4) Lecture, three hours; discussion, one hour (when scheduled). Study of selected topics in linguistic anthropology. Consult Schedule of Classes for topics and instructors. May be repeated for credit with topic change. P/NP or letter grading.

Regional Cultures

160A. Native North Americans. (4) Lecture, three hours; discussion, one hour (when scheduled). Designated for juniors/seniors. Consideration of diversity of Native American societies north of Mexico, including their origins, formation, and development. Particular attention to subsistence and trade and their relationship to social institutions and cultural practices, especially religion. P/NP or letter grading.

160B. Change and Continuity among Native North Americans. (4) Lecture, three hours. Requisite: course 160A. Consideration of change. Native American societies and cultures have undergone since European contact. Emphasis on patterns of adaptation and continuity as Native Americans confronted colonization and its implications. P/NP or letter grading.

161. Latin American Communities. (4) Lecture, three hours. Overview of social and cultural anthropology of small communities in Latin America. Similarities and contrasts in social organization and interpersonal relations described in context of economic, political, and cultural environments. P/NP or letter grading.

162. Ethnography of South America. (4) Lecture, three hours. Introduction to ethnography of South American Indians, with special emphasis on Lowland South America. Survey of history and development of man and society in this world area and examination of exemplary cultures symptomatic of various levels of cultural achievement. P/NP or letter grading.

163P. Ideology and Social Change in Contemporary China. (4) Lecture, three hours; discussion, one hour (when scheduled). Introduction to sociocultural changes in China from 1919 to contemporary. Topics include ideology and politics in everyday life, social stratification and mobility, cultural construction of socialist person, changes in courtship, marriage, and family, and political and economic reforms in post-Mao era. P/NP or letter grading.

163Q. Societies of Central Asia. (4) Lecture, three hours; discussion, one hour (when scheduled). Overview of culture and society among diverse peoples of Inner Asia, including Mongolia, Tibet, and Soviet Central Asia. Topics include environment and economic adaptation, politics in traditional isolation and within framework of recent national integration, kinship, forms of marriage, and family, religion and social order in Hindu/Buddhist culture contact zone, and current problems of modernization. P/NP or letter grading.

163R. Japan. (4) Lecture, three hours. Overview of contemporary Japanese society. General introduction, kinship, marriage and family life, social mobility and education, norms and values, religions, patterns of interpersonal relations, social deviance. P/NP or letter grading.

166P. Sub-Saharan Africa. (4) Lecture, three hours. Issues of ecology and political economy; continuing impacts of colonialism, nationalism, and current challenges for contemporary societies. Examination of Africa’s significance to development of anthropology. Cultural background for understanding events in contemporary Africa provided. P/NP or letter grading.

166Q. Culture Area of Maghrib (North Africa). (4) (Same as Arabic M171 and History M108C.) Lecture, three hours. Designed for juniors/seniors. Introduction to modern Maghrib (Morocco, Algeria, Tunisia, Libya, and Libya, also known as Maghrib or Tamasgha. Topics include changing notions of personal, tribal, ethnic, linguistic and religious identities; colonialism; gender and legal rights, changing representations of Islam, and relations in region’s public spaces, P/NP or letter grading.

167. Culture Area of Middle East. (4) Lecture, three hours. Study of Middle East has suggested many theories as to developmental history and evolving human society, birth of monotheism, and origin of agriculture, trade, and cities. Presentation of anthropological material relevant to understanding Middle East as culture area, and Islam as basis of its shared tradition. P/NP or letter grading.

168P. Cultures of Pacific. (4) Lecture, three hours. Four major culture areas of Australia, Melanesia, Polynesia, and Micronesia. General geographical features, prehistory, and language distribution of whole region. Distinctive sociocultural features of each culture area presented in context of their adaptive significance. P/NP or letter grading.

169P. Social and Cultural Identity and Ethnic Relations in Hawai‘i. (4) (Same as Asian American Studies M143C) Lecture, three hours; discussion, one hour. Continuing construction and expression of ethnic identity in various cultural forms and societies in Hawai‘i. Consideration of theoretical approaches to and historic concepts in study of ethnic identity and ethnic relations. Discussion of historical and contemporary aspects of ethnic identity and ethnic relations in Hawai‘i. Given in Hawai‘i. P/NP or letter grading.

M160B. Change and Continuity among Native North Americans. (4) Lecture, three hours; discussion, one hour (when scheduled). Study of selected topics in regional cultures. Consult Schedule of Classes for topics and instructors. May be repeated for credit with topic change. P/NP or letter grading.

Specialized Studies

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to design and finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 885 course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191HA. Beginning Seminar. (4) Seminar, three hours. Limited to anthropology honors program students. Survey of major research strategies in anthropology to aid honors students in developing research proposals. Letter grading.

191HB. Field Methods. (4) Seminar, three hours. Limited to anthropology honors program students. Survey of major fields in anthropology to prepare students to conduct their own field research. Letter grading.

191HC. Data Analysis. (4) Seminar, three hours. Limited to anthropology honors program students. Survey of major forms of data analysis in anthropology to aid honors students in analysis of their own research data. Letter grading.

191HD. Writing for Anthropology. (4) Seminar, three hours. Limited to anthropology honors program students. Teaching of writing skills, with focus on how to write honors theses. Letter grading.

191HE. Writing for Publication and Conference Presentations. (4) Seminar, three hours. Limited to anthropology honors program students. Preparation of honors theses for publication and for conference presentations and posters. Letter grading.

195. Journal Club Seminars: Anthropology. (1) Seminar, one hour. Limited to anthropology honors or graduate students. Discussion of current readings in discipline. May be linked with speaker series. May be repeated for credit with topic change. P/NP grading.

194. Research Group Seminars: Anthropology. (1) Seminar, one hour. Limited to undergraduate students who are part of research group or internship. Discussion of research methods and current literature in discipline for faculty members or students. May meet concurrently with graduate research seminars. May be repeated for credit with topic change. P/NP grading.

195CE. Community and Corporate Internships in Anthropology. (4) Tutorial, to be arranged. Limited to juniors/seniors. Internship in corporate, governmental, or nonprofit setting coordinated through Center for Community Engagement. Students work directly with written assignments, attend biweekly meetings with graduate student instructor, and write final research papers. Faculty mentor and graduate student instructor construct series of readings for students related to internship site. May be repeated for credit with consent of Center for Community Engagement. No more than 8 units may be applied toward major; units applied must be taken for letter grade. May not be applied toward concentration or distribution requirements. Individual contract with supervising faculty member required. P/NP or letter grading.

197. Individual Studies in Anthropology. (2 to 8) Tutorial, to be arranged. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned readings and tangible evidence of mastery of subject by student to be submitted for instructor or other product required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research in Anthropology. (2 to 8) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200. Anthropology Graduate Prospective. (4) Seminar, three hours. Exposing incoming graduate students to contemporary view of anthropology by using work of UCLA faculty members to identify cross-cutting themes that bridge four fields of discipline and represent state of art of field. Historical overview of field and tracing of formation of discipline. Faculty guest speakers engage in discussion on aspects of their work that intersect with one or more of topical threads presented by instructor and provide one or more student discusssions. Discussion of speaker’s work, instructor and student responses, and weekly readings selected from visiting faculty member’s work and positioning speaker’s work in broader historical context. Letter grading.

201A-M201B. Graduate Core Seminars: Archaeology. (4–4) (Same as Archaeology M201A-M201B) Seminar, three hours. Course M201A is required of anthropologists and includes two major discusssions based on carefully selected list of 25 major works related to development of archaeology in social sciences (M201A) and humanities (M201B). Core seminars provide overview of major forms of data analysis in modern archaeology and relevant interpretative strategies. May be repeated for credit with consent of advisor. S/U or letter grading.

201C. Archaeological Research Design. (4) Seminar, three hours. Requisites: courses M201A, M201B. How to design archaeological projects in preparation for MA thesis or PhD phase. Students do exploratory research and write research design that could form basis for extensive paper, grant application, or oral examination. Students work closely with faculty member and report weekly on their progress. Preparation of at least two oral progress-report presentations, one on theoretical framework and one on practical aspects of project. Final written research design that incorporates theoretical and practical aspects of research and formulates bridging arguments required. S/U or letter grading.

202A. Core Seminar: Biological Anthropology Colloquium. (4) Seminar, four hours. Required of anthropology students in biological anthropology subfield. Discussion focused on introducing students to field, and providing opportunity to present on current research. Selected outside or internal speakers to provide opportunities to present data, marshall theory, and present arguments within established theoretical perspective. Letter grading.

202B. Core Seminar: Biological Anthropology. (4) Seminar, three hours. Required of anthropology students in biological anthropology subfield. First in two-course series. Examination of theoretical and empirical writings that shaped biological subfield, and evolutionary studies of behavior more generally. Topics include evolutionary theory, paleoanthropology, population genetics, and evolutionary game theory. Letter grading.

202C. Core Seminar: Biological Anthropology. (4) Seminar, three hours. Required of anthropology students in biological anthropology subfield. Second in two-course series. Examination of theoretical and empirical writings that shaped biological subfield, and evolutionary studies of behavior more generally. Topics include evolutionary theory, primatology, evolutionary psychology, cultural evolution, and human behavioral ecology. Letter grading.


204A. Core Seminar: Linguistic Anthropology. (4) Seminar, three hours. Designed to familiarize graduate students with central theoretical and methodological concepts in linguistic anthropology. Study of classic and contemporary texts, focusing on relationship between language and culture. Focus on linguistic anthropo- logical theory, with additional discussion of methodologies within and related to discipline including ethnographic fieldwork, conversational analysis, syntactic analysis, sociopoietic analysis, sociolinguistic interviewing, and philosophical approaches. Letter grading.

204B. Core Seminar: Linguistic Anthropology. (4) Seminar, three hours. Survey of recent full-length ethnographic works in linguistic anthropology to engage with methods, practices, and theoretical frameworks being used across subfield. Consideration of texts’ relationship to works in other subfields, related disciplines, and prior approaches to understanding interplay between linguistic context and culture. Consideration also of ethnographic writing as genre, and critical engagement with ways that authors present data, marshal theory, and present arguments within book format. Texts characterize and personalize different geographies for dissertation writing in anthropology, allowing for additional professionalization component. Letter grading.

Archaeology


210QA. Introduction to Archaeological Sciences. (4) (Same as Ancient Near East CM210Q) Lecture, three hours. Basic understanding of newly introduced methods and techniques throughout field of archae- ology to implement them and to appreciate and evaluate results of use by others who have em- bedded them in their scholarly publications or theoret- ical models. Systematic instruction in digital data management and mining, scientific analysis of raw materials (including geological, biological, and archaeological data), and visual presentation of data and research results (ranging from simple graphs to virtual reality). Concurrently scheduled with course CM110Q. S/U or letter grading.

211. Classification in Archaeology: Method and The- ory. (4) Seminar, three hours. Limited to graduate an- thropology and archaeology students. Discussion of issues that have guided arguments about how archae- ological classification of artifacts should be con- ducted, with focus on ceramic classification and dis- covery of cultural types. Methods for implementing discovery approach to classification illustrated with a lithic and pottery examples. Review of relationship be- tween classification, style, and function. S/U or letter grading.

212P. Explanation of Societal Change. (4) Seminar, three hours. Examination of processes of societal evo- lution, emphasizing usefulness of variety of explana- tory models from general systems theory, ecology, an- thropology, and other sources. Specific research questions vary with each course offering. May be re- peated for credit. S/U or letter grading.

212Q. Archaeology of Urbanism. (4) Seminar, three hours. Evaluation of cities as most complex form of human population center, using both archaeological and modern examples. Observations about material culture and space enable assessment of social and dyn- amics as cities are constructed and lived in by variety of different ethnic, economic, ritual, and political groups. S/U or letter grading.
214. Selected Topics in Prehistoric Civilizations of New World. (4) Seminar, three hours. Mesoamerican and Andean civilizations normally constitute major focus of seminar. May be repeated for credit. S/U or letter grading.

M216. Topics in Asian Archaeology. (4) (Same as Art History M258B.) Seminar, three hours. Designed for graduate students. Topics may include identification of ethnic groups in archaeology, archaeology of religion, archaeological reflections of commerce and trade and their influence on social development, archaeology of language dispersal, cultural contact and nature of cultural influence. S/U or letter grading.

CM217. Selected Laboratory Topics in Archaeology. (4) (Same as Anthropology M205A,) Lecture, one hour; laboratory, two hours. Designed for graduate students in archaeology or in other departments. Specialized analysis of problems of cultural remains. Topic may be one of following: zooarchaeology, paleoethnobotany, lithic analysis, rock art. Laboratory experience with collections and data. May be repeated for credit with topic change. Concurrently scheduled with course C117. S/U or letter grading.

219. Selected Topics in Anthropological/Archaeological Theory. (4) Seminar, three hours. Designed for graduate students. Variable topics course on important theoretical themes in anthropological and archaeological theory. Topics include early village societies, specialization and cultural complexity, ethnography for archaeologists, archaeology of non-Western societies, materialist/idealist debates, urbanism, and exchange systems. May be repeated for credit. S/U or letter grading.

Biological Anthropology


222. Graduate Core Seminar: Biological Anthropology in Review. (4) Seminar, three hours. Graduate course in biological anthropology. Topics include evolutionary theory, behavior of nonhuman primates, hominid evolutionary history, and contemporary human variation. Letter grading.

223. Experimental Biological Anthropology. (2) Seminar, two hours. Research seminar for graduate students conducting experimental research in biological anthropology to assist students in developing research ideas and methods and analyzing results. S/U grading.

229. Current Problems in Biological Anthropology. (4) Seminar, three hours. Detailed examination of current research in biological anthropology (specific topics to be announced). Emphasis on nature of hypotheses underlying research and application of research to national and international problems. S/U or letter grading.

Sociocultural Anthropology


232P. Anthropology and Media Theory. (4) Seminar, three hours. Limited to graduate students. Examination of theories and debates that underlie visual anthropology very broadly defined, including issues of interpretation, production, and reception of visual media, which includes ethnographic, documentary, and fictional diaries, as well as television programming. S/U or letter grading.

232Q. Ethnographies of Information Technology. (4) Seminar, three hours. Emerging work on new information economy, with emphasis on ethnography. Reading of anthropological work and materials from range of disciplines, including sociology, geography, urban studies, and management studies. S/U or letter grading.

233P. Advanced Seminar: Medical Anthropology. (4) Seminar, three hours. Limited to 15 students. Examination of interrelationships between society, culture, ecology, health, and illness. Bases for written critical analysis and class discussion provided through key theoretical works. S/U or letter grading.

M233Q. Latin America: Traditional Medicine, Shamanism, and Folk Illness. (4) (Same as Community Health Sciences M264 and Latin American Studies M264.) Lecture, three hours. Recommended preparation: Community Health Sciences M260, bilingual English/Spanish skills. Examination of role of traditional medicine and shamanism in Latin America and exploration of how indigenous and mestizo groups diagnose and treat folk illness and Western-defined diseases with variety of health-seeking methods. Examination of art, music, and ritual and case examples of religion and healing practices via lecture, film, and audio-visual materials. Letter grading.


233T. Narrative and Times of Trouble. (4) Seminar, three hours. Recommended prerequisite: one course from 203A, 203B, 203C, 204, or 252A. Exploration of how linguistic and psychological approaches to cultural anthropology inform each other in relation to narrative and times of trouble. Topics include narrative sense-making in response to illness and misfortune; phenomenology of time; narrative, healing, and experiences; remembering through narrative; narrative subjectivity; and narrative and selves in motion. S/U or letter grading.

234. Mind, Medicine, and Culture. (2) Seminar, two hours. Intensive psychological approach to medical anthropology. Topics include religious and psychological group hosting regular talks and discussions with scholars from UCLA and beyond. Group provides forum for exploring recent research and classical and contemporary theoretical perspectives that inform psychosocial studies and medical anthropology. S/U grading.


236. Seminar: Psychocultural Studies and Medical Anthropology. (4) (Same as Anthropology M227.) Seminar, four hours. Devoted to present state of research in psychosocial studies. Survey of work in child development and socialization, personality, psychobiology, transcultural psychiatry, deviant learning, and psychiatric therapies. Basics of cultural psychology, cultural perspectives on change. S/U or letter grading.

M237. Psychological Anthropology. (4) (Same as Psychiatry M272.) Seminar, three hours. Various psychological issues in anthropology, both theoretical and methodological. Areas of interest include such things as culture and theory, culture and personality, and culture psychiatry. Discussion of questions relating to symbolic and unconsciousness processes as they relate to culture. Topics vary from term to term. May be repeated for credit with topic change. S/U or letter grading.

M238. Native American Revitalization Movements. (4) (Same as History M260C.) Lecture, two hours; discussion, one hour. Examination of revivification movements among native peoples of North America (north of Mexico). Specific revivification includes Haudenosaunee Snake, 1870 and 1890 Ghost Dances, and Peyote Religion. Letter grading.

239. Selected Topics in Field Ethnography. (4 to 8) Seminar, three hours. Discussion and practicum in various techniques for collecting and analyzing ethnographic field data. S/U or letter grading.

239Q. Ethnographic Methods in Sociocultural Anthropology. (4) Seminar, three hours. Introduction to some of key methods used in anthropological research, paying special attention to topic formation, research design, deployment of evidence and theoretical resources, techniques of engagement (participant observation, interviewing, genealogy, etc.), media making and analysis, and politics and ethics of ethnographic knowledge production. Approach combines research in critical anthropology with methodological practice with workshop-style explorations of particular techniques for gathering, analyzing, and presenting field material. Exploration of limits and potential of ethnographic evidence by setting up model projects and experimenting with typical fieldwork tasks. S/U or letter grading.

M239R. Latinx Photothnography. (4) (Same as Chicano and Central American Studies M218.) Seminar, three hours. Hands-on introduction to using photograpy as ethnographic field method. Introduction to basics of photography with review of key and relevant ideas from fields of sociocultural and visual anthropology, and photographic theory. Exploration of technical, ethical, and aesthetic aspects of picture making and their relationship to anthropological field methods, participant observation, and issues of representation—especially among Latinx communities. Student-led discussions of assigned readings and in-class hands-on learning. Quarter-long photothnography project focused on Latinx issues in greater Los Angeles. S/U or letter grading.

241. Culture, Power, Social Change. (2) Seminar, two hours. Cutting-edge research in sociocultural anthropology. Talks given by scholars from different universities around the world and faculty from UCLA with discussion regularly attended by students and faculty from wide range of related departments in addition to anthropology. Additional discussions about recently published or unpublished manuscripts. Professional sessions for doctoral students. Topics of discussion vary from year to year. S/U grading.


M243. Gender Systems. (4) (Same as Gender Studies M263.) Seminar, three hours. Current theoretical developments in understanding gender systems cross-culturally, with emphasis on relationship between systems of gender, economy, ideological systems, and social inequality. Selection of ethnographic cases from recent literature. S/U or letter grading.

C244M. Multispecies Anthropology. (4) Lecture, three hours. Survey of human-animal relationships across history, from origins of domestication to present-day debates over animal rights, and very different ways societies distant in time and space from each other have constructed these species and their ties to human others. Concurrently scheduled with course C144M. S/U or letter grading.


C244S. Repatriation of Native American Human Remains and Cultural Objects. (4) Lecture, two hours; discussion, one hour. Native Americans have recently been successful in obtaining passage of federal and state laws repatriating human remains and cultural objects to them. Examination of this phenomenon. May be concurrently scheduled with course C144S. S/U or letter grading.

M245S. Critical Theory of African Diaspora. (4) (Same as African American Studies M205S.) Seminar, four hours. Introduction to variety of ideas that underlie articulation of concept of African diaspora. Structured through understanding of African diaspora as historical formation, with focus on ways in which this community is imagined. Consideration of who belongs to African diaspora community, and how this community is defined. S/U or letter grading.
246. Contemporary Problems in Africa. (4) Seminar, three hours. Problematic issues in Africa in light of classical anthropological literature and recent work by anthropologists and other fieldworkers in Africa, with cases from eastern and southern Africa. S/U or letter grading.

M247P. Japan in Age of Empire. (4) (Same as Asian M292 and History M286.) Seminar, three hours. Designed for students of Asian history. Since late 18th century Japan expanded its empire into East and Southeast Asia. Coverage of that period and array of anthropological studies conducted in Japan’s colonies and occupied areas. Students will explore an area of study of colonialism. S/U or letter grading.

M247G. Central Asian Studies: Discipline, Methods, Debates. (2) (Same as History M287 and Near Eastern Languages M287.) Seminar, two hours. Introduction to study of Central Asia as practiced by historians, social scientists, and social sciences disciplines. S/U grading.

247R. Modernization and Taiwan Indigenous Societies. (4) Seminar, three hours. Historical examination of impact of modernization on indigenous populations in Taiwan beginning with Han colonization. Examination of integration of indigenous groups into state politics and market economy, and state-sponsored courses that forced erasure of indigenous cultures and knowledge. Resistance by groups to assimilationist processes through emergence of new strategies meant to maintain indigenous identities with regard to Taiwan's ongoing development into an “indigenous peoples’ state.” Offers framework to understanding Taiwan indigenous peoples' experiences under modernization. S/U or letter grading.

M248. Anthropology and History of Mediterranean. (4) (Same as History M248 and Near Eastern Languages M248.) Seminar, three hours. Introduction to historical and anthropological writings about Mediterranean. Draws on variety of classic and contemporary theories, histories, and ethnographies about Mediterranean Sea. Topics include geographical and imagined boundaries, Mediterranean honor/shame concepts, colonial and post-colonial Mediterranean, Levantine gender, culture change, and religious conversion. For centuries of teaching and learning, communities have sought to push against ways nation-state schools have devalued communities, their lifeways, and their lives. Most recently, this movement is indebted to several decades of research, theory, and practice in asset or strength-based pedagogy tradition. Work on culturally sustaining pedagogy (CSP) has joined these decades of community vision science that seeks to perpetuate and foster—to sustain—linguistic, literate, and cultural pluralism as part of schooling for positive social transformation and revitalization. S/U or letter grading.

257. Topics in Semantics and Pragmatics. (4) Seminar, four hours. Detailed examination of specialized topics in semantics and pragmatics. Topics vary from year to year and may include metaphor, theories of reference and denotation, honorific speech, evidentiality, reported speech, etc. May be repeated for credit with topic change. S/U or letter grading.

C257P. Language and Politics. (4) Lecture, three hours: discussion, one hour (when scheduled). Required preparation: course 257. Use of recent political events to collect, learn how to analyze, and write up short pieces on political talk, primarily in U.S. Currently scheduled with course C157P S/U or letter grading.

258. Language Socialization. (4) Seminar, four hours. Exploration of process of socialization through language and socialization to use language across lifespan, across communities of practice within single society, and across different ethnic and socioeconomic groups. Ways in which verbal interaction between novices and experts is structured linguistically and culturally. S/U or letter grading.

259. Selected Topics in Language and Anthropology. (4) Seminar, three hours. Problems in relations of language, culture, and society. May be repeated for credit. S/U or letter grading.

Research Methods

282. Research Design in Cultural Anthropology. (4) Lecture, three hours. Primarily designed for graduate students preparing for fieldwork. Unique position of anthropology as addressing problems for scientific research design. Review of typical research problems and appropriate methods. Students prepare their own research designs and present them for class discussion. S/U grading.

283. Proposal Writing Seminar. (4) Seminar, three hours. Introduction to art of proposal writing. Focus on proposal for anthropological fieldwork, with skills being useful across disciplines and proposal genres. Structured as writing workshop, with weekly writing assignments and group critique. S/U or letter grading.

284B. Quantitative Research Methodology. (4) Seminar, three hours. Limits to traditional quantitative methods depend on and are appropriate to research questions and designs students bring to class. S/U or letter grading.

M285A. Qualitative Research: Design and Data Collection. (4) Formerly numbered M285A. (Same as Community Health Sciences M216A.) Lecture, three hours. Hands-on approach to qualitative data analysis. Students learn how to conduct all steps of thematic analysis, including developing coding and coding schemes, analytic techniques to compare and categorize data, assessing validity and quality of data, as well as summarizing and presenting qualitative findings. Lectures, discussion of readings, and practical exercises by hand and with Dedoose.com software. S/U or letter grading.

M285B. Qualitative Research: Analysis and Dissemination. (4) (Same as Community Health Sciences M216B.) Lecture, three hours. Hands-on approach to qualitative data analysis. Students learn how to conduct all steps of thematic analysis, including developing coding and coding schemes, analytic techniques to compare and categorize data, assessing validity and quality of data, as well as summarizing and presenting qualitative findings. Lectures, discussion of readings, and practical exercises by hand and with Dedoose.com software. S/U or letter grading.

287R. Relational Models: Theory and Research Design. (4) Seminar, three hours. Relational models (RMT) posit that people in all cultures use combinations of just four relational models (RMs) to organize most aspects of most social coordination: communal sharing, authority ranking, equality matching, and market pricing. Exploration of how people use these RMs to motivate, generate, constitute, coordinate, judge, and sanction social interaction. RMT aims to account for what is universal and what varies across cultures, positing necessity for cultural complements that specify how and with which each relational model operates. Readings may include RMT research in social anthropology, archaeological, social theory, semiotics, linguistics, developmental, cognitive, social, political, moral, clinical, and cultural psychology, neuroscience, evolution, sociology, family studies, philosophy, management, marketing, and consumer psychology, economics, justice, public health, public policy, and international development. S/U or letter grading.

Specialized Studies

294. Human Complex Systems Forum. (1) Seminar, 90 minutes every other week. Interdisciplinary seminar seminar designed to provide students with a survey of current research in understanding nature of human societies from complexity and multigenerational perspective. May be repeated for credit. S/U grading.


299. Selected Topics in Anthropology. (4) Seminar, three hours. Designed for graduate students. Study of selected topics of anthropological interest. Consult Schedule of Classes for topics and instructors. May be repeated for credit. S/U or letter grading.

Special Studies

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel must be regularly enrolled as graduate students, and be supervised by an advisor or, fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and supervision at UCLA. May be repeated for credit. S/U or letter grading.
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Linguistics
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Kie R. Zuraw, PhD, Director of Graduate Studies

Overview
The UCLA Academic Senate approved the disestablishment of the Department of Applied Linguistics; the discontinuance of the graduate degree and certificate programs, Language Teaching minor, and African Languages BA; and the transfer of the Applied Linguistics BA to the Department of Linguistics effective winter quarter 2015. Students currently enrolled in any of the programs may complete them under current requirements.

Undergraduate Study
The Applied Linguistics BA was transferred to the Linguistics Department effective winter quarter 2015.

Graduate Study
The Department of Applied Linguistics offers Master of Arts (MA), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in Applied Linguistics. However, the UCLA Academic Senate approved the discontinuance of the graduate degree and certificate programs effective winter quarter 2015. Students currently enrolled in any of the programs may complete them under current requirements.

Applied Linguistics
Lower-Division Course

30W. Language and Social Interaction. (5) Lecture, three hours; discussion, two hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course 30. Exploration of range of topics related to study of language and social interaction in both mundane and professional settings, particularly how language affects social lives and how social organization affects use of language. Topics include different approaches to study of language in social interaction (theories and research methodologies), issues regarding language and social identity (such as socio-economic status, race, gender, and situational identity), and issues concerning language and culture (such as cross-cultural misunderstandings and language socialization). Satisfies Writing II requirement. Letter grading.

Graduate Courses
375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

596. Directed Individual Study. (2 to 8) Tutorial, to be arranged. Limited to MA and PhD students. Independent study in one area of applied linguistics. May not be applied toward MA course requirements. Up to 8 units may be applied toward PhD course requirements. May be repeated for credit. S/U or letter grading.

597. Preparation for PhD Qualifying Examinations. (2 to 12) Tutorial, to be arranged. S/U grading.


599. Research for PhD Dissertation. (2 to 12) Tutorial, to be arranged. Preparation: consent of UCLA adviser and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.

Overview
The Archaeology Interdepartmental Program brings together interests and specialties represented by those departments offering courses in archaeology, as well as others offering courses relevant to archaeology.

Mission
The primary purpose of the program is to train scholars in archaeology for university-level teaching and research and other professional aims. Its resources are intended for those archaeology students whose academic goals cannot be met within any single department and who, consequently, require an individually designed plan of study combining academic preparation in two or more departments. Applications are especially encouraged from students whose interests may form bridges with disciplines and departments not offering archaeology (e.g., botany, chemistry, geology, mathematics, statistics, and zoology). There are opportunities for participation in a variety of field, laboratory, and computer studies.

Graduate Major
Archaeology MA, CPhil, PhD

The program does not encourage applicants who seek only an MA degree.

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.
C110. Archaeological Materials Identification and Characterization. (4) Lecture, one hour; laboratory, two hours. Laboratory-oriented introduction for archaeologists to identification and quantitative description of solid materials, especially metals, ceramics, and other inorganic and some organic substances. Concurrently scheduled with course C210. P/NP or letter grading.

M112. Archaeology and Art of Christian and Islamic Egypt. (4) (Same as Art History M119D, Islamic Studies M112, and Middle Eastern Studies M112.) Lecture, three hours. Culture of Egypt transformed gradually after Muslim conquest in mid-7th century CE. According to material evidence such as ceramics, textiles, architectural forms, and building techniques, Christianity survived in Egypt during ceramic analysis or geophysical research, biochemistry during archaeological residue analysis, or biology during zooarchaeological or palaeoethnobotanical research offers point of departure for instructors as well as motivation to students. P/NP or letter grading.

C120. Special Topics in Archaeology. (2 or 4) Lecture, three hours. Designed for seniors/juniors. Special topics on theoretical subjects in archaeology such as new strategies, regional synthesis, or current work by core program faculty or special visiting scholars. May be repeated for credit with topic change. Concurrently scheduled with course C220. Final project or paper required if taken for 4 units (P/NP or letter grading); 2-unit course has P/NP grading.

C159. Fieldwork in Archaeology. (2 to 12) Fieldwork to be arranged. Participation in archaeological field excavations or museum research under supervision of staff archaeologists at UCLA. Minimum of one month of field time away from campus required. May be repeated for credit with consent of adviser. Concurrently scheduled with course C259. P/NP or letter grading.

C160. Ancient and Historic Metals: Corrosion, Technology, and Microstructure. (6) Seminar, four hours; laboratory, four hours. Overview of technology of ancient metals, aspects of extraction and alloying, corrosion that ancient metals undergo, and how this impact scholarship, new scholarly insights, but also to provide integrated instruction in science, technology, engineering, and mathematics (STEM) skills. Use of archaeological data as paradigm in STEM education. Instant practical application of mathematics during surveying, geology during ceramic analysis or geophysical research, biochemistry during archaeological residue analysis, or biology during zooarchaeological or palaeoethnobotanical research offers point of departure for instructors as well as motivation to students. P/NP or letter grading.

99H. Honors Contracts. (1) Tutorial, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

99HC. Honors Contracts. (1) Tutorial, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students and faculty members work closely with faculty members and report on their progress. Preparation of at least two oral presentations, one on theoretical framework and one on practical aspects of project. Final written research design that incorporates theoretical and practical aspects of research and formulates bridging arguments required. S/U or letter grading.

M205A. Selected Laboratory Topics in Archaeology. (4) (Same as Anthropology M205A.) Lecture, one hour; laboratory, two hours. Designed for graduate students in archaeology or in other departments. Specialized analysis of particular classes of cultural remains. Topic may be one of following: zooarchaeology, paleoethnobotany, ceramics, lithic analysis, rock art, Laboratory experience with collections and data. May be repeated for credit with topic change. S/U or letter grading.

205B. Intensive Laboratory Training in Archaeology. (6) Lecture, three hours; laboratory, two hours minimum. Advanced laboratory training for graduate students with extended laboratory hours. Special laboratory-based topics, including but not limited to lithic analysis, ceramic analysis, zooarchaeology, and palaeoethnobotany. May be repeated for credit with topic change. S/U or letter grading.


C220. Special Topics in Archaeology. (2 or 4) Lecture, three hours. Specialized subjects in archaeology such as new strategies, regional synthesis, or current work by core program faculty or special visiting scholars. May be repeated for credit with topic change. Concurrently scheduled with course C210. Final project or paper required if taken for 4 units (S/U or letter grading); 2-unit course has P/NP grading.

C259. Fieldwork in Archaeology. (2 to 12) Fieldwork to be arranged. Participation in archaeological field excavations or museum research under supervision of staff archaeologists at UCLA. Minimum of one month of field time away from campus required. May be repeated for credit with consent of adviser. Concurrently scheduled with course C159. S/U or letter grading.

M265. Depositional History and Stratigraphic Analysis. (4) (Same as Ancient Near East M265.) Lecture, two hours. Theoretical understanding of depositional processes (laws) which include pedogenesis and of stratigraphic procedures to be used in recovery of embedded cultural materials. Study of issues covered in laboratory with specific emphasis on excavations and site reports. Coverage of theoretical implications of such disciplines as surveying and pedology with help of specialists. S/U or letter grading.

C280. Ancient and Historic Metals: Corrosion, Technology, and Microstructure. (4) Seminar, four hours; laboratory, four hours. Overview of technology of ancient metals, aspects of extraction and alloying, corrosion that ancient metals undergo, and how this impacts their preservation. Exploration of knowledge and research work of last two decades that has substantially advanced understanding of processes of extraction, alloying, surface patination, metallic coatings, corrosion, and metallography. Laboratory work in preparation and examination of metallic samples under microscope, as well as lectures on technology of metallic works of art. Discussion of phase and stability diagrams of metallic systems and environments. Metallographic study samples represent Bronze Age Europe, Renaissance Europe, China from Warring States to Tang dynasty, Japanese sword-making, Indian iron, bronze, Peruvian, Colombian, Costa Rican, and Panamanian copper and gold-copper alloys. Concurrently scheduled with course C280. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

198HC. Honors Contracts. (1) Tutorial, three hours. Limited to 20 students. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

Upper-Division Courses

C110. Archaeological Materials Identification and Characterization. (4) Lecture, one hour; laboratory, two hours. Laboratory-oriented introduction for archaeologists to identification and quantitative description of solid materials, especially metals, ceramics, and other inorganic and some organic substances. Concurrently scheduled with course C210. P/NP or letter grading.

M112. Archaeology and Art of Christian and Islamic Egypt. (4) (Same as Art History M119D, Islamic Studies M112, and Middle Eastern Studies M112.) Lecture, three hours. Culture of Egypt transformed gradually after Muslim conquest in mid-7th century CE. According to material evidence such as ceramics, textiles, architectural forms, and building techniques, Christianity survived in Egypt during ceramic analysis or geophysical research, biochemistry during archaeological residue analysis, or biology during zooarchaeological or palaeoethnobotanical research offers point of departure for instructors as well as motivation to students. P/NP or letter grading.

C120. Special Topics in Archaeology. (2 or 4) Lecture, three hours. Designed for seniors/juniors. Special topics on theoretical subjects in archaeology such as new strategies, regional synthesis, or current work by core program faculty or special visiting scholars. May be repeated for credit with topic change. Concurrently scheduled with course C220. Final project or paper required if taken for 4 units (P/NP or letter grading); 2-unit course has P/NP grading.

C159. Fieldwork in Archaeology. (2 to 12) Fieldwork to be arranged. Participation in archaeological field excavations or museum research under supervision of staff archaeologists at UCLA. Minimum of one month of field time away from campus required. May be repeated for credit with topic change. Concurrently scheduled with course C259. Final project or paper required if taken for 4 units (S/U or letter grading); 2-unit course has S/U grading.

C160. Ancient and Historic Metals: Corrosion, Technology, and Microstructure. (6) Seminar, four hours; laboratory, four hours. Overview of technology of ancient metals, aspects of extraction and alloying, corrosion that ancient metals undergo, and how this impacts their preservation. Exploration of knowledge and research work of last two decades that has substantially advanced understanding of processes of extraction, alloying, surface patination, metallic coatings, corrosion, and microstructure. Laboratory work in preparation and examination of metallic samples under microscope, as well as lectures on technology of metallic works of art. Discussion of phase and stability diagrams of metallic systems and environments. Metallographic study samples represent Bronze Age Europe, Renaissance Europe, China from Warring States to Tang dynasty, Japanese sword-making, Indian iron, bronze, Peruvian, Colombian, Costa Rican, and Panamanian copper and gold-copper alloys. Concurrently scheduled with course C159. S/U or letter grading.

M265. Depositional History and Stratigraphic Analysis. (4) (Same as Ancient Near East M265.) Lecture, two hours. Theoretical understanding of depositional processes (laws) which include pedogenesis and of stratigraphic procedures to be used in recovery of embedded cultural materials. Study of issues covered in laboratory with specific emphasis on excavations and site reports. Coverage of theoretical implications of such disciplines as surveying and pedology with help of specialists. S/U or letter grading.

C280. Ancient and Historic Metals: Corrosion, Technology, and Microstructure. (4) Seminar, four hours; laboratory, four hours. Overview of technology of ancient metals, aspects of extraction and alloying, corrosion that ancient metals undergo, and how this impacts their preservation. Exploration of knowledge and research work of last two decades that has substantially advanced understanding of processes of extraction, alloying, surface patination, metallic coatings, corrosion, and microstructure. Laboratory work in preparation and examination of metallic samples under microscope, as well as lectures on technology of metallic works of art. Discussion of phase and stability diagrams of metallic systems and environments. Metallographic study samples represent Bronze Age Europe, Renaissance Europe, China from Warring States to Tang dynasty, Japanese sword-making, Indian iron, bronze, Peruvian, Colombian, Costa Rican, and Panamanian copper and gold-copper alloys. Concurrently scheduled with course C280. Letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation apprentice personnel employment as teaching associate, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curricular development at UCLA. May be repeated for credit. S/U or letter grading.
ARCHITECTURE AND URBAN DESIGN

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Dana Cuff, PhD
Neil M. Denari, MArch
Greg S. Lynn, MArch
Heather L. Roberge, MArch
Brett B. Steele, AADipl

Professors Emeriti
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Samuel Aroni, PhD
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Adjunct Professors
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Jeffrey N. Inaba, MArch, MA
Alan Locke, MSc
Roger Sherman, MArch

Adjunct Associate Professors
Julia Koerner-Al-Rawi, MSc
Mohamed Sharif, MS

Adjunct Assistant Professor
Natasha S. Sandmeier, MA

Overview

The Department of Architecture and Urban Design at UCLA offers a Bachelor of Arts (BA) degree in Architectural Studies and four graduate degree programs tailored to the needs of different groups of students: Master of Architecture (MArch); Master of Arts (MA) and Doctor of Philosophy (PhD) in Architecture; and Master of Science (MS) in Architecture and Urban Design.

Accreditation

In the U.S. most state registration boards require a degree from an accredited professional degree program as a requisite for licensure. The National Architectural Accrediting Board (NAAB), the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes two types of degrees: Bachelor of Architecture and Master of Architecture. A program may be granted a five-year, three-year, or two-year term of accreditation, depending on its degree of conformance with established standards. Master’s degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree which, when earned sequentially, comprise an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

Undergraduate Major

Architectural Studies BA

The BA in Architectural Studies is a two-year program with focus on the built environment. The curriculum visualizes architecture as a cultural, creative, and technical practice and a discipline with direct social impact. Within the context of a liberal arts education, a finely balanced set of architecture and urban design courses, ranging from the history and theory of design to contemporary building technologies, provides students with a diverse foundation of knowledge in the field of architecture and prepares them for graduate school and/or careers in a wide range of fields.

Learning Outcomes

The Architectural Studies major has the following learning outcomes:

- Demonstrated competence in representational techniques including physical and digital modeling, drawing, and analytical diagramming
- Use of representational techniques to document design concepts, organization, spatial order, and scale
- Ability to compile portfolio of original architectural and three-dimensional design proposals
- Familiarity with historical and contemporary precedents in the field
- Demonstrated written awareness of the historical, technological, and cultural significance of precedent works
- Familiarity with, and presentation and discussion of, concepts related to form, organization, and space making
- Delivery of oral and graphic presentations of design concepts and proposals
- Reception of and response to design criticism, and reflection of this response in revised design documentation, as an integral part of the design process

Entry to the Major

Admission

Students are admitted for fall quarter only. Admission is highly competitive, and only a limited number of students are admitted each year. UCLA students may apply for admission in fall quarter of their second year in residence, must have at least a 3.0 cumulative grade-point average, and are required to complete the preparation for the major courses, with grades of B or better, before applying for admission. Transfer students must have at least a 3.0 cumulative GPA and are expected to complete the preparation for the major courses during their first year in residence. All applicants must submit a statement of interest and a three- to six-page PDF of creative work. For more information, consult with the undergraduate adviser.

Requirements

Preparation for the Major


The Major

Required: Architecture and Urban Design 121, 122, 123, 131, 132, 133, 141, 142, 143.

Graduate Majors

Architecture MA, PhD

The MA and PhD degree programs offer opportunities to pursue research and scholarship in the field of architecture. Graduates typically pursue academic or applied research and consulting careers.

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA.
graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Architecture and Urban Design MS

The Architecture and Urban Design MS is an advanced self-supporting professional degree program for students who already hold a first professional degree in architecture. The program offers opportunities for intensive concentration in a variety of areas of professional specialization.

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Master of Architecture

MArch is a three-year first professional degree program accredited by the NAAB. It does not assume any prior background in architecture. Students who do have some prior architecture background (e.g., a four-year undergraduate degree) may also enter the program and may petition to waive certain required courses and substitute more advanced electives in their place. MArch graduates normally pursue professional careers in architectural practice.

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Concurrent Degree Program

Concurrent degree programs allow students to reduce the number of courses required for two degrees, since some courses may apply to both degrees.

• Master of Architecture/Master of Urban and Regional Planning

Architecture and Urban Design

Lower-Division Courses

10A. Histories of Architecture and Urbanism I. (5) Lecture, three hours; discussion, one hour; outside study, 11 hours. Exploration of developments in global architecture and urbanism from prehistory to 1600, and critical reflection on terms such as building, architecture, city, history, and culture. Focus on world context, construction and technology, and history of architectural ideas. P/NP or letter grading.

10B. Histories of Architecture and Urbanism II. (5) Lecture, three hours; discussion, one hour; outside study, 11 hours. Survey of architectural and urban history from 1600 to present in global context. Exploration of buildings, cities, spaces, artifacts, landscapes, and ideas through their relation to geopolitical conditions and through their relation to theories of design. P/NP or letter grading.

19. Flat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

30. Introduction to Architectural Studies. (5) Lecture, three hours; discussion, one hour; outside study, 11 hours. Exploration of role of built environment in social, cultural, and political life: how buildings are constructed, what they mean, effects they have on world, and way that futures and built environments define private and public life. Focus on series of contemporary case studies for each of which reveals new possibilities for the future of architecture. Emphasis on how architecture extends to cities, roads, books, and films. Consideration of historical context and cultural genealogy of particular buildings and cities, with emphasis on how architecture relates to culture, and the built environments, which are built and used by common, ordinary, anonymous, or vernacular non-built communities around world. Concurrently scheduled with course 121.


M125B. Digital Cultural Mapping Core Course B: Google Earth, Geographic Information Systems, Hypermedia, and Timelines (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 123, 122. Limited to Architectural Studies majors. Introduction to disciplinary issues, techniques, and organizations of landscape and how those can influence design of building and site. Development of material and temporal characteristics of architecture relative to role those play in landscape. Introduction to issues of accessibility and egress as systems of movement. Structure as a component that relates to site, construction, topography, climate, accessibility, and their mutual interaction. Letter grading.

M125C. Digital Cultural Mapping Core Course C: Google Earth, Geographic Information Systems, Hypermedia, and Timelines (4) Lecture, three hours; discussion, one hour. Enforced requisite: course M125B or Ancient Near East M125B Laboratory, three hours; discussion, one hour. Enforced requisite: Ancient Near East 125A. Hands-on laboratory-based investigation of emerging digital mapping technologies and GIS implementation, Web-based mapping applications, virtual globes, and geographic information systems (GIS). Critique and creation of maps of cultural phenomena, applying skills learned in courses 125A to real-world data sets in humanities and social sciences. By mastering emerging technologies in field of digital cultural mapping, students take part in evaluation and production of sophisticated representations of complex data, becoming active participants in development of this new field. How to use suite of GIS and georegographic tools. Fostering of creative approaches to and engagement with mapping technologies: What new questions can be asked and answered using these technologies? How does one reason, argue, and solve real-world problems through digital cultural mapping? Design, development, and implementation of student mapping-based research projects. Part of Digital Cultural Mapping Project supported by W.M. Keck Foundation. P/NP or letter grading.

Architecture and Urban Design / 205

102. Introduction to Representation. (2) Studio, four hours; outside study, two hours. Limited to currently enrolled college/university students and graduates of colleges/universities. Introduction to techniques of spatial representation as they relate to architectural design. How to communicate using two- and three-dimensional drawing and modeling. Analog and digital techniques and opportunity afforded by moving between both. Analog techniques include orthographic and axonometric projection. Digital techniques focus on computer graphics fundamentals, including bit map and vector graphic imaging using Adobe suite and modeling using Rhinoceros. Offered in summer only. Letter grading.

103. Introduction to Architectural Design. (3) Studio, 18 hours. Limited to currently enrolled college/university students and graduates of colleges/universities. Introduction to basic architectural design principles and problem solving. How to control point, line, surface, and volume to shape spaces for human use. Visual analysis as tool for discussing and understanding organization. Techniques of repetition, variation, order, scale, and rhythm. Use of case-study analysis to uncover disciplinary issues within design problems and production of individual solutions to problems. Offered in summer only. Letter grading.

121. Studio I. (5) Lecture, six hours; outside study, 10 hours. Limited to Architectural Studies majors. Introduction to basic architectural design principles and problem solving: how to control point, line, surface, and volume to shape spaces for human use. Visual analysis as tool for discussing and understanding organization. Techniques of repetition, variation, order, scale, and rhythm. Use of case-study analysis to uncover disciplinary issues within design problems, as well as to produce individual solutions to those problems. Letter grading.


131. Issues in Contemporary Design. (5) Lecture, three hours; outside study, 12 hours. Limited to Architectural Studies majors. How global design culture
today operates as part of set of spatial, economic, political, and social discourses. From development of cities to new formal languages in architecture, consequences of fact that great percentage of our lives is spent in controlled designed environments, including role that research and interdisciplinarity play today in influencing design ideas and processes, as well as how design is influenced by technology and new urban contexts.

132. Histories of Housing and Domesticity: 19th Century to the Present. (5) Lecture, three hours; outside study, 12 hours. Limited to Architectural Studies majors. Introduction to study of housing and its design. Investigation of relationship between architecture, political economy, and the environment through the medium of housing, from 19th-century philanthropy to cooperative, municipal, national enterprise. Focuses, including examples spanning two centuries, studies connects politics, law, industry, and finance to better identify the role of architecture in the materialization of housing. Letter grading.

133. Modernism and Metropolis. (5) Lecture, three hours; outside study, 12 hours. Limited to Architectural Studies majors. Introduction to emergence of contemporary metropolises through series of comparative urban studies, that begin in Los Angeles and extend to engage range of cities, including key examples from Asia to South America. Modern project can be seen in myriad forms across globe, so that city and suburb, flat and tower, in complex conversation of aesthetic, political, spatial, economic, technological, and social issues. Letter grading.

134. Technology I: Projections. (5) Laboratory, four hours; outside study, 11 hours. Limited to Architectural Studies majors. Introduction to techniques of spatial representation as they relate to architectural design. How to communicate using two- and three-dimensional techniques. Analog and digital techniques and opportunities afforded by moving between both. Analog techniques include orthographic and axonometric projection. Digital techniques focus on computer-aided, interactive mapping. Graphic conventions and organization of content. Letter grading.

135. Technology II: Building Materials and Methods. (5) Laboratory, four hours; outside study, 11 hours. Limited to Architectural Studies majors. Introduction to construction systems and materials in relation to design, such as framed, bearing wall, or hybrid systems. Graphic conventions and organization of content. Letter grading.

143. Technology III: Digital Technology. (5) Laboratory, four hours; outside study, 11 hours. Limited to Architectural Studies majors. Overview of three-dimensional computer-aided visualization concepts, teaching applications of computer-aided design (CAD) and Maya and their use relative to process of design and visual communication. Basic representation methods and tools and introduction to additional concepts required to dynamically interact with computer and to explore and understand communicative capacities of different methods of representation. Explanation of bitmap versus vector graphics, typography basics, and color output and integration for print and Web, and introduction to three-dimensional digital modeling and fabrication. Letter grading.

145. Architectural Mediation I. (2) Lecture, two hours; laboratory, two hours. Requisites: Digital Humanities 30, 151. Introduction to concepts of digital modeling/drawing interfaces. Knowledge representation, metaphoric software, and coding towards exploration of advanced digital interfaces such as parametric software, and coding towards exploration of interactive mapping, analysis, timber-based sim- ulations, and fabrications. Two- and three-dimensional output (i.e., animations, animation stills, multimedia, 3D printing, computer numerical control (CNC) milling). Letter grading.

146. Computer Visualization. (4) Lecture, three hours. Designed for graduate students. Concepts and techniques of computer visualization of artifacts, including realistic rendering and animation. Letter grading.

227. Design and Building Models. (4) Lecture, three hours. Review of range of information and knowledge potentially used in design. Knowledge representation, abstractions, and constructs. Logical structure of design information. Development of knowledge used in areas of design, how it can be identified, analyzed, and structured. Letter grading.

228. Architecture Design—the Modern Metropolis. (4) Lecture, three hours. Examination of architectural de- velopment and Finance. (4) May be repeated for credit. Concurrently scheduled with course CM130. S/U or letter grading.

147. Advanced Honors Seminars. (1) Seminar, three hours. Requisite: Architectural Studies 1. Limited to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

154. Introduction to Sustainable Architecture—Technology. (4) Lecture, three hours. Limit- ed to seniors in good academic standing. Special topics in technologies and processes to be repeated for credit. Concurrently scheduled with course C289T. Letter grading.

155. Introduction to Sustainable Architecture—Urban Design. (4) Lecture, two hours; workshop, two hours. Requisite: Architectural Studies 1. Limited to seniors in good academic standing. Special topics in technologies and processes to be repeated for credit. Concurrently scheduled with course C289T. Letter grading.

156. Introduction to Market-Rate Real Estate Development and Finance. (4) May be repeated for credit. Concurrently scheduled with course CM130. S/U or letter grading.

157. Elements of Urban Design. (4) Same as Urban Planning M292.) Lecture, three hours. Examination of fundamental knowledge of techniques and methods of urban design. Multidisciplinary approach leading to understanding urban design in a broader context. Letter grading.

158. Advanced Honors Seminars. (1) Seminar, three hours. Requisite: Architectural Studies 1. Limited to seniors in good academic standing. Special topics in technologies and processes to be repeated for credit. Concurrently scheduled with course C289T. Letter grading.

159. Advanced Honors Seminars. (1) Seminar, three hours. Requisite: Architectural Studies 1. Limited to seniors in good academic standing. Special topics in technologies and processes to be repeated for credit. Concurrently scheduled with course C289T. Letter grading.


162. Advanced Honors Seminars. (1) Seminar, three hours. Requisite: Architectural Studies 1. Limited to seniors in good academic standing. Special topics in technologies and processes to be repeated for credit. Concurrently scheduled with course C289T. Letter grading.

163. Advanced Honors Seminars. (1) Seminar, three hours. Requisite: Architectural Studies 1. Limited to seniors in good academic standing. Special topics in technologies and processes to be repeated for credit. Concurrently scheduled with course C289T. Letter grading.

164. Advanced Honors Seminars. (1) Seminar, three hours. Requisite: Architectural Studies 1. Limited to seniors in good academic standing. Special topics in technologies and processes to be repeated for credit. Concurrently scheduled with course C289T. Letter grading.

165. Advanced Honors Seminars. (1) Seminar, three hours. Requisite: Architectural Studies 1. Limited to seniors in good academic standing. Special topics in technologies and processes to be repeated for credit. Concurrently scheduled with course C289T. Letter grading.

166. Advanced Honors Seminars. (1) Seminar, three hours. Requisite: Architectural Studies 1. Limited to seniors in good academic standing. Special topics in technologies and processes to be repeated for credit. Concurrently scheduled with course C289T. Letter grading.


171. Elements of Urban Design. (4) Same as Urban Planning M292.) Lecture, three hours. Examination of fundamental knowledge of techniques and methods of urban design. Multidisciplinary approach leading to understanding urban design in a broader context. Letter grading.

172. Introduction to Market-Rate Real Estate Development and Finance. (4) May be repeated for credit. Concurrently scheduled with course CM130. S/U or letter grading.

173. Introduction to Sustainable Architecture—Urban Design. (4) Same as Urban Planning M292.) Lecture, three hours. Examination of fundamental knowledge of techniques and methods of urban design. Multidisciplinary approach leading to understanding urban design in a broader context. Letter grading.

174. Roman Architecture and Urbanism. (4) Lecture, three hours. Examination of architectural and urban development in the ancient Roman Republic and Empire, from the Roman age to late Empire. Built environments of ancient world investigated from various perspectives, with consideration to programming, symbolism, and viewing, as well as to technological, aesthetic, and political factors. S/U or letter grading.

175. Renaissance Architecture and Urbanism. (4) Lecture, three hours. Examination of architectural development from 15th to 17th century. Focus on Italian Renaissance and the French to the Mediterranean basin. Analysis of individual structures, cities, and landscape designs to reveal changing cultural and technological values, as well as specific aesthetic and biographic considerations. S/U or letter grading.
Special Topics in Architecture and Urban Design / 207

289. Special Topics in Architecture and Urban Design. (2 to 4) Lecture; two hours; discussion, two hours. Selected academic topics initiated by students, studios, seminars, or faculty directed by faculty member. May be repeated for credit. S/U or letter grading.

C289CS. Special Topics in Architecture and Urban Design—Critical Studies. (4) Lecture, three hours. Special topics in critical studies in architectural culture. May be repeated for credit. Concurrently scheduled with course C188CS. Letter grading.

C289T. Special Topics in Architecture and Urban Design—Technology. (4) Lecture, three hours. Special topics in critical studies in architectural culture. May be repeated for credit. Concurrently scheduled with course C188T. Letter grading.

290. Special Topics in Critical Studies in Architectural Culture. (5) Lecture; three hours; discussion, one hour; outside study, 11 hours. Designed for graduate students. Exploration of how architecture operates in relation to wider cultural, historical, and theoretical issues. May be repeated for maximum of 30 units. Letter grading.


M293. Politics, Ideology, and Design. (4) Same as Urban Planning M293S. Lecture, three hours. Exploration of cultural and political context of architecture and planning work. Examination of theory and practice from variety of perspectives applied to set of varied physical environments and to set of current spatialized concepts. Consideration of theoretical propositions that are shaping present urban and architectural debate and concrete case studies where politics and ideology shape design process. Letter grading.

294A-294B. Environmental Psychology. (4–4) Lecture, three hours. Introduction to models, concepts, and theories concerning impact of environment on human behavior, perception, and thought. Review of research results concerning space perception, cognitive mapping, preferences and attitudes toward environments, effects of crowding and stress, personal space and territoriality. S/U or letter grading.

M295. Introduction to Urban Humanities. (4) Same as Urban Planning M295S. Seminar, six hours; studio, six hours. Core introduction to urban humanities. Analytical methods and research methods of humanistic study with speculative and projective methods of architectural and urban design to better understand contemporary state of human environment. Focus on Los Angeles, specifically Aliso Housing, Boyle Heights; working with resident leaders at Los Angeles City public housing developments. S/U or letter grading.

411. Introductory Design Studio. (6) Studio, 12 hours; outside study, six hours. Introduction to sketching, drawing, perspectives, CAD. Architectural composition is initially studied in terms of its separate elements. After each class students will engage in manipulative exercise that allows for experimentation of its intrinsic possibilities, students undertake series of closely controlled exercises on existing elements and then design small buildings. Letter grading.

412. Building Design Studio. (6) Studio, 12 hours; outside study, six hours. Requirement: course 411. Concentration on basic skills, leading to projects exploring architectural program in relation to design process and, particularly, implications of program on architectural forms and concepts. In second phase, introduction of structural elements to fulfill program requirements and to support and further develop intended forms and concepts. Letter grading.

413. Building Design with Landscape Studio. (6) Studio, 12 hours; outside study, six hours. Requirement: course 412. Introduction to theoretical and technical issues such as site design, landscape design, building typology, Building design and site planning in relation to water, landforms, and plants in natural light, heat, and ventilation. Letter grading.

414. Major Building Design Studio. (6) Studio, 12 hours; outside study, six hours. Requirement: course 413. Designed for second-year graduate students. Introduction to issues such as programming and program manipulation, site planning, urban design, and integration of technical systems and architectural expression. Emphasis either on treatment in breadth of large-scale projects or exploration in depth and detail of smaller-scale projects. Students learn to integrate structure and environmental control and to present their ideas in graphic or model form. Letter grading.

415. Comprehensive Studio. (6) Studio, 12 hours; outside study, six hours. Requirement: course 414. Culmination of core sequence (courses 411 through 414), with focus on development phase of project. Technical concerns such as lighting, material innovation, sustainability, construction documents, and building envelope to be considered critical to generation of architectural form, integrated in design of single building project. Letter grading.


417. Introduction to Urban Design. (6) Seminar, six hours; laboratory, four hours; studio, four hours. Requirement: course 416. Examination of processes of urban planning and design as they relate to the production of urban environments. Letter grading.

418. Special Topics in Architecture. (2 to 8) Tutorials, to be arranged. Projects initiated either by individual students or student teams and directed by faculty member. May be repeated for credit. S/U or letter grading.

419. Environmental Planning. (6) Seminar, six hours; laboratory, four hours. Requirement: course 416. Examination of processes of urban planning and design as they relate to the production of urban environments. Letter grading.

420. Final Advanced Topics Studio. (6) Seminar, six hours; outside study, six hours. Preparation: satisfactory completion of intermediate- and advanced-level studios for MArch II students; satisfactory completion of advanced-level studios and fourth-term standing for MArch III students. Students may choose (through lottery) from several different advanced studio projects focusing on special topics in urban design to be offered by faculty members. Exit document (analytic paper with graphic component that critically examines final student design work) required at completion of course. Letter grading.

424A-424B. Research Studios. (2–2–6) For courses 403A, 403B: seminar, three hours; outside study, three hours; for course 403C: studio, 12 hours; outside study, six hours. Preparation: satisfactory completion of intermediate-level studio courses (412, 413, 414, 415) or MArch II student. Course 403B is requisite to 403A, which is requisite to 403C. In-depth research phase (courses 403A, 403B) and advanced studio project. Focus on number of different special topics in architecture and urban design. In Progress (403A, 403B) and letter (403C) grading.

M404. Joint Planning/Architecture Studio. (4) Same as Urban Planning M404. Lecture, one hour; discussion, one hour; studio, four hours. Opportunity to work on joint planning/architecture project for client. Outside speakers; field trips. Examination of past projects include efforts of faculty members of SCI-Arc, New American House for nontraditional households; PicoAliso Housing, Boyle Heights; working with resident leaders at Los Angeles City public housing developments. S/U or letter grading.


436. Introduction to Building Construction. (2) Laboratory, two hours; outside study, four hours. Introduction to construction techniques. Study of physical principles and methods of construction through series of exercises and field trips. Letter grading.

437. Building Construction. (4) Laboratory, four hours; outside study, eight hours. Principles of structure and enclosure, with focus on construction details. Exploration of building elements for formal and functional properties; in addition, design development of project in previous studio may be developed in detail with integration of range of technical systems. Letter grading.


462. Seminar. (2) Seminar, two hours. Offers guidance and support to first-time teaching assistants (TAs) in Department of Architecture and Urban Design. Covers topics which include teaching philosophies, teaching methodologies, assessment/evaluation/grading practices, and professional development specific to academic professions in the field of architecture. Reading and assignment for students. S/U or letter grading.

463. Comprehensive Examination Seminar. (2) Seminar, three hours; outside study, nine hours. Seminar intended to begin process of developing independent proposal with related research and documentation that moves toward production of final document or book for each project. S/U grading.


496. Special Projects in Architecture. (2 to 8) Tutorial, to be arranged. Projects initiated either by individual students or student teams and directed by faculty member. May be repeated for credit. S/U or letter grading.

497. Special Projects in Urban Design. (2 to 8) Tutorial, to be arranged. Projects initiated either by individual students or student teams and directed by faculty member. May be repeated for credit. S/U or letter grading.

498. Comprehensive Examination Seminar. (2) Seminar, three hours; outside study, nine hours. Seminar intended to begin process of developing independent proposal with related research and documentation that moves toward production of final document or book for each project. S/U grading.
The core studio curriculum is supported by courses in art history, theory, and criticism, and empowers students to reshape their worlds through critical inquiry and transformative creativity. Student are exposed to a broad range of approaches to making and interpreting art, as well as diverse perspectives on the role of art and artists in society. Bachelor of Arts (BA) coursework and Master of Fine Arts (MFA) areas of study include ceramics, interdisciplinary studio, new genres, painting and drawing, photography, and sculpture. Students are encouraged to work intensively within and across these areas of study to find their own voices and craft their own practices. Art majors have access to departmental labs in each area of study as well as a digital studio. Additionally, the Hammer Museum and the Fowler Museum at UCLA are among the many arts resources available to students, both on campus and in the Los Angeles community.

The Art Department reserves the right to use documentation and reproductions of student art work from studio courses, student exhibitions, and other records of creative work in publications including, but not limited to, the undergraduate and graduate brochures and publications, department and school websites, social media, and presentations and events related to student recruitment and outreach.

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Hirsch Perlman, BA
Cauleen Smith, MFA
Patty A. Wickman, MFA

Professors Emeriti
Jennifer Bolande, BFA
Raymond B. Brown, MA
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Associate Professors
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Assistant Professors
Vishal Jugdeo, MFA
Cosmo D. Whyte, MFA

Overview
The Department of Art offers professional art training with an emphasis on interdisciplinary experimentation, equity, and inclusion in art.

Undergraduate Major

Art BA

Capstone Major
The Art major is a designated capstone major. As part of the upper-division advanced studio requirements, all undergraduate students are required to complete a senior studio course that emphasizes analysis and criticism of individual creative work and ideas. Students develop and present a body of creative work in which they exhibit familiarity with and competence in a range of techniques and media, and a level of proficiency in utilizing particular media appropriate to advanced-level studio projects. Graduates are expected to demonstrate familiarity with global historical precedents for and issues in contemporary art, to understand terms and concepts relevant to contemporary art discourse, and to have the ability to effectively articulate analysis of works of art to participate in a studio critique.

Learning Outcomes
The Art major has the following learning outcomes:

- Familiarity with and competency in multiple techniques and media, and a level of proficiency utilizing particular media appropriate to advanced studio projects
- Development of a body of original artwork
- Familiarity with global historical precedents for, and issues in, contemporary art
- Understanding of terms and concepts relevant to contemporary art discourse
- Ability to effectively analyze works of art through studio critique

Requirements
Preparation for the Major

The Major
Required: A minimum of nine upper-division courses, including Art 132, six courses from at least four of the following studio areas of which at least one must be designated with an A: 130 or 130A, 135 or 135A, 137 or 137A, 140, 145 or 145A, 147 or 147A, 148 or 148A, 149 or 149A, one course from Art History M110A through 185, one capstone senior studio course (Art 150), and 8 units of art electives.

Policies

The Major
Each course applied toward major requirements must be taken for a letter grade, with the exception of Art 190, 193, and 195, which are offered only on a Passed/Not Passed grading basis. Of those, no more than 4 units total may be applied toward the upper-division art elective requirement.

Graduate Major

Art MFA
The MFA curriculum fosters the development of a sustained artistic practice through exploration, experimentation, and intensive studio work and study. Opened in Fall 2019, the UCLA Margo Leavin Graduate Art Studios provide individual and communal work spaces for MFA art students with a flexible design that considers the nature of contemporary artistic practice.

The six areas of study—ceramics, interdisciplinary studio, new genres, painting and drawing, photography, and sculpture—are supplemented by contemporary critical theory seminars. Students are encouraged to work across areas of study within the department.

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Additional guidelines are outlined on the Art Department website.

Art

Lower-Division Courses
1A. Drawing. (4) Studio, eight hours; five hours arranged. Course in basic drawing skills intended as preparation for work in variety of media. P/NP or letter grading.
1B. Sculpture. (4) Studio, eight hours; five hours arranged. Introduction to concepts and forms of contemporary sculpture to become familiar with tools and
material to enable students to visually manifest their individual ideas. Presentation of work of contemporary artists. P/NP or letter grading.

11A. Painting. (4) Studio, eight hours; five hours arranged. Basics of painting; introduction to technical procedures, tools, and materials. Discussion of fundamental conceptual and formal concerns. P/NP or letter grading.

11B. Photography. (4) Studio, eight hours; five hours arranged. Basics of photography, with emphasis on individual projects. Various approaches, processes, and applications of photographic medium within context of art, supported by studies in theory, aesthetics, and history. P/NP or letter grading.

11C. Printmaking. (4) Studio, eight hours; five hours arranged. Introductory survey of various technical and conceptual concerns in variety of printmaking media as preparation for more focused study in particular medium of etching, relief, woodcut, screenprint, or lithography. P/NP or letter grading.

11D. New Genres. (4) Studio, eight hours; five hours arranged. Introduction to projects in installation, performance, video, film, and other nontraditional media and processes. May be repeated for maximum of 20 units. Letter grading.

11E. Ceramics. (4) Studio, eight hours; five hours arranged. Introduction to ceramic materials and processes, with emphasis on personal and cultural expression in ceramic media. Discussion of ceramics in contemporary artistic practice and social history of ceramic art. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20. Production. (2) Studio, four hours. Limited to Art majors. Instruction in production techniques and processes; including basics of recording still images, moving images, and sound. Introduction to various tools, software, workflow, storage, and output modalities. Letter grading.

21A. Production: Photographic Print. (2) Studio, four hours. Requisite: course 11B. Limited to Art majors. Not open for credit to students with credit for course 20. Moving image and sound production and post-production techniques, tools, and processes, including instruction in basic principles of recording, editing, and output for still images and photographs. Professional setups and standard practices as well as alternatives. Review of use of tools, software, and output modalities. Instruction in postproduction tools for editing and altering images and producing high-quality printed images. Letter grading.

21B. Production: Moving Image and Sound. (2) Studio, four hours. Limited to Art majors. Not open for credit to students with credit for course 20. Moving image and sound production and post-production techniques, tools, and processes, including instruction in basic principles of recording, editing, and output for still images and photographs. Professional setups and standard practices as well as alternatives. Review of use of tools, software, and output modalities. Instruction in postproduction tools for editing and altering images and producing high-quality printed images. Letter grading.

31A. Rise of Modernism in Global Context. (5) Lecture, three hours; discussion, one hour; field trips three hours. Examination of global forces underlying development of modernism thought on art and society from mid-19th through early-20th centuries. Exploration of premodern/postmodern, tradition and innovation, theory and practice of modernism in context of colonialism and industrialization. Letter grading.

31B. Global Modernism. (5) Lecture, three hours; discussion, one hour; field trips, three hours. Art forms should be studied in context of modernism in its various manifestations and in first year. Continuation of impact of modernist ideas through mid-20th century, with focus primarily on work made from 1920s to 1960s globally. Examination of how modernist ideas and practices were influenced by industrialization, urbanization, colonialism, world wars, and emancipatory movements. Letter grading.

31C. Modernism and Its Discontents. (5) Lecture, three hours; discussion, one hour; field trips, three hours. Art majors should complete courses 31A, 31B, and 31C in sequence in first year. Continued impact of modernist ideas from 1960s to present, covering shift from modernist practices and modernist theories. Examination of critiques of modernism drawing from emancipatory movements and poststructuralist, feminist, queer, performance, postcolonial, and critical race theory. Letter grading.

70. Summer Art Institute: Special Topics in Studio. (3) Studio/lecture/field trips, 45 hours. Limited to high school students in Summer Art Institute. Two-week intensive in studio art covering range of media and concepts. May be repeated for credit. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjacent to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100. Issues in Contemporary Art. (5) Lecture, three hours; discussion, one hour; screenings/ressarch, 11 hours. Requisites: courses 31A, 31B, 31C. Selected topics in theoretical, critical, aesthetic, and historical studies and their relevance to practicing artists. May be repeated for maximum of 20 units. Letter grading.

130A. Advanced Drawing: Topics in Anti-Racism, Equity, Diversity, and Inclusion. (5) Studio, eight hours; seven hours arranged. Requisite: course 11A. May be repeated for maximum of 20 units. Letter grading.

130A. Advanced Drawing: Topics in Anti-Racism, Equity, Diversity, and Inclusion. (5) Studio, eight hours; seven hours arranged. Requisite: course 11A. May be repeated for maximum of 20 units. Letter grading.

130A. Advanced Drawing: Topics in Anti-Racism, Equity, Diversity, and Inclusion. (5) Studio, eight hours; seven hours arranged. Requisite: course 11A. May be repeated for maximum of 20 units. Letter grading.

137A. Advanced New Genre: Topics in Anti-Racism, Equity, Diversity, and Inclusion. (5) Studio, eight hours; seven hours arranged. Requisite: course 11D. Varies approaches to historical and contemporary sculpture that highlights its social impact and cultural content. Themed lectures and studio assignments develop students’ technical, expressive, and conceptual tools to understand and explore anti-racism, equity, diversity, and inclusion. May be repeated for maximum of 20 units. Letter grading.

145A. Advanced Sculpture: Topics in Anti-Racism, Equity, Diversity, and Inclusion. (5) Studio, eight hours; seven hours arranged. Requisite: course 11B. May be repeated for maximum of 20 units. Letter grading.

147A. Advanced Photography: Topics in Anti-Racism, Equity, Diversity, and Inclusion. (5) Studio, eight hours; seven hours arranged. Requisite: course 11B. May be repeated for maximum of 20 units. Letter grading.

148A. Advanced Ceramics: Topics in Anti-Racism, Equity, Diversity, and Inclusion. (5) Studio, eight hours; seven hours arranged. Requisite: course 11C. May be repeated for maximum of 20 units. Letter grading.

149. Advanced Interdisciplinary Studio. (5) Studio, eight hours; seven hours arranged. Requisites: courses 31A, 31B, 31C. Varied project-based studies in conceptually-driven approaches to art making in which students’ core concerns and aims determine all
14A. Advanced Interdisciplinary Studio: Topics in Anti-Racism, Equity, Diversity, and Inclusion. (5) Studio, eight hours; seven hours arranged. Requisites: courses 31A, 31B, 31C. Varied project-based studies in conceptual art related to anti-racism and/or diversity, equity, and inclusion. Students' core concerns and aims determine all aspects of projects, including medium, method, and presentation. Preparation: open to juniors/seniors. Corequisite: courses 14A and 149A may be repeated for maximum of 20 units. Letter grading.

150. Senior Studio. (5) Studio, eight hours; seven hours arranged. Limited to seniors. Advanced studio projects, with emphasis on conceptual analysis and craft of individual creative work and ideas. Letter grading.

170. Special Topics in Studio. (2 to 4) Studio/museum visits, four to eight hours; two to four hours arranged. Current themes in art theory, practice, and criticism, offering students opportunity to explore these issues in studio context through critique of work and discussion of recommended readings. May be repeated for maximum of 16 units. P/NP or letter grading.

C180. Seminar: Art. (4) Seminar, three hours. Limited to junior/senior Art majors. Advanced topics in critical theory and study of contemporary art, with emphasis on individual methodologies. Possible areas of study from structuralism, deconstruction, feminist and psychoanalytic theory, commodification, and censorship. May be repeated for credit. Concurrency scheduled with course C280. Letter grading.

C181. Exhibition and System. (4) Seminar, four hours. Preparation: at least one course from 100 through 150. Examination of temporary exhibition and its associated field of publications as intertextual system of meaning. Final work will be in the form of a proposal for an on-site exhibition. Concurrently scheduled with course C281. Letter grading.

C182. Exhibitions and Public Programs. (4) Seminar, four hours. Preparation: at least one course from 100 through 150. Introduction to principles of program planning and community development in relation to visual arts and work of art museums. Concurrently scheduled with course C282. Letter grading.

C183. Special Topics in Art. (2 or 4) Seminar, six hours. Preparation: at least one course from 100 through 150. Select topic in art explored through variety of approaches that may include projects, readings, discussion, research papers, and oral presentations. Topics announced in advance. May be repeated for credit. Concurrently scheduled with course C283. Letter grading.


M185. Whose Movement Where?: Course on Public Art. (4) Same as Chicana/o and Central American Studies M185 and World Arts and Cultures M126.) Lecture, four hours. Recommended corequisite: course M168A, M168B, or M186C. Examination of public monuments in U.S. as basis for critical insight and critique of American values from perspective of artist. Use of urban Los Angeles as textbook in urban space issues such as who is public, what is public space at large, and what defines neighborhoods, and do different ethnic populations use public space differently. P/NP or letter grading.

M196A. Beyond Mexican Mural: Beginning Muralism and Community Development. (4) Same as Chicana/o and Central American Studies M196A and World Arts and Cultures M125A.) Studio/lecture, four hours. Corequisite: course M186AL. Investigation of muralism as method of community education, development, and empowerment. Exploration of issues through development of large-scale collaborative digitally created image and/or painting for placement in community. Students research, design, and work with community participants. Continuation of project or mastery of subject matter required. May be repeated for credit with consent of adviser. Letter grading.

M196AL-M196BL-M196CL. Beyond Mexican Mural: Community Muralism and Laboratory. (4–2–2) (Same as Chicana/o and Central American Studies M196AL-M196BL-M196CL and World Arts and Cultures M125A.) Lecture, four hours; study in regularly scheduled meetings with faculty mentor while facilitating USIE courses. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, tutorials, and final project. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

190. Studio/Research Colloquia in Art. (1) Seminar, three hours. Corequisite: course 197 or 198. Limited to juniors/seniors. Designed to bring together students undertaking supervised tutorial studio projects or research seminar setting, will be open to more faculty members to discuss their own work or related work in discipline. Led by one supervising faculty member. May be repeated for maximum of 4 units. P/NP grading.

193. Journal Club Seminars: Current Topics in Art. (1) Seminar, three hours. Limited to junior/senior Art majors. Discussion of selected current exhibitions, visiting artist lectures, screenings, and readings in field. May be repeated for credit. P/NP grading.

195. Community Internships in Art. (2 to 4) Tutorial, six to 12 hours. Limited to juniors/seniors. Art-related internship in supervised setting in community agency, business, or institution. Students meet on regular basis with instructor and provide periodic reports of their experience. Only 4 units may be applied toward upper-division art elective major requirement. May be repeated for maximum of 8 units. Individual contract with supervising faculty member required. P/NP grading.

197. Individual Studies in Art. (2 to 4) Tutorial, to be arranged. Preparazione: 3.0 grade-point average in major. Corequisite: course 190. Limited to junior/senior Art majors. Individual intensive studio project or study, with scheduled meetings to be arranged between faculty member and student. Tangible evidence of project or mastery of subject matter required. May be repeated for maximum of 8 units. Individual contract required. Letter grading.

198. Honors Research in Art. (2 to 4) Tutorial, to be arranged. Preparation: 3.0 grade-point average overall, 3.5 grade-point average in major. Corequisite: course 190. Limited to junior/senior Art majors. Development and completion of comprehensive research or studio project under direct supervision of faculty member. May be repeated for maximum of 8 units. Individual contract required. Letter grading.

Graduate Courses

271. Graduate Painting. (2 to 8) Studio, eight hours. Study in painting and associated media. May be repeated for credit with consent of adviser. Letter grading.

272. Graduate Printmaking. (2 to 8) Studio, eight hours. Studies in traditional and experimental printmaking. Selected studies in intaglio, lithograph, woodcut, silk screen, photo printmaking, and mixed media. May be repeated for credit with consent of adviser. Letter grading.

273. Graduate Sculpture. (2 to 8) Studio, eight hours. Studies in sculpture with specific attention to ongoing nature, specificity, and approach to each student’s individual discipline. Individual contract required. May be repeated for credit with consent of adviser. Letter grading.

274. Graduate Photography. (2 to 8) Studio, eight hours. Studies concentrating on development of individual students’ artwork. Studio emphasis with adjacent studies in theoretical and critical analysis. Specific attention to original, expressive, social, and human aesthetic. May be repeated for credit with consent of adviser. Letter grading.

275. Graduate New Genres. (2 to 8) Studio, eight hours. Studies in alternative media, including installation, performance, video, film, and other nontraditional media as a form of professional practice. May be repeated for credit with consent of adviser. Letter grading.
276. Graduate Group Critique. (4) Discussion, four hours; tutorial, to be arranged. Group critique/discussion of students’ research. Additional tutorial meetings by arrangement with instructor. May be repeated for credit. Letter grading.

277. Graduate Ceramics. (2 to 8) Studio, eight hours. Studies in ceramics and art with investigation of traditional and experimental processes and intellectual approaches to art practice utilizing ceramic media. Emphasis on development of significant body of original work reflecting student’s expressive and theoretical concerns. May be repeated for credit. Letter grading.

278. Interdisciplinary Studio. (2 to 8) Studio, eight hours. Tutorial focused on directed research, studio visits, and group discussions of recommended readings. May be repeated for credit. S/U or letter grading.

279. Open Area Studio. (2 to 8) Studio, 12 hours. Limited to Art MFA students. Non-medium-specific course in which students work to establish, expand, and deepen their studio practices, including technical and research methods, to develop significant body of original artwork that reflects their concerns and furthers their artistic goals. May be repeated for credit. Letter grading.

C280. Seminar: Art. (4) Seminar, three hours. Advanced topics in critical theory and study of contemporary art with emphasis on individuals, issues, and methodologies. Possible areas of study from structuralism, deconstruction, feminist and psychoanalytic theory, commodification, and censorship. May be repeated for credit. Concurrently scheduled with course C180. Letter grading.

C281. Exhibition and System. (4) Seminar, four hours. Examination of temporary exhibition and its associated field of publications as intertextual system of meaning, beginning with individual works and proceeding to on-site analysis of current exhibitions. May be repeated for credit. Concurrently scheduled with course C181. Letter grading.

C282. Exhibitions and Public Programs. (4) Seminar, four hours. Introduction to principles of program planning and community development in relation to visual arts and work of art museums. May be repeated for credit. Concurrently scheduled with course C182. Letter grading.

C283. Special Topics in Art. (2 or 4) Seminar, six hours (2-unit course) or 12 hours (4-unit course). Selected topics in art explored through variety of approaches that may include lectures, readings, discussion, research papers, and oral presentations. Topics announced in advance. May be repeated for credit. Concurrently scheduled with course C183. Letter grading.

C284. Special Topics Technical Studio. (2 or 4) Studio, three hours; outside study, three to nine hours. Limited to Art MFA students. Selected topics in techniques related to advanced studio projects. May be repeated for credit. Letter grading.

C287. Contemporary Art Collections in Los Angeles. (2) Seminar, three hours; outside study, three hours. Exploration of critical issues regarding concept of collections and collecting. Visits to institutions and collections and discussion of vision, goals, and scope of collections, as well as individual works. Concurrently scheduled with course C187. Letter grading.

375. Teaching Apprentice Practicum (1 to 4). Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

400A-400B. Visiting Artists Studio. (2–2) Studio, six hours. Designed for MFA students. Introduction to visiting artists in their area of study, with focus on one-on-one critiques with wide range of practitioners. In Progress (400A) and S/U (400B) grading.

400C. Visiting Artists Studio. (4) Studio, 12 hours. Limited to graduate art students. Introduction to visiting artists in their area of study, with focus on one-on-one critiques with wide range of practitioners. S/U grading.

401. MFA Working Groups. (2) Research group meeting, two hours. Limited to MFA students. Three or more MFA candidates propose research and/or studio topics and invite Art Department faculty member to mentor group/topic. May be repeated for credit. S/U grading.

495. Teaching Assistant Training Practicum. (2) Seminar, three hours; outside study, three hours. Forum for first-year teaching assistants for discussion and exploration of teaching pedagogy and classroom mechanics. Problems and practices of teaching art at college level, as well as role of teaching assistants within department. Designed to help new teaching assistants develop teaching skills and to orient them to department and University policies and resources. May not be applied toward degree requirements. S/U grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate adviser and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.

596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. May be repeated for credit with consent of adviser. S/U or letter grading.

597. Preparation for Master’s Comprehensive Examination. (2 to 12) Tutorial, to be arranged. May not be applied toward MA or MFA course requirements. May be repeated. S/U grading.

ART HISTORY
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Hui-Shu Lee, PhD
Saloni Mathur, PhD
Lothar von Falkenhausen, PhD
Glenn Wharton, PhD (Lore and Gerald Cunard Professor of UCLA/Getty Consensus)
Bronwen Wilson, PhD (Edward W. Carter Professor of European Art)

Professors Emeriti
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Susan B. Downey, PhD
Burglind Jungmann, PhD
Cecelia F. Klein, PhD
David M. Kunzle, PhD
Miwon Kwon, PhD (Walter Hopps Professor Emerita of Modern and Contemporary Art)
Steven D. Nelson, PhD
David A. Scott, PhD
Debora L. Silverman, PhD (Presidential Professor Emerita of Modern European History, Art, and Culture)
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Adjunct Professor
John M.D. Pohl, PhD

Adjunct Assistant Professor
Gregory T. Harwell, PhD

Overview
The Department of Art History endorses an interdisciplinary and intercultural approach to art history of all periods and places. By thinking across current categories and boundaries and even critically interrogating art history itself, students are encouraged to question the canon, rethink the relationship between margins and centers, and practice a socially and politically responsible art history.

The rich and varied art resources available at UCLA and throughout Southern California offer students extraordinary opportunities to supplement the formal curriculum.

Undergraduate Major
Art History BA

Capstone Program
The Art History major is a designated capstone program. Students have options for completing a senior honors thesis, a directed independent study, an advanced undergraduate seminar, a museum studies internship, a research assistantship, or a faculty-approved upper-division course that includes additional coursework culminating in the completion of a capstone paper. Through their capstone work, students are expected to conceive and execute a research or creative project; identify and evaluate documentation relevant to the discipline; develop an enhanced capacity for writing and research, critical and analytical thinking, and competent familiarity with art historical methodologies; and identify and articulate these arguments within art historical discourse and areas of specialization. The capstone experience also enables students to develop an enriched understanding of the foundations of the discipline, as well as the current landscape of the field.

Learning Outcomes
The Art History major has the following learning outcomes:

- Accurate identification of major works of art within periods, cultures, or genres comprising various art history subfields
- Analysis of individual works of art using appropriate art history terminology; and placement of them in their aesthetic, historical, and cultural contexts
Entry to the Major

Transfer Students

Transfer applicants to the Art History major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two art history courses in ancient, Renaissance and baroque, medieval, or modern art and two courses in African, Asian, or pre-Columbian art.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Two courses from Art History 20 through 25 and two courses from 27 through 31. It is strongly recommended that the courses be taken prior to enrollment in upper-division courses. Some of these courses serve as requisites to certain upper-division courses.

The Major

Required: Eleven upper-division art history courses as follows:

3. One additional art history elective selected from courses 100 through 185; course 197A may also be included

Honors Program

The honors program is designed for Art History majors who are interested in carrying out an independent research project that culminates in a departmental honors thesis of approximately 30 pages. The program gives qualified students the opportunity to work closely with individual professors on an in-depth supervised research and writing project.

Students must complete Art History 198A and 198B.

Policies

The Major

Each course must be taken for a letter grade.

Honors Program

All senior Art History majors who have completed a minimum of six upper-division art history courses with a departmental grade-point average of 3.5 or better and an overall GPA of 3.0 or better are eligible to apply. Consult the art history student affairs officer no later than the beginning of fall quarter of the senior year.

To qualify for graduation with honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.5 or better in upper-division courses in the department and an overall GPA of 3.0 or better, and (3) complete Art History 198A and 198B with grades of A- or better.

To qualify for graduation with highest honors, students must (1) complete all requirements for the major, (2) have a cumulative GPA of 3.85 or better in upper-division courses in the department and an overall GPA of 3.65 or better, and (3) complete courses 198A and 198B with grades of A.

Undergraduate Minor

Art History Minor

The Art History minor is designed for students who wish to augment their major with a series of courses that analyze the history, theory, and criticism of diverse visual traditions in world culture. On the lower-division level, the minor exposes students to overviews of these traditions in broad time periods from ancient to modern, from the regional to the global, as well as to courses that trace the historical significance of art in the context of specific thematic and media concerns. Upper-division courses offer more specialized content that explores crucial episodes or areas with more intense and rigorous theoretical and methodological strategies.

Admission

To enter the minor students must be in good academic standing with an overall grade-point average of 2.0 or better, have completed 45 units, and file a petition with the student affairs officer in 206B Dodd Hall, 310-825-3982. Students are advised to declare the minor early and meet with the student affairs officer to plan a coherent program.

The Minor

Required Lower-Division Courses (15 units): Three courses selected from Art History 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31.

Required Upper-Division Courses (20 units): Five art history courses as follows:

3. One additional art history elective selected from courses 100 through 185; course 197A may also be included

Policies

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

By petition, one upper-division course with substantial art historical content and methodology applied toward the students’ majors may also be applied toward this minor.
Graduate Major

Art History MA, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Art History

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20. Ancient Art. (5) Lecture, three hours; quiz, one hour; museum field trips. General introduction to art of the ancient Near East. P/NP or letter grading.

21. Medieval Art. (5) Lecture, three hours; discussion, one hour; museum field trips. General introduction to medieval art and architecture. P/NP or letter grading.

22. Renaissance and Baroque Art. (5) Lecture, three hours; discussion, one hour. Survey of Renaissance and Baroque art. P/NP or letter grading.

23. Modern Art. (5) Lecture, three hours; discussion, one hour; museum field trips. History of modern art from 1960s to 1990s, from Manet and impressionists to pop art and minimalism. P/NP or letter grading.

24. Architecture in Modern World. (5) Lecture, three hours; discussion, one hour. Introduction to study of architectural history through examination of built world of past two centuries. Building technologies and forms of economic, social, and political life have produced modern built environment that is both diverse and inextricably connected. Focus on factors that have affected architecture globally and those that give regions, cultures, and historical periods their particular qualities. Topics include architectural and urban ramiﬁcations of modern self-consciousness, nationalism and internationalism, colonialism and anti-colonialism, and new art and architectural theories. P/NP or letter grading.

25. Museum Studies. (5) Lecture, three hours; discussion, one hour; museum field trips. General introduction to study of museums in their social and historical contexts. Examination of debates about museum’s role in society through case studies and analysis of exhibitions, educational programs, and the museum as a cultural institution. P/NP or letter grading.

26. Art and Architecture of Ancient Americas. (5) Lecture, three hours; discussion, one hour; museum field trips. General introduction to art, architecture, and urbanism of Americas (North to South) from earliest settlement until AD 1450. Analysis of variety of media within their historical and cultural context. P/NP or letter grading.

27. Art and Architecture of Ancient Africa. (5) Seminar, three hours. Critical examination of history of discipline of art history, with studies of various theoretical, critical, and methodological approaches to visual arts. Letter grading.

28. Arts of Africa. (5) Lecture, three hours; discussion, one hour; museum field trips. Introduction to arts and architecture of Africa. Examination of social and historical contexts of their production. Introduction to body of information within framework of conceptual problem through series of case studies. P/NP or letter grading.

29. Chinese Art. (5) Lecture, three hours; discussion, one hour; museum field trips. General introduction to Chinese art, covering all major periods from Neolithic to modern age. Presentation of monuments as well as artifacts in variety of media in their social and historical contexts. P/NP or letter grading.

30. Arts of Japan. (5) Lecture, three hours; discussion, one hour; museum field trips. General introduction to art, architecture, and material culture of Japan, from earliest records to present. P/NP or letter grading.

31. Art of India and Southeast Asia. (5) Lecture, three hours; discussion, one hour; museum field trips. Discussion of selection of monuments and objects from Indian subcontinent and Southeast Asia using key historical, cultural, and religious concepts. Analysis of each monument or object in detail, with their relationships compared and contrasted. P/NP or letter grading.

88. Lower-Division Seminars. (4) Seminar, three hours. Limited to freshmen. Variable topics; consult Schedule of Classes or department for topics to be offered in specific term. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to students in College Honors Program. Designated as Honors only. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Directed study under guidance of faculty mentor. May be repeated for credit. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research work). Three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of three units (nine hours). Individual contract required; consult Undergraduate Research Center. May be repeated. Letter grading.

Upper-Division Courses

100. Art Historical Theories and Methodologies. (4) Seminar, three hours. Requisites: three courses from 20 through 31. Critical examination of history of discipline of art history, with studies of various theoretical, critical, and methodological approaches to visual arts. Letter grading.

M110A. Art and Architecture of Ancient Egypt, Predynastic Period. (4) Lecture, three hours. Study of architecture, sculpture, painting, and minor arts during Predynastic period and Old Kingdom. May be repeated for credit with consent of instructor. P/NP or letter grading.

M110B. Art and Architecture of Ancient Egypt, New Kingdom to Greco-Roman Period. (4) Seminar (Same as Ancient Near East CM101A.) Lecture, three hours. Study of architecture, sculpture, painting, and minor arts from New Kingdom to Greco-Roman period. P/NP or letter grading.

M110C. Ancient Egyptian Temple and City of Thebes. (4) Lecture, four hours: fieldwork, one hour. An analysis of ancient temples of city of Thebes (modern day Luxor). Theban temples are some of best-preserved cult buildings in all of Egypt, and their study illuminates traditions of artistic representation, architectural development, and social and political transformations echoed throughout all of ancient Egypt. Investigation of ritual linking of temples on Nile's eastern and western banks through Predynastic processes; changes in function and form of Theban temples through time, and statutory program of individual temples. P/NP or letter grading.

M110D. Art and Death in Ancient Egypt. (4) Seminar (Same as Ancient Near East CM102B.) Lecture, four hours. Study of rituals, images, and words of death, burial, funerary ritual, and afterlife beliefs in ancient Egypt, as well as in ancient Near East and Nubia, with focus on ancient visual materials—both objects and architecture—of Predynastic to Roman Periods. P/NP or letter grading.

M111. Minoan Art and Archaeology. (4) Seminar (Same as Classics M153A.) Lecture, three hours. Requisites: course 20 or Classics 10 or 51A. Study of development of art and architecture in Minoan Crete from circa 3000 to 1000 BC. P/NP or letter grading.

M112. Mycenaean Art and Archaeology. (4) Seminar (Same as Classics M153B.) Lecture, three hours. Requisite: course 20 or Classics 10 or 51A. Study of development of art and architecture of Greek world from approximately 800 until 490 BC. P/NP or letter grading.

M112B. Hellenistic Greek Art and Archaeology. (4) Seminar (Same as Classics M153C.) Lecture, three hours. Requisite: course 20 or Classics 10 or 51A. Study of development of art and architecture of Greek world from approximately 490 until 350 BC. P/NP or letter grading.

M112D. Hellenistic Greek Art and Archaeology. (4) Seminar (Same as Classics M153D.) Lecture, three hours. Requisite: course 20 or Classics 10 or 51A. Study of development of art and architecture of Greek world from approximately 350 until 300 BC. P/NP or letter grading.

M113A. Etruscan Art and Archaeology. (4) Seminar (Same as Classics M153F.) Lecture, three hours. Requisite: course 20 or Classics 10 or 51A. Study of history of art and architecture of Rome and its Empire from circa 1000 BC to end of Roman Republic. P/NP or letter grading.

M113B. Roman Art and Archaeology. (4) Seminar (Same as Classics M153G.) Lecture, three hours. Requisite: course 20 or Classics 10 or 51A. Study of history of art and architecture of Rome and its Empire from circa 300 BC to end of 4th century AD. P/NP or letter grading.


M114A. Greco-Roman Architecture; M114B. Greco-Roman Sculpture; M114C. Greco-Roman Painting.

C114D. Selected Topics in Ancient Art. (4) Lecture, three hours. Variable topics in ancient art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concur rently scheduled with course C214D. P/NP or letter grading.

C115A. Late Antique Art and Architecture. (4) Seminar (Same as Classics M153L.) Lecture, three hours. Art and architecture of late Roman Empire and early Christian world. Concurrently scheduled with course C215A. P/NP or letter grading.


C115D. Gothic Art and Architecture. (4) Lecture, three hours; Art and architecture of Europe in 13th and early 15th centuries. P/NP or letter grading.


C116A. Middle Byzantine Art and Architecture. (4) Lecture, three hours; Requisite: course 21. Theory and development of Byzantine art from iconoclastic controversy to 1204. Concurrently scheduled with course C216A. P/NP or letter grading.


C117A. Medieval Archaeology. (4) Lecture, three hours. Archaeology of medieval world. Concurrently scheduled with course C217A. P/NP or letter grading.

C117B. Selected Topics in Medieval Art. (4) Lecture, three hours. Variable topics in medieval art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C217B. P/NP or letter grading.

M118A. Medieval Armenian Art. (4) (Same as Armenian M1172.) Lecture, three hours. Examination of cultural and historical impact of Armenian miniature paintings, P/NP or letter grading.

M118B. Armenian Painting, 17th to 20th Century. (4) (Same as Armenian M1173.) Lecture, three hours. Overview of development of modern Armenian painting out of its matrix in 17th and 18th centuries. P/NP or letter grading.

C118C. Selected Topics in Armenian Art. (4) Lecture, three hours. Variable topics in Armenian art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C218. P/NP or letter grading.

119A. Western Islamic Art. (4) Lecture, three hours. From Tigris and Euphrates Rivers to Spain, 7th to 16th century, P/NP or letter grading.

119B. Eastern Islamic Art. (4) Lecture, three hours. From Tigris and Euphrates Rivers through Afghanistan and parts of central Asia; Ottoman Empire. P/NP or letter grading.

M119C. Introduction to Islamic Archaeology. (4) (Same as Islamic Studies M111 and Middle Eastern Studies M111.) Lecture, three hours. From earliest monuments of Islam in Arabia and Jerusalem to humble remains of small Egyptian port; broad focus on archaeological and standing remains in central Islamic lands (primarily Syria, Egypt, and Iraq), Turkey, Iran, North Africa, and Spain. Profound cultural transformations of Islamic 7th century to early Ottoman period in 16th and 17th centuries, which are traceable in material records. Assessment of effectiveness of tools afforded by historical archaeology to aid understanding of past societies. P/NP or letter grading.

M119D. Archaeology and Art of Christian and Islamic Egypt. (4) (Same as Archaeology M112, Islamic Studies M112, and Exeter Studies M112.) Lecture, three hours. Culture of Egypt transformed gradually after Muslim conquest in mid-7th century CE. According to material evidence such as ceramics, textiles, architectural forms, and building techniques, it is functionally impossible to separate pre-Islamic Christian Egypt from early Islamic Egypt. Although population may have become largely Muslim by 10th century, Egypt remained Coptic in many senses even to 14th century and retains sizeable Christian minority to present. Survey of archaeological remains and standing architecture of Egypt from 6th to 19th century, charting changes and continuities in material culture and stratigraphic geography and land use. P/NP or letter grading.

C120. Selected Topics in Islamic Art. (4) Lecture, three hours. Variable topics in Islamic art and architecture that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C220A. P/NP or letter grading.

121A. Italian Renaissance Art of 14th Century. (4) Lecture, three hours. Art and architecture of 14th century. P/NP or letter grading.


121D. Late Renaissance Art: Counter-Reformation. (4) Lecture, three hours. Requisite: course 22. Paintings, sculpture, and architecture of late 16th and early 17th centuries considered in context of Counter-Reformation. P/NP or letter grading.


C125A. Southern Renaissance Art. (4) Lecture, three hours. Art and architecture of Spain or Italy, 16th to late 17th century. Concurrently scheduled with course C225. P/NP or letter grading.

125B. Northern Baroque Art. (4) Lecture, three hours. Requisite: course C125A. Art and architecture of Northern Europe, 16th to late 17th century. P/NP or letter grading.

C126. Selected Topics in Early Modern Art. (4) Lecture, three hours. Variable topics in early modern art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C226. P/NP or letter grading.

127A. European Art of 17th and 18th Centuries. (4) Lecture, three hours. Requisite: course 20 through 31. Examination of art and visual culture of 17th and 18th centuries in light of political and intellectual developments. Special emphasis on effects of royal courts, colonialism, and revolution. P/NP or letter grading.


C127C. Cultural and Intellectual History of Modern Europe, 19th Century. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Climates of taste and climates of opinion. Educational, moral, and religious attitudes; art, thought, and manners of time in historical context. P/NP or letter grading.

C128A-C128B-C128C. History of Photography. (4–4–1) Lecture, three hours; discussion, one hour (when scheduled). History of photography in 20th century, one hour. Introduction to world of work and commerce; and its status as professional and artistic pursuit. Concurrently scheduled with course C238A. P/NP or letter grading.

130. Selected Topics in Modern Art. (4) Lecture, three hours. Requisite: course 23. Changing topics in modern art (post-1780) that reflect interests of individual regular and visiting faculty members. May be repeated once for credit. P/NP or letter grading.


132. Selected Topics in Contemporary Art. (4) Lecture, three hours. Requisite: course 23. Changing topics in contemporary art (post-1945) that reflect interests of individual regular and/or visiting faculty members. May be repeated once for credit. P/NP or letter grading.


C133B. American Art. (Gledge, 1860 to 1900. (4) Lecture, three hours. Painting, sculpture, and architecture in U.S. from Colonial period through Civil War. Concurrently scheduled with course C233B. P/NP or letter grading.

C133C. American Art, 1900 to 1945. (4) Lecture, three hours. Painting, sculpture, and photography in U.S. from 1900 to 1945. Concurrently scheduled with course C233C. P/NP or letter grading.

133D. Architecture in U.S. (4) Lecture, three hours; discussion, one hour. Introduction to history of architecture. May be used in U.S. over last 5,000 years. Architecture as vehicle for political and cultural authority, citizenship, ethnic and social identity; its role in defining place and our relation to nature; its role in asserting human control over natural world; its place in world of work and commerce; and its status as professional and aesthetic pursuit. P/NP or letter grading.

133E. American Houses. (4) Lecture, three hours. May be considered single-faceted. Concurrently scheduled with one of two most American contributions to world architecture (next to skyscrapers). Examination of this claim critically by placing single-family houses in broader context of varied buildings built and occupied by residents of present-day U.S. over last 500 years, including both aesthetically ambitious houses and ordinary (or vernacular) ones, houses of indigenous
groups and those of immigrants of many sorts, urban and rural houses, and single-family houses and multiple dwellings of all sorts. Offers ways to think about houses we have looked to understand how they relate to major themes in history of American architecture. P/NP or letter grading.

CM135A. African American Art before 1900. (4) (Same as African American Studies CM135A.) Lecture, three hours. Decline of slavery and the work to circa 1900 of African American artists whose works provide insight and critical commentary about major features of American life and society. Concurrently scheduled with course CM235A. P/NP or letter grading.

CM135B. African American Art, 1900 to 1963. (4) (Same as African American Studies CM135B.) Lecture, three hours. Detailed inquiry into work of African American artists from Columbia Exhibition to 1963 March on Washington within context of social, political, and cultural engagement, as well as in codification of modern black life in U.S. Concurrently scheduled with course CM235B. P/NP or letter grading.

CM136A. Selected Topics in African American Art. (4) Lecture, three hours. Variable topics in African American art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course CM236A. P/NP or letter grading.

CM137. Arts of Native North America. (4) Lecture, three hours. Survey of painting, sculpture, and other arts from Inuit to peoples of Caribbean and Southwestern cultures. (Same as African American Studies CM137.) Lecture, three hours. Requisite: course 27. Study of art of selected Maya-speaking cultures of southern Mesoamerica from circa 2000 BC to Conquest, with particular emphasis on history and iconography. Concurrently scheduled with course C239A. P/NP or letter grading.

CM139A. Maya Art and Architecture. (4) (Same as Chicana/o and Central American Studies M137.) Lecture, three hours. Requisite: course 27. Study of art of selected Maya-speaking cultures of southern Mesoamerica from circa 2000 BC to Conquest, with particular emphasis on history and iconography. Concurrently scheduled with course C239A. P/NP or letter grading.

CM140. Selected Topics in Arts of Indigenous Americas. (4) Lecture, three hours. Variable topics in artistic production of Native people across Americas that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C240A. P/NP or letter grading.

CM141. Colonial Latin American Art. (4) (Same as Chicana/o and Central American Studies M187B.) Lecture, three hours; discussion, three hours (when scheduled). Art and architecture of colonial Americas from 16th to 18th century. Concurrently scheduled with course C241B. P/NP or letter grading.

CM142A. Mexican Art in Modern Age. (4) Lecture, three hours. Mexican art of 19th and 20th centuries, from foundation of academy in 1785 to present day. Study of art and revolution, muralism, surrealism, indigenism, postcolonialism, and postmodernism in painting, sculpture, prints, photography, and architecture. Concurrently scheduled with course C242A. P/NP or letter grading.

CM142B. Latin American Art of 20th Century. (4) Lecture, three hours; discussion, one hour (when scheduled). Mainstream modern and contemporary art and architecture of selected Latin American countries, including both modernist and postmodernist forms, considering social and political concerns both national and international. Concurrently scheduled with course C242B. P/NP or letter grading.

143. Selected Topics in Latin American Art. (4) Lecture, three hours. Variable topics in Latin American art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. P/NP or letter grading.


145A. Architecture and Urbanism in Africa. (4) Lecture, three hours. Survey of African built environment at various moments and in different places from about 200 CE to present, with emphasis on cultural, social, and historical contexts of architecture, gender, and space, and contemporary African cities. Concurrently scheduled with course C245A. P/NP or letter grading.

145B. Contemporary Arts of Africa. (4) Lecture, three hours; discussion, one hour (when scheduled). Survey of African visual practices since mid-20th century, with special emphasis on changing meaning of art object, status of African artist, global reception of contemporary African art, and very definitions of contemporary African art. Concurrently scheduled with course C245B. P/NP or letter grading.

146A. Selected Topics in African Art. (4) Lecture, three hours. Variable topics in African art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C246A. P/NP or letter grading.


148A. Art and Material Culture, Neolithoc to 210 BC. (4) Lecture, three hours; discussion, one hour. Genesis of Chinese civilization in light of new archaeological finds, including sites and works of art (e.g., ceramics, bronzes, jades). Concurrently scheduled with course C248A. P/NP or letter grading.

148B. Art and Material Culture of Early Imperial China, 210 BC to AD 906. (4) Lecture, three hours. Palaces and tombs of early imperial dynasties, impact of Buddhist art (cave temples), rise of new media and technologies. Concurrently scheduled with course C248B. P/NP or letter grading.

148C. Art and Material Culture of Late Imperial China, 906 to 1911. (4) Lecture, three hours. Secular and religious (Buddhist and Taoist) architecture, painting, sculpture, and various luxury industries (lacquer, porcelain, silks, furniture, wood, and bamboo carving, etc.). Concurrently scheduled with course C248C. P/NP or letter grading.


148E. Art in Modern China. (4) Lecture, three hours. Concentrated look at major schools and masters of Chinese art from turn of 20th century to present, with focus on interaction with foreign cultures and issues of self-identity, assimilation, modernity, tradition, and continuity. Consideration of recent developments in Chinese art in global context. Concurrently scheduled with course C248E. P/NP or letter grading.


148G. Gardens in Chinese Art and Culture. (4) Lecture, three hours; discussion, one hour. Overview of practice, theory, and representation of Chinese gardens in their historical, philosophical, artistic, social, and cultural contexts (lyric writings, paintings, and aspects of material culture. Concurrently scheduled with course C248G. P/NP or letter grading.

149. Selected Topics in Chinese Art. (4) Lecture, three hours. Variable topics in Chinese art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C249A. P/NP or letter grading.


151. Selected Topics in Japanese Art. (4) Lecture, three hours; discussion, one hour (when scheduled). Variable topics in Japanese art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C251A. P/NP or letter grading.

152A. Arts of Korea. (4) Lecture, three hours; museum field trip. Introduction to arts and archaeology on Korean peninsula from Neolithic beginnings to early 20th century through analysis and discussion of selection of monuments and objects within technological, stylistic, religious, cultural, and sociopolitical contexts. Examination of construction of concepts of history and art under colonial and nationalist perspectives, with regard to historical and contemporary East Asian cultural and political interrelations. P/NP or letter grading.

152B. History of Korean Painting. (4) Lecture, three hours. Limited to juniors/seniors. Korean painting history from Three Kingdoms period to 19th century, examined within cultural and sociopolitical contexts. Special emphasis on the social and political status of artists during Choson dynasty (1392 to 1910). Concurrently scheduled with course C252A. P/NP or letter grading.

152C. History of Korean Ceramics. (4) Lecture, three hours. Limited to juniors/seniors. History of Korean ceramics from Neolithic period to 19th century, with special emphasis on technological and stylistic developments. Concurrently scheduled with course C252B. P/NP or letter grading.

152D. History of Korean Buddhist Art. (4) Lecture, three hours. Limited to juniors/seniors. History of Korean Buddhist art from Three Kingdoms period to Choson dynasty, with special emphasis on Buddhist iconography and relationship between sculpture, painting, and architecture. Concurrently scheduled with course C252C. P/NP or letter grading.

153A. Selected Topics in Korean Art. (4) Lecture, three hours. Limited to late 15th century. Variable topics in Korean art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C253A. P/NP or letter grading.

154A. Early Art of India. (4) Lecture, three hours. Not open to freshmen. Survey of Indian art from Indus Valley cultures to 10th century. Emphasis on Buddhist and Hindu backgrounds of arts. P/NP or letter grading.

154B. Later Art of India. (4) Lecture, three hours. Not open to freshmen. Survey of Indian art from 10th to 19th century. Decline of Buddhist art, last efflorescence of Hindu architecture, Muslim painting and architecture, and Rajput painting. P/NP or letter grading.

154C. Advanced Indian Art. (4) Lecture, three hours. Requisite: course 154A. Study in Indian sculpture and architecture. Concurrently scheduled with course C254A. P/NP or letter grading.

154D. Modern and Contemporary South Asian Art. (4) Lecture, three hours; discussion, one hour (when scheduled). Topics in modern and contemporary South Asian art from 1900 to present. P/NP or letter grading.

155. Selected Topics in South and Southeast Asian Art. (4) Lecture, three hours. Variable topics in South and Southeast Asian art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C255A. P/NP or letter grading.

156. Arts of Southeast Asia. (4) Lecture, three hours. Not open to freshmen. Southeast Asian art from its beginning in prehistory through 19th century. Study of
art of selected cultures from Burma, Malaysia, Thailand, Cambodia, Vietnam, and Indonesia. P/NP or letter grading.

C158A. Selected Topics in Asian Arts and Architecture. (4) Lecture, three hours; discussion. Variable topics in Asian arts and architecture that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C260A. P/NP or letter grading.

C160. Art and Empire. (4) Lecture, three hours; discussion, one hour (when scheduled). Examination of relationship between art and imperial ideologies and introduction to current issues in colonial studies and postcolonial criticism. Concurrently scheduled with course C260A. P/NP or letter grading.

161. Cities in History. (4) Lecture, three hours; discussion, one hour. Examination of history of cities worldwide, locating cities in their aesthetic, social, cultural, and symbolic contexts. History of cities from origins of urbanism to present, with focus on recent centuries. P/NP or letter grading.

C169. Selected Topics in Architectural History. (4) Lecture, three hours. Variable topics in architectural history that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C269. P/NP or letter grading.

C170A. Museum Studies. (4) Lecture, three hours; discussion, one hour (when scheduled). Introduction to museology as critical practice, with emphasis on history and theory of museums and impact of culture and society on museum theory and practice. Concurrently scheduled with course C270A. P/NP or letter grading.

C170B. Museum Studies Practicum. (2 to 4) Lecture, three hours. On-site examination and discussion of selected artworks, exhibitions, and associated published and distributed materials, and of museum and gallery institutions, practices, and policies. Concurrently scheduled with course C270B. Letter grading.

C171. Selected Topics in Museum Studies. (4) Seminar, three hours. Variable topics in museum studies that reflect interests of individual regular and/or visiting faculty members. May be repeated for credit with topic change. Concurrently scheduled with course C271. P/NP or letter grading.

C172A. Preservation of Art. (4) Lecture, three hours. Designed for Anthropology and Art History majors and other juniors/seniors. Introduction to preservation of cultural heritage materials, including what should be preserved and why, as well as who should be involved in decision-making process. Discussion of issues of preservation and restoration of these cultural heritage materials and how these practices fit into contextual and symbolic contexts. Materials and techniques used to make cultural heritage materials, in relation to preservation efforts, needed to prevent decay and loss. Introduction to examples of conservation issues related to sites, buildings, monuments, and collections. Ethical and contextual aspects with reference to changing values, illustrating how cultural materials may have been treated differently according to those values. Concurrently scheduled with course C272A. P/NP or letter grading.

C172B. Art: Fakes, Forgeries, and Authenticity. (4) Lecture, three hours. Examination of concepts of authenticity, originality, fakes, and forgeries in art. Overview of problems inherent in concept of authenticity and description of many examples of problems related to this concept. Examines common discussions based on objects from variety of cultures. Introduction to subject of fakes and account of three different areas of connoisseurship that are essential component of production, study, and scientific examination of fakes. Nature of art connoisseurship in many examples from Renaissance and earlier panel paintings, as well as antiquities and traditional African arts. Background of art restoration discussion discussed in terms of dating techniques that can be applied directly to works of art and technical methods by which material constituents of works of art are studied. Concurrently scheduled with course C272C. P/NP or letter grading.

M179. Cultural Heritage and Identity Representation. (4) Lecture, three hours. (Same as Art History 216.) Lecture, three hours; discussion, one hour. Exploration of what it takes to run museum and create exhibit. Introduction to different types of museum work, ranging from collecting and curation, to research, conservation, presentation, visitor experience, and management. Students jointly create exhibit based on Fowler Museum collection. Students research and discuss content of different stakeholders that relate to material under consideration. Consideration of narrative exhibit and how objects and their arrangement convey deliberate or accidental messages. Consideration of audiences as well as original context of each object. Focus on people behind objects, technologies, or material characteristics. P/NP or letter grading.

185. Undergraduate Seminar. (4) Seminar, three hours. Designed for juniors/seniors. Selected aspects of art history explored through readings, discussion, research papers, and oral presentations. May be repeated twice for credit. P/NP or letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SA. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SD. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SA. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

195. Museum Studies Internship. (3) Tutorial, to be arranged. Assignment as adjunct to upper-division lecture course. In Progress (198A) and letter (198B) grading.

196. Research Apprenticeship in Art History. (2 to 4) Tutorial, three hours per week per unit. Limited to juniors/seniors. Entry-level research apprenticeship for undergraduate students under guidance of faculty mentor. May be repeated for credit. Individual contract required. P/NP or letter grading.

197A. Individual Studies in Art History. (2 to 4) Tutorial, to be arranged. Preparation: 3.0 grade-point average in major. Limited to students. Concurrently scheduled with major study for majors, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for maximum of 8 units. Eight units may be applied toward major. Individual contract required. P/NP or letter grading.

197B. Individual Capstone Studies. (2) Tutorial, two hours. Limited to selected majors and minors. Guided study led by faculty supervisor. Instructee with a student to help design culminating capstone project so it conforms to departmental capstone project guidelines. Must be taken in conjunction and concurrently with one upper-division departmental course. May not be repeated for credit. Individual contract required. P/NP or letter grading.

198A-198B. Honors Research in Art History. (4-4) Tutorial, to be arranged. Preparation: completion of minimum of four upper-division art history courses with 3.5 departmental grade-point average and overall 3.0 grade-point average. Limited to junior/senior Art History majors and concurrently with independent research project under supervision of appropriate faculty member(s), culminating in departmental honors thesis of approximately 30 pages. Individual contract required. In Progress (198A) and letter (198B) grading.

199. Directed Research in Art History. (2 to 4) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200. Art Historical Theories and Methodologies. (4) Seminar, three hours. Critical examination of history of discipline of art history, with studies of various theoretical, critical, and methodological approaches to visual arts from antiquity to present. May be repeated for credit with consent of adviser. S/U or letter grading.

201. Topics in the History of Art History. (4) Seminar, three hours. Critical examination of historiographic traditions of specific areas and fields within discipline of art history, concentrating on particular traditions, methods, geographical areas, artistic traditions, or work of one or more authors. May be repeated for credit with consent of adviser. S/U or letter grading.

202. Topics in Theory and Criticism in Art History. (4) Seminar, three hours. Focused studies of various theoretical and critical traditions within art history, concentrating on particular issues, authors, or methodologies either within or across historical and cultural areas. May be repeated for credit with consent of adviser. S/U or letter grading.

203. Topics in Architectural History and Theory. (4) Seminar, three hours. Focused studies of various theoretical and critical traditions within architectural history, concentrating on particular issues, authors, or methodologies either within or across historical, geographic, and cultural areas. May be repeated for credit with consent of adviser. S/U or letter grading.

207. Consortium Scholar Seminar at Getty Research Institute. (4) Seminar, three hours. Open only to graduate seminar at Getty Museum in collaboration with Getty Research Institute. Instructors, topics, and format vary. S/U or letter grading.

210. Egyptian Art. (4) Seminar, two hours. Requisites: courses M110A, M110B, or consent of instructor. Art in Late period and Greco-Roman period. Students should be ready to prepare for every meeting briefing of topic from archaeological memoirs, not to exceed 10 minutes. Some lectures. May be repeated for credit with consent of adviser. S/U or letter grading.
212A. Topics in Aegean Art. (4) Seminar, two hours. Requisites: courses M111, M112A. Art and architecture of Aegean Bronze Age (3000 to 1000 BC). Monuments and problems related to art and culture of Crete, Greece, Cyclades, or Western Anatolia. May be repeated for credit with consent of adviser. S/U or letter grading.

212B. Topics in Classical Art. (4) Seminar, two to three hours. Studies in Parthian art. Site-by-site survey of Near East (Afghanistan, Iran, Iraq, Syria) during period of Greek and Parthian control. May be repeated for credit with consent of adviser. S/U or letter grading.

212C. Classical Art. (4) Seminar, two hours. Studies in Greco-Roman art and archaeology. Studies of specific periods, sites, or artistic media. May be repeated for credit with consent of adviser. S/U or letter grading.

C214D. Selected Topics in Ancient Art. (4) Lecture, three hours. Variable topics in ancient art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C114D. S/U or letter grading.

C215A. Late Antique Art and Architecture. (4) Lecture, three hours. Art and architecture of late Roman Empire and early Christian world. Concurrently scheduled with course C115A. S/U or letter grading.


C216B. Late Byzantine Art and Architecture. (4) Lecture, three hours. Theory and development of Byzantine art from 1204 to 1453. Concurrently scheduled with course C116B. S/U or letter grading.


C217B. Selected Topics in Medieval Art. (4) Lecture, three hours. Variable topics in medieval art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C117B. S/U or letter grading.

217C. Medieval Art. (4) Seminar, two hours. Studies in selected topics in Byzantine and European medieval art. May be repeated for credit with consent of adviser. S/U or letter grading.

217D. Byzantine Art, Architecture, and Archaeology. (4) Seminar, two hours. Selected topics in Byzantine art and architecture. May be repeated for credit with consent of adviser. S/U or letter grading.

C218. Selected Topics in Armenian Art. (4) Lecture, three hours. Variable topics in Armenian art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C118C. S/U or letter grading.

C220A. Advanced Studies in Islamic Art. (4) Seminar, three hours. Monuments or theoretical problems related to Islamic culture and artistic production. May be repeated for credit with consent of adviser. S/U or letter grading.

222A. Italian Renaissance Art. (4) Seminar, two hours. Preparation: knowledge of Italian. Study of various aspects of Leonardo’s theoretical approach to art in terms of his actual or potential works. May be repeated for credit with consent of adviser. S/U or letter grading.

224A. Northern Renaissance Art. (4) Seminar, two hours. Preparation: knowledge of German. Emphasis on selected trend in artist, period, or problem). Research papers and oral reports required. May be repeated for credit with consent of adviser. S/U or letter grading.

C225. Southern Baroque Art. (4) Lecture, three hours. Art and architecture of Spain or Italy, 16th to late 17th century. Concurrently scheduled with course C125A. S/U or letter grading.

225B. Early Modern Art. (4) Seminar, three hours. Emphasis on selected topic (e.g., particular artist, trend, or problem). Research papers and oral reports required. Language requirements depend on area of focus. May be repeated for credit with consent of adviser. S/U or letter grading.

C226. Selected Topics in Early Modern Art. (4) Lecture, three hours. Variable topics in early modern art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C126B. S/U or letter grading.

C228A–C228B. History of Photography. (4–4) Concurrently scheduled with courses C128A–C128B–C228C. S/U or letter grading. C228A. 1839 to 1910. Lecture, three hours. Study of origin, social functions, and development of photography in 19th and early 20th centuries, from Niépce to Atget. C228B. 1910 to Present. Lecture, three hours; discussion, one hour (when scheduled). Study of photography’s entrance into project of avant-garde and its role in formation of postmodern aesthetic. C228C. Selected Topics. Lecture, three hours. Variable topics in history of photography that reflect interests of individual regular and/or visiting faculty members.

228D. History and Theory of Photography. (4) Seminar, three hours. Study of major authors, texts, and theories in photography history, criticism, and theory. S/U or letter grading.

C229A. Modern Art, 1900 to 1950. (4) Lecture, three hours; discussion, one hour. Inquiry into 20th-century modernism from Fauvism to abstract expressionism. Topics include Cubism and abstract art; origins of abstraction, collage, photomontage, and ready-made; rise of automatism and chance procedures; art, utopia, and political revolution; antimodernism and fascism; mass culture, machinic paradigm, and work of art in age of mechanical reproduction. Concurrently scheduled with course C129A. S/U or letter grading.

229B. Dada, 1915 to 1923. (4) Lecture, three hours; discussion, one hour (when scheduled). Introduction to modernism and historical avant-garde of early 20th century, tracing in detail emergence of Dada avant-garde in its various geographical locales during and after World War I. Literature, film, and performance addressed, with special attention to invention of series of avant-garde strategies crucial to Dada: ready-made, chance procedures, mechanical drawing, and photomontage. Concurrently scheduled with course C129B. S/U or letter grading.

C229C. Surrealism, 1924 to 1939. (4) Lecture, three hours; discussion, one hour (when scheduled). Study of art, literature, and film associated with surrealist movement in France, with special attention to disseminations of intellectual thought, as well as to challenge to art history posed by surrealist movement with lessons of psychoanalysis. Concurrently scheduled with course C129C. S/U or letter grading.

230A. European Art, 1700 to 1900. (4) Seminar, two hours. May be repeated for credit with consent of adviser. S/U or letter grading.

C230B–C230C. Seminars: Modern European History. (4–4) (Same as History M230A–M230B) Seminar, three hours. Course C230B is enforced requisite to C230C. May be repeated for credit with consent of adviser. In Progress (M230B) and letter (M230C) grading.

C230D. Modern Art. (4) Seminar, two hours. Changing topics in modern art (including illustration and other popular forms) that reflect interests of particular faculty members. Political and economic factors affecting arts of France and Germany at various times. May be repeated for credit with consent of adviser. S/U or letter grading.

C231A. Contemporary Art, 1940s to 1950s. (4) Lecture, three hours. Requisite: course 23. Study of major artistic and cultural trends following World War II in U.S. and Europe, covering abstract expressionism to pop art. Concurrently scheduled with course C131A. S/U or letter grading.


C232. Contemporary Art. (4) Seminar, three hours. Selected topics in contemporary art, criticism, and theory. S/U or letter grading.

C233A. American Art before Civil War. (4) Lecture, three hours. Painting, sculpture, and architecture in U.S. from Colonial period through Civil War. Concurrently scheduled with course C133A. S/U or letter grading.

C233B. American Art in Gilded Age, 1860 to 1900. (4) Lecture, three hours. Painting, sculpture, and architecture in U.S. from Civil War to turn of century. Concurrently scheduled with course C133B. S/U or letter grading.

C233C. American Art, 1900 to 1945. (4) Lecture, three hours. Painting, sculpture, and photography in U.S. from 1900 to 1945. Concurrently scheduled with course C133C. S/U or letter grading.

C234. American Art. (4) Seminar, two hours. Requisite: courses C233A or C233B or C233C, depending on topic. Topics vary in American art in Colonial period to present. Discussion of weekly readings, student oral presentations, and papers. May be repeated for credit with consent of adviser. S/U or letter grading.

C235A–C235B. African American Art. (4) Selected Topics in African American Studies (CM235A) Lecture, three hours. Detailed inquiry into work to circa 1900 of African American artists whose works provide insightful and critical commentary about major features of American life and society. Concurrently scheduled with course CM135A. S/U or letter grading.

C235B. African American Art, 1900 to 1963. (4) (Same as African American Studies CM235B) Lecture, three hours. Detailed inquiry into work of African American artists from Columbian Exposition to 1963 March on Washington within context of social, political, and cultural engagement, as well as in codification of modern black life in U.S. Concurrently scheduled with course CM135B. S/U or letter grading.

M236. Topics in African American Art. (4) (Same as African American Studies M236) Seminar, three hours. Requisite: course CM235A or CM235B. Topics in African American art from 18th century to present. May be repeated for credit with consent of graduate adviser. S/U or letter grading.

C236A. Selected Topics in African American Art. (4) Lecture, three hours. Variable topics in African American art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C136A. S/U or letter grading.

C239A. Maya Art and Architecture. (4) Lecture, three hours. Requisite: course 27. Study of art of selected Maya-speaking cultures of southern Mesoamerica from circa 2000 BC to Conquest, with particular emphasis on history and iconography. Concurrently scheduled with course CM139A, S/U or letter grading.

C239B. Aztec Art and Architecture. (4) Lecture, three hours. Requisite: course 27. Painting, sculpture, architecture, and other arts of Nahautl-speaking peoples of central Mexico from pre-Conquest on their social and historical context and major scholarly debates. Concurrently scheduled with course C139B, S/U or letter grading.

C239C. Inca Art and Architecture. (4) Lecture, three hours. Exploration of art, architecture, and urbanism of Incas from their empire’s height in late 15th century to their political and cultural fragmentation during Spanish occupation of Andes (1532 to 1824). Concurrently scheduled with course C139C, S/U or letter grading.

C240A. Selected Topics in Arts of Indigenous America. (4) Lecture, three hours. Variable topics in artistic production of Native American peoples across the Americas, with focus of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C140A, S/U or letter grading.


C242A. Mexican Art in Modern Age. (4) Lecture, three hours. Mexican art of 19th and 20th centuries, from foundation of academy in 1785 to present day. Study of art and revolution, muralism, surrealism, indigenism, postcolonialism, and postmodernism in painting, sculpture, prints, photography, and architecture. Concurrently scheduled with course C142A, S/U or letter grading.

C242B. Latin American Art of 20th Century. (4) Lecture, three hours; discussion, one hour (when scheduled). Mainstream modern and contemporary art and architecture of selected Latin American countries, including Brazil, Mexico, and Argentina, considered in context of social and political concerns, both national and international. Concurrently scheduled with course C142B, S/U or letter grading.

C243. Hemispheric and Transnational Approaches to Contemporary Art in Americas. (4) (Same as Chi. 40) Seminar, three hours. May refer to current and future research, teaching, and museum practice in contemporary art of Americas, with focus on hemispheric and transnational approaches. Study of influential theoretical texts from literary studies and critical examination of recent publications in arts, including museum exhibition catalogues, as hemispheric and transnational approach to contemporary Latin and American arts is positioned. Focus intersects with other related topics, including art practice; comparative identities in Americas; art, globalization, and biennials; decolonial turn; transnational feminism; and New American counter narratives. S/U or letter grading.

C245A. Architecture and Urbanism in Africa. (4) Lecture, three hours; discussion, one hour (when scheduled). Survey of African visual practices since mid-20th century, with special emphasis on changing meaning of art object, status of African artist, global reception of contemporary African art, and very definitions of contemporary African art. Concurrently scheduled with course C145B, S/U or letter grading.

C246. African Art. (4) Seminar, three hours. Studies in selected topics in art of sub-Saharan Africa. May be repeated for credit with consent of adviser. S/U or letter grading.

C246A. Selected Topics in African Art. (4) Lecture, three hours. Variable topics in African art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C146A, S/U or letter grading.

C247. Oceanic Art. (4) Seminar, three hours. Studies in selected topics in art of Pacific islands. May be repeated for credit with consent of adviser. S/U or letter grading.

C248A. Art and Material Culture, Neolithic to 210 BC. (4) Lecture, three hours; discussion, one hour. Genesis of Chinese civilization in light of new archaeological finds, including sites and works of art (e.g., ceramics, bronzes, jade). Concurrently scheduled with course C148A, S/U or letter grading.

C248B. Art and Material Culture of Early Imperial China, 210 BC to AD 906. (4) Lecture, three hours. Palaces and tombs of early imperial dynasties, impact of Buddhist art (cave temples), rise of new media and technologies. Concurrently scheduled with course C148B, S/U or letter grading.

C248C. Art and Material Culture of Later Imperial China, 906 to 1911. (4) Lecture, three hours. Secular and religious (Buddhist and Taoist) architecture, sculpture, painting, and various luxury industries (lacquer, porcelain, textiles, jade, bronze, furniture, wood and bamboo carving, etc.). Concurrently scheduled with course C148C, S/U or letter grading.


C248E. Art in Modern China. (4) Lecture, three hours. Concentrated look at major schools and masters of Chinese art from turn of 20th century to present, with focus on interaction with foreign cultures and issues of self-identity, assimilation, modernity, tradition, and continuity. Consideration of recent developments in Chinese art in global context. Concurrently scheduled with course C148E, S/U or letter grading.


C248G. Gardens in Chinese Art and Culture. (4) Lecture, three hours. Exploration of Chinese gardens in their historical, philosophical, artistic, social, and cultural contexts through literary writings, paintings, and aspects of material culture. Concurrently scheduled with course C148G, S/U or letter grading.

C249A. Selected Topics in Chinese Art. (4) Lecture, three hours. Variable topics in Chinese art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C149A, S/U or letter grading.

C249B. Chinese Art. (4) Seminar, three hours. Advanced studies in secular and religious artistic traditions of China. May be repeated for credit with consent of adviser. S/U or letter grading.


C251A. Selected Topics in Japanese Art. (4) Lecture, three hours; discussion, one hour (when scheduled). High-level studies in selected topics in Japanese art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C151A, S/U or letter grading.

C251B. Japanese Art. (4) Lecture, three hours. Advanced studies in secular and religious artistic traditions of Japan. May be repeated for credit with consent of adviser. S/U or letter grading.

C252A. History of Korean Painting. (4) Lecture, three hours. Study of Korean history from Three Kingdoms period to 19th century, examined within cultural and sociopolitical contexts. Special emphasis on diversity of historical events and social status of artists during Choson dynasty (1392 to 1910). Concurrently scheduled with course C152A, S/U or letter grading.

C252B. History of Korean Ceramics. (4) Lecture, three hours. History of Korean ceramics from Neolithic period to present day, with concurrent study of technological and stylistic developments. Concurrently scheduled with course C152C, S/U or letter grading.

C252C. History of Korean Buddhist Art. (4) Lecture, three hours. History of Korean Buddhist art from Three Kingdoms to present day, with special emphasis on Buddhist iconography and relationship between sculpture, painting, and architecture. Concurrently scheduled with course C152D, S/U or letter grading.

C253A. Selected Topics in Korean Art. (4) Lecture, three hours. Variable topics in Korean art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C153A, S/U or letter grading.

C254A. Advanced Indian Art. (4) Lecture, three hours. Requisite: course 154A. Study in Indian sculpture and architecture. Concurrently scheduled with course C154A, S/U or letter grading.

C254B. Modern and Contemporary South Asian Art. (4) Lecture, three hours. Study in modern and contemporary South Asian art from 1900 to present. S/U or letter grading.

C255A. Selected Topics in South and Southeast Asian Art. (4) Lecture, three hours. Variable topics in South and Southeast Asian art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C155A, S/U or letter grading.

C255B. Indian Art. (4) Lecture, two hours. Advanced studies in secular and religious artistic traditions of India. May be repeated for credit with consent of adviser. S/U or letter grading.

C258A. Selected Topics in Asian Arts and Architecture. (4) Lecture, three hours. Variable topics in Asian arts and architecture that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C158A, S/U or letter grading.

M258B. Topics in Asian Archaeology. (4) (Same as Anthropology M216) Seminar, three hours. Designed for graduate students. Topics may include identification of ethnic groups in archaeology, archaeology of religion, archaeological reflections of commerce and trade and their influence on social development, archaelogy of language dispersal, cultural contact and the influence of cultural influence. S/U or letter grading.

C258C. Fieldwork in Archaeology. (2 to 8) Fieldwork, to be arranged. Participation in archaeological excavations or other archaeological research under supervision of staff. May be repeated for credit with consent of adviser. S/U or letter grading.

C260. Art and Empire. (4) Lecture, three hours; discussion, one hour (when scheduled). Examination of relationship between art and imperial ideologies and introduction to current issues in colonial studies and postcolonial criticism. Concurrently scheduled with course C160, S/U or letter grading.


C270B. Museum Studies Practicum. (2 to 4) Lecture, three hours. On-site examination and discussion of selected artworks, exhibitions, and associated published and distributed materials, and of museum and gallery institutional policies, and practices. Concurrently scheduled with course C170B. Letter grading.

C271. Selected Topics in Museum Studies. (4) Seminar, three hours. Variable topics in museum studies that reflect interests of individual regular and/or visiting faculty members. May be repeated for credit with topic change. Concurrently scheduled with course C171. S/U or letter grading.

C272A. Preservation of Art. (4) Lecture, three hours. Designed for graduate students. Introduction to preservation of cultural heritage materials, including what should be preserved and why, as well as who should be involved in decision-making process. Discussion of issues involving preservation and restoration of these cultural heritage materials both in museum and outdoor environment contexts. Materials and techniques used to make cultural heritage materials in relation to preservation efforts needed to prevent decay and loss. Introduction to examples of conservation issues related to sites, buildings, monuments, and collections. Ethical and contextual aspects with reference to changing values illustrating how cultural materials may have been treated differently according to those values. Concurrently scheduled with course C172A. S/U or letter grading.

M272B. Principles, Practice, and Ethics in Conservation of Cultural Heritage. (4) (Formerly numbered 272B.) (Same as Conservation M221.) Seminar, three hours. Introduction to preservation of cultural heritage materials, including what should be preserved and why, as well as who should be involved in decision-making process. Use of several examples of issues and problems involved in preservation of works of art, from Renaissance paintings to Statues of Liberty. Discussion of issues involved in preservation of these cultural heritage materials both in museum and outdoor environment contexts. Materials and techniques used to make cultural heritage materials, in relation to preservation efforts needed to prevent decay and loss. Introduction to examples of conservation issues related to sites, buildings, monuments, and collections. Ethical and contextual aspects with reference to changing values illustrating how cultural materials may have been treated differently according to those values. Concurrently scheduled with course C172A. S/U or letter grading.

C272C. Art: Fakes, Forgeries, and Authenticity. (4) Lecture, three hours. Examination of concepts of authenticity, originality, fakes, and forgeries in art. Overview of issues inherent in concept of authenticity and description of many examples of problems related to this concept in series of discussions based on objects from variety of cultures. Introduction to subject of fakes and forgeries and account of three different areas of connoisseurship that are essential component of production, study, and scientific examination of fakes. Nature of art connoisseurship described in many examples from Renaissance paintings, as well as antiquities and traditional African arts. Background of art restoration and art conservation discussed in relationship to authenticity and technical studies. Scientific tests and form basis of another kind of connoisseurship described in terms of dating techniques that can be applied directly to works of art and technical methods by which material constituents of works of art are studied. Concurrently scheduled with course C172B. S/U or letter grading.

273. Studies in Materials and Production of Artworks. (4) Seminar, three hours. Designed to expose students to material properties and technical production issues related to making of artworks. Introduction to processes of construction, fabrication, maintenance, preservation, and more. Hands-on demonstrations and workshops to deepen understanding of significance of choices that artists make in choice of materials, processes of making that can impact final physical forms as well as aesthetic meanings that can attach to it. Combination of theoretical, ethical, and practical questions that confront conservators as well as those specializing in technical art history. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Teaching Art History. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Designed for graduate students. Required of all new teaching assistants during Fall Quarter of their teaching assistant appointment. Workshop/seminar in teaching techniques and pedagogical issues, consisting of readings, discussions, and guest speakers on selected topics. May not be applied toward MA or PhD course requirements. S/U grading.

496. Teaching with Technology. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Designed for graduate students. Introduction to technological support available to new departmental teaching assistants. Topics include exploring functions of teaching assistant archive, COLE, MYCULA, Gradebook, and Turnitin; and ways to effectively use these tools. Introduction to lesson planning and ways to establish effective teaching strategies in and out of classroom. May be applied toward MA or PhD course requirements. S/U grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate advisor and graduate dean, and host campus instructor, department chair, and graduate dean. Required of all new teaching assistants during Fall Quarter of their teaching assistant appointment. Workshop/seminar in teaching techniques and pedagogical issues, consisting of readings, discussions, and guest speakers on selected topics. May not be applied toward MA or PhD course requirements. S/U grading.

596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. Preparation: mentorship described in terms of dating techniques that can be applied directly to works of art and technical methods by which material constituents of works of art are studied. Concurrently scheduled with course C171. S/U or letter grading.

598. Research for and Preparation of MA Thesis. (2 to 12) Seminar, to be arranged. Preparation: mentoring described in terms of dating techniques that can be applied directly to works of art and technical methods by which material constituents of works of art are studied. Concurrently scheduled with course C171. S/U or letter grading.


10. Arts Encounters: Exploring Arts Literacy in 21st Century. (5) Lecture, four hours; discussion, one hour; field trips, three hours; outside study, seven hours. Through series of direct encounters with art and artists across global range of practices, course equips students with kinds of critical skills that enhance their understanding of, and sharpen their appetite for, wide range of artistic practices. Attendance at performance/art events outside normal class schedule is mandatory, P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

100. Selected Topics in Arts. (4) Lecture, three to six hours; discussion and/or laboratory, two to three hours (when scheduled); outside study, six to nine hours. Selected topics in arts explored through variety of approaches that may include projects, readings, studio work, performance, discussion, research papers, and oral presentations. Topics announced in advance. May be repeated for maximum of 8 units. P/NP grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

### Arts and Architecture Lower-Division Courses

10. Arts Encounters: Exploring Arts Literacy in 21st Century. (5) Lecture, four hours; discussion, one hour; field trips, three hours; outside study, seven hours. Through series of direct encounters with art and artists across global range of practices, course equips students with kinds of critical skills that enhance their understanding of, and sharpen their appetite for, wide range of artistic practices. Attendance at performance/art events outside normal class schedule is mandatory, P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

### Arts and Architecture Schoolwide Programs

**School of the Arts and Architecture**

2200 Broad Art Center
Box 951620
Los Angeles, CA 90095-1620

**School of the Arts and Architecture**

310-206-3564

**Overview**

The School of the Arts and Architecture offers courses as part of the schoolwide curriculum.
own major. Proposals are prepared with faculty guidance and sponsorship and are thoroughly examined for cogency, completeness, and academic merit.

**Undergraduate Major**

**Individual Field BA in Arts and Architecture**

Highly motivated students who find that no single major accommodates their specific interest in a given subject may propose designing their own major. Proposals are prepared with faculty guidance and sponsorship and are thoroughly examined for cogency, completeness, and academic merit.

**Learning Outcomes**

The Individual Field major has the following learning outcomes:

- Demonstrated understanding of how the research and creative methodologies of different disciplines can interface with and illuminate the understanding of another
- Design of a course of study that shows a deep understanding of how the disparate disciplines are connected
- Demonstrated ability to read in the scholarly discourse and style of different disciplines
- Development of voice in written thesis for an interdisciplinary audience
- Written thesis that demonstrates mastery of diverse fields as a result of research sources and production of scholarly and creative work outside of traditionally defined academic boundaries
- Production of a final paper or creative project that synthesizes and integrates a principal theme or themes common to coursework and diverse fields of knowledge

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**ASIAN AMERICAN STUDIES**

**College of Letters and Science**

3332 Rolfe Hall
Box 957225
Los Angeles, CA 90095-7225

**Asian American Studies**

310-267-5592

**Natalie R. Masuoka, PhD, Chair**

**Faculty Roster**

**Professors**

Keith Lujan Camacho, PhD
Michelle L. Caswell, PhD
Mitchell J. Chang, PhD
Cindy F. Fan, PhD
Gilbert C. Gee, PhD
Grace Kyungwon Hong, PhD
Jerry Kang, JD
Vinay Lal, PhD
Anna S. Lau, PhD
Jinqi Ling, PhD
Purnima Mankekar, PhD
Valerie J. Matsumoto, PhD (George and Sakaye Aratani Professor of Japanese American Incarceration, Redress, and Community)
Vinit Mukhiya, PhD
Thu-huong Nguyen-vo, PhD
Kye-young R. Park, PhD (Korea Times– Hankook Ibo Endowed Professor of Korean American Studies and Law)
Shu-mei Shih, PhD (Irving and Jean Stone Professor)
Renée E. Tajima-Peña, BA (UCLA Alumni and Friends of Japanese Ancestry Professor of Japanese American Studies)
Karen N. Umemoto, PhD
David K. Yoo, PhD
Min Zhou, PhD

**Professors Emeriti**

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**Associate Professors**

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Lucy M. Burns, PhD
Jennifer J. Chun, PhD
Evyn Lê Espiritu Gandhi, PhD
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**Assistant Professors**

Juliann T. Anesi, PhD
Jolie Chea, PhD
Loubna N. Gutami, PhD
Cindy C. Sangalang, PhD
Lee Ann S. Wang, PhD

**Adjunct Professor**

Benjamin K.P. Woo, MD

**Adjunct Associate Professor**

Tritia Toyota, PhD

**Overview**

The Department of Asian American Studies, founded in 2004, promotes the study of Asian and Pacific Islander Americans across a number of fields and disciplines. Following the tradition of civil rights struggles of the 1960s and 1970s, the department values the social relevance of academy-based knowledge production, as well as the connection between academia, the Asian and Pacific Islander community, and other disadvantaged social groups. Faculty members in the department are likewise committed to offering a broad, inclusive, and flexible curriculum designed to meet maximum student needs, with emphasis on close mentorship, collaborative teaching, and engaged scholarship.

The department offers a Bachelor of Arts (BA) degree, undergraduate minors in Asian American Studies and Pilipino Studies, a Master of Arts (MA) degree, and two concurrent degree programs: Asian American Studies MA/Master of Public Health with the Fielding School of Public Health Community Health Sciences Department and Asian American Studies MA/Social Welfare MSW with the Luskin School of Public Affairs Social Welfare Department. The Asian American Studies educational program performs the following missions: conducts teaching that enables students to learn, think, and practice in a nurturing and intellectually stimulating environment; equips students with theoretical and practical knowledge, as well as analytical and communicative skills that reflect the excellence of the faculty; and prepares students either for advanced graduate studies or for life after college as artists, citizens, entrepreneurs, political leaders, and professionals.

As an interdisciplinary field, the Asian American Studies curriculum examines the contemporary realities, diverse experiences, and histories of Asian and Pacific Islander Americans. The topical range of such examination includes community work and development, cultural production (including digital media and creative expression), gender, and generational dynamics, migration and diaspora, political participation, social activism, and transnational encounters. The teaching and research methods used by faculty members in the department are interdisciplinary and comparative in nature, with a healthy mix of quantitative, qualitative, interpretive, and applied approaches. These methods develop out of dynamic cross-fertilization among faculty expertise that registers both major intellectual shifts in the field and notable trends from disparate disciplines, professional practices, and epistemological traditions.

**Undergraduate Major**

**Asian American Studies BA**

The BA program in Asian American Studies provides a general introduction for students who anticipate advanced work at the graduate level or careers in research, public service, and community work related to Asian and Pacific Islander Americans.

**Capstone Major**

The Asian American Studies major is a designated capstone major. Students are required to complete either a community-based applied team research project or an independent scholarly or creative expression project. Those who select the community-based project are expected to use their scholarly knowledge and analytical skills to examine problems facing Asian and Pacific Islander American populations, think creatively and innovatively about evidence-based solutions, and to produce reports that benefit community stakeholders. Those who select to design and complete an independent scholarly or creative expression project pursue a key idea or theme of personal interest that is related to their prior coursework and to the experiences and realities of Asian and Pacific Islander Americans. Through their capstone work, all students are expected to demonstrate their skills in using and synthesizing knowledge gained in disparate courses and communicating effectively their findings and
conclusions in a final paper, report, or project and in a public forum.

Learning Outcomes
The Asian American Studies major has the following learning outcomes:

- Development of literacy in foundational histories, emergent and transnational directions, theories, geographies, and ideas of ethnic studies
- Understanding of past and present Asian American and Pacific Islander issues, communities, social movements, geographies, and thought
- Curation of skills in critical and interdisciplinary methodological training in archival research, oral history, ethnography, creative production, data collection and analysis, etc.
- Engagement with pedagogies that examine Asian American and Pacific Islander and ethnic studies decolonial epistemologies and creative expressions
- Centering of the relationship between theory and community engagement, social justice activism, transformative change, and movement building

Entry to the Major

Admission
An overall grade-point average of 2.0 or better is required for admission to the major.

Transfer Students
Transfer applicants to the Asian American Studies major with 90 or more units must complete the following introductory course if possible prior to admission to UCLA: one lower-division Asian American studies course or one course that focuses on Asian Americans. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major
Required: Two courses from Asian American Studies 10 or 19, 20 or 20W, 30 or 30W, 40 or 40W, 50 or 50W.

The Major


Honors Program
Through the Asian American Studies honors program, Asian American Studies majors undertake a year-long thesis or its equivalent with the guidance and supervision of a faculty member. Successful completion of the departmental honors program is indicated on the transcript. For additional information about the departmental honors program, contact the undergraduate academic adviser.

Honors students must take the Asian American Studies 198A, 198B, and 198C sequence in which they write a thesis or its equivalent under the direction of a faculty member.

Policies

The Major
Courses may only satisfy one of the four upper-division categories in the major at a time. No course may be applied to more than one category.

No more than 4 graded units of courses numbered 192 and 198 may be applied toward the major.

No more than 12 graded units of courses numbered 195, 197, 198, and 199 may be applied toward the major.

Each course applied toward the major must be taken for a letter grade, each must be at least 4 units, and students must have an overall grade-point average of 2.0 or better.

Honors Program
For additional information about the departmental honors program, contact the undergraduate academic adviser.

Admission
The honors program is open to junior and senior Asian American Studies majors who have (1) 90 or more total units, (2) a grade-point average of 3.5 or better in upper-division Asian American Studies courses and an overall cumulative GPA of 3.0 or better, and (3) completed two lower-division Asian American Studies courses.

Undergraduate Minors

Asian American Studies Minor
The Asian American Studies minor is designed for students who wish to gain understanding of and competence in Asian American Studies.

Admission
To enter the minor, students must have an overall grade-point average of 2.0 or better, have completed two lower-division Asian American Studies courses, and file a petition with the Asian American Studies student advisor, 3333 Rolfe Hall.

The Minor

Required Lower-Division Courses (10 units): Two courses from Asian American Studies 10 or 10W, 20 or 20W, 30 or 30W, 40 or 40W, 50 or 50W.


Policies

Courses may only satisfy one of the four upper-division categories in the major at a time. No course may be applied to more than one category.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, each must be at least 4 units, and students must have an overall grade-point average of 2.0 or better.

Honors Program
For additional information about the departmental honors program, contact the undergraduate academic adviser.

Admission
The honors program is open to junior and senior Asian American Studies majors who have (1) 90 or more total units, (2) a grade-point average of 3.5 or better in upper-division Asian American Studies courses and an overall cumulative GPA of 3.0 or better, and (3) completed two lower-division Asian American Studies courses.

Pilipino Studies Minor
The Pilipino Studies minor produces graduates competent in histories and contemporary experiences of Filipinos in the U.S. and elsewhere in the world. Student understanding of historical and contemporary histories of Filipinos is grounded in questions of equality, social justice, and disparity, which supply a vocabulary and critical thinking skills necessary to engage with issues including class, cultural production,
Asian American Studies

Lower-Division Courses

10. History of Asian Americans. (5) Lecture, three hours; discussion, one hour. Not open for credit to students with credit for course 10W. Multidisciplinary examination of history of Asians and Pacific Islanders in U.S. P/NP grading.

10W. History of Asian Americans. (5) Lecture, three hours; discussion, two hours. Enforced requisite: English Composition 3 or H in English as a Second Language 36. Not open for credit to students with credit for course 10. Maturity, critical thinking, and archival research for history of Asians and Pacific Islanders in U.S. Satisfies Writing II requirement. Letter grading.

M18. Leadership and Student-Initiated Retention. (2) Same as African American Studies M18, American Indian Studies M18, and Chicana/o and Central American Studies M18.) Seminar, two hours. Limited to freshmen/sophomores/first-year transfer students. Not open for credit to students with credit for course M168. Exploration of issues in retention at UCLA through lens of student-initiated and student-run programs, efforts, activities, and services. Focus on populations with historically low graduation rates targeted by Campus Retention Committee. May not be applied toward departmental major or minor elective requirements. May be repeated once for credit. Letter grading.

19. Flat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20. Contemporary Asian American Communities. (5) Lecture, three hours; discussion, one hour. Multidisciplinary introduction to contemporary Asian American populations and communities in U.S. Topics include contemporary immigration, demographic trends, sociocultural, economic, and political issues, and interethnic relations. P/NP or letter grading.

20W. Contemporary Asian American Communities. (5) Lecture, three hours; discussion, two hours. Requisite: English Composition 3. Not open for credit to students with credit for course 20W. Multidisciplinary introduction to contemporary Asian American populations and communities in U.S. Topics include contemporary immigration, demographic trends, sociocultural, economic, and political issues, and interethnic relations. Satisfies Writing II requirement. Letter grading.

30. Asian American Literature and Culture. (5) Lecture, three hours; discussion, one hour. Enforced requisite: English Composition 3. Not open for credit to students with credit for course 30W. Multidisciplinary introduction to Asian American literature and cultural production. Exploration of cultural politics and creative expression of Asia Pacific Americans in their own terms and in context of emergence and reception of artistic works—from personal, local, regional, national, to and global/imperial. Implicit and explicit comparison of Asian American cultural production to diverse experiences of other aggregated groupings, historic and emergent. Addresses intersectional issues of gendering, sexuality, non-secularity, and socioeconomic conditions. P/NP grading.

30W. Asian American Literature and Culture. (5) Lecture, three hours; discussion, two hours. Enforced requisite: English Composition 3. Not open for credit to students with credit for course 30W. Multidisciplinary introduction to Asian American literature and cultural production. Exploration of cultural politics and creative expression of Asia Pacific Americans in their own terms and in context of emergence and reception of artistic works—from personal, local, regional, national, to and global/imperial. Implicit and explicit comparison of Asian American cultural production to diverse experiences of other aggregated groupings, historic and emergent. Addresses intersectional issues of gendering, sexuality, non-secularity, and socioeconomic conditions. Satisfies Writing II requirement. Letter grading.


Graduate Major

Asian American Studies MA

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Concurrent Degree Programs

Concurrent degree programs allow students to reduce the number of courses required for two degrees, since some courses may apply to both degrees.

• Asian American Studies MA/Master of Public Health
• Asian American Studies MA/Master of Social Welfare

Admission

To enter the minor, students must have an overall grade-point average (GPA) of 2.0 or better, have completed the two lower-division minor courses with a GPA of 2.0 or better, and file a petition with the department undergraduate academic adviser, 3333 Rolfe Hall.

The Minor

Required Lower-Division Courses (10 units):
One course from Asian American Studies 10 or 10W, 20 or 20W, 30 or 30W, 40 or 40W, 50 or 50W, and one course from Filipino 1, 2, 3, 4, 5, 6, or History 9E.

Required Upper-Division Courses (20 units):
One course from Asian American Studies 133, M171D, 176; one course from Anthropology 116S, History 176A, 176B, 176C, Filipino 170; three additional upper-division courses from the lists above or from Filipino 152, 155, 170, Geography 145.

Policies

A minimum of 20 units applied toward the major requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Major

Asian American Studies MA

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.
Upper-Division Courses

103. Social Science Research Methods. (4) Lecture, three hours; discussion, one hour. Designed for juniors/seniors. Introduction to fundamentals of conducting social scientific research, focusing on using some research methods and exercises in evaluating nature and quality of scientific research on Asian American issues. P/NP or letter grading.


104B. Special Internships in Asian Pacific Communities. (4) Fieldwork, eight hours minimum. Requisite: course 104A or another Asian American studies course (except 199). Integrates academic and empirical work by providing students challenge of performing public service and community work in Asian Pacific or other multicultural communities, and bringing their ongoing internship experiences back to the classroom. May be repeated for credit, P/NP or letter grading.

105. Historical Research Methods. (4) Seminar, three hours. Requisite: course 10. Introduction to methods used to locate and analyze source materials for research on Asian American history. Historians have used various sources that may include archival materials, oral history, material culture, and more. P/NP or letter grading.

107. Scholarly and Creative Communication in Asian American Studies. (4) Lecture, three hours. Designed for junior Asian American Studies majors and minors. Examination of alternative modes of expression to effectively reach academic and nonacademic audiences, including written text, visual materials, and performance. Exploration of scholarly works by looking at how narratives are developed, ideas and values are framed, or knowledge is generated and transmitted, through either traditional or electronic mediums. Investigation of discursive and popular forms, stylistic patterns, and communicative practices. Themes and content vary by term. Independent research related to course objective may be pursued with guidance. Letter grading.


110. American Immigration Policy. (4) Lecture, three hours. Enforced requisite: English Composition 30, 30W, 40, 40W, 50, or 50W. In-depth analysis of American immigration laws. Examination of processes and historical development of immigration and naturalization policy in U.S. and its territories. Interrogation of how communities are pitted against each other by structural antigens—such as war, imperialism, racial capitalism, settler colonialism, white supremacy, and heteropatriarchy—and theorizing of strategies for building solidarities across difference. Intersecational and interdisciplinary analysis of race and immigration in relation to gender, sexuality, and class, from ethnic studies, gender studies, anthropology, sociology, history, cultural studies, and literature. P/NP or letter grading.

112A. Historical Survey of Asian American Literature. (5) Same as English M102A. Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: Composition 3 or SH. Survey of Asian American literature, including works by such authors as Edith Eaton, Younghill Kang, Carlos Bulosan, Hisaye Yamamoto, John Okada, Frank Chin, and Maxine Hong. Letter grading.

112B. Contemporary Asian American Literary Issues and Criticism. (5) Same as English M102B. Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: Composition 3 or SH. Survey of Asian American literature that explores key literary and critical issues, such as race and geography, aesthetics and activism, cultural work and immigrant labor, kinship and sexuality, model minority and Orientalism, and meat versus rice, in study of novels, poetry, performance, memoirs, and essays. May be repeated for credit with topic or instructor change. P/NP or letter grading.

112C. Asian American Creative Writing. (4) Seminar, four hours. Enforced requisite: Composition 3 or SH. Designed for juniors/senior. Examination of margin of geographic and psychic spaces that Asian Americans inhabit outside American mainstream and specific factors that influence Asian American identity, class, and sexual orientation, that shape individual's unique margin. Balanced blend of reading and creative writing. P/NP or letter grading.


114. Asian American Education and Schooling. (4) Same as Education M103. Seminar, four hours. Examination of existing body of research from various disciplines on Asian/Pacific American educational experiences. Letter grading.


118. Asian American Religious History. (4) Lecture, four hours. Examination of religious as thematic thread within context of Asian American history, primarily during period before World War II. Basic grounding in early Asian American history through exploration of role of religion in various communities. P/NP or letter grading.

119. Asian American and Pacific Islander Labor Issues. (4) Same as Labor Studies M119. Lecture, three hours. Examination of historical and contemporary labor issues in Asian and Pacific Islander American communities, with emphasis on key role that Asian and Pacific Islander American students can play in supporting labor struggles of low-income immigrants. P/NP or letter grading.

120. Representation and Resistance: Asian American Independent Cinemaking. (3) Seminar, three hours. Exploration of relationship between content, social context, and production processes in independently produced films and digital media by and about Asian American filmmakers, from social change documentaries to theatrical features and online talent. P/NP or letter grading.

121. Exploring Asian American Theater. (4) Lecture, four hours. Study of Asian American plays; students research composition or on their own experience using lessons learned in class. Exploration of scene study and acting exercises. P/NP or letter grading.


122B. Gender and Film in Pacific. (4) Lecture, three hours. Requisite: course 122A. Exploration of role of film in Pacific Islands throughout the 20th century, with attention to politics of gender, history, and representation, to engage students in textural and visual readings of feature-length films about Pacific Islands. Discussions, film screenings, and guest speakers focus on aesthetic, cultural, economic, gendered, historical, and political dimensions of films. P/NP or letter grading.

123. Cultures of/against Empire. (4) Seminar, three hours. Critical concepts and cultural practices linking Asian American studies to study of U.S. cultures of imperialism. Course begins with premise that Asian American studies contribute distinctly to contemporary scholarship on U.S. Empire. Examination of political, ideological, and intellectual coalitions toward which Asian American studies critique builds. Emphasis on works that approach study of empire through comparative racial formation, postcolonialism, transnationalism, and studies of migration. P/NP or letter grading.

124. Comparative Racialization and Indigeneity. (4) Same as African American Studies M124. Lecture, three hours. Examination of processes and histories of racialization and colonialization in U.S. Discursive and visual mediums, and reading assignments, with focus on issues of cultural survival, empire, indigeneity, migration, resistance, sovereignty, and war. P/NP or letter grading.


126. Comparative Race and Indigeneity. (4) Seminar, three hours. Preparation: one ethnic studies course. Analysis of race and indigeneity within comparative ethnic studies framework. Examination of how Asian, Pacific Islander, Black, indigenous, and LatiX identities are formed and defined: how is another race lived in U.S. and its territories. Interrogation of how communities are pitted against each other by structural antagonisms—such as war, imperialism, racial capitalism, settler colonialism, white supremacy, and heteropatriarchy—and theorizing of strategies for building solidarities across difference. Intersecational and interdisciplinary analysis of race and indigeneity in relation to gender, sexuality, and class, from ethnic studies, gender studies, anthropology, sociology, history, cultural studies, and literature. P/NP or letter grading.

127. Participatory Action Research on Youth Organizing for Racial Justice. (4) Same as African American Studies M127B, American Indian Studies M129, Chicana/o and Central American Studies M129B, and Public Affairs M122. Lecture, four hours. Students are trained to conduct participatory action research on grassroots youth organizing across Cali-

130B. Chinese Immigrant Literature and Film. (4) Same as Chicana/o and Central American Studies M153S. Lecture, three hours; discussion, one hour. In-depth analysis of key literature about mass incarceration of Japanese Americans during World War II and its long-term effects of internment. Emphasis on research. Original paper based on primary sources held by University of California required. Letter grading.


131B. Japanese Americans and Incarceration. (4) Seminar, three to four hours. Prerequisite: course 10 or 10W. Designed for juniors/seniors. In-depth analysis of key literature about mass incarceration of Japanese Americans during World War II and its long-term effects of internment. Emphasis on research. Original paper based on primary sources held by University of California required. Letter grading.


135. Southeast Asian Refugee Communities in U.S. (4) Lecture, three hours. Survey of contemporary Southeast Asian American communities and examination of different communities that led to migration of almost two million people from Laos, Cambodia, and Vietnam with close attention to history of U.S. imperialism and Cold War politics. Screening of fiction and nonfiction films by and/or about Southeast Asian refugees. P/NP or letter grading.

140XP. Power to People: Asian and Pacific Islander Community-Based Learning. (4) Formerly numbered 140SL.) Lecture, two hours; fieldwork, four hours. Enforced prerequisite: course 10W, 20W, 30W, 30W, 40W, 50W, or 50W. Service-learning course to engage and critically examine community organizing and community-based organizations and their role in the Pacific Islander communities related to issues such as arts and culture, community health, and applied research. P/NP or letter grading.

141AX. Asian American and Pacific Islander Leadership Development Project Part I: Leadership. (4) Formerly numbered 141A) Lecture, three to four hours. Limited to juniors/seniors. First term of two-term series on leadership development, with focus on intellectual and practical strategies of leadership concepts, models, and skills. In Progress grading (credit to be given only on completion of course 141BX).

141BX. Asian American and Pacific Islander Leadership Development Project Part II: Field Studies. (4) Formerly numbered 141B.) Lecture, three to four hours. Enforced prerequisite: course 141AX. Limited to juniors/senior. Second term of two-term series on leadership development, with focus on Asian American, Pacific Islander, and other ethnic communities in Los Angeles. Examination of different approaches and strategies to community building and maintenance. P/NP or letter grading.

C142A. Ethnocommunications I: Introduction to Creating Community Media. (4) Seminar, three hours. Strong verbal communication skills and familiarity with technology required. Introduction to social documentary theory and methodology. Through hands-on production, use of digital video to tell visual stories, reclaim history, and examine social issues related to diverse peoples, cultures, and communities. Viewing of films and documentaries. Final group project. P/NP or letter grading.

C142B. Ethnocommunications II: Intermediate Creating Community Media. (4) Seminar, three hours. Strong verbal communication skills and familiarity with technology required. Intermediate application of social documentary theory and methodology. Continuing instruction in use of digital technology and concepts. Topics include videography, composition, sound recording, interviewing techniques, editing, and writing treatments. Completion of community-based documentary required. Concurrently scheduled with course C242A. P/NP or letter grading.


M143A. Fieldwork in Asian American and Pacific Islander Communities. (4) Same as Anthropology M1380.) Lecture, three hours; discussion, one hour. Introduction to qualitative research methods and application of field techniques, data collection, analysis, and reporting. Critical reflection of issues related to identity, migration, multiculturalism, tourism, and indigenous rights. Field excursions and guest lecturers from local community included. Given in Hawai’i, P/NP or letter grading.

143B. Politics of Race, Ethnicity, Migration, and Multiculturalism in Hawai’i. (4) Lecture, three hours; discussion, one hour. Continuing construction and expression of ethnic identity in various cultural forms and social contexts in Hawai’i. Overview of theoretical approaches to and basic concepts in identity formation, including racism, intersectionality, and discourses of historical and contemporary aspects of ethnic identity and ethnic relations in Hawai’i. Given in Hawai’i, P/NP or letter grading.

M143C. Ethnic Identity and Ethnic Relations in Hawai’i. (4) Same as Anthropology M168Q.) Lecture, three hours; discussion, one hour. Continuing construction and expression of ethnic identity in various cultural forms and social contexts in Hawai’i. Overview of theoretical approaches to and basic concepts in identity formation, including racism, intersectionality, and discourses of historical and contemporary aspects of ethnic identity and ethnic relations in Hawai’i. Given in Hawai’i, P/NP or letter grading.

M160. Culture, Media, and Los Angeles. (6) Same as Chicana/o and Central American Studies M182B, Gender Studies M140C, and Labor Studies M143.) Lecture, three hours; discussion, one hour. Examination of how gender, race, class, and status shape domestic labor in U.S. Examination of domestic worker experiences through film, fiction, and tradi-tional scholarship. Investigation of why domestic work is in high demand, who employs domestic workers, and why immigrants and women of color make up large percentage of this workforce. Exploration of how domestic workers navigate pay and working condi-tions, and how they build community and family net-works in shadows of their privileged employers. P/NP or letter grading.

M163. Worker Center Movement: Next Wave Organizing for Justice for Immigrant Workers. (4) Same as Chicana/o and Central American Studies M160C, Gender Studies M160C, and Labor Studies M160.) Seminar, three hours; discussion, one hour. Examination of how gender, race, class, and status shape domestic labor in U.S. Examination of domestic worker experiences through film, fiction, and tradi-tional scholarship. Investigation of why domestic work is in high demand, who employs domestic workers, and why immigrants and women of color make up large percentage of this workforce. Exploration of how domestic workers navigate pay and working condi-tions, and how they build community and family net-works in shadows of their privileged employers. P/NP or letter grading.

M164. Women, Violence, Globalization: India, Philippines, Singapore, Vietnam. (4) Same as Gender Studies M144AX.) Lecture, three hours; discussion, one hour. Study of various forms of violence done on women not only in and of themselves but in light of larger systems of oppres-sion, with focus on Filipino, Vietnamese, Singaporean, and South Asian cultures.

M165. Race, Gender, Class. (5) Same as Comparative Literature M175S.) Seminar, three hours. Theoretical and literary readings combined to explore three main aspects of social and cultural experience (race, gender, class) as separate and intersecting spheres affecting both minority and majority populations in U.S. Examination of these issues from comparative perspectives. P/NP or letter grading.

M166A. Multiculturalism in Hawai’i. (4) Same as Chicana/o and Central American Studies M156A and Labor Studies M166A.) Lecture, three hours; discussion, one hour. New immigrant rights movement, with particular attention to labor and higher education. Overview of history of immigrant rights movement and examination of development of
coalition efforts between labor movement and immi-
rants movement nationally and locally. Special focus
on issues of immigrant students in higher educa-
tion, changes facing undocumented immigrant stu-
dents, and legislative and policy issues that have
emerged. Students conduct oral histories, family his-
tories, research on immigration and immigrant rights,
write poetry and spoken word about immigrant experi-
ence, and develop student publication on immigrant
students in higher education. P/NP or letter grading.

M168B. Research on Immigration Rights, Labor, and
higher education. (Same as Chicana/o and
Central American Studies M156B and Labor Studies
M168B.) Seminar, two hours. Required course:
course M168A. Expansion of research conducted by
students in course M168A involving oral histories,
research on immigration/labor/higher educa-
tion, and evaluation of legislation and legal issues im-
pacting undocumented students. Letter grading.

M166C. Research on Immigrant Students and High-
er Education. (Same as Chicana/o and
Central American Studies M156C and Labor Studies
M166C.) Seminar, three hours. Enforced requisites:
courses M166A, M166B. Expansion of research conducted
by students in course M166B involving oral his-
tories, research on immigration/labor/higher educa-
tion, and evaluation of legislative and legal issues im-
pacting undocumented students. Designed around class
projects, where students work on showcasing all
material collected throughout year. Letter grading.

167. Immigration and New Second Generation. (4)
Lecture, three hours. Study of lived experiences of
contemporary immigrants and their children. Examina-
tion of socioeconomic circumstances, life chances,
and outcomes of new second generation. Review of
theoretical literature and empirical research on immi-
gration, immigrant adaptation, comparing historical
and contemporary trends of immigration and ex-
periences of adult immigrants. Study of immigrant
children’s experiences, considering patterns, pro-
ceses, and outcomes growing up in an American
identity formation. Asian immigration and Asian Ameri-
cans from comparative perspective. P/NP or letter grading.

M168. Student-Initiated Retention and Outreach Is-
is in Higher Education. (Same as Asian Ameri-
can Studies M118. American Indian Studies M118,
and Chicana/o and Central American Studies M118.)
Lecture, four hours. Exploration of issues in outreach
and retention efforts in higher education, es-
cially through student-initiated programs, efforts, ac-
tivities, and services, with focus on UCLA as case.
May be repeated twice for credit. Letter grading.

M169. Constructing Race. (4) (Same as African
American and Anthropology M144P) Lecture, three
hours; discussion, one hour (when scheduled).
Examination of race, socially constructed category, from
anthropological perspective. Consider-
ation of development of racial categories over time
and in different regions, racial passing, multiple
identity in U.S., whiteness, race in popular culture,
and race and identity. P/NP or letter grading.

170. Transnational Perspectives on Asian America.
(4) Lecture, three hours. Recommended preparation:
background in Asian Pacific American social and legal
history. Designed for juniors/seniors. Examination of
transformations occurred in Asian America in
last four decades as consequence of global eco-
nomic restructuring and new immigration. Introduc-
tion to and survey of new frameworks for understanding
these changes. Modern Asian Pacific American
communities, using theories of transnationalism and
Asian American political and racial history. Readings
and discussion on transnational aspects of wide range of
histories, cultures, and contemporary topics in context of
Asia/Asian American experience. Building of linkages
between roots of social constructions of race and mul-
tisited social processes that now constitute globalizing
Asian American experience. Theoretical readings assigned. P/NP
or letter grading.

171A. Critical Issues in U.S.-China Relations. (4)
Lecture, three hours. Not open to freshmen. Critical
examination of U.S. involvement in China, Hong Kong,
and Taiwan, including study of historical, cultural, po-
tical, and socioeconomic factors that shape relations
between China, Hong Kong, and Taiwan and U.S. Ex-
amination of impact of relationships in Pacific Rim
and Chinese American and their communities. P/NP
or letter grading.

171B. Critical Issues in U.S.-Japan Relations. (4)
Lecture, three hours. Not open to freshmen. Critical
examination of U.S. involvement in Japan, including
study of historical, cultural, political, and socioeco-
nomic factors that shape relations between Japan and
U.S. Examination of impact of relationships in Pacific
Rim and Japanese American and their communities.
P/NP or letter grading.

171C. Critical Issues in U.S.-Korea Relations. (4)
Lecture, three hours. Not open to freshmen. Critical
examination of U.S. involvement in Korea, including
study of historical, cultural, political, and socioeco-
nomic factors that shape relations between Vietnam
and U.S. Examination of impact of relationships in
Pacific Rim and Korean American and their communities.
P/NP or letter grading.

171D. Critical Issues in U.S.-Philippine Relations.
(4) (Same as History M144C) Lecture, three hours;
discussion, one hour (when scheduled). Recom-
pended preparation: History 176A, 176B, 176C. De-
signated for juniors/seniors. Examination of complex in-
terrelationships of U.S. Participation with Philippine/
American Studies / 225
Seminars in Comparative Race, Ethnicity, Gender, and
Sexuality. (4) Seminar, three hours. Limited to
juniors/seniors. Variable topics in selected comparative and
international issues pertaining to transnationalism and diasporas.
May be repeated for credit with topic change. P/NP or letter grading.

175A. Topics in Comparative Race, Ethnicity, Gen-
er, and Sexuality. (4) Seminar, three to four hours.
Limited to juniors/seniors. Variable topics in selected issues on race,
ethnicity, gender, and sexuality from comparative perspective.
May be repeated for credit with topic change. P/NP or letter grading.

175B. Topics in Transnationalism and Dias-
soros. (4) Seminar, three to four hours. Limited to
juniors/seniors. Variable topics in selected comparative and
international issues pertaining to transnationalism and diasporas.
May be repeated for credit with topic change. P/NP or letter grading.

176. Making Fiction Work: Philippines and Its Else-
where. (4) Seminar, three hours. Required course:
course from 10, 10W, 20, 20W, 30, 30W, 40,
40W, 50, 50W, 123, 123, M171D or History M144C,
Fem 130A, 132, 155, or consent of instructor. Phi-
ippines and Filipino global diaspora as launching off
point for interdisciplinary study of cultural diversity, na-
tional identity formation, global migration, labor, rise of Asia,
and borders. Critical study of difference, not as identitarian, celebratory approach of sameness;
rather focus on shared struggles between minoritized groups in U.S.
and shared histories of U.S. territorial possessions. May not be repeated for credit. P/NP or letter grading.

177. Social Movements in Guam and Pacific. (4)
Lecture, three hours. Survey of immigrant and indige-
nous histories in Guam, Mariana Islands, and Oceania,
Emphasis on Asian, Chicana/o, and Pacific Islander
communities, and feminist, environmental, nationalist,
and religious social movements. P/NP or letter grading.

178. Critical Refugee Studies. (4) Lecture, three
hours. Required course: 10, 10W, 20, 20W, 30, 30W, 40,
40W, 50, or 50W. Examination of how refugees
represented in government and popular media, and
how refugees represent themselves with cultural
production. Rather than focus on refugee as victim,
study centers refugee as subject of knowledge pro-
duction for critical analyses of war, empire, militarism,
and human rights. P/NP or letter grading.

179. Asian Community: Border-Crossing, Dias-
poric Formation, and Social Transformation. (4)
(Same as Sociology M139.) Lecture, three hours; dis-
cussion, one hour (when scheduled). Examination of
cultural formation and diasporic social transform-
sion in transnational South Asian diasporas enable us to
rethink relationship between Asian American studies, di-
asporic studies, and area studies. P/NP or letter grading.

182C. Gender in South Asian Communities at Home
and Abroad. (4) Lecture, three hours. Emphasis on gender
representation of gender to histories and identities of men
and women of South Asian affiliation across multiple
historical and geopolitical contexts. Focus on colonial
South Asia, South Asian diasporas in U.K., South
Asian Americans in U.S., and transnational South
Asian public cultures. Theoretical approaches to study of
South Asians in comparative frame and consider-
ation of how transnational perspectives enable revi-
sioning South Asian American experiences and to
rethink relationship between Asian American studies, di-
asporic studies, and area studies. P/NP or letter grading.

182B. Gender in South Asian Communities at Home
and Abroad. (4) Lecture, three hours. Emphasis on gender
representation of gender to histories and identities of men
and women of South Asian affiliation across multiple
historical and geopolitical contexts. Focus on colonial
South Asia, South Asian diasporas in U.K., South
Asian Americans in U.S., and transnational South
Asian public cultures. Theoretical approaches to study of
South Asians in comparative frame and consider-
ation of how transnational perspectives enable revi-
sioning South Asian American experiences and to
rethink relationship between Asian American studies, di-
asporic studies, and area studies. P/NP or letter grading.

185. Capstone Community-Based Research. (4)
Seminar, three hours; fieldwork, three hours. Limited
to seniors majoring in area studies and minor and may be used to fulfill
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capstone requirement for major and minor. Students work as research team, are matched with one or more community groups, and must complete minimum of 40 fieldwork hours. Duties and responsibilities collaboratively determined by instructor, students, and sponsoring organizations. Readings determined in consultation with instructor. Letter grading.

186. Capstone Research Seminar. (4) Seminar, three hours. Limited to senior departmental majors and minors. Synthesis and application of knowledge students have acquired through prior departmental courses so they can conduct in-depth research or creative-expressive pursuits. Outcomes may vary by instructor and term. Students pursue independent work related to course theme with guidance from instructor, then share and critique other student work in progress. Letter grading.

187A. Special Courses in Research Methodologies. (4) Lecture, three hours; discussion, one hour (when scheduled). Limited to juniors/seniors. Variable topics in multidisciplinary research methodologies in Asian American studies. May be repeated for credit with topic change. P/NP or letter grading.

187B. Special Courses in Asian American Themes. (4) Lecture, three hours; discussion, one hour (when scheduled). Limited to juniors/seniors. Variable topics in historical and contemporary issues pertaining to different Asian-origin subgroups and their respective communities. May be repeated for credit with topic change. P/NP or letter grading.

187C. Special Courses in Asian American Populations and Communities. (4) Lecture, three hours; discussion, one hour (when scheduled). Limited to juniors/seniors. Variable topics in historical and contemporary issues pertaining to different Asian-origin subgroups and their respective communities. May be repeated for credit with topic change. P/NP or letter grading.

188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enrolled corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. Letter grading.

188B. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enrolled corequisite: course 188A. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enrolled corequisite: course 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with course instructor on extended topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191A. Topics in Research Methodologies. (4) Seminar, three to four hours. Limited to juniors/seniors. Variable topics in multidisciplinary research methodologies in Asian American studies. May be repeated for credit with topic change. P/NP or letter grading.

191B. Topics in Asian American Themes. (4) Seminar, three to four hours. Limited to juniors/seniors. Variable topics in selected Asian American themes, including issues in cultural formation, religion, education, social class, economic development, social movement, politics, and public policy. May be repeated for credit with topic change. P/NP or letter grading.

191C. Topics in Asian American Populations and Communities. (4) Seminar, three to four hours. Limited to juniors/seniors. Variable topics in historical and contemporary issues pertaining to different Asian-origin subgroups and their respective communities. May be repeated for credit with topic change. P/NP or letter grading.

M191F. Topics in Asian American Literature. (5) (Same as English M191C.) Seminar, three or four hours. Enrolled requisite: English Composition 3 or 3H. Variable specialized studies course in Asian American literature. Topics may include genres (autobiography, novel, poetry, short fiction, or drama); specific national communities; Asian American themes; topics in transnational migration; cross-cultural, interdisciplinary, or intercultural negotiation; and gender and queer politics. Reading, discussion, and development of culminating project. May be repeated for credit with topic change. P/NP or letter grading.

192. Undergraduate Practicum in Asian American Studies. (4) Seminar, four hours. Limited to juniors/seniors. Training and supervised practicum for advanced undergraduate students in Asian American studies courses. Students assist in preparation of materials and engagement of innovative projects with guidance of faculty members in small course settings. No more than 4 units may be applied toward major; units applied must be taken for letter grade. May be repeated for credit.

195. Community or Corporate Internships in Asian American Studies. (4) Tutorial, two hours; fieldwork, eight hours. Requisites: courses 10 or 10W, and 20. Limited to juniors/seniors. Internship in supervised field setting in community agency or business. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for credit. Individual contract with supervising faculty member required. Letter grading.

195CE. Comparative Approaches to Community and Corporate Internships. (4) (Same as African American Studies M195CE. American Indian Studies M195CE. Chicana/Latina Studies M195CE, and Gender Studies M195CE.) Tutorial, one hour; fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship in corporate, governmental, or nonprofit settings coordinated through Center for Community Learning. Comparative study of race, gender, and indigeneity in relation to contemporary workplace dynamics. Students complete weekly written assignments, attend biweekly meetings with graduate student coordinator, and write final research paper. Faculty sponsor and graduate student coordinator conduct series of reading assignments that examine issues related to internship site. Individual contract with supervising faculty member required. P/NP or letter grading.

196. Research Apprenticeship in Asian American Studies. (2 to 4) Tutorial, three hours per week per unit. Limited to junior or senior-level research apprenticeship for upper division students under guidance of faculty mentor to learn skills and techniques. May not be applied toward departmental major or minor requirements. May be repeated for credit. Individual contract required. P/NP or letter grading.

197. Individual Studies in Asian American Studies. (2 to 4) Tutorial, three hours. Requisites: course 10 or 10W or 20 or comparable knowledge in Asian American studies. 3.0 grade-point average or better. Limited to juniors/seniors. Directed reading of scholarly work or supervised research between student and faculty member. No original research or project expectancy, but tangible evidence of mastery of subject matter required. May be repeated for maximum of 8 units. Individual contract required. P/NP or letter grading.

198A. Honors Research in Asian American Studies. (4) Tutorial, three to four hours. Requisites: two courses from 10 (or 10W), 20, and 30 (or 30W) and one course from 104A through M108, 187A, or 191A. Introductory research techniques and applications of methodologies in study of Asian and Pacific Islanders in U.S. Development of honors thesis or comprehensive research project under direct supervision of faculty mentor. May be repeated for credit. Individual contract required. Letter grading.

198B-198C. Honors Research in Asian American Studies. (4-4) Tutorial, three hours. Requisite: course 198A. Course 198B is requisite to 198C. Development and completion of honors thesis or comprehensive research project under direct supervision of faculty mentor. May be repeated for credit. Individual contract required. In Progress (198B) and letter (198C) grading.

199. Directed Research or Senior Project in Asian American Studies. (2 to 4) Tutorial, three hours. Preparation: 3.0 overall grade-point average. Requisites: courses 10 (or 10W) and 20 or comparable knowledge in Asian American studies. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating research paper or project report required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200A. Historical Perspectives on Asian American and Pacific Islander American Communities. (4) Seminar, three hours. Designed for graduate students. Examination of critical issues in Asian and Pacific Islander American history and historiography. Introduction to research in archival and/or oral history methods. S/U or letter grading.

200B. Critical Approaches to Emerging Issues in Asian and Pacific Islander American Studies. (4) Seminar, three hours. Designed for graduate students. Examination of emergent issues in Asian and Pacific Islander American communities, using selected theoretical approaches. Introduction to research in social scientific methods such as ethnography, participant observation, interviewing, survey development, or community-based research. S/U or letter grading.


203. Asian American Research Methods. (4) Seminar, three hours. Introduction to empirical research methods, stressing uses and relevancy in research with ethnic minority populations. Review of characteristics and logical processes of research and applicability of scientific and scholarly inquiry in advancing knowledge. S/U or letter grading.

213. Asian-Latinos. (4) (Same as Chicana/o and Central American Studies M213.) Seminar, three hours. Limited to graduate students. Examination of historical and contemporary populations of Asian-Latinos in Latin America and U.S. Review and critique of nascent literature on Asian-Latinos and analysis of experience of Asian-Latinos utilizing theoretical frameworks of mestizaje, critical mixed-race theory, and transnationalism. Course is often-overlooked Asian contributions to Latin American and Chicano/Latino
culture and identity and exploration of unique experi-
ence of mixed-race Asian-Latinos. S/U or letter
grading.

or 4 to 8) Lecture, three hours. Course 215A is
enforced requisite to 215B. Designed for graduate
students. Through judicial opinions, commentary, and
historical readings, examination of how American law
has shaped demographics, experiences, and possibil-
ities of Asian Americans and also how they shaped
American law as well. Concurrently scheduled with
Law 315. In Progress (215A) and S/U or letter (215B)
grading.

222. Colonialism and Law in Pacific. (4) Seminar,
three hours. Reading seminar on broad topics of colo-
nialism and law. Survey of anthropological, historical,
and legal studies of ways in which colonialism and law
operate as methods of social control, order, and sur-
veillance in Asia and Pacific. S/U or letter grading.

231. Japanese American Resettlement: Meaning
and Methods. (4) Seminar, three hours. Designed for
graduate students. In-depth analysis of multiple di-
mensions of Japanese American post-World War II re-
settlement and research methods needed to study re-
settlement holistically. S/U or letter grading.

M239. Race, Ethnicity, and Culture as Concepts in
Practicum and Research. (Same as Community
Health Sciences M239.) Seminar, three hours. Integra-
tion of cross-cultural findings in healthcare with cur-
cent American (U.S.) healthcare system paradigms to
facilitate designing culturally based public health pro-
grams and train culturally competent practitioners.
Letter grading.

C242A. Ethnocommunications I: Introduction to
Creating Community Media. (4) Seminar, three hours.
Strong verbal communication skills and familiarity with
technology required. Introduction to social document-
ary theory and methodology. Through hands-on pro-
duction, uses of digital video and tell visual stories, re-
claim and examine social issues related to dis-
verse peoples, cultures, and communities. Viewing of
films and interactive media for critique and discussion,
guest speakers, basic instruction in use of digital
video technology, and group and individual video proj-
ects. Concurrently scheduled with course C142A. S/U
or letter grading.

C242B. Ethnocommunications II: Intermediate
Creating Community Media. (4) Seminar, three hours.
Strong verbal communication skills and familiarity with
technology required. Intermediate application of social
documentary theory and methodology. Use of digital
video to create new approaches to visual storytelling,
claim history, and examine social issues related to dis-
verse peoples, cultures, and communities. Con-
tinuing instruction in use of digital technology and
concepts. Topics include videography, composition,
sound recording, interviewing techniques, editing, and
writing treatments. Completion of community-based
documentary required. Concurrently scheduled with
course C142B. S/U or letter grading.

C242C. Ethnocommunications III: Advanced Creating
Community Media. (4) Seminar, three hours. En-
forced requisite: course C242B. Advanced application of
social documentary theory and methodology. Con-
tinuing instruction in use of digital technology and
concepts. Intensive instruction in proposal writing,
videography, composition, sound recording, interview-
ting techniques, visual storytelling, and editing.
Completion of community-based documentary ins-
table for public exhibition required. Concurrently
scheduled with course C142C. S/U or letter grading.

M260. Topics in Asian American Literature. (4)
(Same as English M260A.) Seminar, three hours. Grad-
uate seminar that examines and critically evaluates
writings of Asian Americans. May be repeated for
credit. S/U or letter grading.

M261. Theorizing Third World. (4) (Same as Com-
parative Literature M274A.) Seminar, three hours. Investi-
gation of politics of power, gender, and race in complex
relationships between so-called First World and
Third World, using both theoretical and textual ap-
proaches. S/U or letter grading.

M290Q. Social Welfare Policy in Asian American
Communities. (Same as Social Welfare M290Q.) Seminar,
three hours. Overview of social welfare policy in Asian
American communities. Introduction to major
social welfare policies and programs in U.S. and im-
 pact on Asian American communities. Policy develop-
ment, approaches, processes of implementation, eval-
uation, and strategies to effect policy. S/U or letter
grading.

297A. Topics in Asian American Studies. (4) Sem-
inar, three hours. Designed for graduate students. Se-
lected topics in Asian American studies. S/U or letter
grading.

297B. Topics in Asian American Studies: Asian Mi-
gation to U.S. (4) Seminar, three hours. Emphasis on
Asia as main regional source for international mi-
grates. Topics include patterns and theories of inter-
national migration and their relevance to Asian experi-
ence, sending and receiving country perspectives, re-
search and policy issues. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Sem-
inar, three hours. Preparation: apprentice personnel
employment as teaching assistant, associate, or fel-
low. Teaching apprenticeship under active guidance
and supervision of regular faculty member responsible
for curriculum and instruction at UCLA. Unit credit
may be applied toward full-time equivalence but not
 toward 11-course requirement for MA. May be re-
peated for credit. S/U grading.

490. Writing Workshop for Graduate Students. (2)
Lecture, one hour; discussion, one hour. Practice in
writing reports, grant proposals, abstracts, theses,
and article-length research papers. Analyzing rhetor-
cical and stylistic features of essays in various Asian
American journals helps students improve both their
prose style and editorial abilities. Four units may be
applied toward MA degree requirements. May be re-
peated once for credit. S/U grading.

495. Supervised Teaching of Asian American Stud-
ies. (4) Seminar, three hours. Emphasis on
Asian American studies. Designed for graduate students.
Required of all new teaching assistants. Special course for
teaching assistants designed to deal with problems and
techniques for teaching introductory Asian American
studies courses. Unit credit may be applied toward full-time equivalence but not toward
course requirements for MA. MA grading.

596. Directed Individual Study or Research. (2 to 8)
Tutorial, to be arranged. S/U or letter grading.

597. Research for and Preparation of MA Capstone.
(2 to 8) Tutorial, three hours. Limited to graduate stu-
dents. Preparation and research for MA capstone.
May be repeated for credit. S/U grading.

598. Research for and Preparation of MA Thesis. (2
to 8) Tutorial, to be arranged. Preparation of research

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Michael D. Emmerich, PhD (Tadashi Yanai Endowed Chair in Japanese Literature)
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Seiji M. Lippit, PhD
Thu-huong Nguyen-vo, PhD
David C. Schaberg, PhD
Shu-mei Shih, PhD (Irving and Jean Stone Professor)
Sung-Ock S. Sohn, PhD
Hongyin Tao, PhD

Professors Emeriti
William M. Bodiford, PhD
Robert E. Buswell, Jr., PhD (Irving and Jean Stone Professor Emeritus)
John B. Duncan, PhD
Robert C. Epp, PhD
Theodore D. Huters, PhD
Shoichi Iwasaki, PhD
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Shirleen S. Wong, PhD
Pauline R. Yu, PhD

Associate Professors
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Sung-Deuk Oak, ThD (Dong Soon Im and Mi Ja Im Endowed Professor of Korean Christianity)
Oona Paredes, PhD
Sakato Shimazaki, PhD

Assistant Professors
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Diego Loukota Sanclemente, PhD
Huijun Mai, PhD
Hyun Suk Park, PhD
Sixiang Wang, PhD
Yinghui Wu, PhD
Juniko Yamazaki, PhD

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Lecturer SOE
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Hee Ju, PhD
Jennifer J. Jung-Kim, PhD
Yumiko Kawanishi, PhD
Jae-eun I. Mitsunaga, PhD
Thu-Ba Nguyen-Hoai, PhD
Yoko Nomami, MA
Yan Shen, MA
Michelle M. Fu Smith, PhD
Xiaoxin Sun, BA
Asako H. Takakura, EdD
Overview

The Department of Asian Languages and Cultures offers a wide range of courses in the languages, literatures, religions, and cultural heritage of China, Japan, and Korea, as well as South and Southeast Asia. The department offers training in many specialized fields such as archaeology, film, folklore, history, linguistics, literature, mythology, religious studies, and cultural studies. Courses prepare students for careers in business, government service, international relations, journalism, law, publishing, teaching, and academic professions.

Courses for Nonmajors

The department offers many courses in which knowledge of Asian languages is not required. A current list is available on the Registrar’s course descriptions web page.

Undergraduate Study

For undergraduates, the department offers majors that combine language study with courses taught in English that examine the rich cultural heritage of China, Japan, and Korea, as well as South and Southeast Asia. The majors also offer opportunities for education abroad in an Asian country. The language courses aim to develop the four skills of speaking, aural comprehension, reading, and writing in a balanced and mutually supportive manner. The lecture and seminar courses aim to develop critical thinking and writing skills through in-depth study of a culture within a broader historical and comparative context.

Undergraduate majors who wish to pursue graduate degrees are encouraged to apply for admission to the departmental honors program. Students considering a major or minor in the department should consult with the departmental undergraduate adviser as soon as possible in their university career, but in no case later than the point at which they are about to begin taking upper-division courses. Students should select courses to fulfill major or minor requirements in consultation with the undergraduate adviser. The approved list of courses for each category of major or minor requirements is available in the department office (290 Royce Hall) and on its website.

Undergraduate Policies

Placement in Language Courses

Students are not placed in Chinese, Filipino, Hindi-Urdu, Indonesian, Japanese, Korean, Thai, and Vietnamese language courses automatically according to their years of previous study. Students with any prior knowledge or study of an Asian language who wish to take courses in that language at UCLA are required to take the appropriate departmental language placement examination (see the Schedule of Classes or department website for more information). The examination determines which course is most appropriate for the student’s current level of proficiency. Students who have obtained college credit for Asian language courses may not repeat those same courses for credit. Prospective majors who place out of the upper-division modern language requirement are expected to substitute an equivalent number of other units to be selected in consultation with the departmental undergraduate adviser.

Language Acquisition Courses

No credit is allowed for completing a less advanced course after successful completion of a more advanced Asian language course with focus on conversation, grammar, and/or composition.

Graduate Study

At the graduate level, the department offers highly selective PhD degree programs that train research scholars for academic careers in various fields of Asian culture, including literature, linguistics, film, religion, and history.

Undergraduate Majors

Asian Humanities BA

Study Abroad

Early acquisition of Asian language skills aids in the timely completion of major requirements and enriches appreciation of Asian cultures. Students are encouraged, therefore, to complete up to a year of language study in approved programs of study abroad.

Learning Outcomes

The Asian Humanities major has the following learning outcomes:

- Identification of major elements of cultures in Asia, with particular attention to chosen regions of expertise
- Assessment of the social contours of a given Asian society, and explanation of ways in which dynamics within communities and other social structures shape the course of events
- Understanding of the role that language and literature play in reflecting and influencing Asian societies, across time and different literary genres
- Formulation of effective written and oral arguments that address important themes and issues in Asian arts and cultures, in ways that are historically appropriate and relevant to particular contexts
- Conduct research on Asian languages, literatures, and other cultural elements, making effective and critical use of primary and secondary source materials
- Appreciation of the central place of religion in Asian cultures, with focus on chosen region of expertise and tradition of focus

Entry to the Major

Transfer Students

Transfer applicants to the Asian Humanities major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of Chinese, Japanese, Korean, Filipino/Tagalog, Hindi, Indonesian, Thai, or Vietnamese and either one civilization course on Asia or one introduction to Buddhism course or one introduction to Asian religions course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Completion of the intermediate sequence in one Asian language offered by the department (e.g., Chinese 6, 10, Filipino 6, Hindi-Urdu 100C, Indonesian 6, Japanese 10, Korean 6, 10, Thai 6, Vietnamese 6, or equivalent) and Asian 30 or one civilization course (e.g., Chinese 50, Japanese 50, 70, Korean 50) or one introduction to religions course (e.g., Asian M60, M60W, M61, Chinese M60, M60W, Korean M60, South Asian M60, Southeast Asian M60) or one culture course (e.g., Japanese 75, 80, Korean 40, 70, 80) within the department.

The Major

Required: Three upper-division language courses in one Asian language offered by the department and eight upper-division electives within the department, including at least one course from at least four of the following areas: Asia, China, Japan, Korea, South Asia, or Southeast Asia.

Honors Program

The honors program is a three-term sequence (Asian 198A-198B-198C), taken in addition to requirements for the major, that culminates in the submission of a 40- to 60-page thesis. In most circumstances courses 198A-198B-198C are taken in the senior year (fall, winter, and spring quarters), although students also have the option of taking course 198A in spring quarter of their junior year. Students are expected to use an Asian language in their research, with the scope of language work to be determined in consultation with their faculty adviser.

Policies

Honors Program

Admission

The honors program is open to majors with a 3.5 grade-point average in upper-division courses in the major and a 3.0 overall GPA. Students should apply for admission by spring quarter of their junior year and, at the time of admission, must have completed at least two upper-division courses in their major. For application forms and more information, contact the departmental undergraduate adviser.
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Requirements
Highest honors, honors, or no honors are awarded as determined by the faculty thesis director and the departmental honors committee.

To qualify for graduation with departmental honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.5 or better in upper-division courses required for the major and an overall GPA of 3.0 or better, and (3) complete Asian 198A-198B-198C.

To qualify for graduation with departmental highest honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.8 or better in upper-division courses required for the major and an overall GPA of 3.5 or better, and (3) complete Asian 198A-198B-198C with a grade of A in each course.

Asian Languages and Linguistics BA

Study Abroad
Early acquisition of Asian language skills aids in the timely completion of major requirements and enriches appreciation of Asian cultures. Students are encouraged, therefore, to complete up to a year of language study in approved programs of study abroad.

Learning Outcomes

The Asian Languages and Linguistics major has the following learning outcomes:

- Identification of major linguistic features of Asian languages, with attention to chosen region of expertise
- Demonstrated working knowledge of one or two Asian languages
- Demonstrated competency in fieldwork with Asian languages in their natural social and cultural contexts
- Demonstrated familiarity with current theories of language pedagogy with practical skills in classroom teaching of an Asian language
- Understanding of the interdependency and dynamic relationship between language, society, culture, and social interaction in the context of Asian languages across time and different modes of communication
- Conduct research and formulate effective written and oral arguments that address important themes and issues in languages and cultures of Asia

Entry to the Major

Transfer Students
Transfer applicants to the Asian Languages and Linguistics major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of Chinese, Japanese, Korean, Filipino/Tagalog, Hindi, Indonesian, Thai, or Vietnamese and either one Asian languages and culture course or one civilization course on Asia or one introduction to Buddhism course or one introduction to Asian religions course or one introduction to linguistic analysis course.

The Major

Required: Eleven courses as follows: (1) five upper-division language courses in one Asian language offered by the department, or three upper-division language courses in one Asian language offered by the department and two upper-division language courses in a different Asian language offered by the department, (2) Asian 100 and 104, (3) two Asian linguistics courses selected from Asian CM124, Chinese 103, C120, Japanese M120, CM122, CM123, CM127, Korean CM120, 124, South Asian 170, and (4) two upper-division electives within the department or from the Linguistics Department.

Honors Program
The honors program is a three-term sequence (Asian 198A-198B-198C), taken in addition to requirements for the major, that culminates in the submission of a 40- to 60-page thesis. In most circumstances courses 198A-198B-198C are taken in the senior year (fall, winter, and spring quarters), although students also have the option of taking course 198A in spring quarter of their junior year. Students are expected to use an Asian language in their research, with the scope of language work to be determined in consultation with their faculty adviser.

Policies

Preparation for the Major
All preparation courses must be completed with a C or better grade. A minimum 2.5 grade-point average is required for both (1) the language and (2) Linguistics 20 and the civilization/religion course.

Honors Program

Admission
The honors program is open to majors with a 3.5 grade-point average in upper-division courses in the major and a 3.0 overall GPA. Students should apply for admission by spring quarter of their junior year and, at the time of admission, must have completed at least two upper-division courses in their major. For application forms and more information, contact the departmental undergraduate adviser.

Asian Religions BA

Study Abroad
Early acquisition of Asian language skills aids in the timely completion of major requirements and enriches appreciation of Asian cultures. Students are encouraged, therefore, to complete up to a year of language study in approved programs of study abroad.

Learning Outcomes

The Asian Religions major has the following learning outcomes:

- Appreciation of the central place of religion in Asian cultures, with focus on chosen region of expertise and tradition of focus
- Understanding of the crucial role of language and written documents in the development of religious beliefs and practices
- Clear and effective writing on topics in the field, in a way that is sensitive to the complex dynamics and transformations of religion across Asian cultural boundaries
- Formulation of research projects using primary and secondary source materials, making effective and critical use of primary and secondary source materials
- Demonstrated working knowledge of one Asian language at an intermediate level
- Demonstrated basic exposure to the Buddhist argot of one Asian language

Entry to the Major

Transfer Students
Transfer applicants to the Asian Religions major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of Chinese, Japanese, Korean, Filipino/Tagalog, Hindi, Indonesian, Thai, or Vietnamese, or one year of Sanskrit, and one introduction to Buddhism course or one introduction to Asian religions course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.
Requirements

Preparation for the Major

Required: Completion of the intermediate sequence in one Asian language offered by the department (e.g., Chinese 6, 10, Filipino 6, Hindi-Urdu 100C, Indonesian 6, Japanese 6, 10, Korean 6, 10, Thai 6, Vietnamese 6, or equivalent) and Asian 30 or one introduction to religions course from Asian M60, M60W, M61, Chinese M60, M60W, Korean M60, South Asian M60, or Southeast Asian M60.

The Major

Required: Three upper-division language courses in one Asian language offered by the department; six upper-division Asian religions courses within the department, including at least one course each concerning religions in China, Japan, Korea, and either South Asia or Southeast Asia; and two electives within the department.

Honors Program

The honors program is a three-term sequence (Asian 198A-198B-198C), taken in addition to requirements for the major, that culminates in the submission of a 40- to 60-page thesis. In most circumstances courses 198A-198B-198C are taken in the senior year (fall, winter, and spring quarters), although students also have the option of taking course 198A in spring quarter of their junior year. Students are expected to use an Asian language in their research, with the scope of language work to be determined in consultation with their faculty adviser.

Policies

Honors Program

Admission

The honors program is open to majors with a 3.5 grade-point average in upper-division courses in the major and a 3.0 overall GPA. Students should apply for admission by spring quarter of their junior year and, at the time of admission, must have completed at least two upper-division courses in their major. For application forms and more information, contact the departmental undergraduate adviser.

Requirements

Highest honors, honors, or no honors are awarded as determined by the faculty thesis director and the departmental honors committee.

To qualify for graduation with departmental honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.5 or better in upper-division courses required for the major and an overall GPA of 3.0 or better, and (3) complete Asian 198A-198B-198C.

To qualify for graduation with departmental highest honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.8 or better in upper-division courses required for the major and an overall GPA of 3.5 or better, and (3) complete Asian 198A-198B-198C with a grade of A in each course.

Chinese BA

Study Abroad

Early acquisition of Asian language skills aids in the timely completion of major requirements and enriches appreciation of Asian cultures. Students are encouraged, therefore, to complete up to a year of language study in approved programs of study abroad.

Learning Outcomes

The Chinese major has the following learning outcomes:

- Advanced ability to speak, read, and write modern Chinese
- Demonstrated competence in reading classical Chinese
- Broad knowledge of Chinese cultural, religious, and/or literary history from early periods to the modern era
- Demonstrated disciplinary familiarity in analysis of texts, objects, and historical trends
- Clear and effective writing on topics in Chinese civilization, in ways that draw upon the complex dynamics and cultural transformations across the history of China
- Formulation of research projects that engage critically and thoughtfully with primary and secondary materials

Entry to the Major

Transfer Students

Transfer applicants to the Chinese major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of Chinese and one Chinese civilization course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Chinese 6 or 6A or 10 or equivalent, and one course from 50, M60, M60W, 70, 70W, or Asian 30.

The Major

Required: Eleven courses as follows: (1) five language courses selected from either modern Chinese (Chinese 100A and 100B and 100C or 100I, 101A, 101B, 102A, C107A, C120, 130A or 130B, 135) or from premodern Chinese (110A, 110B, 110C, 140A through 140D, 165)—at least two language courses must be in the premodern language or texts, (2) one literature course selected from 130A, 130B, 131, 135, 140A through 140D, C150A, C150B, 151, 152, or M153, (3) three elective courses on China selected from C138, C139, 154, 155, C156, CM160, 165, 174, C175, 176, 180, 184, 185, 186, 187, 191A, 191B, or from items 1 and 2 above not used to fulfill another requirement, and (4) two additional upper-division elective courses within the department but outside China.

Honors Program

The honors program is a three-term sequence (Asian 198A-198B-198C), taken in addition to requirements for the major, that culminates in the submission of a 40- to 60-page thesis. In most circumstances courses 198A-198B-198C are taken in the senior year (fall, winter, and spring quarters), although students also have the option of taking course 198A in spring quarter of their junior year. Students are expected to use an Asian language in their research, with the scope of language work to be determined in consultation with their faculty adviser. Highest honors, honors, or no honors are awarded as determined by the faculty thesis director and the departmental honors committee.

Policies

Honors Program

Admission

The honors program is open to majors with a 3.5 grade-point average in upper-division courses in the major and a 3.0 overall GPA. Students should apply for admission by spring quarter of their junior year and, at the time of admission, must have completed at least two upper-division courses in their major. For application forms and more information, contact the departmental undergraduate adviser.

Requirements

Highest honors, honors, or no honors are awarded as determined by the faculty thesis director and the departmental honors committee.

To qualify for graduation with departmental honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.5 or better in upper-division courses required for the major and an overall GPA of 3.0 or better, and (3) complete Asian 198A-198B-198C.

To qualify for graduation with departmental highest honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.8 or better in upper-division courses required for the major and an overall GPA of 3.5 or better, and (3) complete Asian 198A-198B-198C with a grade of A in each course.

Japanese BA

Study Abroad

Early acquisition of Asian language skills aids in the timely completion of major requirements and enriches appreciation of Asian cultures. Students are encouraged, therefore, to complete up to a year of language study in approved programs of study abroad.

Learning Outcomes

The Japanese major has the following learning outcomes:

- Demonstrated advanced written and oral knowledge of the Japanese language
- Demonstrated broad knowledge of Japanese cultural history from ancient times to the present
• Demonstrated specific skills and expertise, including research, analysis, and writing, of a specialized topic in the study of Japanese language and culture
• Ability to identify primary sources in Japanese and analyze them within their historical and cultural context
• Working knowledge of scholarly discourse on a specialized topic in Japanese culture
• Conception and execution of research projects that identify and engage with a specialized topic in Japanese culture

Entry to the Major

Transfer Students
Transfer applicants to the Japanese major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of Japanese and one Japanese civilization or images of Japan course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major
Required: Japanese 6 or 10 or equivalent, and one course from 50, 70, 75, 80, Asian 30.

The Major
Required: Eleven courses as follows: (1) five language courses in modern or premodern language or texts selected from Japanese 100A and 100B and 100C or 100S, 100R, 101A and 101B or 101C or 101S, 103A, 103B, 104, 105A, 105B, 110A, 110B, M120, CM123, 130A, 130B, 140A, 140B, 140C, C149, 165, (2) one literature course selected from CM150, 151, 154, M156, 157, C159, 170, 172, 174, or 191A, (3) three elective courses on Japan selected from CM122, CM123, CM127, 155, CM160, 161, 165, C171, C182, 191B, 191C, or from items 1 and 2 above not used to fulfill another requirement, and (4) two additional upper-division elective courses within the department but outside Japan.

Honors Program
The honors program is a three-term sequence (Asian 198A-198B-198C), taken in addition to requirements for the major, that culminates in the submission of a 40- to 60-page thesis. In most circumstances courses 198A-198B-198C are taken in the senior year (fall, winter, and spring quarters), although students also have the option of taking course 198A in spring quarter of their junior year. Students are expected to use an Asian language in their research, with the scope of language work to be determined in consultation with their faculty adviser.

Policies

Honors Program
Admission
The honors program is open to majors with a 3.5 grade-point average in upper-division courses in the major and an overall GPA of 3.0 or better, and (3) complete Asian 198A-198B-198C.

Students should apply for admission by spring quarter of their junior year and, at the time of admission, must have completed at least two upper-division courses in their major. For application forms and more information, contact the departmental undergraduate adviser.

Requirements

Highest honors, honors, or no honors are awarded as determined by the faculty thesis director and the departmental honors committee.

To qualify for graduation with departmental honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.5 or better in upper-division courses required for the major and an overall GPA of 3.0 or better, and (3) complete Asian 198A-198B-198C.

To qualify for graduation with departmental honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.8 or better in upper-division courses required for the major and an overall GPA of 3.0 or better, and (3) complete Asian 198A-198B-198C.

The honors program is open to majors with a 3.5 grade-point average in upper-division courses in the major and a 3.0 overall GPA. Students should apply for admission by spring quarter of their junior year and, at the time of admission, must have completed at least two upper-division courses in their major. For application forms and more information, contact the departmental undergraduate adviser.

Requirements

Preparation for the Major
Required: Korean 6 or 10 or equivalent, and one course from 40, 50, M60, 70, 80, Asian 30.

The Major

Honors Program
The honors program is a three-term sequence (Asian 198A-198B-198C), taken in addition to requirements for the major, that culminates in the submission of a 40- to 60-page thesis. In most circumstances courses 198A-198B-198C are taken in the senior year (fall, winter, and spring quarters), although students also have the option of taking course 198A in spring quarter of their junior year. Students are expected to use an Asian language in their research, with the scope of language work to be determined in consultation with their faculty adviser.

Policies

Honors Program
Admission
The honors program is open to majors with a 3.5 grade-point average in upper-division courses in the major and a 3.0 overall GPA. Students should apply for admission by spring quarter of their junior year and, at the time of admission, must have completed at least two upper-division courses in their major. For application forms and more information, contact the departmental undergraduate adviser.

Requirements

Highest honors, honors, or no honors are awarded as determined by the faculty thesis director and the departmental honors committee.

To qualify for graduation with departmental honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.5 or better in upper-division courses required for the major and an overall GPA of 3.0 or better, and (3) complete Asian 198A-198B-198C.

To qualify for graduation with departmental honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.8 or better in upper-division courses required for the major and an overall GPA of 3.0 or better, and (3) complete Asian 198A-198B-198C.

Entry to the Major

Transfer Students
Transfer applicants to the Korean major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of Japanese and one Japanese civilization or images of Japan course.

Study Abroad
Early acquisition of Asian language skills aids in the timely completion of major requirements and enriches appreciation of Asian cultures. Students are encouraged, therefore, to complete up to a year of language study in approved programs of study abroad.

Learning Outcomes
The Korean major has the following learning outcomes:

- Demonstrated advanced knowledge of written and spoken Korean
- Broad knowledge of Korean history, literature, thoughts, and religions from the ancient to the modern era
- Engagement in critical comparisons of historical and other narratives
- Relation of historical and cultural developments in Korea with other countries in East Asia and beyond
- Discussion of the scholarly literature about a topic in an area of expertise
- Analysis of texts, cultural objects, and historical developments based on disciplinary knowledge
- Conduct research projects using primary and second source materials critically and persuasively

Entry to the Major

Transfer Students
Transfer applicants to the Korean major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of Korean and one Korean civilization course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.
per-division courses required for the major and an overall GPA of 3.5 or better, and (3) complete Asian 198A-198B-198C with a grade of A in each course.

**Southeast Asian Studies BA**

**Study Abroad**

Early acquisition of Asian language skills aids in the timely completion of major requirements and enriches appreciation of Asian cultures. Students are encouraged, therefore, to complete up to a year of language study in approved programs of study abroad.

**Learning Outcomes**

The Southeast Asian Studies major has the following learning outcomes:

- Appreciation of the region’s broader socio-cultural and historical patterns
- Understanding of commonalities of societies and peoples across region
- Appreciation of distinctive elements, particularly between island and mainland populations
- Understanding of cultural, historical, and social contours of a particular Southeast Asian country
- Ability to assess social contours of Southeast Asian societies broadly
- Understanding of ways in which dynamics within communities and other social structures shape the course of events
- Understanding and assessment of distinct challenges that have shaped the region’s pre-modern historical trajectory
- Understanding and assessment of complex challenges that face contemporary societies in the region
- Appreciation of the central place of religion, religious diversity, and religious conflict in Southeast Asian societies
- Reading and assessment of cultural documents—literature, oral tales, performances—in their respective sociocultural contexts
- Conduct specialized research on Southeast Asian societies, history, or culture, making effective and critical use of primary and secondary source materials
- Formulation of effective written and oral arguments that address important themes and issues in Southeast Asian arts and cultures, in ways that are historically appropriate and relevant

**Entry to the Major**

**Transfer Students**

Transfer applicants to the Southeast Asian Studies major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one year of Filipino/Tagalog, Indonesian, Thai, or Vietnamese; and one course in Asian civilization, Asian languages and cultures, introduction to Asian religions, or introduction to Buddhism.

Refer to the **UCLA transfer admission guide** for up-to-date information regarding transfer selection for admission.

**Requirements**

**Preparation for the Major**

Required: Completion of the intermediate sequence in one Southeast Asian language offered by the department (e.g., Filipino 6, Indonesian 6, Thai 6, Vietnamese 6, or equivalent); Southeast Asian Studies 50; and one religion, literature, or culture course (e.g., Asian 30, Southeast Asian M60, 70, or Vietnamese 40) within the department.

**The Major**

Required: Eleven courses as follows: (1) one upper-division language course in a Southeast Asian language offered by the department selected from Indonesian 100A, 100B, 100C, Thai 100A, 100B, 100C, or Vietnamese 100A, 100B, 100C; (2) eight upper-division elective courses on Southeast Asia selected from Anthropology 116S, Asian American Studies 123, 125, 133, 134, M164, M171D, 171E, 176, Art History 156, Filipino 170, History 176A, 176B, 176C, 176E, 177A, 177B, 187M, Political Science 158, Southeast Asian Studies C120, 130, 135, C140, C150, 157, 160, 170A, 170B, 170C, Vietnamese CM155, 180A, or 180B; (3) two upper-division electives on other parts of Asia (China, Japan, Korea, South Asia) within the department or offered by another department (History, Geography, Anthropology, Political Science, Asian American Studies).

**Policies**

**Preparation for the Major**

Students must complete the preparation courses with at least a 2.0 grade-point average.

**The Major**

Students may petition to satisfy (1) with an independent study (course 199) with a faculty member or a course in translation where the student’s written work is primarily in the target language.

**Undergraduate Minors**

**Asian Humanities Minor**

The Asian Humanities minor is designed to recognize a serious commitment to the study of Asian cultures. Students must have completed 45 units at UCLA and all lower-division requirements for the minor, and consult with the departmental undergraduate adviser.

**Admission**

To enter the minor, students must have an overall grade-point average of 2.0 or better, have completed 45 units at UCLA and all lower-division requirements for the minor, and consult with the departmental undergraduate adviser.

**The Minor**

**Required Lower-Division Courses (10 units):**

Completion of the intermediate sequence in one Asian language offered by the department (e.g., Chinese 6, 10, Filipino 6, Hindi-Urdu 100C, Indonesian 6, Japanese 6, 10, Korean 6, 10, Thai 6, Vietnamese 6, or equivalent) and Asian 30 or one civilization course (e.g., Chinese 50, Japanese 50, 70, Korean 50) or one introduction to religions course (e.g., Asian M60, M60W, M61, Chinese M60, M60W, Korean M60, South Asian M60, Southeast Asian M60) or one culture course (e.g., Japanese 75, 80, Korean 40, 70, 80) within the department.

**Required Upper-Division Courses (20 units):**

Three language courses in one Asian language offered by the department and two electives within the department.

**Policies**

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor, and at least 16 units must be taken in residence at UCLA.

Each minor course must be taken for a letter grade, and students must have an overall
grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Majors

Asian Languages and Cultures MA, CPhil, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Teaching Asian Languages MA

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Asian

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1 Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

M20. Visible Language: Study of Writing. (5) Same as Indo-European Studies M20, Near Eastern Languages M20, Slavic M20, and Southeast Asian Languages M20.) Lecture three hours; discussion, one hour. Consideration of concrete means of language representation in writing systems. Earliest representations of language known are those of Near East dating to end of 4th millennium BC. While literate civilizations of Egypt, Indus Valley, China, and Mesoamerica left little evidence of corresponding earliest developments, their antiquity and, in case of China and Mesoamerica, their evident isolation mark these centers as loci of independent developments. Cross-listed in literature and writing studies. P/NP or letter grading.

Upper-Division Courses

100. Methods in Asian Linguistics. (4) Lecture, three hours; discussion, one hour. Research methodologies for dealing with Asian languages, with emphases on theoretical issues, applied linguistics, and sociolinguistics. P/NP or letter grading.

M60. Introduction to Buddhism. (5) Same as Religion M60A. Lecture, three hours; discussion, one hour. Not open for credit to students with credit for course M60B. Knowledge of Asian languages not required. General survey of development of Buddhism in India, with focus on those religious doctrines and meditative practices most essential to various Asian traditions of Buddhism. Letter grading.

M60W. Introduction to Buddhism. (5) Same as Religion M60W. Lecture, three hours; discussion, one hour. Enforced requisite: English Composition 3 or 3H or English as Second Language 36. Not open for credit to students with credit for course M60B. Knowledge of language and/or survey of Buddhist worldview and lifestyle, with focus on those religious doctrines and meditative practices most essential to various Asian traditions of Buddhism. P/NP or letter grading.

M61. Introduction to Zen Buddhism. (5) Same as Religion M61. Lecture, three hours; discussion, one hour. Knowledge of Asian languages not required. Introduction to Zen traditions and to interplay between Zen and other fundamental cultural and religious concerns in East Asia. Topics include role of Zen within Buddhist thought and practice, artistic and literary arts, society, and daily life. Letter grading.

70A-70B-70C. Popular Culture in East Asia. (5-5-5) Lecture, three hours; discussion, one hour. Popular culture in China, Japan, Korea, and Vietnam. Topics include popular culture, language, literature, art, material culture, cinema, and music. Themes include identities, gender, sexuality, and class relations. Letter grading. 70A, Fall, 19th Centuries; 70B, 1895 to 1945; 70C, From 1945.

89. Honors Seminars. (1 Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students and for honors students. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

100. Asian Language Pedagogy. (4) Lecture, three hours; discussion, one hour. Required of all Asian Languages and Linguistics majors. Current issues in teaching Asian languages. Pedagogical grammar, curricular development, social, cultural, and cognitive foundations of Asian language acquisition, best practices in teaching Asian language writing systems, special issues in teaching heritage students, comparisons of K-12 teaching and college language teaching, assessment of teaching methods, and emerging trends in Asian language teaching. P/NP or letter grading.

120FL. Readings in East Asian Languages. (2) Seminar, two hours. Requisite: Chinese 6 or 6A or 6C or Japanese 6 or 6A or 6C or Korean 6 or 6A or 6C or 6A. Cross-listed as adjunct to lower-division lecture course. In-depth exploration of selected topics in current, non-specialized areas of Asia. Topics vary, but may include death, gender, and state and religion. May be repeated for credit with topic change. Letter grading.

122. Buddhist Meditation Traditions. (4) Lecture, three hours; discussion, one hour. Knowledge of Asian languages not required. Survey of theory and practice
study of Asia in preparation for writing of senior honors thesis. May be repeated for credit. Letter grading.

193. Speaker Series Seminars: Asian Languages and Cultures. (2) Seminar, two hours. Limited to undergraduate students. Introduction to latest scholarship in field of Asian studies. Attendance at selected scholarly presentations required, as well as sessions with speakers. open to advanced undergraduate students and other interested students. Knowledge of Asian languages not required. Investigation of various themes in development of Buddhist traditions across historical periods as well as national and subnational cultures, including issues of praxis, politics, and translation. Letter grading.

164. Buddhism and Early Religious History of Pakistan, Afghanistan, and Central Asia: Introduction. (4) Lecture, three hours. Knowledge of Asian languages not required. Survey of regions and religions of Central Asia, especially Buddhism in Afghanistan and Pakistan. Topics include archaeological, art historical material, and linguistic approaches to history of religions. Letter grading.

C170. Approaches to Study of Religion. (4) Seminar, three hours. Investigation of many ways in which religion and religion may be studied, including anthropological, sociological, psychological, phenomenological, political, and other approaches. Readings of primary and secondary sources of modern scholarship. Concurrently scheduled with course C270. Letter grading.

184. Women in History: East Asia. (4) Lecture, three hours. Knowledge of Korean not required. Survey of East Asian histories, cultures, and societies from perspective of women and women’s empowerment to see how gendered concepts are meted and reconstructed through negotiations by women and men with processes of political, social, and cultural changes. P/N or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/N or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit. Individual contract required. P/N or letter grading.

190. Research Colloquia in Asian Languages and Cultures. (2) Seminar. Corequisite: course 198A, 198B, or 198C. Designed to bring together advanced undergraduate students under taking individual supervised tutorial research in seminar setting with one or more faculty members to discuss their own work or related work in discipline. Led by one supervising faculty member. May be repeated for credit. P/N or letter grading.

190A. Variable Topics Research Seminars: Life Writing in East Asia. (4) Seminar, three hours. Research seminar on selected topics. Readings of biography and autobiography as elements of East Asian cultural traditions, with focus rotating between China, Japan, and Korea. Readings in English and relevant East Asian languages, discussion, and development of culminating project. May be repeated for credit. Letter grading.

191A. Variable Topics Research Seminars: Buddhist Studies. (4) Seminar, three hours. Limited to juniors/ seniors. Research seminar on selected topics in Buddhist studies. Reading, discussion, and development of culminating project. May be repeated for credit. Letter grading.

191H. Honors Research Seminars: Asian Languages and Cultures. (4) Seminar, three hours. Limited to departmental and College honors students. Introduction to research methods and critical approaches of acquisition theories and best practices as related to Asian language teaching. In Progress (204A) and S/U or letter grading.

205. Variable Topics in East Asian Culture and History. (4–4) Seminar, three hours. Explored topics in East Asian culture and history, with focus on China, Japan, and Korea. May be repeated for credit change. S/U or letter grading.

206A. MA Practicum: Issues in Teaching Asian Languages and Cultures. (4) Seminar, two hours; teaching practice, two hours. Training and supervised Asian language practicum in form of in-person, online, and/or peer-based instructional activities for MA students under training to become language instructors at K-12 or postsecondary level. Activities generally involve lesson design, delivering instruction, and tutoring. Reading and discussion of recent theoretical works in cultural studies. S/U or letter grading.

206B. MA Practicum: Instructional Apprenticeship in Teaching Asian Languages. (4) Seminar, three hours; teaching practice, two hours. Training and supervised Asian language practicum in form of in-person, online, and/or peer-based instructional activities for MA students under training to become language instructors at K-12 or postsecondary level. Activities generally involve lesson design, delivering instruction, and tutoring. Discussion of recent theoretical works in cultural studies. S/U or letter grading.

207. Speaker Series in East Asian Languages and Cultures. (4) Seminar, two hours. Focus on specific aspect of East Asian language and culture. S/U or letter grading.

210. Proseminar: Cultural and Comparative Studies. (4) Seminar, two hours. Limited to honors students. Introduction to theoretical topics relevant to comparative study of East Asian cultures in modern period. Readings include Western theoretical works and recent approaches to East Asian topics. S/U or letter grading.


216. Seminar: History and Asia. (4) Seminar, three hours. Designed for graduate students. Readings and discussion of major historiographical trends, with focus on how they have been applied to Asia. Topics include Marxist histories, Annales school and cultural history, microhistories, gender, space, historical memory, postcolonial histories, subaltern, and modernity. S/U or letter grading.

220A-220B. Seminars: Topics in Cultural Studies. (4–4) Seminar, three hours. Complements course 210. Further investigation of methodology and materials of cultural studies in connection with specific topics selected by instructors. May be repeated for credit. In Progress (220A) and letter grading (220B).

222A-222B. Corpus Linguistics. (4–4) Seminar, three hours. Construction and exploitation of computerized language corpora for studying issues in areas such as historical linguistics, language change and variation, language learning, and teaching. Discussion of special issues in working with East Asian language corpora. In Progress (222A) and S/U or letter grading (222B).

CM224. Teaching and Learning of Heritage Languages. (4) (Same as Near Eastern Languages CM214 and Slavic CM124.) Lecture, three hours. Construction of issues relevant to heritage language learners (HL), and to heritage language (HL) instruc-
300. Critical Transformations: Reading Knowledge of at least one East Asian language. Concerns of literary theory that are brought to fore by reading of literature from or about East Asia. Readings from both Western and Eastern theorists; issues of translation, comparison, and categorization. In Progress (230A) and letter (230B) grading.

245A-245B. Seminars: Topics in East Asian Literary History. (4–4) Seminar, three hours. Preparation: reading knowledge of at least one East Asian language. Critical issues common to literary historiography in East Asia, including periodization, canon, ideology, interaction between high and low culture, written and oral traditions. In Progress (245A) and letter (245B) grading.

243. Translation Workshop: East Asian Texts. (2) Seminar, two hours. Requires: Chinese 200A or Japanese 200 or Korean 200. Preparation: knowledge of one East Asian language. Designed for graduate students. Course 245A concerned with conceptual architecture and complexity of modernity, with readings largely from European sources. In-class debate probes relevance of these readings for work as Asianists. Focus on Asian writings in course 245B. In Progress (245A) and letter (245B) grading.

255. Topics in Southeast Asian Literature and/or Cinema. (4) Seminar, three hours. Preparation: knowledge of at least five years of one East Asian language. Designed for graduate students. Course 245A concerned with conceptual architecture and complexity of modernity, with readings largely from European sources. In-class debate probes relevance of these readings for work as Asianists. Focus on Asian writings in course 245B. In Progress (245A) and letter (245B) grading.


265A-265B. Seminars: Selected Topics in Buddhist Studies. (4–4) Seminar, three hours. Preparation: knowledge of at least five years of one East Asian language. Designed for graduate students. Course 245A concerned with conceptual architecture and complexity of modernity, with readings largely from European sources. In-class debate probes relevance of these readings for work as Asianists. Focus on Asian writings in course 245B. In Progress (265A) and letter (265B) grading.


281A-281B. Field Methods for Study of East Asian Oral Traditions. (4–4) Seminar, three hours. Description and evaluation of modern approaches to collecting and documenting oral tradition as text, performance, and sociocultural event, providing hands-on experience in fieldwork and archiving methods. Consideration of approaches ranging from written transcription and textualization to audio and video presentations. In Progress (281A) and S/U or letter (281B) grading.

M292. Japan in Age of Empire. (4) (Same as Anthropology M284.) Seminar, three hours. Enrolled for graduate students. Since late 19th century, Japan expanded its empire into East and Southeast Asia. Coverage of that period and array of anthropological insights into Japan's colonial, and occupied areas in this hardly explored area of study of colonialism. S/U or letter grading.

293. Graduate Student Colloquium. (4) Research group meeting, three hours. Designed to provide graduate students with opportunity to present their research to other students and faculty members. S/U grading.

297. Life Writing in East Asia. (4) Seminar, three hours. Readings of biography and autobiography as elements of East Asian cultural traditions, with focus rotating between China, Japan, and Korea. Readings in English and relevant East Asian languages. Letter grading.

299. Independent Study. (2 to 6) Seminar, to be arranged. Enforced requisite: consent of UCLA graduate adviser. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Continuation of course 2. P/NP or letter grading.

301. Teaching East Asian Language as Foreign Language. (4) Lecture, four hours. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teacher assistant, associate, or fellow. Teachers are evaluated by active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Teaching Asian Languages at College Level. (4) Seminar, three hours. Preparation: appointment as teaching assistant in East Asian languages and cultures or Southern languages and cultures. Study in team-teaching, teaching methodology, developing course materials, and testing. Participation in peer observations and workshops required. Students receive unit credit toward full-time equivalence but not toward any degree requirements. S/U grading.

496C. Computer Technologies for Teaching College-Level Chinese. (2) Lecture, two hours. Intended for current or potential teaching assistants in Chinese language. Introduction to tools and technologies designed to enrich classroom learning, help effectively manage student records, and expose students to current computer software and web resources. May not be applied toward degree requirements. S/U grading.

496E. Computer Technologies for Teaching College-Level East Asian Languages. (2) Lecture, two hours. Intended for current or potential teaching assistants in East Asian languages. Introduction to tools and technologies designed to enrich classroom learning, help effectively manage student records, and expose students to current computer software and web resources. May not be applied toward degree requirements. S/U grading.

496J. Computer Technologies for Teaching College-Level Japanese. (2) Lecture, two hours. Intended for current or potential teaching assistants in Japanese language. Introduction to tools and technologies designed to enrich classroom learning, help effectively manage student records, and expose students to current computer software and web resources. May not be applied toward degree requirements. S/U grading.

496K. Computer Technologies for Teaching College-Level Korean. (2) Lecture, two hours. Intended for current or potential teaching assistants in Korean language. Introduction to tools and technologies designed to enrich classroom learning, help effectively manage student records, and expose students to current computer software and web resources. May not be applied toward degree requirements. S/U grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate adviser and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.


597. Preparation for MA Comprehensive Examination or PhD Qualifying Examinations. (4 to 8) Tutorial, to be arranged. S/U grading.

598. Research for and Preparation of MA Thesis. (4 to 6) Tutorial, to be arranged. Maximum of 8 units may be applied toward MA degree requirements. S/U grading.


Chinese Lower-Division Courses

1. Elementary Modern Chinese. (5) Lecture, three hours; discussion, two hours. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Introduction to Chinese characters, including pronunciation, grammar, and Chinese characters, with emphasis on all four basic language skills—speaking, listening comprehension, reading, and writing. P/NP or letter grading.

2A. Elementary Modern Chinese for Advanced Beginners. (5) Lecture, three hours; discussion, two hours. Recommended preparation: ability to speak and understand Mandarin or other Chinese dialects at elementary levels. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Continuation of course 1. P/NP or letter grading.

2B. Elementary Modern Chinese. (5) Lecture, three hours; discussion, two hours. Enforced requisite: course 1 with grade of C or better or Chinese placement test. First-year Chinese. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Continuation of course 1A. P/NP or letter grading.

3. Elementary Modern Chinese. (5) Lecture, three hours; discussion, two hours. Enforced requisite: course 2 with grade of C or better or Chinese placement test. First-year Chinese. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Continuation of course 2. P/NP or letter grading.

3A. Elementary Modern Chinese for Advanced Beginners. (5) Lecture, three hours; discussion, two hours. Enforced requisite: course 2A with grade of C or better or Chinese placement test. First-year Chinese. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Continuation of course 2A. P/NP or letter grading.

3R. Accelerated Modern Chinese for Advanced Beginners. (5) Lecture, three hours; discussion, one hour. Enforced requisite: course 2 or 2A with grade of C or better or Chinese placement test. Second-year Chinese. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Continuation of course 2R. P/NP or letter grading.

4. Intermediate Modern Chinese. (5) Lecture, three hours; discussion, one hour. Enforced requisite: course 3 or 3R with grade of C or better or Chinese placement test. Second-year Chinese. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Continuation of course 3. P/NP or letter grading.
learned, from whatever source, enough Chinese to qualify for more advanced courses. Designed to strengthen communicative skills of listening, speaking, reading, and writing, knowledge of idiomatic expressions, and both traditional and simplified characters. P/NP or letter grading.

4A. Intermediate Modern Chinese for Advanced Students. (5) Lecture, three hours; discussion, one hour. Requisite: course 3A with grade of C or better or Chinese placement test. Second-year Chinese. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Designed for students who already have certain listening and speaking skills in Mandarin or other Chinese dialects at intermediate levels. Training in all four basic language skills (speaking, listening, reading, and writing). P/NP or letter grading.

5. Intermediate Modern Chinese. (5) Lecture, three hours; discussion, one hour. Requisite: course 4A with grade of C or better or Chinese placement test. Second-year Chinese. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Observation of listening, speaking, reading, and writing. Grammar reviews, knowledge of idiomatic expressions, and both traditional and simplified characters. Completion of course 5 is equivalent to completion of course 6. Offered in summer only. P/NP or letter grading.

19. Flat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current interest. Lightly led by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20. Chinese Language, Society, and Culture. (4) Lecture, two hours; discussion, two hours. Recommended preparation: one to two years of college-level Chinese. Exploration of relationship between Chinese language, society, and culture. Discussion of fundamental role that language plays in Chinese social life and the complex interplay of how social and cultural factors impact ways in which Chinese language is organized. Main focus on language and thought patterns, language and gender, language and thought, cognitive dimensions of language and law, language and arts, and language and globalization. P/NP or letter grading.

21. Popular Culture in Modern Chinese Societies. (5) Lecture, three hours; discussion, one hour. Examination of modern Chinese culture in China, Taiwan, Hong Kong, and overseas Chinese communities. From fiction to film, music to MTV and cartoons to karaoke, probing as popular as it has manifested itself in Chinese societies and tracing of its development over last century. P/NP or letter grading.

50. Chinese Civilization. (5) Lecture, three hours; discussion, one hour. Open not for credit to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Observation of pre-20th-century Chinese literary traditions, including selections from poetry, prose, fiction, and drama. P/NP or letter grading.

70W. Classics of Chinese Literature. (5) Lecture, three hours; discussion, two hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course 70. Prior knowledge of Chinese culture, language, and literature is recommended. Introduction to pre-20th-century Chinese literary traditions, including selections from poetry, prose, fiction, and drama. Satisfies Writing II requirement. Letter grading.

80. Chinese Cinema: Pictures, Prisms, Products, Projections. (5) Lecture, two hours; discussion, one hour; film viewing, three hours. Knowledge of Chinese not required. Introduction to history and major themes of Chinese cinema. Representative films studied in contexts of culture, society, politics, and economics, with reflections on changing meanings of both Chinese and cinema. May not be repeated for credit. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, Three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89H. Honors Contracts. (1) Tutorial, three hours. Limited to 20 students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

97. Variable Topics in Chinese Culture. (4) Lecture, discussion, one hour. Knowledge of Chinese culture, language, and literature not required. Variable topics course covering many different aspects of Chinese culture. Consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit with topic change. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100A-100B-100C. Advanced Modern Chinese. (4–4–4) Lecture, three hours; discussion, one hour. Enforced requisite: course 6 with grade of C or better or Chinese placement test is enforced requisite to 100B; course 100B with grade of C or better or Chinese placement test is enforced requisite to 100C. Third-year Chinese. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Materials selected from contemporary Chinese publications, with emphasis on social sciences. Texts analyzed for their linguistic features and social and cultural background. Readings, compositions, informal debates on topical issues, and oral presentations. P/NP or letter grading.

100E-100F. Adv. Modern Chinese for Heritage Speakers. (4–4–4) Lecture, three hours; discussion, two hours. Enforced requisite: course 6A with grade of C or better or Chinese placement test. Course 100E with grade of C or better or Chinese placement test is enforced requisite to 100F; course 100F with grade of C or better or Chinese placement test is enforced requisite to 100E. Third-year Chinese for heritage speakers. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Materials selected from contemporary Chinese publications, with emphasis on social sciences. Texts analyzed for their lin-
quistic features and social and cultural background. Readings, compositions, informal debates on topical issues, and oral presentations. Offered in summer only. P/NP or letter grading.

101A-101B-101C. Advanced Readings in Modern Chinese. (4) Lecture, two hours; discussion, two hours; for course 101C, lecture, three hours; discussion, one hour. Requisite: course 101A, 101B, or Chinese placement test; for course 101C: 101B or Chinese placement test. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Advanced readings and>H
development of subjectivity and modes of address. Critical writings of traditional China, with emphasis on social sciences, science and technology, medicine, and applied linguistics. Concurrently scheduled with courses C207A-C207B. P/NP or letter grading.

105FL. Special Studies: Readings in Chinese. (2) Seminar, two hours; for course 105FL, discussion, two hours. Open only to upper-division students planning to do advanced coursework or research on China. Topics from magazines, journals, and books related to humanities and social sciences. Each course may be taken independent of credit. Letter grading (101C) and letter grading (101A, 101B).

108FL. Advanced Chinese Rhetoric and Critical Writings of Traditional China. (3) Lecture, eight hours. Enforced requisite: Chinese placement test. Designed for students who have completed secondary education or equivalent in Chinese. Focus on developing sophisticated Chinese rhetorical strategies in speaking and writing, and on writing critical essays on thinking skills through use of Chinese language. Chinese texts and multimedia materials used as basis for in-depth analysis and understanding of contemporary topics in Chinese politics, law, and society. Each course may be taken independently for credit. Letter grading.

109. Advanced Tutorial Instruction in Chinese. (2) Tutorial, two hours; for course 109, lecture, two hours; for Chinese placement test. Tutorial and guided independent study to help students develop advanced proficiency in oral and written Chinese. May be repeated for credit. P/NP or letter grading.

110A-110B-110C. Introduction to Classical Chinese. (4-4-4) Lecture, three hours; discussion, one hour. Enforced requisite: course 3 or Chinese placement test. Course 110A is enforced requisite to 110B, which is enforced requisite to 110C. Grammar and readings in selected premorden texts. P/NP or letter grading.

120. Introduction to Chinese Linguistics. (4) Lecture, three hours; discussion, one hour. Recommended preparation: one to two years of college-level Chinese. Introduction to language, forms and one half hours; discussion, one hour. Enforced requisite: course 3 or Chinese placement test. Course 110A is enforced requisite to 110B, which is enforced requisite to 110C. Grammar and readings in selected premorden texts. P/NP or letter grading.

124. Taiwanese Language and Culture. (4) Lecture, two hours; discussion, one hour. Enforced requisite: course 3 or Chinese placement test. Taiyú, or Taiwanes (also known as Minnan, Hoklo, or Hokkien, depending on context or region), is language that most Taiwanese people use in daily lives, including everyday interaction and communication, entertainment, social and cultural events, etc. Examination of various manifestations of Taiyú in different forms of cultural production, including cinema, television series, pop music, animation, Gezai opera, glove puppetry, and other media. Discussion also of how these media have represented Taiwan's society and shaped its cultural landscape. P/NP or letter grading.

125. Taiwanese Language and Expressive Cultures. (4) Lecture, two hours; discussion, one hour. Enforced requisite: course 3 or Chinese placement test. Taiyú, or Taiwanese (also known as Minnan, Hoklo, or Hokkien, depending on context or region), is language that most Taiwanese people use in daily lives, including everyday interaction and communication, entertainment, social and cultural events, etc. Expressive culture is one way by which group of people express their ideas, emotions, values, ideologies, and belief systems through language and non-verbal linguistic devices. Major coverage on language use as reflected in various types of media: film, television, Internet, advertisement, etc. May be repeated for credit. P/NP or letter grading.

126. Romance Languages and Literatures 371. Special Studies: Asian Languages and Cultures. (3) Lecture, three hours; discussion, one hour. Enforced requisite: course 100B or Chinese placement test. Readings and discussion of works of modern Chinese literature. Each course may be taken independently for credit. Letter grading.

131. World Sinophone Literature: Theories and Practices. (4) Lecture, two hours; discussion, one hour. Enforced requisite: course 100B or Chinese placement test. Reading and discussion of works of modern Chinese literature. Each course may be taken independently for credit. Letter grading.

137. How to Read Chinese Poetry. (4) Lecture, two and one half hours; discussion, one hour. From earliest vestiges of Chinese poetry more than two thousand years ago to contemporary Chinese homes, and to San Francisco's Angel Island in late 19th century, few students of China (or pre-modern East Asia) go far without suddenly encountering pervasive presence of Chinese poetry, oral poems or classical poetry, lines or rhymes in language use as reflected in various types of media: film, television, Internet, advertisement, etc. May be repeated for credit. P/NP or letter grading.


139. Gardens in China. (4) Lecture, three hours; discussion, one hour. Recommended preparation: course 50. Interdisciplinary survey of historic and literary gardens in China, with focus on English translations of texts by native writers and recent Western scholars. Letter grading.

140A-140D. Readings in Classical Chinese Literature. (4 each) Lecture, three hours; discussion, one hour. Enforced requisite: course 110C. Advanced classical Chinese. Readings and discussion of works of premodern Chinese literature. Each course may be taken independently for credit. Letter grading. 140A. Poetry; 140B. Prose; 140C. Fiction; 140D. Philosophical Texts.

144. Translation Workshop: Modern Chinese Texts. (4) Lecture, three hours; discussion, one hour. Preparation: bilingual competency in Chinese and English. Workshop on Chinese-English literary translation, designed to hone and improve translation skills. Focus on close readings and analysis of original texts against published English translations and actual translation work. May include interpretation segment, designed to improve interpretation skills. Concurrently scheduled with course C250A. Letter grading.

150A. Lyric Traditions. (4) Lecture, three hours; discussion, one hour. Knowledge of Chinese not required. Readings in English translation of poetic and critical writings of traditional China, with emphasis on development of subjectivity and modes of address. Concurrently scheduled with course C250A. P/NP or letter grading.

M153. Chinese Immigrant Literature and Film. (4) (Same as Asian American Studies M103B and Comparative Literature M117.) Lecture, three hours; discussion, one hour. Knowledge of Chinese not required. In-depth look at Chinese immigrant experience through literature and films. Theories of diaspora, gender, and race to inform thinking and discussion of relevant issues. P/NP or letter grading.

154. Introduction to Chinese Cinema. (4) Lecture, two hours; discussion, one hour. Knowledge of Chinese not required. Survey of Chinese cinema through its relationship to culture, including political histories. May be repeated for credit with topic change. P/NP or letter grading.

155. Topics in Chinese Cinema. (4) Lecture, two hours; discussion, one hour; film viewing, three hours. Knowledge of Chinese not required. Critical study of films from China, Hong Kong, Taiwan, and Chinese diaspora. Examination of aesthetics, genres, directors and stars, other arts and media, and cultural and political histories. May be repeated for credit with topic change. P/NP or letter grading.

156. Variable Topics in Culture and Society in Taiwan. (4) Lecture, three hours; discussion, one hour. Designed for seniors. Knowledge of Chinese not required. Examination of relationship between culture (art, literature, film) and society in Taiwan. Reading, audio and visual material, discussion, and development of culminating project. May be repeated for credit with topic change. Concurrently scheduled with course C257. Letter grading.

157. Contemporary Chinese Popular Culture. (4) Lecture, three hours; discussion, one hour. Examination of various aspects of modern and contemporary popular culture in China, Taiwan, and Hong Kong from cultural studies perspective. Genres and media include literature, print culture, cinema, martial arts film and fiction, television, radio, pop music, visual arts, fashion, advertising, and cyberculture. P/NP or letter grading.

159. Variable Topics in Culture and Society in China. (4) Lecture, three hours; discussion, one hour. Knowledge of Chinese not required. Critical study of relationship between culture (art, literature, history, film) and society in China. Reading, audio and visual material, discussion, and development of culminating project. May be repeated for credit with topic change. P/NP or letter grading.


165. Introduction to Chinese Buddhist Texts. (4) Lecture, three hours; discussion, one hour. Knowledge of Chinese not required. Examination of key Buddhist texts, including the Diamond Sutra, and translated into Chinese. May be repeated for credit with consent of instructor. Letter grading.


C175. Introduction to Chinese Thought. (4) Lecture, three hours; discussion, one hour. Knowledge of Chinese not required. Survey of Chinese thought as represented in texts of Zhou through early Han periods (circa 1000 to 100 BCE), with focus on invention of Confucian tradition (including Five Classics) and on debates that took place against challenges from Mohists, Taoists, and other groups of thinkers. Concurrently scheduled with course C275. Letter grading.

175SL. Community-Based Introduction to Chinese Thought. (4) Seminar, three hours. Knowledge of Chinese not required. Commu- nity-based survey of Chinese thought as represented in texts of Zhou through early Han periods (circa 1000 to 100 BCE), with focus on invention of Confucian tradition (including Five Classics) and on defenses of that tradition against challenges from Mohists, Taoists, and other groups of thinkers. Service learning component included. May be repeated for credit with topic change. Letter grading.

176. Neo-Confucianism. (4) Lecture, three hours; discussion, one hour. Knowledge of Chinese not required. Examination of movement to revitalize and reinterpret teachings of Confucius during the Tang, Song, Yuan, and Ming dynasties, with consideration of both neo-Confucian philosophy and social action. Letter grading.

180. Chinese Mythology and Supernaturalism. (4) Lecture, three hours; discussion, one hour. Knowledge of Chinese not required. Survey of corpus of traditional Chinese mythology, with focus on examples preserved in variety of early texts, later evolutions in dramatic and fictional works, and evidence from visual arts. Letter grading.

182. Archaeology of Early Global Trade and Piracy. (4) Courses may be repeated for credit. Examination of role of trade and piracy at threshold of globalization (13th to 17th century), with focus on continuity and transformation in Asian trade network in response to early global trade. Investigation based on archaeological study of porcelain, tracing movement from kilns around Chinese trading ports to shipwrecks and consumer societies in Southeast Asia and colonial Americas. As one of most important commodities on trans-Pacific voyage, close association of porcelain production and trade with international piracy in tradi- tional historiography presents new angle for under- standing dynamics of early global trade and indus- tries. Letter grading.

M183. Archaeological Landscapes of China. (4) (Same as Anthropology M116R.) Lecture, three hours; discussion, one hour (when scheduled). Declas- sified space in China. Students will work in a team to use remote sensing data from satellite images, investigation of changing historical and archaeo- logical landscapes in China during last 5,000 years. Social processes at various scales, from emerg- ing social formations to centers and formation of imperial landscapes. P/NP or letter grading.

184. Crime, Law, and Punishment in Traditional China. (4) Lecture, three hours; discussion, one hour. Examination of how and why crime is defined and administered under traditional Chinese legal systems. May be repeated for credit. Letter grading.


186. Archaeology in China. (4) Lecture, three hours; discussion, one hour. Knowledge of Chinese not required. Early Chinese study of their own past, types of evidence used, methodological approaches and sur- veys of major excavations of sites of all periods. Letter grading.

187. Chinese Ethnology and Calligraphy. (4) Lecture, three hours; discussion, one hour. Recommended prerequisite: course 3. Coverage of (1) development of Chinese writing system from pottery inscrip- tions 6,000 years ago to modern simplified forms and studies of six scripts principles that were used to form Chinese characters; (2) characteristics of cal- ligraphic art and its appreciation, with focus on ways of recognizing and interpreting cursive style, common for handwriting. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or activities and led by lecture course instructor. May be applied toward honors credit for eligible stu- dents. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Component in (1) Tutorial, three hours. Limited to students in College Honors Program. De- signed as adjunct to upper-division lecture course. In- dividual study with lecture course instructor to explore topics in greater depth through supplemental read- ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re- quired. Honors content noted on transcript. Letter grading.


197. Individual Studies in Chinese. (4) Tutorial, to be arranged. Limited to juniors/seniors and graduate stu- dents who desire more advanced or specialized in- struction in Chinese. Individual intensive study, with scheduled meetings to be arranged between faculty and student. Advanced reading and research, and evidence of mastery of subject matter required. May be repeated for credit. Individual contract required; see undergraduate adviser. P/NP or letter grading.
ical, biographical, and geographical sources; encyclopedias; anthologies; rare editions; illustrated matter.

200B. Proseminar: Premodern Chinese Literature. (4) Seminar, three hours; discussion, one hour. Introduction to major bibliographical and methodological resources in field of premodern Chinese literature, with focus on research tools in field and on scholarship in English on major literary genres. Preparation: consent of instructor.

200C. Proseminar: Modern Chinese Literature and Cinema. (4) Seminar, three hours. Introduction to major bibliographical and methodological resources in fields of modern Chinese literary and cinematic studies, including theoretical tools, historical knowledge, and critical trends. Letter grading.


M202. China Studies: Discipline, Methods, Debates. (2) (Same as History M280.) Seminar, two hours. Introduction to study of China as practiced in humanities and social sciences disciplines. S/U grading.


C207A-C207B. Academic/Professional Chinese. (4–4) Lecture, three hours; discussion, one hour. Enforced requisite: course 101B or Chinese placement test. Test. Improvement to reading and writing skills in specific academic and professional subject areas for students who have studied general Chinese at advanced level, with coverage in Chinese humanities and social sciences, science and technology, medicine, and applied linguistics. Concurrently scheduled with courses C107A-C107B. S/U or letter grading.

209. Issues in Modern Chinese Literature. (4) Seminar, three hours. Exploration of selected topics and issues in Sinophone literature, literature written in Sinitic languages by ethnic minority writers in China, and literature written by those living outside China across world, especially in Malaysia, Taiwan, Singapore, and the U.S. S/U or letter grading.


211A-211B. Seminars: Classical Chinese Poetry. (4–4) Seminar, three hours; discussion, one hour. Review of ancient Chinese poetry. Preparation: reading of ancient Chinese poetry and basic knowledge of Chinese music. May be repeated for credit with consent of instructor. Letter grading.

212. Topics in Chinese Poetry. (4) Readings/discussion, three hours. Selected readings from classical poetic tradition, with focus on individual poets, themes, or other critical aspects. May be repeated for credit with consent of instructor. Letter grading.

213A-213B. Chinese-Language Cinemas. (4–4) Seminar, three hours; film-viewing laboratory, two hours. Discussion of Chinese-language films. Examination of theory and methodology, historiography, industry and institutions, style and aesthetics, major genres and artists, and other media, and other cultural and social contexts. May be repeated for credit with consent of instructor. In Progress (213A) and letter (213B) grading.

220A-220B. Theoretical Approaches to Chinese and Sinophone Cultures. (4–4) Seminar, three hours. Discussion of Western literary and cultural theory, investigating both challenges and limitations Western theory may pose for Chinese literary and cultural studies. Specific topics vary from year to year. In Progress (220A) and letter (220B) grading.

224A-224B. Seminars: Selected Topics in Chinese Linguistics. (4–4) Seminar, three hours. Critical reading and discussion of selected topics in Chinese functional linguistics and grammar, corpus linguistics, sociolinguistics, language change. May be repeated for credit with consent of instructor. In Progress (224Aa) and letter (224B) grading.


230A-230B. Seminars: Selected Topics in Modern Chinese Literature. (4–4) Seminar, three hours. Selected readings in 20th-century Chinese literature, emphasizing fiction and poetry. Projects may be repeated for credit. In Progress (230A) and letter (230B) grading.

237. How to Read Chinese Poetry. (4) Lecture, two and one half hours; discussion, one hour. Preparation: one year of literary Chinese. From earliest vestiges of Chinese poetry more than two thousand years ago, to doors of contemporary Chinese homes, and to San Francisco’s Angel Island in late 19th century; few students of China’s poetry go far without suddenly encountering pervasive presence of Chinese poetry (shi). Examination of why poetry, role poetry plays in Chinese culture, and how to read it. Basic beginning in learning how to read Chinese classical poetry. Study of topical and accumulative, designed to have effect of building blocks and progressive overlays. Introduction to language, forms, and history of the poetic or literary unit of Chinese lyric poetry, individual words and their selection; formal elements and rhetorical features; modes of perception and how it governs lyric description, narration, and argument. Consideration of presuppositions of what poetry is and how it is to be read. Concurrently scheduled with course C137. S/U or letter grading.

238. Travel Writing in Premodern China. (4) Lecture, three hours; discussion, one hour. Recommended preparation: course 50. Exploration of travel writing in China, with focus on English translations of works by native writers and by foreign visitors through centuries. Concurrently scheduled with course C138. Letter grading.

240. Introduction to Chinese Linguistics. (4) Lecture, three hours; discussion, one hour. Recommended preparation: basic knowledge of Chinese sound system, writing system and its reform, regional differences, major structural features, language in society and in cultural process. Knowledge of Chinese must be concurrently scheduled with course C120. Letter grading.

241A-241B. Heaven, Earth, and Monarchy in Ancient China. (4–4) Seminar, three hours. Preparation: working knowledge of classical Chinese. Close reading of chapters from Han dynasty collection of writings on forms of music, social interaction, education, marriage, and mourning in Zhou royal court, with discussion of topics in recent cultural semiology and anthropology. In Progress (241Aa) and letter (241B) grading.

242A-242B. Chinese Classics and Exegetical Traditions. (4–4) Seminar, three hours. Recommended preparation: command of literary Chinese. Reading and discussion of selections from one traditional Chinese classic (Confucian Five Classics, others), with introduction to exegetical history, secondary scholarship, and research methodology. Topics vary from year to year. May be repeated for credit. In Progress (242Aa) and letter (242B) grading.


244. Translation Workshop: Modern Chinese Texts. (4) Lecture, three hours; discussion, one hour. Preparation: bilingual competency in Chinese and English. Workshop on Chinese-English literary translation, designed to hone and improve translation skills. Focus on close readings and analysis of original texts against published English translations and actual translation work. May include interpretation segment, designed to improve interpretation skills. Concurrently scheduled with course C144. S/U or letter grading.

245A-245B. Seminars: Traditional Chinese Narrative and Drama. (4–4) Seminar, three hours. Preparation: reading knowledge of colloquial and literary Chinese. Topics drawn from traditional narrative and drama, with emphasis on generic, hermeneutical, and historical approaches. Topics in narrative selected from texts from Chou through Ch’ing periods. Topics drawn from tsa-ch’i and ch’-uan-ch’i. May be repeated for credit with consent of instructor. In Progress (245Aa) and letter (245B) grading.

250A. Lyrical Traditions. (4) Lecture, three hours; discussion, one hour. Readings of poetic and critical writings of traditional China, with emphasis on development of subjectivity and modes of address. Concurrently scheduled with course C150A. Graduate students required to read primary materials in original Chinese. S/U or letter grading.

250B. Chinese Literature in Translation: Traditional Narrative and Fiction. (4) Lecture, three hours; discussion, one hour. Knowledge of Chinese not required. Examination of translation of past and present narratives from Chinese narrative traditions from Tang to mid-Qing periods (7th-18th centuries). Readings from biographical writings, fiction, drama, legal cases, etc., with particular focus on different narrative traditions and their cultural assumptions and intersections. Exploration of important issues in context of imperial China, including order and chaos, self and other, desire and transience, gender norms and transgression, violence and justice. May be taken independently for credit. Concurrently scheduled with course C150B. Letter grading.

256A-256B. Chinese Literary Criticism. (4–4) Seminar, three hours. Issues in production and interpretation of literary works, as formulated by Chinese critics from classical age onward. Letter grading.

257. Variable Topics in Culture and Society in Taiwan. (4–4) Lecture, three hours; discussion, one hour. Designed for graduate students. Knowledge of Chinese not required. Examination of relationship between culture (art, literature, film) and society in Taiwan. Reading, audio and visual material, discussion, and development of culminating project. May be repeated for credit with topic change. Concurrently scheduled with course C156. Letter grading.


265A-265B. Seminars: Chinese Buddhist Texts. (4–4) Seminar, three hours. May be repeated for credit with consent of instructor. In Progress (265A) and letter (265B) grading.

275. Introduction to Chinese Thought. (4) Lecture, three hours; discussion, one hour. Knowledge of Chinese not required. Examination of relationship between culture (art, literature, film) and society in China. Reading, audio and visual material, discussion, and development of culminating project. May be repeated for credit with topic change. Concurrently scheduled with course C156. Letter grading.


290A. Seminar: Selected Topics in Chinese Archaeology. (4–4) Seminar, three hours. Preparation: consent of instructor. In Progress (290A) and letter (285B) grading.

290A-290B. Seminars: Selected Topics in Chinese Archaeology. (4–4) Seminar, three hours. Preparation: consent of instructor. In Progress (290A) and letter (285B) grading.
Filipino
Lower-Division Courses

1. Introductory Filipino. (5) Lecture, two hours; discussion, three hours. Coverage of basic Filipino/Tagalog grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

2. Intermediate Filipino. (5) Lecture, two hours; discussion, three hours. Emphasis on advanced level of proficiency toward greater proficiency and fluency in reading, writing, speaking, and listening in Filipino language. P/NP or letter grading.

3. Intermediate Filipino. (5) Lecture, two hours; discussion, three hours. Reinforcement of course 2 with grade of C or better. Coverage of basic Filipino/Tagalog grammar and vocabulary. P/NP or letter grading.


8. Elementary Filipino: Intensive. (15) Lecture, 10 hours; discussion, 10 hours. Intensive course equivalent to courses 1, 2, and 3. Coverage of basic Filipino/Tagalog grammar, with equal emphasis on reading, writing, conversation, and comprehension. Offered in summer only. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCL. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to upper-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Hindi-Urdu
Lower-Division Courses

1. Introductory Hindi-Urdu. (8) Lecture, two hours; discussion, three hours. Emphasis on Hindi/Urdu grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

2. Introductory Hindi-Urdu. (5) Lecture, two hours; discussion, three hours. Advanced course in Hindi/Urdu grammar, with emphasis on oral and written proficiency in Hindi/Urdu. P/NP or letter grading.

3. Intermediate Hindi-Urdu. (5) Lecture, two hours; discussion, three hours. Advanced course in Hindi/Urdu grammar, with emphasis on oral and written proficiency in Hindi/Urdu. P/NP or letter grading.

3R. Elementary Hindi-Urdu Reading and Writing. (5) Lecture, five hours. Recommended preparation: speaking and listening skills in Hindi-Urdu. Training in reading and writing skills at elementary level, equivalent to completion of one year of Hindi-Urdu. P/NP or letter grading.

120A. Advanced Hindi-Urdu: Reading and Writing. (4) Lecture, three hours. Emphasis on reading of texts. P/NP or letter grading.

155. Topics in Hindi-Urdu Cinema and Literature. (4) Lecture, three hours; discussion, one hour. Knowledge of Hindi-Urdu required. Critical analysis of language and cultural history, and sociopolitical issues as reflected in Hindi-Urdu films and/or literature. May be repeated for credit. P/NP or letter grading.

170. People, Society, and Culture of Philippines. (4) Lecture, two hours; discussion, one hour. In-depth examination of Philippines, from pre-Hispanic history and cultural formation under both Spain and the U.S. to struggle for independence. P/NP or letter grading.

200. People, Society, and Culture of Philippines. (4) Lecture, two hours; discussion, one hour. In-depth examination of Philippines, from pre-Hispanic history and cultural formation under both Spain and the U.S. to struggle for independence. P/NP or letter grading.
Upper-Division Courses

100A-100B-100C. Intermediate Hindi-Urdu. (4–4–4) Lecture, two hours; discussion, three hours. Enforced requisite: course 3 with grade of C or better. Course 100A is prerequisite to 100B; course 100B with grade of C or better is requisite to 100C. Reinforcement of basic Hindi grammar and coverage of more advanced topics. Broadening of skills in conversation and composition; reading of selected texts. P/NP or letter grading.

109. Advanced Tutorial Instruction in Hindi-Urdu. (2) Tutorial, two hours. Requisite: course 6 or Hindi-Urdu placement test. Tutorial and guided independent study to help students develop advanced to superior proficiency in oral and written Hindi-Urdu. May be repeated for credit. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Upper-Division Courses

100A-100B-100C. Advanced Indonesian. (4–4–4) Lecture, five hours; discussion, one hour. Requisite: course 3 with grade of C or better is requisite to 100B; course 100B with grade of C or better is requisite to 100C. Preparation for more advanced study of specialized academic subjects, including but not limited to social sciences and humanities. Students read authentic materials in Indonesian concerning various issues. P/NP or letter grading.

109. Advanced Tutorial Instruction in Indonesian. (2) Tutorial, two hours. Requisite: course 6 or Indone- sian placement test. Tutorial and guided independent study to help students develop advanced to superior proficiency in oral and written Indonesian. May be repeated for credit. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

1. Introductory Indonesian. (5) Lecture, three hours; discussion, two hours. Not open to students who have learned enough Indonesian to qualify for more advanced courses. Coverage of basic Indonesian grammar, with equal emphasis on oral and written Hindi-Urdu. May be repeated for credit. P/NP or letter grading. 100HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

2. Introductory Indonesian. (5) Lecture, three hours; discussion, two hours. Requisite: course 1 with grade of C or better. Not open to students who have learned enough Indonesian to qualify for more advanced courses. Coverage of basic Indonesian grammar, with equal emphasis on oral and written Indonesian. May be repeated for credit. P/NP or letter grading.

3. Introductory Indonesian. (5) Lecture, three hours; discussion, two hours. Requisite: course 2 with grade of C or better. Not open to students who have learned enough Indonesian to qualify for more advanced courses. Coverage of basic Indonesian grammar, with equal emphasis on oral and written Indonesian. May be repeated for credit. P/NP or letter grading.

4. Intermediate Indonesian. (5) Lecture, three hours; discussion, two hours. Requisite: course 3 with grade of C or better. Not open to students who have learned enough Indonesian to qualify for more advanced courses. Coverage of basic Indonesian grammar, with equal emphasis on oral and written Indonesian. May be repeated for credit. P/NP or letter grading.

5. Intermediate Modern Japanese. (5) Lecture, two hours; discussion, one hour. Requisite: course 5 with grade of C or better. Not open to students who have learned enough Japanese to qualify for more advanced courses. Coverage of basic Japanese grammar, with equal emphasis on oral and written Japanese. May be repeated for credit. P/NP or letter grading.

6. Intermediate Modern Japanese. (5) Lecture, two hours; discussion, one hour. Requisite: course 4 with grade of C or better. Not open to students who have learned enough Japanese to qualify for more advanced courses. Coverage of basic Japanese grammar, with equal emphasis on oral and written Japanese. May be repeated for credit. P/NP or letter grading.

7. Intermediate Modern Japanese. (5) Lecture, two hours; discussion, one hour. Requisite: course 5 with grade of C or better. Not open to students who have learned enough Japanese to qualify for more advanced courses. Coverage of basic Japanese grammar, with equal emphasis on oral and written Japanese. May be repeated for credit. P/NP or letter grading.

8. Elementary Japanese: Intensive. (15) Lecture, 10 hours; discussion, 10 hours. Open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Intensive course equivalent to courses 1, 2, and 3. Introduc- tion to fundamentals of standard Japanese, including pronunciation, Japanese character, with emphasis on all four basic language skills—speaking, listening comprehension, reading, and writing. Offered in summer only. P/NP or letter grading.

9. Elementary Modern Japanese. (5) Lecture, 10 hours; discussion, 10 hours. Enforced requisite: course 3 with grade of C or better. Not open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Coverage of basic Japanese grammar, with equal emphasis on oral and written Japanese. May be repeated for credit. P/NP or letter grading.

51. Literature and Film in Japanese. (5) Lecture, three hours; discussion, one hour. Knowledge of Japanese culture, literature, or language not required. Introduction to selected classical texts and visual arts, with focus on literary texts and visual art, with an emphasis on the role of cultural exchange in the development of classical Japanese and modern Japanese literature and art. P/NP or letter grading.

52. Images of Japan: Literature and Film. (5) Lecture, three hours; discussion, one hour. Knowledge of Japanese language or culture is recommended. Selected readings and visual art for an in-depth exploration of the relationship between literature and film in Japan. P/NP or letter grading.

53. Anime. (5) Lecture, three hours; discussion, one hour. Knowledge of Japanese language or culture is recommended. Focus on recent scholarship on anime production, reception, and cultural influence. P/NP or letter grading.

54. Language and Film in Modern Japan. (5) Lecture, four hours; discussion, one hour. How is action constituted on the screen? How has modern technological media informed and transformed our understanding of action? How has our experience and conception of action been mediated by cinematic and digital media? Tracing history of portrayal and experience of action in both cinema and digital media. Emphasis on moving image practices surrounding production and reception of popular film genres from Japan such as chambara or samurai film and yakuza film. Consideration also of their relationship to international film culture and genres (e.g., Hollywood Western, gangster film, Chinese martial arts cinema, and contemporary Hollywood blockbusters) in context of historical transformations in media practices and in modes of distribution and reception. Study of theoretical debates, institutional practices, and political questions that inform our understandings of moving image as action. Introduction to action as throughputs and problematics of action. P/NP or letter grading.

55. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

56. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individually study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for credit. P/NP or letter grading.

57. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated, P/NP grading.

Upper-Division Courses

100A-100B. Advanced Modern Japanese. (4-4-4) Lecture, three hours; discussion, one hour. Requirement: course 6 or 10 with grade of C or better or Japanese placement test. Course 100A with grade of C or better or Japanese placement test. Not open to students with credit for course 100B or who have learned, from whatever source, Japanese to the level of Japanese placement test. Enforced requisites: course 6 or 10 with grade of C or better or Japanese placement test. Not open to students with credit for course 100A or who have learned, from whatever source, Japanese to the level of Japanese placement test. May be taken concurrently with course 100B. Development of overall competency in reading advanced-level Japanese materials. Instructing in understanding practical expressions, as well as expansion of kanji and vocabulary to achieve higher ability in comprehension of written materials in Japanese. Translations from Japanese to English, as well as from English to Japanese. P/NP or letter grading.

100S. Advanced Modern Japanese: Intensive. (12) Lecture, 10 hours; discussion, 10 hours. Enforced requisites: course 6 or 10 with grade of C or better or Japanese placement test. Not open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Intensive course equivalent to courses 100A, 100B, and 100C. Learning Japanese as a key to understanding cultural issues of contemporary Japanese society. Materials selected from contemporary publications, videos, and audiotapes. Reading with focus on linguistic features, historical context, and project work. Offered in summer only. P/NP or letter grading.

101A-101B-101C. Fourth-Year Japanese: Advanced Reading (4-4-4) Lecture, three hours. Enforced requisites: course 100B or 100C with grade of C or better or Japanese placement test. Not open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Consideration of seminal works of classical literature, and contemporary works in context of broader historical transformations in media practices and in modes of distribution and reception. Study of theoretical debates, institutional practices, and ethical and political questions that inform our inquiries into moving image as action, and into action as throughputs and problematics of action. P/NP or letter grading.

101S. Fourth-Year Japanese: Advanced Reading—Intensive. (12) Lecture, 10 hours; discussion, 10 hours. Enforced requisites: course 100B or 100C with grade of C or better or Japanese placement test. Not open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Intensive course equivalent to courses 100A, 100B, and 100C. Learning Japanese as a key to understanding cultural issues of contemporary Japanese society. Materials selected from contemporary publications, videos, and audiotapes. Reading with focus on linguistic features, historical context, and project work. Offered in summer only. P/NP or letter grading.

105A-105B. Advanced Reading and Writing for Japanese. (4) Lecture, three hours; discussion, one hour. Enforced requisites: course 100A or 100B with grade of C or better or Japanese placement test. Not open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Consideration of seminal works of classical literature, and contemporary works in context of broader historical transformations in media practices and in modes of distribution and reception. Study of theoretical debates, institutional practices, and ethical and political questions that inform our inquiries into moving image as action, and into action as throughputs and problematics of action. P/NP or letter grading.


110B. Introduction to Classical Japanese: Reading Proficiency. (4) Lecture, three hours; discussion, one hour. Enforced requisites: course 110A. Grammar and readings of selected premodern texts. P/NP or letter grading.


CM123. Structure of Japanese. (4) (Same as Linguistics M176B.) Lecture, three hours; discussion, one hour. Enforced requisites: course 4 or 10 or Japanese placement test. Functional linguistic analysis of grammatical structures of Japanese. Not open to students who have taken equivalent to courses C222. Letter grading.

CM124. Language and Culture of Ryukyu/Okinawa. (4) Seminar, three hours. Enforced requisites: course 6 or 10 or Japanese placement test. Research seminar with reading, discussion, linguistic analysis, and development of culminating project. Letter grading.


CM130A-130B-130C. Readings in Modern Japanese Literature. (4-4-4) Lecture, three hours; discussion, one hour. Enforced requisites: course 100A or 100B or Japanese placement test. Not open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Consideration of seminal works of classical literature, and contemporary works in context of broader historical transformations in media practices and in modes of distribution and reception. Study of theoretical debates, institutional practices, and cultural issues of contemporary Japanese society. Materials selected from contemporary publications, videos, and audiotapes. Reading knowledge of Hiragana. Prior linguistic background also recommended. Critical reading and discussion of selected current research papers in syntax, pragmatics, discourse, and sociolinguistics from perspectives of contrastive study of Japanese and Korean. Concurrently scheduled with course CM227. Letter grading.

CM130A-130B-130C. Readings in Modern Japanese Literature. (4-4-4) Lecture, three hours; discussion, one hour. Enforced requisites: course 100A or 100B or Japanese placement test. Not open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Consideration of seminal works of classical literature, and contemporary works in context of broader historical transformations in media practices and in modes of distribution and reception. Study of theoretical debates, institutional practices, and cultural issues of contemporary Japanese society. Materials selected from contemporary publications, videos, and audiotapes. Reading knowledge of Hiragana. Prior linguistic background also recommended. Critical reading and discussion of selected current research papers in syntax, pragmatics, discourse, and sociolinguistics from perspectives of contrastive study of Japanese and Korean. Concurrently scheduled with course CM227. Letter grading.

CM140A-140B-140C. Readings in Classical Japanese Literature. (4-4-4) Seminar, three hours. Enforced requisites: course 110A. Readings and discussion of works of classical, medieval, and early modern Japa-
nese literature. Each course may be taken inde-
pendently for credit. Letter grading. 140A. Heian; 140B. Medieval; 140C. Edo.

C149. Introduction to Kambun and Other Literary Styles. (4) Lecture, three hours. Enforced requisite: course 110A. Introduction to Kambun, Japanese liter-
ary rendering of premodern Sino-Japanese, and So-

C150. Topics in Japanese Literature and Philosophy. (4) Lecture, three hours; discussion, one hour. Knowledge of Japanese not required. Discussion of philo-
sophical topics such as experience, identity, value, technology, in light of Japanese literary texts. Con-
currently scheduled with course C250. Letter grading.

151. Japanese Literature in Translation: Modern. (4) Lecture, three hours; discussion, one hour. Requisite: English Composition 3 or 3H or one course from Com-
parative Literature 1A, 1B, 1C, 1D. Knowledge of Jap-

140B. Japanese Tales of Supernatural. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 110A. Introduction to Kambun, Japanese liter-
ary rendering of premodern Sino-Japanese, and So-
robun, epistolary style. Concurrently scheduled with course C149. Letter grading.

150. Postwar Japanese Culture through Literature. (4) Lecture, three hours; discussion, one hour. Requi-
site: course 110A or Chinese 165 or Japanese placement test. Pro-

140A. Introduction to Kambun and Other Literary Styles. (4) Lecture, three hours. Enforced requisite: course 110A. Introduction to Kambun, Japanese liter-
ary rendering of premodern Sino-Japanese, and So-
robun, epistolary style. Concurrently scheduled with course C149. Letter grading.

C150. Topics in Japanese Literature and Philosophy. (4) Lecture, three hours; discussion, one hour. Knowledge of Japanese not required. Discussion of philo-
sophical topics such as experience, identity, value, technology, in light of Japanese literary texts. Con-
currently scheduled with course C250. Letter grading.

151. Japanese Literature in Translation: Modern. (4) Lecture, three hours; discussion, one hour. Requisite: English Composition 3 or 3H or one course from Com-
parative Literature 1A, 1B, 1C, 1D. Knowledge of Jap-

140B. Japanese Tales of Supernatural. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 110A. Introduction to Kambun, Japanese liter-
ary rendering of premodern Sino-Japanese, and So-
robun, epistolary style. Concurrently scheduled with course C149. Letter grading.

C150. Topics in Japanese Literature and Philosophy. (4) Lecture, three hours; discussion, one hour. Knowledge of Japanese not required. Discussion of philo-
sophical topics such as experience, identity, value, technology, in light of Japanese literary texts. Con-
currently scheduled with course C250. Letter grading.

151. Japanese Literature in Translation: Modern. (4) Lecture, three hours; discussion, one hour. Requisite: English Composition 3 or 3H or one course from Com-
parative Literature 1A, 1B, 1C, 1D. Knowledge of Jap-

140B. Japanese Tales of Supernatural. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 110A. Introduction to Kambun, Japanese liter-
ary rendering of premodern Sino-Japanese, and So-
robun, epistolary style. Concurrently scheduled with course C149. Letter grading.

C150. Topics in Japanese Literature and Philosophy. (4) Lecture, three hours; discussion, one hour. Knowledge of Japanese not required. Discussion of philo-
sophical topics such as experience, identity, value, technology, in light of Japanese literary texts. Con-
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parative Literature 1A, 1B, 1C, 1D. Knowledge of Jap-

140B. Japanese Tales of Supernatural. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 110A. Introduction to Kambun, Japanese liter-
ary rendering of premodern Sino-Japanese, and So-
robun, epistolary style. Concurrently scheduled with course C149. Letter grading.

C150. Topics in Japanese Literature and Philosophy. (4) Lecture, three hours; discussion, one hour. Knowledge of Japanese not required. Discussion of philo-
sophical topics such as experience, identity, value, technology, in light of Japanese literary texts. Con-
currently scheduled with course C250. Letter grading.

151. Japanese Literature in Translation: Modern. (4) Lecture, three hours; discussion, one hour. Requisite: English Composition 3 or 3H or one course from Com-
parative Literature 1A, 1B, 1C, 1D. Knowledge of Jap-

140B. Japanese Tales of Supernatural. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 110A. Introduction to Kambun, Japanese liter-
ary rendering of premodern Sino-Japanese, and So-
robun, epistolary style. Concurrently scheduled with course C149. Letter grading.

C150. Topics in Japanese Literature and Philosophy. (4) Lecture, three hours; discussion, one hour. Knowledge of Japanese not required. Discussion of philo-
sophical topics such as experience, identity, value, technology, in light of Japanese literary texts. Con-
currently scheduled with course C250. Letter grading.

151. Japanese Literature in Translation: Modern. (4) Lecture, three hours; discussion, one hour. Requisite: English Composition 3 or 3H or one course from Com-
parative Literature 1A, 1B, 1C, 1D. Knowledge of Jap-

140B. Japanese Tales of Supernatural. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 110A. Introduction to Kambun, Japanese liter-
ary rendering of premodern Sino-Japanese, and So-
robun, epistolary style. Concurrently scheduled with course C149. Letter grading.

C150. Topics in Japanese Literature and Philosophy. (4) Lecture, three hours; discussion, one hour. Knowledge of Japanese not required. Discussion of philo-
sophical topics such as experience, identity, value, technology, in light of Japanese literary texts. Con-
currently scheduled with course C250. Letter grading.

151. Japanese Literature in Translation: Modern. (4) Lecture, three hours; discussion, one hour. Requisite: English Composition 3 or 3H or one course from Com-
parative Literature 1A, 1B, 1C, 1D. Knowledge of Jap-

140B. Japanese Tales of Supernatural. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 110A. Introduction to Kambun, Japanese liter-
ary rendering of premodern Sino-Japanese, and So-
robun, epistolary style. Concurrently scheduled with course C149. Letter grading.

C150. Topics in Japanese Literature and Philosophy. (4) Lecture, three hours; discussion, one hour. Knowledge of Japanese not required. Discussion of philo-
sophical topics such as experience, identity, value, technology, in light of Japanese literary texts. Con-
currently scheduled with course C250. Letter grading.

151. Japanese Literature in Translation: Modern. (4) Lecture, three hours; discussion, one hour. Requisite: English Composition 3 or 3H or one course from Com-
parative Literature 1A, 1B, 1C, 1D. Knowledge of Jap-

140B. Japanese Tales of Supernatural. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 110A. Introduction to Kambun, Japanese liter-
ary rendering of premodern Sino-Japanese, and So-
robun, epistolary style. Concurrently scheduled with course C149. Letter grading.

C150. Topics in Japanese Literature and Philosophy. (4) Lecture, three hours; discussion, one hour. Knowledge of Japanese not required. Discussion of philo-
sophical topics such as experience, identity, value, technology, in light of Japanese literary texts. Con-
currently scheduled with course C250. Letter grading.
Korean

Lower-Division Courses

1. Elementary Modern Korean. (5) Lecture, three hours; discussion, two hours. Not open to students who have learned, from whatever source, enough Korean to qualify for more advanced courses. Introduction to standard spoken Korean and Korean writing, with emphasis on conversation. P/NP or letter grading.

2. Intermediate Modern Korean. (5) Lecture, three hours; discussion, two hours. Enrollment required: course 3A with grade of C or better or Korean placement test. Not open to students who have learned, from whatever source, enough Korean to qualify for more advanced courses. Continuation of course 3A. P/NP or letter grading.

3. Intermediate Modern Korean. (5) Lecture, three hours; discussion, one hour. Enrollment required: course 4 with grade of C or better or Korean placement test. Not open to students who have attended elementary school in Korea for more than one year or who have learned, from whatever source, enough Korean to qualify for more advanced courses. Designed for students who seek training in written components of standard Korean (spelling, grammar, readings, and conversation in modern Korean). P/NP or letter grading.

4. Intermediate Modern Korean. (5) Lecture, three hours; discussion, one hour. Enrollment required: course 3A with grade of C or better or Korean placement test. Not open to students who have attended elementary school in Korea for more than one year or who have learned, from whatever source, enough Korean to qualify for more advanced courses. Designed for students who seek training in written components of standard Korean (spelling, grammar, readings, and conversation in modern Korean). P/NP or letter grading.

5. Intermediate Modern Korean. (5) Lecture, three hours; discussion, one hour. Enrollment required: course 4 with grade of C or better or Korean placement test. Not open to students who have attended elementary school in Korea for more than one year or who have learned, from whatever source, enough Korean to qualify for more advanced courses. Continuation of course 4. P/NP or letter grading.

6. Intermediate Modern Korean. (5) Lecture, three hours; discussion, two hours. Not open to students who have learned, from whatever source, enough Korean to qualify for more advanced courses. Designed for Korean-heritage learners. Emphasis on four skills (spelling, grammar, readings, and conversation in modern Korean). P/NP or letter grading.

7. Intermediate Modern Korean. (5) Lecture, three hours; discussion, two hours. Enrollment required: course 5A with grade of B or better or Korean placement test. Not open to students who have learned, from whatever source, enough Korean to qualify for more advanced courses. Designed for Korean-heritage learners. Emphasis on four skills (spelling, grammar, readings, and conversation in modern Korean). P/NP or letter grading.

8. Elementary Korean: Intensive. (15) Lecture, 10 hours; discussion, 10 hours. Not open to students who have learned, from whatever source, enough Korean to qualify for more advanced courses. Designed for advanced Korean learners. Emphasis on four skills—speaking, listening comprehension, reading, and writing. Offered in summer only. P/NP or letter grading.

40W. Korean Wave: Globalization of South Korean Popular Culture. (5) Lecture, two and one half hours; discussion, one hour. Enforced requisite: English Composition 3. Not open for credit to students with credit for course 40. Knowledge of Korean not required. Introduction to Korean popular culture, with focus on representative global phenomenon of Korean Wave (Hallyu). Use of concepts that theorize transnational flows of culture and relationship between cultural and sociopolitical power as framework, with focus on different genres of media and their individual examples—from pop culture, drama, film, and television. Analysis to understand each as example of larger movement of culture across national borders from contexts of production to contexts of reception. Satisfies Writing in the Literature grading.

50. History of Korean Civilization. (5) Lecture, three hours; discussion, one hour. Knowledge of Korean not required. General survey of development of Korean culture within context of political, social, and economic history. P/NP or letter grading.

M60. Introduction to Korean Religions. (Same as Religion M606.) Lecture, three hours; discussion, one hour. Knowledge of Asian languages not required. General survey of history of religions in Korea—Shamanism, Buddhism, Confucianism, Christianity, Ttakgang, and some new religions—with focus on religious doctrines, practices, Korean characteristics, and social impacts. P/NP or letter grading.

70. Impacts of Korean Language, Literature, and Cultural History. (5) Lecture, three hours; discussion, one hour. Broad overview of cultural history of Korea, from premodern period into present. P/NP or letter grading.

80. Introduction to Korean Cinema. (5) Lecture, three hours; discussion, one hour. Broad overview of Korean film history from beginning of 20th century into present. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual course instructor to explore topical topics in greater depth through supplemental readings, papers, or other activities. May be repeated for credit. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101A-101B-101C. Advanced Readings in Modern Korean. (4–4–4) Lecture, three hours; discussion, one hour. Enforced requisite: course 100C or Korean placement test. Course 101A is not open for credit to students with credit for course 101B; course 101B or Korean placement test is enforced requisite to 101C. Advanced readings and discussion for students planning to do advanced course work or research on Korea. Topics selected from magisterial works and recent journals and relevant areas and social sciences. P/NP (undergraduates), S/U (graduates), or letter grading.


102A-102B-102C. Advanced Korean Conversation. (4–4–4) Lecture, three hours. Requisite: course 6 or 6A or 10 or Korean placement test. Not open to students who attended elementary school in Korea for more than two years or who have learned, from whatever source, enough Korean to qualify for more advanced courses. Designed to improve spoken proficiency. Each course may be taken independently for credit. P/NP or letter grading.

103A-103B-103C. Readings in Sino-Korean Characters. (4–4–4) Lecture, three hours; discussion, two hours. Requisite: course 100C or Korean placement test. Course 103A or Korean placement test is requisite to 103B; course 103B or Korean placement test is requisite to 103C. Sino-Korean vocabulary and characters necessary for advanced and superior level of knowledge in Korean. Sino-Korean characters are used differently from same Chinese characters used in contemporary China in terms of pronunciation, meaning, and word formation. Professional-level Korean skills. S/U (graduates), 1,800 vocabulary. P/NP or letter grading.

104A-104B-104C. Korean Writing for Advanced Learners. (4–4–4) Lecture, three hours; discussion, one hour. Enforced requisite: course 101C or Korean placement test. Emphasis on academic writing in Korean, including rhetorical conventions, argument construction, and development of personal style. Readings include representative examples of diverse genres selected from magazines, journals, and books. Each course may be taken independently for credit. P/NP (undergraduates), S/U (graduates), or letter grading.

105A-C105B-C105C. Reading Korean Academic Texts. (4–4–4) Lecture, three hours. Enforced requisite: course 101C or Korean placement test. Intended to improve reading skills for students who have studied Korean to advanced level, with coverage in Korean of materials on Korean history, culture, and society. Each course may be taken independently for credit. Concurrently scheduled with courses C205A-C205B-C205C. P/NP or letter grading.

106A-106B-106C. Superior Korean. (4–4–4) Lecture, three hours. Recommended preparation: course 101C. May not be taken concurrently with course 102A, 102B, or 102C. Use of speaking, listening, reading, and writing skills to participate effectively, or understand without difficulty any practical, social, and professional topics. S/U (graduates), or letter grading. Each course may be taken independently for credit. P/NP or letter grading.

106SL. Superior Korean with Service Learning. (4–4–4) Lecture, three hours; fieldwork, two hours. Recommended preparation: concurrent course 102A, 102B, 102C, or 106SL. Use of speaking, listening, reading, and writing skills to participate effectively, or understand without difficulty any practical, social, and professional topics. May not be taken concurrently with course 102A, 102B, 102C, or 106SL. Concurrently scheduled with selected current research papers in syntax, pragmatics, discourse, and sociolinguistics from perspective of contrastive study of Japanese and Korean. Concurrently scheduled with course CM227. Letter grading.

108. Topics in Korean Language and Culture. (4) Lecture, three hours; discussion, one hour. Recommended preparation: one to two years of college-level Korean. Introduction of basic concepts in sociolinguistics, discourse analysis, and multimedia resources to analyze Korean language and culture. Study to increase understanding of variety of socio-cultural variables of Korean language. Exploration of interrelationship among language, culture, and society by examining Korean popular media (e.g., film/television, popular literature) and sociolinguistic and cultural references as well as various sociolinguistic and cultural references as well as sociolinguistic and cultural variables of Korean language. Each course may be taken independently for credit. P/NP or letter grading.

107A-107B-107C. Professional/Academic Korean. (4–4–4) Lecture, three hours; discussion, one hour. Enforced requisite: course 101C or Korean placement test. Course 107A or Korean placement test is requisite to 107B or 107C. May not be taken concurrently with course 102A, 102B, or 102C. Development of professional and academic proficiency in oral and written Korean to understand many sociolinguistic and cultural references as well as variety of styles and forms pertinent to professional needs, meet demands of professional interactions, and develop professional-level tasks in student special-ization areas. Special attention to vocabulary development on professional level. Development of both interactive and noninteractive listening. Research projects to be assigned according to student interests. P/NP or letter grading.

107SL. Professional/Academic Korean and Community-Based Learning. (4) Lecture, three hours; fieldwork, two hours. Recommended preparation: course 101C or Korean placement test. May not be taken concurrently with course 102A, 102B, 102C, 106A, 106SL, or 107A. Development of professional and academic proficiency in oral and written Korean to understand many sociolinguistic and cultural references as well as variety of styles and forms pertinent to professional needs, meet demands of professional interactions, and carry out professional-level tasks in student specialization areas. Special attention to vocabulary development on professional level. Research projects to be assigned according to student interests. Opportunity for students to communicate in Korean in authentic and professional contexts while providing useful service to community. P/NP or letter grading.

108FL. Special Studies: Readings in Korean. (2) Seminar, two hours. Required preparation: course 101C or Korean placement test. Students must be concurrently enrolled in affiliated course. Additional work in Korean to augment work assigned in main course, including reading, writing, and other exercises. May be repeated for credit. P/NP or letter grading.

109. Advanced Tutorial Instruction in Korean. (2) Tutorial, two hours. Requisite: course 100C or Korean placement test. Tutorial and guided independent study to help students develop advanced to superior proficiency in oral and written Korean. May be repeated for credit. P/NP or letter grading.

120. Structure of Korean. (4) (Same as Linguistics M177.) Lecture, three hours; discussion, one hour. Recommended preparation: two years of Korean, or one year of Korean and one year of linguistics. Introduction to structure of the Korean language. Discussion of major syntactic, semantic, and pragmatic characteristics of Korean in light of linguistic universals, with brief introduction to formation, typological features, and phonological structure of Korean. Concurrently scheduled with course C220. Letter grading.

124. Topics in Korean Language and Culture. (4) Lecture, three hours; discussion, one hour. Recommended preparation: one to two years of college-level Korean. Introduction of basic concepts in sociolinguistics, discourse analysis, and multimedia resources to analyze Korean language and culture. Study to increase understanding of variety of socio-cultural variables of Korean language. Exploration of interrelationship among language, culture, and society by examining Korean popular media (e.g., film/television, popular literature) and sociolinguistic and cultural references as well as sociolinguistic and cultural variables of Korean language. Each course may be taken independently for credit. P/NP or letter grading.


130A-130B. Readings in Modern Korean Literature. (4–4–4) Lecture, three hours. Enforced requisite: course 100C or Korean placement test. Study of Korean literature from 1945—present. Intended for students to communicate in Korean in authentic and professional contexts while providing useful service to community. P/NP or letter grading.


Cultural and Literary Translation: Modern. (4) Lecture, three hours; discussion, one hour. Requisite: English Composition 3 or 3H or one course from Comparative Literature 1A, 1B, 1C, 1D. Knowledge of Korean not required: Texts from 17th century to modern period. Concurrently scheduled with course C251. P/NP or letter grading.

Korea West Encounters. (4) Lecture, three hours; discussion, one hour. Knowledge of Korean not required. Exploration of major cultural exchanges between Korea and West from late 16th to early 20th century and writings of leading historical figures. Letter grading.

Contemporary Korean Culture through Literature and Film. (4) Lecture, three hours; discussion, one hour. Requisite: English Composition 3 or one course from Comparative Literature 1A, 1B, 1C, 1D. Knowledge of Korean not required. Use of fiction and film to explore contemporary Korean culture in cross-cultural context. P/NP or letter grading.

Topics in Korean Cinema. (4) Lecture, one hour; discussion, one hour; film viewing, three hours. Knowledge of Korean not required. Introduction to and critical survey of Korean cinema, examining intersection between 20th-century Korean history, politics, and filmmaking. P/NP or letter grading.

Variable Topics in Culture and Society in Korea. (4) Lecture, three hours; discussion, one hour. Knowledge of Korean is not required. Examination of relationship between culture (art, literature, film) and society in Korea. Reading, audio and visual material, discussion, and development of culminating projects and/or writing assignments. May be repeated for credit with topic change. Letter grading.

Korean Buddhism. (4) (Same as Religion M161C.) Lecture, three hours; discussion, one hour. Knowledge of Korean is not required. Introduction and development of Buddhism in Korea, interactions between indigenous Korean culture and Sinic traditions of Buddhism, Korean syntheses of imported Buddhist theologies, and indigenous Buddhist techniques and, and independent Son (Zen) schools of Korea. Concurrently scheduled with course C260. Letter grading.

Introduction to Korean Buddhist Texts. (4) Lecture, three hours; discussion, one hour. Recommended requisite: course 100A or Chinese 110C or Korean placement test. Introduction to reading premodern Korean Buddhist texts written in Sino-Korean and taking into account various koreanized classical, philosophical, and religious writings, Korean Buddhist apocryphal scriptures, native exegetical commentaries, and Son (Zen) texts. Coverage varies. Texts may be read in either Sino-Korean or Korean. May be repeated with consent of instructor. Letter grading.

Topics in Korean Christianity. (4) Lecture, three hours; discussion, one hour. Knowledge of Korean not required. Historical development of Christianity in Korea, beliefs and practices, impact of Christianity on modern Korean culture and society. Coverage varies. May be repeated for credit with consent of instructor. Letter grading.

Intellectual History of Premodern Korea. (4) Lecture, three hours. Knowledge of Korean not required. General survey of Korean thought from earliest records to 19th century, including shamanism, Taoism, Buddhism, Christianity, and Confucianism. Korean traditions and those found in India, China, Japan, and West. P/NP or letter grading.

Introduction to Korean Confucian Texts. (4) Lecture, three hours. Enforced requisite: course 100C or Chinese 110C or Korean placement test. Reading in premodern Koryo and Choson texts on politics, society, and culture. Coverage varies. Texts may be read in either Sino-Korean or literary Chinese. May be repeated with consent of instructor. P/NP or letter grading.

Intellectual History of Modern Korea. (4) Formerly numbered 177.) Lecture, three hours; discussion, one hour. Requisite: Knowledge of Korean not required. Survey of Korean thought in late 19th and 20th centuries, including religious thought, political thought, feminism, nationalism, and economic thinking. Concurrently scheduled with course C277. P/NP or letter grading.

Modern Korean Historiography. (4) Seminar, three hours. Enforced requisite: course C101A or C105A or Korean placement test. Introduction to modern Korean historical works on Korean history in modern period. Coverage varies. May be repeated with consent of instructor. P/NP or letter grading.

History of Korea. (4–4–4) Lecture, three hours; discussion, one hour. Knowledge of Korean not required. Survey of Korean history in modern period. Coverage varies. May be repeated with consent of instructor. P/NP or letter grading.

Korean Folklore. (4) Lecture, three hours; discussion, one hour. Knowledge of Korean not required. Korean history from perspective of women. Because gender relations and identification of modern Korean women. May be repeated with consent of instructor. P/NP or letter grading.

Women in History: Korea. (4) Lecture, three hours; discussion, one hour. Knowledge of Korean not required. Examination of modern Korean history from perspective of women since mid-19th century. Coverage of gender roles and identity of modern Korean women. May be repeated with consent of instructor. P/NP or letter grading.

Korea and Vietnam: Comparative Modern Histories. (4) (Same as Vietnamese M186.) Seminar, three hours. Comparative survey of intertwined and parallel histories of Korea and Vietnam, organized chronologically, but structured around key themes that serve as basis for comparison. Modern experiences of colonized Vietnam and Korea have many significant parallels, including imposition of colonial control, transition to modernized countries’-civilizations, war, and the effects of colonialism, and shared experiences of World War II. Both were also divided after war between communist regimes in the north and strongly anti-communist regimes in the south. Each also experienced warfare after division and direct involvement of U.S. during height of cold war between 1950s and 1970s. P/NP or letter grading.

Popular and Folk Religion in Korea. (4) Lecture, three hours; discussion, one hour. Knowledge of Korean not required. Examination of forms of popular and folk religion in Korea, including shamanism, ancestor worship, and contemporary religious movements. Letter grading.

Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.
191B. Variable Topics Research Seminars: Contemporary Korean History. (4) Seminar, three hours. Research seminar on selected topics in modern Korean history. Reading, discussion, and development of culminating project. May be repeated for credit. Letter grading.

197. Individual Studies in Korean. (4) Tutorial, to be arranged. Limited to juniors/seniors and graduate students. Students obtain course material in advanced or specialized instruction in Korean. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required; see undergraduate adviser. P/NP or letter grading.

**Graduate Courses**

200. Bibliography and Methods of Research in Korean. (4) Lecture, three hours. Requisites: course 101C, Chinese 110C. Review of basic Western and modern Korean reference books, with concentration on Korean literature and language, and survey of basic bibliographical material. In addition, introduction to most important primary sources in student's field of specialization. Letter grade.

203. Variable Topics in Korean Culture. (4) Seminar, three hours. Advanced course that explores Korean culture through in-depth reading of Korean-language texts across different periods. Topics include literature, religion, folklore, cultural history, language, and society. May be repeated for credit. S/U or letter grading.

C205A-C205B. Reading Korean Academic Texts. (4–4) Lecture, three hours. Requisite: course 101C or Korean placement test. Intended to improve reading skills for students who have studied Korean to advanced level, with coverage in Korean of materials on Korean history, culture, and society. Each course may be taken independently for credit. Concurrently scheduled with courses C205A-C205B. S/U or letter grading.

C205C. Reading Korean Academic Texts. (4) Lecture, three hours. Intended to improve reading skills for students who have studied Korean to advanced level, with coverage in Korean of materials on Korean history, culture, and society. May be taken independently for credit. Concurrently scheduled with course C205C. S/U or letter grading.


212. 19th-Century Korea. (4) Seminar, three hours; discussion, one hour. Requisite: course 180B or 180C. Predecessor covering crucial period from coronation of Sunjong in 1800 to annexation of Korea by Japan in 1910, including major historical scholarly on political, diplomatic, social, economic, intellectual, and cultural history. Letter grading.

215. Korean Literary History. (4) Lecture, three hours. Designed for graduate students. Critical history of development of traditional Korean literature, with emphasis on history and ideology, literary systems, archetypes of genre, history of literary forms and kinds, periodization, and critical issues in literary history. One particular area of focus to be nationalist canon that governs literary studies in Korea and West. Letter grading.

C220. Structure of Korean. (4) Lecture, three hours; discussion, two hours. Recommended preparation: two years of Korean, or one year of Korean and some knowledge of linguistics. Discussion of major syntactic, semantic, and pragmatic characteristics of Korean in light of linguistic universals, with brief introduction to formation, typological features, and phonological structure of Korean. Concurrently scheduled with course CM120. S/U or letter grading.

C224A-C224B. Seminars: Selected Topics in Korean Linguistics. (4–4) Seminar, three hours. Critical reading and discussion of selected topics in Korean functional linguistics (grammaticalization, discourse, pragmatics, sociolinguistics, syntax, morphology, or pragmatics) in pedagogy. In Progress (224A) and letter (224B) grading.


C230A-C230B. Seminars: Literary Translation from Korean. (4–4) Seminar, three hours. Preparation: reading knowledge of Korean. In consultation with instructor, students select works to be translated. Devoted to skill of producing accurate and readable translations, with emphasis on problems and techniques unique to poetry and prose. At end of term, students expected to produce publishable translations. May be repeated once with consent of instructor. In Progress (230A) and letter (230B) grading.

C235A-C235B. Seminars: Modern Topics in Korean Literature. (4–4) Seminar, three hours. Preparation: at least five years of Korean. Recommended: reading knowledge of Chinese or Japanese. Limited to graduate students. Study of selected period, movement, theme, or author of 20th-century Korean literature, with critical review of secondary works in Western and Korean languages. May be repeated for credit with consent of instructor. In Progress (235A) and letter (235B) grading.


**South Asian Lower-Division Courses**

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual interest selected by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.
110A. Elementary Sanskrit. (4) (Same as Religion M60D.) Lecture, three hours; discussion, one hour. Introduction to religions of classical India—Vedic, Brahmanical Hindu, Jain, and Buddh—paying equal attention to change and continuity, with emphasis on chronological development. P/NP or letter grading.

99. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated once for credit. Honors content noted on transcript. P/NP or letter grading.

M50, Religion in Classical India: Introduction. (5) (Same as Religion M60.) Lecture, three hours; discussion, one hour. Introduction to religions of classical India—Vedic, Brahmanical Hindu, Jain, and Buddhist—paying equal attention to change and continuity, with emphasis on chronological development. P/NP or letter grading.

185. Women and Gender in Ancient India. (4) Lecture, three hours. Knowledge of Asian languages not required. Examination of function and status of women in ancient India, primarily through study of key religious and legal texts. Topics include women’s life cycle, relation to social institutions, and challenges to these ideals, especially in narrative literature. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

99HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) (Same as Indo-Euro Graduate Courses 99.) Tutorial (supervised research or other scholarly work), three hours per week; discussion, one hour per week. Honors content noted on transcript. P/NP or letter grading.

M60. Religion in Classical India: Introduction. (5) (Same as Religion M60.) Lecture, three hours; discussion, one hour. General introduction to varied and diverse region of Southeast Asia. Designed to acquaint students with broad themes that characterize societies, cultures, and civilizations of this vitally important part of globe. Study of historical trajectories that have led eleven countries of region to present situations. Emphasis on examination of these societies and important contemporary issues relating to geography, topography, politics, culture, literature, gender issues, religion, human rights, and environment. P/NP or letter grading.

M60. Religious Traditions in Southeast Asia. (4) (Same as Religion M60B.) Lecture, three hours; discussion, one hour. Introduction to historical development and contemporary practice of religions in Southeast Asia. Examination of indigenous religious beliefs and major textually based religions introduced to region, including Hinduism, Buddhism, Islam, and Christianity. P/NP or letter grading.

70. Modern Southeast Asian Literature. (5) Lecture, three hours; discussion, one hour. Exploration of modern literatures of Southeast Asia. Designed to expose students to range of literatures, predominantly novels and short stories, that were written across this region in response to dramatic changes brought about by colonialism and its aftermath. P/NP or letter grading.

99. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

99HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) (Same as Indo-Euro Graduate Courses 99.) Tutorial (supervised research or other scholarly work), three hours per week; discussion, one hour per week. Honors content noted on transcript. P/NP or letter grading.

M60. Religion in Classical India: Introduction. (5) (Same as Religion M60.) Lecture, three hours; discussion, one hour. General introduction to varied and diverse region of Southeast Asia. Designed to acquaint students with broad themes that characterize societies, cultures, and civilizations of this vitally important part of globe. Study of historical trajectories that have led eleven countries of region to present situations. Emphasis on examination of these societies and important contemporary issues relating to geography, topography, politics, culture, literature, gender issues, religion, human rights, and environment. P/NP or letter grading.

M60. Religious Traditions in Southeast Asia. (4) (Same as Religion M60B.) Lecture, three hours; discussion, one hour. Introduction to historical development and contemporary practice of religions in Southeast Asia. Examination of indigenous religious beliefs and major textually based religions introduced to region, including Hinduism, Buddhism, Islam, and Christianity. P/NP or letter grading.

110A. Elementary Sanskrit. (4) Lecture, three hours. Introduction to script and grammar, with reading exercises and attention to significance of Sanskrit for understanding of other Indo-European languages. P/NP or letter grading.


110C. Advanced Sanskrit. (4) Lecture, three hours. Requisite: course 110B. Reading of entire Bhagavadgita or comparable amount of other Sanskrit literature. P/NP or letter grading.

110. Readings in Sanskrit. (4) Lecture, three hours. Requisite: course 110C. Knowledge of Sanskrit required. Survey of some landmarks of classical Indian literature from second millennium BCE into second millennium CE, including both poetics and prose, high art and more popular genres, and secular and religious texts, examined in their social and institutional contexts. P/NP or letter grading.

115. Topics in South Asian Cinema and Literature. (4) Lecture, three hours. Knowledge of Indian languages not required. Survey of some landmarks of classical Indian literature from second millennium BCE into second millennium CE, including both poetics and prose, high art and more popular genres, and secular and religious texts, examined in their social and institutional contexts. P/NP or letter grading.

CM160. Buddhism in India. (4) (Same as Religion M160.) Lecture, three hours; discussion, one hour. Knowledge of Indian languages not required. Overview of social and doctrinal history of Buddhism from its origin to its disappearance in India, based not only on texts but on archaeological, art historical, and inscriptive sources. Examination of both formal doctrine and actual practices and on what learned Buddhists did, saw, and made. Concurrently scheduled with course CM160. Letter grading.

Southeast Asian Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics in greater depth through supplemental readings, papers, or other activities. May be repeated once for credit. P/NP or letter grading.

230. Selected Readings in Sanskrit Texts. (4) Lecture, three hours. May be repeated for credit with consent of instructor. S/U or letter grading.

234A-234B. Introduction to Panini’s Grammar. (4-4) Lecture, three hours. Requisite: course 110C. Reading of selected passages of text, with introduction to Panini’s technique. S/U or letter grading.

236A. Pali and Prakrits. (4-4) Lecture, three hours. Preparations: knowledge of Sanskrit equivalent to course 110B. Grammatical studies of readings and texts. Comparative considerations. S/U or letter grading.

243. Translation Workshop: Premodern Sanskrit, Pali, and/or Prakrit Texts. (2) Seminar, two hours. Requisite: course 110C. Translation, grammatical analysis, and discussion of selections from premodern Sanskrit, Pali, and/or Prakrit literature. Letter grading.

C260. Buddhism in India. (4) Lecture, three hours; discussion, one hour. Knowledge of Indian languages not required. Overview of social and doctrinal history of Buddhism from its origin to its disappearance in India, based not only on texts but on archaeological, art historical, and inscriptive sources. Examination of both formal doctrine and actual practices and on what learned Buddhists did, saw, and made. Concurrently scheduled with course CM160. Letter grading.

C120. Ghosts, Spirits, and Witches: Supernatural in Southeast Asia. (4) Lecture, two hours; discussion, one hour. From magical tattoos, tree spirits, and faith healing to angry ghosts and disemboweled flying vultures: exploration of the world of Southeast Asia through folk tales, urban myths, published accounts, popular films, and other media. Study of wide variety of supernatural creatures and
May be applied toward honors credit for eligible stu-
dents. Honors content noted on transcript. P/N or
letter grading. 189HC. Honors Contracts. (1) Tutorial, three hours.
Limited to students in College Honors Program. De-
signated as adjunct to upper-division lecture course. In-
dividual study with lecture course instructor to explore
topics in greater depth through supplemental read-
ings, papers, or other activities. May be repeated with
maximum of 4 units. Individual honors contract re-
quired. Honors content noted on transcript. Letter
grading. 197. Individual Studies in Southeast Asian. (4) Tuto-
torial, to be arranged by instructor and student.
Graduate students who desire more advanced or spe-
cialized treatment of one language offered in program
beyond introductory and intermediate courses cur-
cently offered. Individual study. May be repeated with
suggested meetings to be arranged between faculty
member and student. Assigned reading and tangible
evidence of mastery of subject matter required. May
be repeated for credit. Individual contract required;
see academic coordinator. P/N or letter grading.

Graduate Courses

205. Southeast Asian Culture and History. (4) Seminar,
three hours. Designed to expose graduate stu-
dents to study of Southeast Asia as region across
multidisciplinary lines of thought. Topics include history,
culture, human rights, ethnicity, religion, politics. Concur-
rently scheduled with course C240. P/N or letter grading.

C150. Indigenous Peoples of Southeast Asia. (4)
Lecture, two hours; discussion, one hour. In Southeast
Asia, indigeneity is multi-layered concept. Most of
population is native, yet there are specific ethnic groups
that are legally designated or otherwise recognized as
indigenous peoples. Ideas about indigeneity also vary
to time and space, among indigenous peoples
therefore, in ways that do not always align with
elements valorized in anthropological, political, or
global advocacy contexts. Offers local/national and
regional orientation to modern plight of indigenous
peoples in Southeast Asia, but situates politically
within contemporary discussions and debates about
indigenous activism and advocacy, as well as global ac-
ademic scholarship pertaining to indigenous peoples.

Study of most pertinent issues relating to modern in-
digenous realities in Southeast Asia. Students gain
foundation to engage in comparative discussion with
regard to indigenous peoples in Americas and else-
where. Concurrently scheduled with course C250.
P/N or letter grading.

157. Gender Issues in Southeast Asia. (4) Seminar,
three hours. Critical examination of gender issues in
one or more Southeast Asian countries as they con-
note to social historical contexts nationally, regionally,
or globally. May be repeated for credit. P/N or letter
grading.

160. Majorities and Minorities in Southeast Asia. (4)
Lecture, two hours; discussion, one hour. Focus on
cultural, political, and historical relationships between
majority ethnic groups and minorities in possibly most
culturally, religiously, and ethnically diverse regions
from the world—Southeast Asia. Provides productive frame-
work to discuss nature of Southeast Asia’s extreme di-
versity, resulting in multicultural relationships; in compa-
native and historical context—both regionally and,
to some extent, globally. Discussions and assign-
ments will be focused on the creation of experiences and
perspectives of regions’ many different types of mi-
nority peoples. Critical examination of majority/minority
as lived experience and as factor that informs minority
rights issues. Race, class, and gender discussions and
events related to minority-majority relationships in
Southeast Asia. P/N or letter grading.

170A-170B-170C. Topics in Southeast Asian Stud-
ies. (4-4-4) Lecture, three hours. Exploration of
Southeast Asian culture through in-depth reading of
texts and/or visual documents. Topics include litera-
ture, religion, folklore, cultural history, and society. P/
N or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three
hours. Limited to 20 students. Designed as adjunct
to undergraduate lecture course. Exploration of topics in
greater depth through supplemental readings, papers,
or other activities and led by lecture course instructor.

## Thai Lower-Division Courses

1. Introductory Thai. (5) Lecture, three hours; discus-
sion, two hours. Coverage of basic Thai grammar, with
equal emphasis on reading, writing, conversation, and
comprehension. P/N or letter grading.

2. Introductory Thai. (5) Lecture, three hours; discus-
sion, two hours. Requisite: course 1 with grade of C or
better. Coverage of basic Thai grammar, with equal
emphasis on reading, writing, conversation, and com-
prehension. P/N or letter grading.

3. Introductory Thai. (5) Lecture, three hours; discus-
sion, two hours. Requisite: course 2 with grade of C or
better. Coverage of basic Thai grammar, with equal
emphasis on reading, writing, conversation, and com-
prehension. P/N or letter grading.

## Thai Scripts. (5) Lecture, five hours. Recom-
manded preparation: speaking and listening skills in
Thai and Thai placement test. Training in reading and
writing at introductory level. Completion of course 3R
is equivalent to completion of one year of college-level
Thai. P/N or letter grading.

4. Intermediate Thai. (5) Lecture, five hours. Rein-
forcement of basic Thai grammar and coverage of
more advanced topics. Broadening of skills in conver-
sation and composition; reading of selected texts.
P/N or letter grading.

5. Intermediate Thai. (5) Lecture, five hours. En-
forced requisite: course 4 with grade of C or better.
Reinforcement of basic Thai grammar and coverage of
more advanced topics. Broadening of skills in conver-
sation and composition; reading of selected texts.
P/N or letter grading.

## Intermediate Thai. (5) Lecture, five hours. En-
forced requisite: course 5 with grade of C or better.
Reinforcement of basic Thai grammar and coverage of
more advanced topics. Broadening of skills in conver-
sation and composition; reading of selected texts.
P/N or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar,
one hour. Discussion of and critical thinking about topics
of current intellectual importance, taught by faculty
members in their areas of expertise and illuminating
many paths of discovery at UCLA. P/N or letter
grading.

89HC. Honors Contracts. (1) Tutorial, three hours.
Limited to students in College Honors Program. De-
signed as adjunct to lower-division lecture course. In-
dividual study with lecture course instructor to explore
topics in greater depth through supplemental readings,
papers, or other activities and led by lecture course
instructor. May be applied toward honors credit for eligible stu-
dents. Honors content noted on transcript. Letter
grading.

## Upper-Division Courses

100A-100B-100C. Advanced Thai. (4-4-4) Lecture,
three hours. Course 100B is the prerequisite. Course
better is requisite to 100B; course 100B with grade of C
or better is requisite to 100C. Reinforcement of basic
grammar and vocabulary acquired at beginning and
intermediate levels. Coverage of more advanced topics
on various aspects of Thai society. Broadening

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**Upper-Division Courses**

- **100A-100B-100C. Advanced Thai. (4-4-4)** Lecture, three hours. Course 100B is the prerequisite. Course better is requisite to 100B; course 100B with grade of C or better is requisite to 100C. Reinforcement of basic grammar and vocabulary acquired at beginning and intermediate levels. Coverage of more advanced topics on various aspects of Thai society. Broadening...
of skills in conversation and composition. Reading of selected texts and authentic materials. P/NP or letter grading.

109. Advanced Tutorial Instruction in Thai. (2) Tutorial, two hours. Enforced requisite: course 6 or Thai placement test. Tutorial and guided independent study to help students develop advanced to superior proficiency in oral and written Thai. May be repeated for credit. P/NP or letter grade. Limited to 20 students. Honors content noted on transcript. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities not led by lecture course instructors. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Vietnamese

Lower-Division Courses

1. Introductory Vietnamese. (5) Lecture, two hours; discussion, three hours. Coverage of basic Vietnamese grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

2. Introductory Vietnamese for Heritage Learners. (5) Lecture, two hours; discussion, three hours. Not open to students who have learned, from whatever source, enough Vietnamese to qualify for more advanced courses. Designed for Vietnamese-heritage learners who have some limited knowledge of Vietnamese or have had no formal instruction in Vietnamese. Emphasis on spelling, basic grammar, reading, writing, daily conversation, and polite forms. P/NP or letter grading.

3. Intermediate Vietnamese for Heritage Learners. (5) Lecture, two hours; discussion, three hours. Enforced requisite: course 1A with grade of C or better. Coverage of basic Vietnamese grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

4. Introductory Vietnamese. (5) Lecture, two hours; discussion, three hours. Enforced requisite: course 3 with grade of C or better. Reinforcement of basic Vietnamese grammar and coverage of more advanced topics. Broadening of skills in conversation and composition; reading of selected texts. P/NP or letter grading.

5. Intermediate Vietnamese. (5) Lecture, two hours; discussion, three hours. Enforced requisite: course 4 with grade of C or better. Reinforcement of basic Vietnamese grammar and coverage of more advanced topics. Broadening of skills in conversation and composition; reading of selected texts. P/NP or letter grading.

6. Intermediate Vietnamese. (5) Lecture, two hours; discussion, three hours. Enforced requisite: course 5 with grade of C or better. Reinforcement of basic Vietnamese grammar and coverage of more advanced topics. Broadening of skills in conversation and composition; reading of selected texts. P/NP or letter grading.

7. Elementary Vietnamese Intensive. (15) Lecture, 10 hours; discussion, 10 hours. Intensive course equivalent to courses 1, 2, and 3. Coverage of basic Vietnamese grammar, with equal emphasis on reading, writing, conversation, and comprehension. Offered in summer only. P/NP or letter grading.

8. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

9. 40. War in Vietnamese Popular Culture. (5) Lecture, three hours; discussion, one hour. Knowledge of Vietnamese popular culture needed. Emphasis on semiotics and social meaning of popular culture produced and consumed by, or about, people in Vietnam and diasporas. Materials include theoretical and other scholarly works, as well as literature, music, visual art, films, and comics. Reading of scholarly writings for argument, date, and methods, and learning to apply theoretical frameworks in readings and lectures to analysis of popular cultural productions. P/NP or letter grading.

90. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

98HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 3) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must have good academic standing and enroll in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100A-100B-100C. Advanced Vietnamese. (4-4-4) Lecture, three hours; discussion. (Fall and Winter) 100A. Enforced requisite: course 8 with grade of C or better or Vietnamese placement test. Designed to strengthen and build on language skills previously acquired at beginning and intermediate levels. Content-based readings and discussion, with various aspects of Vietnam, particularly its culture. Readings include both authentic original works and simplified texts. Each course may be taken independently for credit. P/NP or letter grading.

109. Advanced Tutorial Instruction in Vietnamese. (2) Tutorial, two hours. Enforced requisite: course 6 or Vietnamese placement test. Tutorial and guided independent study to help students develop advanced to superior proficiency in oral and written Vietnamese. May be repeated for credit. P/NP or letter grading.

CM155. Topics in Vietnamese Cinema and/or Literature. (4) (Same as Asian American Studies M173.) Lecture, three hours; discussion, one hour. Knowledge of Vietnamese not required. Critical and historical examination of literary and/or filmic representations connected to social practices such as empire, nation, diaspora, and globalization. Original language course materials available for interested students. May be concurrently scheduled with course C255. P/NP or letter grading.

155FL. Readings in Vietnamese. (2) Seminar, two hours. Enforced requisite: course 3 or 3A. Enforced corequisite: course M155. Additional work in Vietnamese to augment work assigned in course M155, including reading, writing, and other exercises in Vietnamese. P/NP or letter grading.

170. Variable Topics in Vietnamese Linguistics, Languages, and Cultures. (4) Lecture, three hours. Knowledge of Vietnamese may be required. Critical analysis of language and culture in Vietnam, exploring notion of Vietnam as culture area, surveying literary landscape through poetry, fiction, and films. May be repeated for credit. P/NP or letter grading.

180A. Vietnam: History and Civilization to 1858. (4) Lecture, three hours; discussion, one hour. Recommended preparation: at least one Asian history course. Exploration of Vietnamese society and culture from origins to early 19th century, with emphasis on examination of ways in which interactions between indigenous and Chinese/Southeast Asian political and cultural forces helped shape Vietnamese culture. May be repeated for credit. P/NP or letter grading.

180B. Vietnam: History and Civilization, 1858 to Present. (4) Lecture, three hours; discussion, one hour. Recommended preparation: at least one Asian history course. Exploration of Vietnam history and civilization during colonial and postcolonial eras, with emphasis on profound changes that swept through Vietnamese society during period of extended political and military conflict. P/NP or letter grading.

M186. Korea and Vietnam: Comparative Modern Histories. (4) (Same as Korean M186.) Seminar, three hours; comparative surveys. Comparative surveys of modern periods of Korea and Vietnam, focusing on parallel histories of Korea and Vietnam, organized chronologically, but structured around key themes that serve as basis for comparison. Modern experiences of colonialism, liberation wars, and shared experiences of World War II. Both were also divided after war between communist regimes in north and strongly anticommunist regimes in south. Each also experienced warfare after division and direct involvement of U.S. during height of cold war between 1950s and 1970s. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.
Graduate Courses

C255. Topics in Vietnamese Cinema and/or Literature. (4) Lecture, three hours; discussion, one hour. Knowledge of Vietnamese not required. Critical and historical examination of literary and/or filmic representations connected to social practices such as em-pire, nation, diaspora, and globalization. Original language course materials available for interested students. May be concurrently scheduled with course C155. S/U or letter grading.

297B. Topics in Contemporary Vietnamese Culture. (4) Seminar, three hours. Selected topics in Viet-namese contemporary culture, including diasporic culture, with emphasis on cultural production. Primary materials combined with theoretical readings. S/U or letter grading.

ATMOSPHERIC AND OCEANIC SCIENCES

College of Letters and Science

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Faculty Roster

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Rong Fu, PhD
Alexander D. Hall, PhD
Jasper F. Kod, PhD
Qinbin Li, PhD
James C. McWilliams, PhD (Louis B. Slichter Professor of Geophysics and Planetary Physics)
Jonathan L. Mitchell, PhD
J. David Neelin, PhD
Suzanne E. Paulson, PhD
Jochen P. Stutz, PhD
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Karen McKinnon, PhD

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Adjunct Professors
Randall R. Friedi, PhD
Yu Gu, PhD
Lawrence W. Harding, PhD
Hui Su, PhD

Overview

The atmospheric and oceanic sciences present a wide variety of problems of compelling scienti-fic interest and increasing social concern. This is exemplified by efforts to improve air quality, depositions caused by severe storms and floods, attempts to control or modify weather phenomena, problems of long-range weather forecasts, climate change, and predictions, and expanding scientific frontiers into our outer at-mosphere and atmospheres of other planets.

The Department of Atmospheric and Oceanic Sciences offers a broad curriculum in dynamic and synoptic meteorology, atmospheric phys-ics and chemistry, and upper atmosphere and space physics.

The Bachelor of Science (BS) degree qualifies students for entry-level technical positions or represents valuable background for training in other professions. Master of Science (MS) and Doctor of Philosophy (PhD) degree holders work in universities, research centers, laborato ries, and government services and, increas ingly, in the rapidly burgeoning private sector.

Undergraduate Majors

Atmospheric and Oceanic Sciences BS

Learning Outcomes

The Atmospheric and Oceanic Sciences major has the following learning outcomes:

• Display mastery of basic principles and tools of science: calculus, physics, chemistry, com-puter programming, and writing

• Display fundamental understanding of atmo-spheric and oceanic sciences

• Demonstrated analytical and mathematical skills through application of learned concepts and tools to solve theoretical, computational, and empirical problems

• Ability to apply knowledge to independently identify, analyze, and understand real-world problems and issues

• Demonstrated effective oral and written com-munication of results and conclusions of investigative work

Entry to the Major

Transfer Students

Transfer applicants to the Atmospheric and Oceanic Sciences major with 90 or more units must complete as many of the following intro-ductive courses as possible prior to admission to UCLA: one year of calculus, one year of cal-culus-based physics, and one semester of general chemistry.

Atmospheric and Oceanic Sciences / 251

Recommended before transfer for timely de-gree completion: one additional semester of general chemistry and one computer program-ming course (preferably in Python).

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Atmospheric and Oceanic Sciences 51, M71 (preferred) or Program in Computing 10A, 90; Chemistry and Biochemistry 14A and 14B, or 20A and 20B; Life Sciences 20A and 30B, or Mathematics 3A, 3B, and 3C, or 31A, 31B, 32A, 32B, 33A, and 33B; Physics 1A, 1B, and 1C, or 1AH, 1BH, and 1CH, or 5A, 5B, and 5C.

Students interested in pursuing graduate studies in atmospheric and oceanic sciences or obtaining employment with the National Weather Service or other government agencies are strongly urged to select the Mathematics 31A through 33B sequence and the Physics 1 sequence.

The Major

Required: Four courses from Atmospheric and Oceanic Sciences 101, 103, 104, M105, 107, 112, three additional upper-division atmos-pheric sciences courses selected in consulta-tion with the undergraduate advisers, and two upper-division courses from a list of chemistry, mathematics, physics, and statistics courses selected in consultation with the undergraduate advisers.

Policies

The Major

Atmospheric and Oceanic Sciences 199 (in-de-pendent research) taken for 4 units may be units to satisfy one upper-division elective. Thesis approval required from faculty adviser and submitted to department student affairs officer.

Atmospheric and Oceanic Sciences/Mathematics BS

Capstone Major

The Atmospheric and Oceanic Sciences/Mathemat-ics major is a designated capstone major. Students acquire experience in conceiving and executing research projects designed to evalu-ate hypotheses and complete an individual project or thesis selected with the assistance of the program advisers and faculty mentor. The topic should reflect integrative application of mathematics to atmospheric and oceanic sci-ences. Students are expected to prepare a sig-nificant independent piece of work that applies knowledge gained in their coursework in a new and unique way.

Learning Outcomes

The Atmospheric and Oceanic Sciences/Mathemat-ics major has the following learning out-comes:
• Fundamental knowledge of the atmospheric and oceanic sciences, and the mathematical tools that enable research to be conducted
• Identification of potential research areas of interest
• Experience in conceiving and executing research projects designed to evaluate hypotheses through courses that stress oral and written presentation of research results
• Proposition, execution, and evaluation of a research project with the assistance and supervision of a faculty mentor
• Tangible capstone product, such as a written thesis, that will be archived and possibly disseminated within and beyond the department

Entry to the Major

Transfer Students
Transfer applicants to the Atmospheric and Oceanic Sciences/Mathematics major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one and a half years of calculus through multivariable and one year of calculus-based physics.

Recommended before transfer for timely degree completion: linear algebra, differential equations, and one computer programming course (preferably in Python).

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Atmospheric and Oceanic Sciences M71 or Program in Computing 10A, 90, Mathematics 31A, 31B, 32A, 32B, 33A, 33B, Physics 1A, 1B, 1C, and one course selected from Atmospheric and Oceanic Sciences 1, 2, 3, 5, 7, 51. Chemistry and Biochemistry 14A and 14B (or 20A and 20B) may also be required, depending on atmospheric and oceanic sciences upper-division course selection.

The Major

Required: Six mathematics courses, including Mathematics 115A, 131A, 134, and three elective courses selected from 115B, 131B, 135, 136, 142, 151A, 151B, 170A, 170B, one of which must be 115B, 131B, 151B, or 170B; six upper-division atmospheric and oceanic sciences courses, including two core courses selected from Atmospheric and Oceanic Sciences 101, 103, 112, and two elective courses selected from C110, C115, M120, C144, C160, C170, 180, and any two additional upper-division atmospheric and oceanic sciences courses.

One capstone senior projects/thesis course, Atmospheric and Oceanic Sciences 198, taken for 4 units, is also required. An individual project or thesis to be selected with the assistance of the program advisers and a faculty mentor must be completed. Thesis approval required from faculty adviser and submitted to department student affairs officer.

Policies

Preparation for the Major
Each course must be taken for a letter grade and must be passed with a grade of C– or better, and students must have a minimum overall grade-point average of 2.0 for the courses.

Climate Science BS

Learning Outcomes
The Climate Science major has the following learning outcomes:
• Demonstrated mastery of the basic principles and tools of science
• Demonstrated fundamental understanding of the atmospheric and oceanic sciences
• Demonstrated analytical and mathematical skills through the application of learned concepts and tools in solving relevant theoretical, computational, and empirical problems
• Ability to apply knowledge gained to independently identify, analyze, and understand real-world problems and issues
• Demonstrated effective oral and written communication of results and conclusions
• Understanding of the societal and policy context of climate science

Entry to the Major

Transfer Students
Transfer applicants to the Climate Science major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one year of calculus, one semester of calculus-based physics, one general chemistry course, and one introductory statistics course.

Recommended before transfer for timely degree completion: one additional semester of calculus-based physics, and one computer programming course (preferably in Python).

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Atmospheric and Oceanic Sciences 51, M71 or Program in Computing 10A; Chemistry and Biochemistry 14A and 14B, or 20A and 20B; Life Sciences 30A and 30B, or Mathematics 3A, 3B, and 3C, or 31A, 31B, 32A, and 33B; Physics 1A, 1B, and 1C, 1AH, 1BH, and 1CH, or 5A, 5B, and 5C; Statistics 10, 12, or 13.

Students interested in pursuing graduate studies in climate sciences or other branches of science are encouraged to select the Mathematics 31A through 33B sequence and the Physics 1 sequence.

The Major

Required: Atmospheric and Oceanic Sciences 101, M105, C110, 112, 121, 123, 145, and two upper-division policy/solutions or quantitative courses from a preapproved list.

Policies

The Major
Atmospheric and Oceanic Sciences 199 (independent research) taken for 4 units may be used to satisfy one upper-division elective. Thesis approval required from faculty adviser and submitted to department student affairs officer.

Upper-division electives may also be selected in consultation with the undergraduate advisers.

Students preparing for graduate studies in climate science or other areas should discuss specific requirements with the undergraduate advisers.

Undergraduate Minor

Atmospheric and Oceanic Sciences Minor
The Atmospheric and Oceanic Sciences minor provides a formal vehicle for students specializing in other science fields to pursue interests in the atmospheric and oceanic environment. It is designed to be flexible, recognizing that many topics in this field cross traditional disciplinary boundaries.

Admission
To enter the minor, students must have an overall grade-point average of 2.0 or better and must make an appointment with a departmental undergraduate adviser for approval in selecting a coordinated program of courses from within the department and related disciplines. For more information, contact the department at 310-825-1954.

The Minor

Required Courses (28 units): Seven 4-unit courses, including (1) four from Atmospheric and Oceanic Sciences M100, 101, 102, 103, 104, M105, M106, 107, C110, C111, 112, CM114A, C115, M120, 121, 123, 130, 135, 141, C144, 145, 150, C160, C170, 180, 199, and (2) three additional courses, two of which must be upper-division, from any of the above atmospheric and oceanic sciences courses beyond the minimum four required or from Atmospheric and Oceanic Sciences 1, 2, 3, 51, 90, 186 (must be taken twice), Chemistry and Biochemistry 103, 110A, 110B, 113A, C113B, 114, Earth, Planetary, and Space Sciences 15, Ecology and Evolutionary Biology 109, C119A, 122, 123A or 123B, 147, 148, Mathematics 115A, 115B, 132, 135, 136, 146, 170A, 170B, Physics 110A, 110B, 112, M122, 131, 132. Other relevant courses from related disciplines may be substituted with prior approval of the department. At least five courses approved for the minor must be upper division.

Groups of courses relevant to specific subareas of atmospheric sciences include (1) atmospheric chemistry: Atmospheric and Oceanic Sciences 104, Chemistry and Biochemistry 103, 110A, 110B, C113B, 114; (2) atmospheric chemistry and biology: Atmospheric and Oce-
anic Sciences 101, 104, Ecology and Evolutionary Biology 109, C119A, 122; (3) atmospheric and oceanic sciences: Atmospheric and Oceanic Sciences 101, 102, Physics 112, 131, 132; (4) atmospheric and oceanic dynamics and mathematical modeling: Atmospheric and Oceanic Sciences 101, 103, 104, Ecology and Evolutionary Biology 108, 123A or 123B, 147, 148; (6) upper atmosphere: Atmospheric and Oceanic Sciences 101, M120, C170, Physics 110A, 110B, M122.

Policies
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

One course may be taken on a Passed/Not Passed basis; each of the other minor courses must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Major
Atmospheric and Oceanic Sciences MS, CPhil, PhD

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Atmospheric and Oceanic Sciences

Lower-Division Courses
1. Climate Change: From Puzzles to Policy. (4) Lecture, three hours; discussion, one hour. Overview of fundamentals of Earth’s climate, including greenhouse effect, water and chemical cycles, oscillating features of atmospheric and oceanic circulation, and feedback between different system components. Existing and contentious scientific puzzles of climate system, including causes of global climate, greenhouse warming, and El Niño. Importance of climate science and prediction to society, with emphasis on science’s role in identifying, qualifying, and solving environmental problems such as ozone hole and greenhouse warming. P/NP or letter grading.

2. Air Pollution. (4) Lecture, three hours; discussion, one hour. Causes and effects of high concentrations of pollutants in atmosphere. Topics include nature and sources of gaseous and particulate pollutants, their transport, dispersion, modification, and removal, with emphasis on atmospheric processes on scales ranging from individual sources to global effects; interaction with biosphere and oceans; stratospheric pollution, P/NP or letter grading.

3. Air Pollution Laboratory. (1) Laboratory, one hour. Enforced corequisite: course 2. Lectures and demonstrations supporting material in course 2, including box model simulation, dose responses, air parcel motion and pollution dispersion, daily and seasonal variation, and smog transport, P/NP or letter grading.

4. Meteorology and Extreme Weather. (4) Lecture, three hours; discussion, one hour. Nature and causes of weather phenomena, including atmospheric global circulation, clouds and storms, lightning and precipitation, fronts and cyclones, and tornados and hurricanes. P/NP or letter grading.


6. Introduction to Climate Change: From Puzzles to Policy. (4) Seminar, three hours. Discussion and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

7. Introduction to Oceanography. (6) Lecture, four hours; discussion, one hour. Requisites: Mathematics 3B or 31B. Lecture, three hours; laboratory, 90 minutes; outside computing study, six to 10 hours. Introduction to writing programs, visualization of geoscience data, and comparison with models. P/NP or letter grading.

8. Laboratory and Oceanography. (5) Seminar, three hours. Variable topics; consult Schedule of Classes or department for topics to be offered in specific term. P/NP or letter grading.

9. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

9HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 credits. Individual honors contract required. Honors content noted on transcript. Letter grading.

90. Introduction to Undergraduate Research in Atmospheric and Oceanic Sciences. (4) Lecture, two hours; laboratory, two hours. Requisites: course M71 (or Program in Computing 10A); Life Sciences 30A and 30B or Mathematics 31A and 31B. Students gain basic ability to understand, conduct, and communicate scientific research in atmospheric and oceanic sciences. Univariate and bivariate statistical data analysis, scientific computer programming, basics of scientific process, finding and reading scientific literature, basic experimental techniques, Earth system data analysis and report writing, communication of scientific findings in oral and written form. Skills taught in context of projects from atmospheric and oceanic sciences. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other work three hours per week per unit). Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses
M100. Earth and Its Environment. (4) Same as Environmental Science M111.) Lecture, three hours. Overview of Earth and the Earth system, life on Earth, other worlds, and life on other worlds. Topics include origins of life, astrobiology, the Earth and oceanic sciences. P/NP or letter grading.

101. Fundamentals of Atmospheric Dynamics and Thermodynamics. (6) Lecture, four hours; discussion, one hour. Requisites: Mathematics 3B or 31B or Life Sciences 30B; Physics 1B or 5B or 5C or 6B. Introduction to thermodynamics (flows of heat, energy, and work); and dynamics (forces). Topics covered include hydrostatic balance, first law of thermodynamics, latent and sensible heat processes; atmospheric and oceanic circulation. El Niño and inter-annual climate prediction. Greenhouse effect and global warming. P/NP or letter grading.

102. Climate Change and the Middle East. (4) Lecture, three hours; discussion, one hour. Enforced re-quisites: Mathematics 3C or 32A; Physics 1B or 6C, with permission of C or better. Climate and major environmental issues in climate change due to human activities or natural climate variations. Quantitative introduction to new science of climate modeling to understand and predict these changes. Physical processes in climate system. Atmospheric and oceanic circulation. El Niño and year-to-year climate prediction. Greenhouse effect and global warming. P/NP or letter grading.


104. Fundamentals of Atmospheric and Oceanic Sciences. (4) Lecture, three hours; discussion, one hour. Requisite: Chemistry 1AB or 208A. Chemistry of air and water pollution, including photochemistry, acid rain, air pollution meteorology and dispersion, ground and water surface water pollution, chemical cycling, air/water interface, global atmospheric change. Letter grading.

M105. Introduction to Marine Chemistry. (4) (Same as Chemistry and Earth and Oceanic Science M139.) Lecture, three hours; discussion, one hour. Introduc- tory course for physical sciences, life sciences, and engineering majors interested in oceanic environment. Chemical composition of oceans and nature of physical, chemical, and biological processes governing this composition in past and present. Cycles of major and
minor oceanic constituents, with focus on those that are most important for life (i.e., carbon, nitrogen, phosphorus, silicon, and oxygen). Investigation of primary production, export production, remineralization, diazotrophy, and air-sea gas exchange processes. Letter grading.

M106. Applied Climatology: Principles of Climate Impact on Natural Environment. (4) [Same as Geology M106.] Lecture, 90 minutes; discussion, one hour. Designed for juniors/seniors. Exploration of knowledge and tools to solve complex problems in contemporary applied climatology, including current practices, future scenarios, and human influence on changing climates. P/NP or letter grading.

C110L. Advanced Dynamic and Synoptic Meteorology Lab. (2) Lecture, three hours; discussion, one hour. Concurrently scheduled with course C227L. P/NP or letter grading.

M111. Introduction to Machine Learning for Physical Sciences. (4) Lecture, 90 minutes; laboratory, 90 minutes. Designed for physical sciences students. Practical, hands-on introduction to the most popular algorithms of machine learning (ML). Students gain most practical skills to start working in industry or re- search immediately, using popular Python programming language. Students will learn how to obtain and covering essential theory to understand what algorithms do. Focus on solving typical problems that arise in physical sciences. Covers algorithms in broad areas of ML, including supervised learning (regression and classification) and unsupervised learning (clustering and dimensionality reduction). Lectures and programming exercises. Concurrently scheduled with course C227L. P/NP or letter grading.

C112. Climate Change Assessment. (4) Lecture, three hours; discussion, one hour. Prerequisite: one course from Life Sciences 30B, 40, Mathematics 3B, 31B, Statistics 10, 100, 105, or consent of instructor. Scientifically and technologically relevant questions: courses 1, 51, Environment 102, 103, 104, 105, 106, 107, Environment 175, or equivalent background for reading quantitative scientific literature in climate change. Projections of future anthropogenic climate change and understanding of natural climate variability depend on international climate model intercomparison projects, on large observing systems coordinating space and ground observations, and on multi-science climate assessments. Lectures, readings, and projects with presentations address current issues in the scientific literature on assessment of climate change for decision-making with prior background in the atmospheric, oceanic and environmental sciences. P/NP or letter grading.

CM114A. Aquatic Geomicrobiology: Metabolisms. (4) [Formerly numbered CM114.] Lecture, three hours. Prerequisite: course M105 or Earth, Planetary, and Space Sciences C107. Study of fundamental geomicrobiological metabolisms and biogeochemical reactions occurring in aquatic systems and how these processes interact with environment. Metabolisms include photosynthetic (anoxic and oxygenic photosynthesis), chemoheterotrophic (fermentation of organic compounds), and phototrophic (organic matter degradation with light), and chemoheterotrophic (iron, nitrogen, manganese, methane, and sulfur oxidation) pathways. Introduction of principal bioenergetics (adenosine triphosphate production, Gibbs free energy, chemiosmosis, thermodynamic calculations) and biological iso-oxygen fractionation. Concurrently scheduled with course CM237A. P/NP or letter grading.

CM114B. Aquatic Geomicrobiology: Environments. (4) [Same as Earth, Planetary, and Space Sciences CM114B.] Lecture, three hours. Prerequisite: course CM114A. Broad overview of aquatic geomicrobiological processes in diverse environmental settings (e.g., sediments, microbial mats, water column, wetlands, cold seeps, hydrothermal vents, deep biosphere), and how these processes drive elements cycling on Earth. Concurrently scheduled with course CM237B. P/NP or letter grading.

C115. Mesoscalemeteorology. (4) Lecture, three hours. Prerequisite: course 101. Observations of phenomena with length scales ranging from 20 km to 2,000 km. Topics include polar lows, air masses, thunderstorms, multicell storms, supercell tornadoes, gust fronts, downbursts, microbursts, and dry line. Discussions on design of field project. Concurrently scheduled with course C229. P/NP or letter grading.


121. Climate Mitigation Solutions. (4) Lecture, three hours; discussion, one hour. Corequisite: course from 1, 2, 3, 51, M100, 102, or 112. Critical survey of potential strategies to address climate change, including solutions in infrastructure, transpor- tation, energy, and construction sectors, as well as geoengineering. Exploration of roles of communi- cation, equity, religion, social change, and education in mitigating climate change. P/NP or letter grading.

123. Climate Adaptation Solutions. (4) Lecture, three hours; discussion, one hour. Prerequisites: courses 1, 51, Environment 102, 103, 104, 105, 106, 107, Environment 175, or equivalent background for reading quantitative scientific literature in climate change. Studies the current adaptation strategies and their impacts on human and natural systems. Examination of these issues from local to global scales, emphasizing intersections with other deep sustainability challenges. P/NP or letter grading.

130. California’s Ocean. (4) Lecture, four hours. Recommended prerequisite: course 103 or M105. Circulation, biogeography, and chemistry of coastal waters; measurement techniques, computational modeling, conservation, and management for California’s coastal ocean, including coastal measurement/cruise and term project (paper and presentation). Letter grading.

135. Ocean Change in the Anthropocene. (4) Lecture, 90 minutes; laboratory, 90 minutes. Prerequisites: courses 103, 105. Review of main impacts of human activities on ocean, from warming and acidification to overfishing, pollution, and exploitation of marine resources. Discussion of concepts of governance and sustainability. Introduction to global ocean datasets and IPHC class-managed research cruises; present paper presentation to review significant papers from scientific literature. Letter grading.


144. Atmospheric Boundary Layer. (4) Lecture, three hours. Enforced prerequisite: course 101 with grade of B+ or better. Atmospheric boundary layer is lowest portion of atmosphere, representing interface between Earth’s surface and atmosphere. Focus on processes that determine it. Concurrently scheduled with course C222. P/NP or letter grading.

145. Atmospheric Physics: Radiation, Clouds, and Aerosols. (4) Lecture, three hours; discussion, one hour. Prerequisites: Physics 1A, 1B, and 1C, or 6A, 6B, and 6C. Theory and application of atmospheric radiation, aerosol, and cloud processes. Topics include radiative transfer, cloud and rain formation, aerosol properties, impact of aerosol and clouds on climate. Letter grading.

150. Atmospheric and Oceanic Sciences Laboratory. (5) Lecture, one hour; laboratory, six hours. Prerequisites: Mathematics 3B or 31B, Physics 1B and 1C (or 5B and 5C). Many of today’s environmental problems, such as stratospheric ozone hole, current rise of greenhouse gas concentrations, and various severe weather phenomena, were either discovered or investigated using accurate observational techniques. Direct experimental observations remain crucial compo- nent in today’s efforts to better understand weather, climate, and pollution of atmosphere. Introduction to experimental/observational approach in atmos- pheric and oceanic sciences. Students work in small groups to gain hands-on experience in setup, performance, analysis, and reporting of different ex- periments. Introduction to underlying principles of these experimental methods and basic data analysis tools. P/NP or letter grading.

151. Introduction to Ecosystem-Atmosphere Interactions. (4) Lecture, three hours; discussion, one hour. Exchanges of energy, moisture, atmosphere trace gases, and momentum between terrestrial eco- systems and atmosphere. Examination of feedbacks between physical environment and physiological status of plants and soils. Topics include canopy structure and function, leaf energy balance, and carbon and water fluxes between plants, soils, and atmo-sphere. Letter grading.

160. Remote Sensing of Atmosphere and Oceans. (4) Lecture, three hours; discussion, one hour. Prerequisite: Physics 1C or 5B. Theory and techniques of remote sensing: atmo- spheric spectroscopy, scatterometry, passive and active techniques; relevant satellite sys- tems; inversion methods; remote sensing of clouds, aerosols, temperature, precipitation, and trace constitu- tives; remote sensing of oceans and atmosphere. Concurrently scheduled with course C205A. P/NP or letter grading.


180. Numerical Methods in Atmospheric Sciences. (4) Lecture, three hours; discussion, one hour. Prerequisites: Mathematics 33A, Physics 1C. Introduction to numerical methods employed in atmo- spheric and oceanic sciences: theory, application,
programming, and visualization tools. Students build their own numerical model of atmospheric/oceanic circulation. Term project. Letter grading.

181. Analysis and Prediction of Weather Systems. (3) Lecture. Laboratory, three hours. Requisite: course C110. Limited to junior/senior Atmospheric and Oceanic Sciences majors. Introduction to collection, display, and application of weather observations and numerical forecasts. Special emphasis on mathematical meteorology, includes daily weather map discussions, and analysis and interpretation of numerical weather prediction model outputs. Letter grading.

C182. Data Analysis in Atmospheric and Oceanic Sciences. (3) Lecture, laboratory, one hour. Enforced requisite: one course from 101 through M105. Recommended: one probability course. Overview of data analytic methods in common use in atmospheric and oceanic sciences. Emphasis on practical applications, with specific examples from atmospheric and oceanic sciences. Concurrently scheduled with course C260. P/NP or letter grading.

186. Operational Meteorology. (2) Seminar, one hour. Training seminar for undergraduate students who are selected for learning assistant (LA) program. Exploration of current topics in pedagogy and education research focused on methods of learning and their practical application in small-group settings. Students practice communication skills with frequent assessment of and feedback on progress. Letter grading.

192A. Methods and Application of Collaborative Learning Theory in Atmospheric and Oceanic Sciences. (2, 4) Seminar, two hours; clinic, four hours. Requisites: Life Sciences M192A (may be taken concurrently) and at least one term of prior experience in same course in which collaborative learning theory is practiced and refined under supervision of instructors. With instructor guidance, students apply pedagogical principles based on current education research, assist with development of innovative instructional materials, and receive frequent feedback on their progress. Letter grading.

197. Individual Studies in Atmospheric and Oceanic Sciences. (2, 4) Tutorial, to be arranged. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidences of progress will be required. May not be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research in Atmospheric and Oceanic Sciences. (2, 4) Seminar, one hour. Preparation: individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses


200B. Introduction to Dynamics of Earth System. (4) Lecture, three hours. Overview of processes that determine the Earth system and contribute to its change including global and meridional energy balance; radiative-convective equilibrium; surface processes; planetary boundary layers; global atmospheric circulation; coupled ocean–atmosphere; El Niño–Southern Oscillation and other climate variability modes; paleoclimate; climate sensitivity; climate variability and change; Earth’s carbon cycle (atmosphere, ocean, land), and space physics. S/U or letter grading.

200C. Introduction to Atmospheric and Oceanic Radiation, Physics, and Chemistry. (4) Lecture, three hours; discussion, one hour. Propagation and budget of radiation in atmosphere and ocean; absorption and scattering of solar and infrared radiation; radiation budget consideration; aerosols in atmosphere; principles of water droplet and ice crystal formation; diffusion and accretion of droplets and ice crystals; aerosols; clouds; oceanic and atmospheric processes. S/U or letter grading.

200D. Scientific Communication for Atmospheric and Oceanic Scientists. (4) Lecture, three hours; discussion, one hour. Basics of scientific communication. How to efficiently survey literature and read scientific papers. Philosophy of scientific writing. Writing literature review, identifying and articulating gap in scientific literature, writing effective introduction that places science in context. How to efficiently survey literature and write scientific papers. How to give effective presentation. S/U or letter grading.


201C. Atmospheric and Oceanic Turbulence. (4) Lecture, three hours. Requisite: course 200A. Recommended: course 201A. Turbulent flows that occur on relatively small scales (< 10 km) in both atmosphere and ocean. Involved with classical models, convective, and boundary-layer turbulence and its geophysical modification due to stratification, Earth’s rotation, and water phase changes. S/U or letter grading.

202A. Introduction to Atmospheric and Oceanic Sciences. (4) Seminar, one hour. Fundamentals of ocean physics, chemistry, and biology. Equations of motion, dynamical balances, conservation laws. Ocean circulation and material transport from small-scale eddies and waves to global circulation of thermohaline and deep-ocean; influences on ecosystem processes, biogeochemical provinces; ocean and chemical cycles; implications for global heat transport, sea ice, and climate. S/U or letter grading.

M203A. Introduction to Atmospheric Chemistry. (4) (Same as Civil Engineering M262A.) Lecture, three hours. Requisite for undergraduates: Chemistry 20B. Principles of chemical kinetics, thermodynamics, spectroscopy, and photochemistry; chemical composition, history and sources of Earth’s atmosphere; biogeochemical cycles of key atmospheric constituents; basic photochemistry of troposphere and stratosphere, upper atmosphere chemical processes; air pollution; chemistry and climate. S/U or letter grading.

203B. Introduction to Atmospheric Physics. (4) Lecture, three hours; discussion, one hour. Principles of radiation transfer; absorption and scattering of solar and infrared radiation; radiation budget consideration; aerosols in atmosphere; principles of water droplet and ice crystal formation; diffusion and accretion of droplets and ice crystals; aerosols; clouds; oceanic and atmospheric processes. S/U or letter grading.

C204. Introduction to Machine Learning for Physical Sciences. (4) Lecture, 90 minutes; laboratory, 90 minutes. Designed for physical science students. Practical, hands-on introduction to seven of most popular algorithms of machine learning (ML). Students gain most practical skills to start working in industry or researcher immediately using popular Python programming language, together with ScikitLearn ML library, and covering essential theory to understand what algorithms to focus on problems that arise in physical sciences. Covers algorithms in broad areas of ML, including supervised learning (regression and classification) and unsupervised learning (clustering and dimensionality reduction). Lectures and programming exercises. Concurrently scheduled with course C111. S/U or letter grading.

C205A. Introduction to Solar System Plasmas. (4) Lecture, three hours; discussion, one hour. Introduction to basic plasma physics of objects occurring in sun, solar wind, magnetospheres, and ionospheres of planets, using simple fluid (magnetohydrodynamic) models as well as individual particle (particle radiation belt dynamics) approach. Solar-plasmas, coupling processes, geomagnetic phenomena, aurora. Concurrently scheduled with course C170. S/U for majors with consent of instructor after successful completion.
of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

205B. Introduction to Solar-Terrestrial Physics. (4) Lecture, three hours; discussion, one hour. Lower division, planetary, magnetospheric, ionospheric, auroral, geo-magnetic phenomenological and theoretical background for studies in space physics. Contextual understanding of radiation, successional changes in ionospheric plasma; space weather; auroral, geomagnetic processes; auroral and magnetospheric disturbances. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

205C. Planetary Upper Atmospheres. (4) Lecture, three hours; discussion, one hour. Aeronomy of upper atmospheres of Earth and other planets and some of their satellites—thermospheric structure and morphology, thermal balances, interaction with solar radiation, and chemical processes. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.


213. Global Circulation of Atmosphere. (4) Lecture, three hours; discussion, one hour. Requisite: course 200B. Global atmospheric circulation and its variability in changing climate. Topics include theory of Rossby waves and applications to global circulation of atmospheric dynamics, convective and radiative circulation, wave-mean interaction and application to jet-stream, storm tracks, energetics of eddies and available potential energy in atmosphere, and coupling among circulation, moisture, and clouds. S/U or letter grading.

214. Atmospheric Dynamics. (4) Lecture, three hours. Radiative transfer and energy-balance models (EBMs). Multiple equilibrium climates and their stability. Coupled EBMs of atmosphere and oceans. Climatic history of our planet. Continuum mechanics of ice sheets and mantle. Oscillatory models of Quaternary glaciation cycles. Transitions from equilibrium to periodic and aperiodic climate behavior. Climatic predictability. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

215. Ocean Circulation. (4) Lecture, three hours. Requisites: courses 101, 102. Dynamics of oceanic circulation, theory, and modeling of ocean circulation with global to regional scope. Circulation types include thermohaline and wind-driven currents. Examination of relationships between oceanic circulation and large-scale climate, atmospheric climate, and biogeochemical transport. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

216A. Tropical Motions with Moist Processes. (4) Lecture, three hours. Requisite: course 201C. Cumulus convection and the boundary layer in tropics. Cloud clusters and mesoscale convective systems. Interaction of cumulus convection with large-scale environment. Tropical cyclones. Monsoon meteorology. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.


217. Regional Climate Dynamics. (4) Lecture, three hours; discussion, one hour. Global distribution of climate regimes with spatial scales smaller than 100 km. Mechanisms maintaining regional climate variation against larger-scale atmospheric and climate gradients. Regional climate/landscape/human system interactions. S/U or letter grading.


222. Atmospheric Boundary Layer. (4) Lecture, three hours. Atmospheric boundary layer: lowest portion of atmosphere, representing interface between Earth’s surface and atmosphere, is strongly affected by turbulence, and plays important role in exchange of heat, momentum, trace gases, and aerosols between Earth’s surface and free troposphere. Investigation of properties of atmospheric boundary layer and processes that determine it. Concurrently scheduled with course C144. S/U or letter grading.

223. Atmospheric Turbulence. (4) Lecture, three hours. Kinematics of homogeneous and shear flow turbulence. Surface and planetary boundary layers, including heat transfer and turbulent convection. Survey of current research laboratory observations and their interpretation by theory. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

224B. Atmospheric Diffusion and Air Pollution. (4) (Same as Civil Engineering M262B.) Lecture, three hours. Nature and sources of atmospheric pollution; diffusion from point, line, and area sources; pollution dispersion in urban complexes; meteorological factors and air pollution potential; meteorological aspects of air pollution. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

225. Advanced Topics in Aerosol Chemistry and Physics. (4) Lecture, three hours. Requisites: courses M203A, M203B (may be taken concurrently). Study of advanced aerosol processes, including emission processes, optical properties, secondary organic aerosol formation and heterogeneous chemistry, and methods for aerosol measurements. Each student performs a research project in detail at one aspect covered. May be repeated for credit. S/U or letter grading.

C227. Advanced Dynamic and Synoptic Meteorology. (4) Lecture, three and one half hours. Weather map analysis, adiabatic dynamics, satellite interpretation, severe weather forecasting, isentropic analysis, frontogenesis, quasi-geostrophic omega equation. Concurrently scheduled with course C110. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

C227L. Advanced Dynamic and Synoptic Meteorological Laboratory. (2) Lab, three hours. Comprehensive weather forecasting exercises and map discussions led by meteorologist. Concurrently scheduled with course C110L. S/U or letter grading.

C228. Mesometeorology. (4) Lecture, three hours; discussion, one hour. Observation of phenomena with length scales ranging from 20 km to 2,000 km.
Topics include polar lows, airmass thunderstorms, multicell storms, supercell tornadoes, gust fronts, downdrafts, microbursts, and dry line. Discussions on design of field project. Concurrently scheduled with course C115. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination) or letter grading.

22B. Upper Atmosphere and Space Science (4) Lecture, three hours. Requisites: courses 201C, 228B. Numerical and analytical modeling of convective and mesoscale motions, from shallow heat sources to large complex systems. Model formulations, assumptions, parameterizations, and solution techniques. Role of modeling efforts in understanding dynamic structure and behavior of systems. S/U (for majors with consent of instructor, after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

Atmospheric Physics and Chemistry

230A. Atmospheric Chemistry I. (4) Lecture, three hours. Requisite: course M203A. Photochemistry of troposphere; physical chemistry of surfaces and solutions; precipitation chemistry and acid rain; atmospheric chemistry of aerosols; chemical cycling of gaseous species; current issues in global change. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

230B. Atmospheric Chemistry II. (4) Lecture, three hours. Requisite: course M203A. Photochemistry of stratosphere and mesosphere; basic ionospheric processes; ionospheric composition and ozone layer; physical chemistry of upper atmosphere clouds and aerosols; comparative photochemistry of planetary atmospheres; observational techniques and results. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

232. Chemical Transport Modeling. (4) Lecture, three hours. Requisites: courses M203A, 230A, 230B. Equations of tracer transport and chemical kinetics modeling in three dimensions; numerical techniques; coupled simulations of gas-phase and aerosol microphysical and chemical processes; and chemical and physical processes; and chemical and physical processes of radiative transfer. S/U (for majors with consent of instructor, after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.


CM237A. Aquatic Geomicrobiology: Metabolisms. (4) (Same as Earth, Planetary, and Space Sciences CM214A.) Lecture, three hours. Recommended requisite: course M105 or Earth, Planetary, and Space Sciences C107. Study of fundamental geomicrobiological metabolisms and biogeochemical reactions occurring in aquatic systems and how these processes interact with ecosystems. Metabolisms include photoheterotrophic (anoxic and oxygenic photochemistry), chemoheterotrophic (fermentation and respiration of organic material), photolysotrophic (organic material degradation with high energy light), and nitrogen fixation pathways. S/U or letter grading.

CM237B. Aquatic Geomicrobiology: Environments. (4) (Same as Earth, Planetary, and Space Sciences CM214B.) Lecture, three hours. Recommended requisite: course CM214A. Broad overview of aquatic biogeochemical processes in diverse environments (seawater, sediments, freshwater, seawater, and eukaryotic algae), fundamental geomicrobiological metabolisms and discussion of scientific publications. S/U or letter grading.

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244A. Radar Meteorology. (4) Lecture, three hours. Requisite: Physics 101 or 107. Radar detection of spherical and nonspherical particles; use of radar in studying size distributions of cloud and precipitation particles, precipitation intensity and amount, updraft velocities, horizontal wind speed, and turbulence; radar observations of convective clouds, thunderstorms, tornadoes, hurricanes, squall lines, and fronts; clear air echoes. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.


246. Data Analysis in Atmospheric and Oceanic Sciences. (4) Lecture, three hours. Requisite: course 203B. Recommended requisite: course 203A. Study of how aerosols can affect weather and climate by interacting with clouds through microphysical properties; aerosol interactions in climate change assessments. Structured around reading and discussion of scientific publications. S/U or letter grading.

Upper Atmosphere and Space Physics

M250A. Solar System Magnetohydrodynamics. (4) (Same as Earth, Planetary, and Space Sciences M263A.) Lecture, three hours. Requisite: course CM114B. Derivation of MHD equations with two fluid approximation and for nonmajors at discretion of major department) or letter grading.

M258. Sources and Losses of Magnetospheric Plasma. (4) Lecture, three hours. Requisite: course C205A. Derivation of MHD equations with two fluid aspects, generalized Ohm’s law, small amplitude waves, discontinuities, shock waves, and instabilities. Applications to statics and dynamics of solar wind and planetary magnetospheres and to solar wind/magnetosphere/ionosphere coupling. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

256. Ionospheric Electrodynamics. (4) Lecture, three hours. Requisite: course C205A. Adiabatic charged particle dynamics; incoherent radiation processes; collective effects in plasma; propagation characteristics of electrostatic and electromagnetic waves; introduction to resonant interaction between charged particles and plasma waves. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

257. Radiation Belt Plasma Physics. (4) Lecture, three hours. Requisite: course C205A. Derivation of MHD equations with two fluid aspects and their relation to satellite observations and magnetospheric structure. Processes responsible for source, loss, and transport of energetic radiation belt particles. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.


methods. Model validation and evaluation, significance tests, error analysis, bias detection. Emphasis on practical applications, with specific examples from atmospheric and oceanic sciences. Concurrently scheduled with course C18J, S/U or letter grading.

Special Studies
270. Seminar: Atmospheric Sciences. (2) Seminar, one hour. May be repeated for credit. S/U or letter grading.


276. Seminar: Mesoscale Processes. (2) Seminar, one hour. Selected topics of current research interest in convective, extratropical cyclones, and fronts. May be repeated for credit. S/U or letter grading.

277. Seminar: Coastal Ocean. (2) Seminar, one hour. Selected topics of current interdisciplinary research in marine and coastal sciences, including physical oceanography, biogeochemistry, marine biology, coastal engineering, atmospheric processes, and health-related issues. May be repeated for credit. S/U grading.

281. Special Topics in Dynamic Meteorology. (2 to 4) Lecture, two hours. Individual meetings with instructor to be arranged. Content varies from year to year. S/U or letter grading.

282. Special Topics in Oceanography. (2 to 4) Lecture, two hours. Individual meetings with instructor to be arranged. May be repeated for credit. S/U or letter grading.

283. Special Topics in Atmospheric Physics. (2 to 4) Lecture, two hours. Individual meetings with instructor to be arranged. May be repeated for credit. S/U or letter grading.

284. Special Topics in Atmospheric Chemistry. (2 to 4) Lecture, two hours. Individual meetings with instructor to be arranged. May be repeated for credit. S/U or letter grading.

285. Special Topics in Solar Planetary Relations. (2 to 4) Lecture, two hours. Individual meetings with instructor to be arranged. Selected topics of current research interest in solar wind, magnetospheric, or ionospheric physics. S/U or letter grading.

286. Statistical Prediction and Verification. (2) Seminar, one hour; discussion, one hour. Statistical prediction and verification. Topics include multiple linear regression, stepwise regression, and area-weighted connectivity. May be repeated for credit. S/U grading.

287. Machine Learning Approaches for Determining Causality in Coupled Earth System Data. (3) Seminar, three hours; discussion, one hour. Determining causality in earth system data is challenging because of strong coupling between different variables. Study of state-of-the-art statistical approaches that are designed to infer causality between variables that are strongly coupled on different time scales—for example, ocean-atmospheric coupling and land-vegetation-atmospheric coupling, and for nonlinear coupling. Methods include but not limited to Granger causality, generalized equilibrium feedback assessment, step-wise generalized equilibrium feedback assessment, empirical dynamic modeling, and area weighted connectivity. Offers stimulating group learning experience through reading papers and discussion, and if possible, application of some methods to earth system data. S/U grading.

296A-296L. Advanced Topics in Atmospheric Sciences. (2 each) Discussion, two hours. Advanced study and analysis of current topics in atmospheric sciences. Discussion of current research and literature in research specialty of faculty member teaching course. May be repeated for credit. S/U grading.

296A. Ocean Dynamics. Research group meeting, two hours. S/U grading.

296B. Boundary Layers, Clouds, and Climate. Fundamental processes and processes' impacts on different scales. May be repeated for credit. S/U grading.


296O. Regional to Local Modeling of Atmospheric Composition and Climate Interactions. (2) Research group meeting, two hours. Presentation and discussion of research on modeling of air quality and atmospheric composition from local to regional scales. Topics include research in air quality forecasting, to improve predictive capability of pollution episodes (e.g., haze conditions, forest fires, dust outbreaks); data assimilation and inverse modeling, i.e., using atmospheric observations (e.g., satellite, ground based, airborne) to improve air quality forecasts or better constrain emission sources; and investigation of modeling of aerosols (particles in atmosphere) and their interactions with clouds and radiation, which are in part responsible for uncertainties in climate change projections. Presentations by participants and invited speakers from other research groups. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Teaching Atmospheric and Oceanic Sciences. (2 each) Discussion, two days; intensive training session prior to Fall Quarter. Required of all new teaching assistants and recommended for new PhD students and graduate students intending to be teaching assistants during academic year. Introduction to classroom teaching for general education and upper-division departmental courses. Topics include pedagogical techniques, preparation, academic integrity, and integration of technology and electronic communications. S/U grading.


Overview
The faculty members in the Department of Bioengineering have created state-of-the-art facilities for cutting-edge research and developed an innovative curriculum for the education of the next generation of bioengineers. The bioengineering program offers forward-looking courses dedicated to producing graduates who are well-grounded in the fundamental sciences and highly proficient in rigorous analytical engineering tools necessary for lifelong success in the wide range of possible bioengineering careers. Combined with a strong emphasis on research, the program provides a unique educational experience that responds to the growing needs and demands of bioengineering.

Undergraduate Major

Bioengineering BS

The bioengineering program is accredited by the Engineering Accreditation Commission of ABET.

Capstone Major

The bioengineering major is a designated capstone major. Utilizing knowledge from previous courses and new skills learned from the capstone courses, undergraduate students work in teams to apply advanced knowledge of mathematics, science, and engineering principles to address problems at the interface of biology and engineering to develop innovative bioengineering solutions to meet specific sets of design criteria. Coursework entails construction of student designs, project updates, presentation of projects in written and oral format, and team competition.

Learning Outcomes

The Bioengineering major has the following learning outcomes:

- Application of advanced knowledge of mathematics, science, and engineering principles to address problems at the interface of biology and engineering
- Design of a system, component, or process to meet desired needs
- Function as a productive member of a multidisciplinary team
- Effective oral and written communication
- Identification, formulation, and solution of engineering problems

Requirements

Preparation for the Major

Required: Bioengineering 10; Chemistry and Biochemistry 20A, 20B, 20L, 30A, 30AL, 30B; Civil and Environmental Engineering M20 or Computer Science 31 or Mechanical and Aerospace Engineering M20; Life Sciences 7A (satisfies school GE life sciences requirement) and 7C; Mathematics 31A, 31B, 32A, 32B, 33A, 33B; Physics 1A, 1B, 1C, 4AL.

The Major

Students must complete the following courses:

1. Bioengineering 100, 110, 120, 167L, 175, 176, 180, Electrical and Computer Engineering 100; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; two capstone design courses (Bioengineering 177A, 177B)

2. Six additional major field elective courses (24 units) from Bioengineering C101, C102, C104, C105, C106, C107, 121, 122, C131, 132, C135, C139A, C139B, CM140, CM145, C147, M153, M155, 170, CM178, C179, 180L, M182, C183, C185, CM186, CM187, 199 (6 units maximum)

Three of the major field elective courses and the three technical breadth courses may also be selected from one of the following tracks. Bioengineering majors cannot take bioengineering technical breadth courses to fulfill the technical breadth requirement.

Biomaterials and Regenerative Medicine: Bioengineering C104, C105, CM140, C147, C183, C185, 199 (8 units maximum), Materials Science and Engineering 104, 110, C111, 120, 130, 132, 143A, 150, 151, 160, 161. The above materials science and engineering courses may be used to satisfy the technical breadth requirement.

Biomedical Devices: Bioengineering C131, M153, 199 (8 units maximum), Electrical and Computer Engineering 102, Mechanical and Aerospace Engineering C187L. The electrical and computer engineering or mechanical and aerospace engineering courses listed above may be used to satisfy the technical breadth requirement.

For Bioengineering 199 to fulfill a track requirement, the research project must fit within the scope of the track field, and the research report must be approved by the supervisor and vice chair.
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C102. Human Physiological Systems for Bioengineering I. (4) Lecture, three hours; laboratory, two hours. Preparation: human molecular biology, biochemistry, and cell biology. Not open for credit to Ph.D. students in Physiological Science majors. Broad overview of basic biological activities and organization of human body in system (organ/tissue) to system basis, with particular emphasis on molecular basis. Modeling/simulation of functional system includes demonstration of biomedical instruments, as well as visits to biomedical facilities. Concurrently scheduled with course C202. Letter grading.

C104. Physical Chemistry of Biomacromolecules. (4) Lecture, three hours; discussion, two hours; outside study, seven hours. Requisites: Chemistry 20A, 20B, 30A, Life Sciences 7A. To understand biological materials in terms of functional replacements, it is important to understand their physical chemistry. Biomacromolecules such as protein or DNA can be analyzed and characterized by applying fundamentals of polymer physics. Topics: structure and conformation, bulk and solution thermodynamics and phase behavior, polymer networks, and viscoelasticity. Application of engineering principles to problems involving biomacromolecules such as protein conformation, solvation of charged species, and separation and characterization of biomacromolecules. Concurrently scheduled with course C204. Letter grading.

C105. Engineering of Bioconjugates. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: Chemistry 20A, 20B, 20L. Highly recommended: one organic chemistry course. Bioconjugation involves the covalent attachment of coupled biomolecules for wide range of applications. Oligonucleotides may be coupled to one surface in gene chip, or one protein may be coupled to one polymer to enhance its stability in serum. Wide variety of bioconjugates are used in delivery of pharmaceuticals, in sensors, in medical diagnostics, and in tissue engineering. Basic concepts of chemical ligation, including choice and design of coupling chemistry, illustrated by a dependence tree for a biomolecule and desired application, such as degradable or nondegradable linkers. Presentation and discussion of design and synthesis of synthetic bioconjugates for some sample applications. Concurrently scheduled with course C205. Letter grading.

C106. Topics in Bioelectricity for Bioengineers. (4) Lecture, three hours; discussion, one hour; outside study, eight hours. Enforced requisites: Chemistry 20B, Chemistry 30A, Life Sciences 7A, Mathematics 33B, Physics 1C. Coverage in depth of physical processes associated with biological membranes and channel proteins, with specific emphasis on control of membrane conductance. Basic physical principles governing electrosorption in dielectric media, building on complexity to ultimately address action potentials and signal propagation in nerves. Topics include Nernst/Planck/Boltzmann relations, Arrhenius, Nernst potential, Donnan equilibrium, GHK equations, energy barriers in ion channels, cable equation, action potentials, Hodgkin/Huxley equations, impulse propagation, axon geometry and conduction, dendritic integration, concurrent with course C206. Letter grading.

C107. Polymer Chemistry for Bioengineers. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: Chemistry 21A, 21B, 21C. Fundamentals of synthetic polymer synthesis, including step-growth, chain growth (ionic, radical, metal catalyzed), and ring-opening, with focus on factors that can be used to control chain length, chain length distribution, and chain-end functionality, chain copolymerization, and stereochemistry in polymers. Presentation of applications of use of different polymerization techniques. Concepts include: chain-growth, chain-opening, and coordination polymerization, and effects of synthesis route on polymer properties. Lectures include both theory and practical issues demonstrated through laboratory experiments. Concurrently scheduled with course C207. Letter grading.

110. Biotransport and Bioreaction Processes. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: course 100, Mathematics 33B. Introduction to analysis of fluid flow, heat transfer, mass transfer, binding events, and biochemical reactions in systems of interest to bioengineers, including cells, tissues, organs, human body, extracorporeal devices, tissue engineering systems, and bioMEMS. Introduction to pharmacokinetic analysis. Letter grading.


121. Introduction to Microcontrollers. (4) Lecture, one hour; discussion, one hour; outside study, seven hours. Enforced requisites: Computer Engineering 120A, Electrical Engineering 110A, and 110B. Introduction to basic and advanced concepts involved in development of projects using microcontrollers. Project-based homework has small theory component. Involves final design project. Letter grading.

122. Introduction to Medical Imaging. (4) Lecture, four hours; discussion, four hours; outside study, four hours. Enforced requisites: Computer Engineering 120A or 120B, Electrical Engineering 111A. Principles and acquisition of medical images, with focus on medical imaging modalities. Application of principles and survey of technology and applications in field of biomedical imaging. Letter grading.

131. Nanopore Sensing. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: courses 100, 120, Life Sciences 7A, Physics 1A, 1B, 1C. Analysis of sensors based on measurements of fluctuating ionic conductance through artificial or protein nanopores and conductance. Applications to single molecule detection and DNA sequencing. Review of current literature and technological applications. History and instrumentation of resistive pulse sensing. Determination of electrical measurements in electrolytes, nanopore fabrication, ionic conductance through pores and GHK equation, patch clamp and single channel measurements and instrumentation. Issues include, protein engineering, molecular sensing, DNA sequencing, membrane engineering, and future directions of field. Concurrently scheduled with course C231. Letter grading.

132. Nanogenerators for Bioengineering. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Addresses fundamentals, materials, processes, manufacturing, and devices fabrication for nanogenerators. Key biomedical applications, in particular for use in circulatory system, neural system, cell modulation, microbe disinfection, and biodegradable electronics. Functionality of nanogenerators can serve for energy, sensing, and therapy purposes. Nanogenerators can be key components to realize autonomous intelligent closed-loop sensing and therapeutic system on human body for personalized health care to conquer medical fields in Internet of Things era. Letter grading.

C135. Orthopaedic Biomechanical Engineering. (4) (Formerly numbered 125.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course C102. Principles of orthopaedic biomechanical engineering, with focus on orthopaedic implant performance and how to evaluate new and existing implants. Topics include orthopaedic and biomechanical terminology and basic anatomy, introduction to free body diagrams and calculations of joint reaction forces; material versus structural properties; introduction to stress analysis; mechanisms of fracture patterns and fracture fixation; biomechanics of joint replacement; fabrication of medical materials and tribology; design and evaluation of total joint replacements; and introduction to spine biomechanics, spine implants, and pure moment testing. Concurrently scheduled with course C235. Letter grading.

C139A. Biomaterials Materials Science I. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: Chemistry 20A, 20B, 20L, Life Sciences 7A. To understand biological materials in terms of functional replacements, it is important to understand their physical chemistry. Biomacromolecules such as protein or DNA can be analyzed and characterized by applying fundamentals of polymer physics. Topics: structure and conformation, bulk and solution thermodynamics and phase behavior, polymer networks, and viscoelasticity. Application of engineering principles to problems involving biomacromolecules such as protein conformation, solvation of charged species, and separation and characterization of biomacromolecules. Concurrently scheduled with course C204. Letter grading.

C139B. Biomaterials Materials Science II. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Course C139A is not required to take C139B. Topics include: introduction to biological materials science that concern materials aspects of molecular biology, cell biology, and bioengineering. Understanding of different basic types of biomacromolecules, with emphasis on nucleic acids, proteins, and lipids. Study of how biological and biomimetic systems organize into their functional forms via self-assembly and how these structures impart biological function. Understanding of different examples from bioengineering and biomedical engineering. Case study on current topics, including drug delivery, gene therapy, cancer therapeutics, emerging pathogens, and relation of self-assembly to disease states. May be taken independent for credit. Concurrently scheduled with course C239A. Letter grading.

C140. Introduction to Biomechanics. (4) (Same as Chemistry and Agricultural Engineering C140.) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: Mechanical and Aerospace Engineering 101, 102, and 156A or 166A. Introduction to mechanics of fundamentals of mechanics that optimize load transfer, mobility, and function. Dynamics and kinematics. Fluid mechanics applications. Heat and mass transfer. Power generation. Laboratory simulations and tests. Concurrently scheduled with course CM240. Letter grading.

C145. Molecular Biotechnology for Engineers. (4) (Same as Chemical Engineering CM145.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: Chemical Engineering 45 or Life Sciences 7C. Selected topics in molecular biology that form foundation of biotechnology and biomedical industry today. Topics include recombinant DNA technology, expression of gene expression, directed mutagenesis and protein engineering. DNA-based diagnostics and DNA microarrays, antibody and protein-based diagnostics, genomics and bioinformatics, isolation of human genes, gene therapy, and tissue engineering. Concurrently scheduled with course CM245. Letter grading.

C147. Applied Tissue Engineering: Clinical and Industrial Perspective. (4) Lecture, three hours; discussion, one hour; outside study, seven hours. Requisites: Chemistry 214A or Chemical Engineering 45 or Life Sciences 7C. Overview of central topics of tissue engineering with focus on how control of tissue growth into regulated clinically viable products. Topics include biomaterials selection, cell source, delivery methods, FDA approval processes, and physical/chemical and biological testing. Case studies include skin and artificial skin, bone and cartilage, blood vessels, neurotissue engineering, and liver, kidney, and other organs.

M153. Introduction to Microscale and Nanoscale Manufacturing. (4) (Same as Chemical Engineering M153, Electrical and Computer Engineering M153, and Materials Engineering M153B.) Lecture, three hours; laboratory, four hours; outside study, five hours. Enforced requisites: Chemistry 20A, Physics 1A, 1B, 4A, 4L. Introduction to general manufacturing fundamentals, computer-aided design, and microfabrication and nanofabrication. Focus on concepts, physics, and instruments of various microfabrication and nanofabrication techniques that have been broadly applied in science, technology, and academia, including various photolithography technologies, physical and chemical deposition methods, and physical and chemical etching methods. Hands-on experience for fabrication of micro- and nanostructures in modern clean-room environment. Letter grading.

C155. Fluid-Particle and Fluid-Structure Interactions in Microflows. (4) Lecture, four hours; laboratory, one hour; outside study, seven hours. Enforced requisites: Math 18, 21, 80A, 80B, and 80C. Introduction to general manufacturing fundamentals, computer-aided design, and microfabrication and nanofabrication. Focus on concepts, physics, and instruments of various microfabrication and nanofabrication techniques that have been broadly applied in science, technology, and academia, including various photolithography technologies, physical and chemical deposition methods, and physical and chemical etching methods. Hands-on experience for fabrication of micro- and nanostructures in modern clean-room environment. Letter grading.

C166W. Bioengineering Ethics. (4) Lecture, four hours; discussion, three hours; outside study, five hours. All professions have ethical rules that derive from moral theory; Bioethics is well-established discipline that addresses ethical concerns about life, such as when do fertilized eggs become people? Should ending of life ever be assisted? At what cost should it be maintained? Unlike physicians, bioengineers do not make these decisions alone. Engineering ethics addresses ethical problems about producing devices from molecules to bridges, such as when do concerns about risk outweigh concerns about cost? When are weapons a part of design? At what point does benefit of committing to building devices outweigh need to wait for more scientific confirmation of their effectiveness? Bioengineers must be aware of consequences of applying such devices to all living systems. Emphasis on research and writing within engineering environments. Satisfies engineering writing requirement. Letter grading.

167L. Bioengineering Laboratory. (4) Lecture, two hours; laboratory, six hours; outside study, four hours. Enforced requisite: Chemistry 20L. Laboratory experiments in fluorescence microscopy, biocomputation, soft lithography, and cell culture culture in design of engineered surface for cell growth. Introduction to techniques used in laboratories and their underlying physical or chemical properties. Case studies connect laboratory techniques to current biomedical engineering research and reinforce experimental design skills. Letter grading.

170. Cell Engineering and Laboratory. (4) Lecture, four hours; laboratory, four hours; outside study, four hours. Enforced requisites: Biology 1B, 1C, 4AL. Overview of foundational data analysis and machine-learning methods in bioengineering, focusing on how these techniques can be applied to interpret experimental observations of biological systems. Discussion of data distributions, cross-validation, analysis of variance, reproducible computational workflows, dimensionality reduction, regression, hidden Markov models, and clustering. Emphasis on practical knowledge of data analysis and machine-learning methods relevant to bioengineering. Application of these methods to experimental data from bioengineering. Part I of two-part series. Molecular basis of normal physiology and pathophysiology, and engineering design principles of cardiovascular and pulmonary systems. Fundamental engineering principles of selected medical therapeutic devices. Letter grading.

170L. System Integration in Biology, Engineering, and Medicine I Laboratory. (4) Lecture, one hour; laboratory, four hours; clinical visits, four hours; outside study, three hours. Corequisite: course 180. Hands-on experimentation and clinical applications of selected medical therapeutic devices associated with cardiovascular and pulmonary disorders. Letter grading.

170S. Dynamic Biosystem Modeling and Simulation Methodology. (4) (Same as Computer Science M182B.) Lecture, four hours; discussion, one hour; laboratory, two hours. Enforced requisites: Math 21A, 21B, 21C, 3A, 3B, 3C. Overview of foundational data analysis and machine-learning methods in bioengineering, focusing on how these techniques can be applied to interpret experimental observations of biological systems. Discussion of data distributions, cross-validation, analysis of variance, reproducible computational workflows, dimensionality reduction, regression, hidden Markov models, and clustering. Emphasis on practical knowledge of data analysis and machine-learning methods relevant to bioengineering. Application of these methods to experimental data from bioengineering. Part I of two-part series. Molecular basis of normal physiology and pathophysiology, and engineering design principles of cardiovascular and pulmonary systems. Fundamental engineering principles of selected medical therapeutic devices. Letter grading.
194. Research Group Seminars: Bioengineering. (4) Seminar, three hours. Limited to bioengineering undergraduate students who are part of research group. Study and analysis of current topics in bioengineering. Discussion of current research literature in research specialty of faculty member teaching course. Student presentation of projects in research specialty. May be repeated for credit. Letter grading.

195. Directed Individual Research. (2 to 6) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project related to system basis with permission of school. Individual contract required; enrollment petitions available in Office of Academic and Student Affairs. Letter grading.

Graduate Courses


C204. Physical Chemistry of Biomacromolecules. (4) Lecture, three hours; discussion, two hours; outside study, seven hours. Preparation:Chemistry 20A, 20B, 30B, Life Sciences 7A. To understand biological materials and design synthetic replacements, it is imperative to understand their physical chemistry. Biomacromolecules such as protein or DNA can be analyzed and characterized using fundamental principles of physical chemical theory. Investigation of polymer structure and conformation, bulk and solution thermodynamics and phase behavior, polymer networks, and viscoelasticity. Application of principles to problems involving biomacromolecules such as protein conformation, solvation of charged species, and separation and characterization of biomacromolecules. Concurrently scheduled with course C104. Letter grading.

C205. Engineering of Bioconjugates. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Preparation:Chemistry 20A, 20B, 30L. Highly recommended: one organic chemistry course. Bioconjugate chemistry is science of coupling biomolecules for wide range of applications. Oligonucleotides may be coupled to one surface in gene chip, or one protein may be coupled to one polymer to enhance its stability in serum. Wide variety of bioconjugates are used in delivery of pharmaceuticals, in sensors, in medical diagnostics, and in tissue engineering. Basic concepts of chemical ligation, including choice and design of conjugate linkers depending on type of biomolecule and desired application, such as degradable versus nondegradable linkers. Presentation and discussion of design and synthesis of synthetic bioconjugates for some sample applications. Concurrently scheduled with course C105. Letter grading.

C206. Topics in Bioelectricity for Bioengineers. (4) Lecture, outside study, eight hours. Preparation:Chemistry 20B, Life Sciences 7A, Mathematics 33B, Physics 1C. Coverage in depth of physical processes associated with electrical phenomena and channel proteins, with specific emphasis on electrophysiology. Basic physical principles governing electrostatics in dielectric media, building on complexity to ultimately address action potentials and signal propagation in nerves. Topics include Nernst/Planck and Poisson/Boltzmann equations, Nernst potential, Donnan equilibrium, GHK equations, energy barriers in ion channels, cable equation, action potentials, Hodgkin/Huxley equations, impulse propagation, axon geometry and conduction, dendritic integration. Concurrently scheduled with course C106. Letter grading.

C207. Polymer Chemistry for Biologists. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Preparation:Chemistry 30A, 30B, Mathematics 31A, 31B, 32A or M32T, 33A, and 33B. Dynamic biosystem modeling and computer simulation methods for studying biological/biomedical processes and systems at multiple levels of organization. Intermediate linear and nonlinear control system, multicompartamental, epidemiological, pharmacoki netic, and other biomodeling methods applied to life sciences problems involving human systems. Topics include both theory and practical issues demonstrated through examples. Concurrently scheduled with course CM106. Letter grading.


M214A. Digital Speech Processing. (4) (Same as Electrical and Computer Engineering M214A.) Lecture, three hours; laboratory, two hours; outside study, seven hours. Preparation:Electrical and Computer Engineering 113. Theory and applications of digital processing of speech signals. Mathematical models of human speech production and perception mechanisms, speech analysis/synthesis. Techniques include linear prediction, filter-bank models, and homomorphic filtering. Applications include automatic recognition, and hearing aids. Letter grading.

M215. Biochemical Reaction Engineering. (4) (Same as Chemical Engineering CM215.) Lecture, four hours; discussion, one hour; outside study, seven hours. Preparation:Chemical Engineering 101C. Use of previously learned concepts of biophysical chemistry, thermodynamics, transport phenomena, and reaction kinetics to develop tools needed for technical design and economic analysis of biological reactors. Letter grading.

M217. Biomedical Imaging. (4) (Same as Electrical and Computer Engineering M217.) Lecture, three hours; discussion, one hour; outside study, eight hours. Preparation:Electrical and Computer Engineering 114 or 211A. Optical imaging modalities in biomedicine. Other nonoptical imaging modalities discussed briefly for comparison purposes. Letter grading.

M219. Principles and Applications of Magnetic Resonance Imaging. (4) (Same as Physics and Biology in Medicine M219.) Lecture, three hours; discussion, one hour. Basic principles of magnetic resonance (MR), physics, mathematics, and image formation. Introduction to advanced techniques in rapid imaging, quantitative imaging, and spectroscopy. Letter grading.

220. Introduction to Medical Informatics. (2) Lecture, two hours; outside study, four hours. Designed for graduate students. Introduction to research topics
and issues in medical informatics for students new to field. Definition of this emerging field of study, current research efforts, and future directions in research. Key issues in medical informatics to expose students to different application domains, such as information system architectures, data and process modeling, information extraction and representations, information retrieval and visualization, health services research, telemedicine, and current research en- and developments. S/U grading.

221. Human Anatomy and Physiology for Medical and Imaging Informatics. (4) Lecture; four hours; laboratory, four hours; outside study, eight hours. Designed for graduate students. Exposure to programming concepts for medical applications, with focus on basic abstraction techniques used in image processing and medical informatics courses, Letter grading. 222A. Requisites: Computer Science 31, 32, Program in Computing 20A, 20B. Course 223A is required to 223B, which is required to 223C. Integrated with topics previously identified in course M227 to reinforce concepts presented with practical experience. Projects focus on understanding medical networking issues and implementation of basic protocols for healthcare environments, with emphasis on use of DICOM. Introduction to basic tools and methods used within informatics. 223B. Requisite: course 223A. Integrated with topics presented in courses 223A, 223B, and 223C to reinforce concepts presented with practical experience. Projects focus on medical image manipulation and decision support systems. 223C. Requisite: course 223B. Integration of programming concepts with medical applications, with focus on basic abstraction techniques used to extract meaningful features from medical text and imaging data and visualize results. Integrated with topics presented in courses 224B and M226. Letter grading. Projects presented with practical experience. Projects focus on medical image retrieval, knowledge representation, and visualization. 224A. Physics and Informatics of Medical Imaging. (4) Lecture; four hours; laboratory, four hours; outside study, eight hours. Designed for graduate students. Introduction to principles of medical imaging and imaging informatics for nonphysicists. Overview of core concepts presented with practical experience. Projects focus on medical imaging and implementation of basic protocols for healthcare environments, with emphasis on use of DICOM. Introduction to basic tools and methods used within informatics. 225B. Requisite: course 223A. Lecture, four hours; outside study, seven hours. Enforced corequisite: Computer Science 101C. Separation strategies, unit operations, and economic factors used to design processes for isolating proteins, lipids, additives, or pharmaceuticals that are products of biochemical reactions. Letter grading.

225C. Bioseparations and Bioprocess Engineering. (4) Same as Chemical Engineering OM225.) Lecture, four hours; outside study, seven hours. Enforced corequisite: Chemical Engineering 101C. Separation strategies, unit operations, and economic factors used to design processes for isolating proteins, lipids, additives, or pharmaceuticals that are products of biochemical reactions. Letter grading.

226. Medical Knowledge Representation. (4) Same as Information Studies M226.) Seminar, four hours; discussion, one hour; outside study, eight hours. Designed for graduate students. Issues related to medical knowledge representation and its application in healthcare processes. Topics include data structures used for representation (knowledge graphs, frame-based models), different data models for representing spatio-temporal information, rule-based implementations, current statistical methods for discovery of knowledge data mining, and hierarchical classification), and basic information retrieval. Review of work in constructing ontologies, with focus on problems in implementation and definition. Common medical ontologies fielding schemes, and standardized indices/terminologies (SNOMED, UMLS). Letter grading.

227. Medical Information Infrastructures and Internet Technologies. (4) Same as Information Studies M227.) Lecture, four hours; outside study, eight hours. Designed for graduate students. Introduction to networking, communications, and information infrastructures (introduction to technologies related to networking, data, and Web-based communication). Lecture to current medical communication protocols (HL7, DICOM) and current medical information systems (HIS, RIS, PACS). Introduction to networking, such as wireless health system tools, peer-to-peer topologies, grid/cloud computing, Introduction to security and encryption in networked environments. Letter grading.

228. Medical Decision Making. (4) Same as Information Studies M228.) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced corequisite: course 223A. Overview of issues related to medical decision making. Introduction to concept of evidence-based medicine and decision related processes to process of care and outcomes and their relationship to statistics to understand research results and evaluations, and algorithmic methods for decision-making processes (Bayes theorem, decision trees). Study design, hypothesis testing, and focus on technical advances in medical decision support systems and expert systems, with review of classical and current research. Introduction to common statistical and decision-making software packages to familiarize students with current tools. Letter grading.

229. Advanced Topics in Magnetic Resonance Imaging. (4) Same as Physics and Biology in Medicine M229.) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced corequisite: course M219. Overview of advanced MRI imaging research, related to development or translation of new magnetic resonance imaging (MRI) technique. Basic tools and understanding of recent MRI developments that have had high impact on patient care, clinical trials design or image reconstructions, and enable imaging of anatomic or function in way that surpasses what is currently possible with any modality. Topics include in-depth scientific principles design, rapid image acquisition, parallel imaging, compressed sensing, image reconstruction and processing, motion encoding, and other advanced computational imaging and understanding, and understanding and avoiding artifacts. Programming exercises in MATLAB to provide hands-on experience. Letter grading.

C231. Nanopore Sensing. (4) Lecture; four hours; discussion, one hour; outside study, seven hours. Enforced corequisite: course 220B. Introduction to，并且是基于计算生物学和生物信息学的科学，该概念材料涉及分子生物学的科学，包括分子生物学的科学，细胞生物学，和生物-

242. Biophotonics. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: Mechanical and Aerospace Engineering CM145. Introduction to biophotonics and survey applications in field of biophotonics. Letter grading.

CM240. Introduction to Biomechanics. (4) (Same as Mechanical and Aerospace Engineering CM240.) Lecture, four hours; discussion, two hours; outside study, six hours. Topics in biomechanical biology that form foundation of biomechanics and biomechanical engineering today. Topics include recombinant DNA technology, molecular mechanisms of muscle contraction and relaxation, directed mutagenesis and protein engineering, DNA-based diagnostics and DNA microarrays, antibody and protein-based diagnostics, genomics and proteomics, isolation of human genes, gene therapy, and tissue engineering. Concurrently scheduled with course CM145. Letter grading.

C247. Applied Tissue Engineering: Clinical and Industrial Perspective. (4) Lecture, three hours; discussion, two hours; laboratory, seven hours. Requisites: course CM202D, Chemistry 20A, 20B, 20L, Life Sciences 7A. Overview of central topics of tissue engineering, with focus on how to build artificial tissues into regulated clinically viable products. Topics include biomaterials selection, cell source, delivery methods, FDA approval processes, and physical/chemical and biological testing. Case studies include skin and artificial skin, bone, blood vessels, nerve, tissue engineering, and liver, kidney, and other organs. Clinical and industrial perspectives of tissue engineering products. Manufacturing constraints, clinical limitations, and technological challenges in design and development of tissue-engineering devices. Concurrently scheduled with course CM145. Letter grading.

M248. Introduction to Molecular Imaging. (4) (Same as Pharmacology M248 and Physics and Biology in Medicine M248.) Lecture, three hours; laboratory, one hour; outside study, seven hours. Exploration of role of molecular imaging in modern biology and medicine, including imaging physics, instrumentation, imaging processing, and applications of imaging for range of modalities. Practical experience provided through series of imaging laboratories. Letter grading.

M250B. Microelectromechanical Systems (MEMS) Fabrication. (4) (Same as Electrical and Computer Engineering M250B.) Lecture, four hours; discussion, one hour; outside study, eight hours. Enrolled requisites: course CM202A. Discussion of microfabrication processes used to construct MEMS. Coverage of many lithographic, deposition, and etching processes, as well as their combination in process integration; advanced topics include chemical resists, corrosion, mechanical properties, and residual/ intrinsic stress. Letter grading.

M252. Microelectromechanical Systems (MEMS) Device Physics and Design. (4) (Same as Electrical and Computer Engineering M252 and Mechanical and Aerospace Engineering M282.) Lecture, four hours; discussion, one hour; outside study, seven hours. Introduction to MEMS design. Design methods, design rules, sensing and actuation mechanisms, microsensor, and microactuator designs. Designing MEMS to be produced with both foundry and nonfoundry processes. Computer-aided design for MEMS. Design project requires. Letter grading.

C255. Fluid-Particle and Fluid-Structure Interactions in Microflows. (4) Lecture, four hours; laboratory, one hour; outside study, seven hours. Enforced requisites: course 110. Introduction to Navier/Stokes equations and Navier-Stokes fluid mechanics framework for calculating simple flows and numerical methods to solve and gain intuition for complex flows. Forces on particles in Stokes flow and finite-size flow. Fluid particles with and without finite inertia and implications for particle-particle interactions. Secondary flows induced by structures and particles confined in flows. Particle separation using flow fractionation, inertial focusing, structure-induced separations. Application concepts in internal biological flows and separations for biotechnology. Helps students become familiar with system biology and fundamental aspects of synthetic biology, design and model microfluidic systems to manipulate fluids, cells, and particles, and develop strong intuition for how fluid and particles behave in arbitrarily structured channels over range of Reynolds numbers. Concurrently scheduled with course C155. Letter grading.

250. Drug Delivery Devices: Innovation and Translation. (4) Lecture, four hours; discussion, two hours; laboratory, two hours; outside study, seven hours. Introduction to drug delivery devices and relevant biomedical applications. Topics provide comprehensive and critical examination of current and emerging research and development on drug delivery. Emphasis placed on innovation and translation. Topics include bioresponsive drug delivery systems, drug delivery reservoirs, MEMS and micro/nanorobots for drug delivery, nanomedicine-devicenetwork combination products, and development and regulation of drug delivery devices. Students acquire theoretical and practical knowledge of drug delivery devices. Students gain ability to identify advanced approaches for drug delivery devices in effective and safe manner, from systemic administration to site-specific release; design appropriate mechanisms, materials, and structures for engineering drug delivery devices to deliver different therapeutics for treating variety of diseases; and propose methods and relevant experiments to validate efficacy of certain drug delivery devices. Letter grading.

M260. Neuroengineering. (4) (Same as Electrical and Computer Engineering M255 and Neuroscience M260.) Lecture, four hours; laboratory, three hours; outside study, five hours. Requisites: Mathematics 32A, Physics 1B or 5C. Introduction to principles and techniques of neuroengineering research. S/U grading.

M261A-M261B-M261C. Evaluation of Research Literature in Neuroengineering. (2–2–2) (Same as Electrical and Computer Engineering M261A-M261B-M261C.) Lecture, seven hours; discussion, two hours; outside study, seven hours. Enforced requisites: Neuroscience 21A and 21B. Analysis of research studies. Students become sufficiently familiar with techniques to design studies incorporating such analyses, execute analysis, and work in teams using similar approaches, and ensure correctness of their results. Letter grading.

CM275. Machine Learning and Data-Driven Modeling in Bioengineering. (4) (Formerly numbered C275.) Lecture, four hours; laboratory, two hours; outside study, six hours. Requisites: Civil Engineering M20 or Mechanical and Aerospace Engineering M20 or Computer Science 31, Mathematics 32B, 33A. Overview of foundational data analysis and machine-learning methods in bioengineering, focusing on how these techniques can be applied to interpret experimental observations. Topics include probabilities, distributions, statistical validation, and model development for retrievable computational workflows, dimensionality reduction, regression, hidden Markov models, and clustering. Students gain theoretical and practical knowledge of data analysis and machine-learning methods relevant to bioengineering. Application of these methods to experimental data from bioengineering studies. Students become sufficiently familiar with these techniques to design studies incorporating such analyses, execute analysis, and work in teams using similar approaches, and ensure correctness of their results. Letter grading.

CM279. Introduction to Biomaterials. (4) (Same as Materials Science CM279.) Lecture, four hours; discussion, two hours; outside study, seven hours. Requisites: Chemistry 20A, 20B, and 20L, or Materials Science 104. Engineering materials used in medicine and dentistry for repair and/or restoration of damaged natural tissues. Topics include relationships between material properties, suitability to task, surface chemistry, processing and treatment methods, and biocompatibility. Concurrently scheduled with course CM179. Letter grading.

C279. Biomaterials-Tissue Interactions. (4) Lecture, three hours; outside study, nine hours. Enrolled requisites: course C275. In-depth exploration of host cellular response to biomaterials and tissue interface, and clotting, biocompatibility, animal models, inflammation, infection, extracellular matrix, cell adhesion, and role of mechanical forces. Concurrently scheduled with course C179. Letter grading.

C266. Wearable Bioelectronics. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Practice of human care may be on cusp of revolution, driven by unprecedented level of personalization enabled by advances in technology. Students will research transformation of wearable devices from curiosities that provide qualitative information for fitness enthusiasts to sophisticated systems that produce clinical-grade measurements. Topics are application of wearable electronics to transform clinical research in field of wearable bioelectronics. Addresses fundamentals, materials, processes, and devices for wearable bioelectronics, some key foundational concepts including device fabrication, manufacturing, and health-care applications. Concurrently scheduled with course C166. Letter grading.

271. Biotechnology of Cellular Therapies. (4) Lecture, four hours; discussion, two hours; outside study, seven hours. Examination of how to design cells and cellular systems to perform therapeutic tasks in complex physiological environments. Discussion of immunity and immune therapies are important to creating therapies with well-defined properties based on cells. Letter grading.

M273. Micro- and Nanoscale Biosensing for Molecu- lar Diagnostics. (4) (Same as Electrical and Computer Engineering M273.) Lecture, four hours; discussion, one hour; outside study, seven hours. Covers state-of-art and emerging biosensors in context of molecular diagnostics. Students learn relevant biology and biochemistry pertinent to molecular diagnostics. Students gain thorough understanding of interfaces between bioparticles, biofluids, and electronics. Topics include biosensor performance parameters, modes of detection, sample preparation challenges, microfluidics, and emerging wearable biosensing platforms, as well as opportunities in next generation diagnostic and sequencing technologies. Letter grading.

275. Machine Learning and Data-Driven Modeling in Bioengineering. (4) (Formerly numbered C275.) Lecture, four hours; laboratory, two hours; outside study, six hours. Requisites: Civil Engineering M20 or Mechanical and Aerospace Engineering M20 or Computer Science 31, Mathematics 32B, 33A. Overview of foundational data analysis and machine-learning methods in bioengineering, focusing on how these techniques can be applied to interpret experimental observations. Topics include probabilities, distributions, statistical validation, and model development for retrievable computational workflows, dimensionality reduction, regression, hidden Markov models, and clustering. Students gain theoretical and practical knowledge of data analysis and machine-learning methods relevant to bioengineering. Application of these methods to experimental data from bioengineering studies. Students become sufficiently familiar with these techniques to design studies incorporating such analyses, execute analysis, and work in teams using similar approaches, and ensure correctness of their results. Letter grading.
281. Advanced Bioconjugate Design and Methods. (4) Lecture; four hours; outside study, eight hours. Requisite: course C285. Builds upon basic concepts of chemical conjugation covered in course C265. Discusses and focuses on current state-of-art methods and designs for precise bioconjugate formation, especially in context of living cells. Focus on recently developed bioconjugate methods from primary literature, and their applications in live cell imaging. Students gain deep understanding of principles of bioconjugation: coupling of biologically active molecules to substrates, devices, or one another, especially in vivo applications in living cells and in vivo. Letter grading.

282. Biomaterial Interfaces. (4) Lecture; four hours; laboratory, eight hours. Requisite: course CM178 or CM278. Function, utility, and biocompatibility of biomaterials and cells with their surface and interfacial properties. Discussion of morphology and composition of biomaterials and nanoscales, mesoscales, and macroscapes, techniques for characterizing structure and properties of biomaterial surfaces, and methods for designing and fabricating biomaterials with prescribed structure and properties in vitro and in vivo. Letter grading.

C283. Targeted Drug Delivery and Controlled Drug Release. (4) Seminar; discussion, two hours; outside study, seven hours. Requisite: Chemistry 20A, 20B, 20L. New therapies require comprehensive understanding of modern biology, pharmacology, biomaterials, and biotechnology. Targeted delivery of genes and drugs and their controlled release are important in treatment of challenging diseases and relevant to tissue engineering and regenerative medicine. Drug delivery enhances and clinical pharmacodynamics. Application of engineering principles (diffusion, transport, kinetics) to problems in drug formulation and delivery to establish rationale for design and development of novel drug delivery systems that can provide spatial and temporal control of drug release. Introduction to biomaterials with specialized structural and interfacial properties. Exploration of both chemistry and physical presentation of devices and compounds used in delivery and release. Concurrently scheduled with course CM183. Letter grading.

M284. Functional Neuroimaging: Techniques and Applications. (3) Same as Neuroscience M285. Lecture, three hours. In-depth examination of activation imaging, including MRI and electrophysiological methods, data acquisition and analysis, experimental design, and results obtained thus far in human systems. Strong focus on understanding technologies, how to design activation imaging studies, how to interpret results. Review of historical and rudimentary visits and design and implementation of functional MRI experiment. S/U or letter grading.


CM286. Computational Systems Biology: Modeling and Simulation of Biomedical Systems. (5) Same as Computer Science CM286R. Lecture; four hours; laboratory, two hours; discussion, one hour. Requisite: Life Sciences 100B, Mathematics 32A, 32B, 33A, or 33B; or Mathematics 31A, 31B, 32A or M32T, 32A, and 32B. Dynamic biosystem modeling and computer simulation methods for studying biological/biomedical processes and systems at multiple levels of organization: Molecular, cellular, tissue, and systems. Linear control system, multicompartamental, epidemiological, pharmacokinetic, and other biomodeling methodologies, and their applications to molecular, cellular, organ, and population levels. Both theory- and data-driven modeling, with focus on translating biomodeling goals and data into dynamical mathematical models, and implementing them for simulation, quantification, and analysis. Numerical simulation, optimization, and parameter identifiability

286. Research in Biomaterials. (2) Seminar; discussion, two hours; outside study, two hours. Requisite: course C265. Builds upon basic concepts of chemical conjugation covered in course C265. Discusses and focuses on current state-of-art methods and designs for precise bioconjugate formation, especially in context of living cells. Focus on recently developed bioconjugate methods from primary literature, and their applications in live cell imaging. Students gain deep understanding of principles of bioconjugation: coupling of biologically active molecules to substrates, devices, or one another, especially in vivo applications in living cells and in vivo. Letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Teaching Assistant Training Seminar. (2) Seminar, two hours; outside study, four hours. Limited to graduate bioengineering students. Required of all departmental teaching assistants. May be taken concurrently while holding TA appointment. Seminar on communicating bioengineering and biomedical engineering principles, concepts, and methods; teaching assistant preparation, organization, and presentation of material, including use of visual aids, grading, advising, and rapport with students. S/U grading.

596. Directed Individual or Tutorial Studies. (1 to 6) Tutorial, to be arranged. Limited to graduate bioengineering students. Petition forms to request enrollment may be obtained from program office. Supervised investigation of advanced technical problems. S/U grading.

597A. Preparation for MS Comprehensive Examination. (2 to 12) Tutorial, to be arranged. Limited to graduate bioengineering students. Reading and preparation for MS comprehensive examination. S/U grading.

597B. Preparation for PhD Preliminary Examinations. (2 to 16) Tutorial, to be arranged. Limited to graduate bioengineering students. Preparing for PhD examination. S/U grading.

597C. Preparation for PhD Oral Qualifying Examination. (1 to 6) Tutorial, to be arranged. Limited to graduate bioengineering students. Supervised independent research for PhD candidates, including thesis prospectus. S/U grading.

599. Research for and Preparation of PhD Dissertation. (1 to 12) Seminar, to be arranged. Preparation and research for original dissertation. Limited to graduate bioengineering students. Usually taken after students have been advanced to candidacy. S/U grading.

Overview

Bioinformatics is defined broadly as the study of the inherent structure of biological information. It is the marriage of biology and the information sciences. Examples of current bioinformatics research include the analysis of gene and protein sequences to reveal protein evolution and alternative splicing, the development of computational approaches to study and predict protein structure to further understanding of function, the analysis of mass spectrometry data to understand the convolution between phosphorylation and cancer, the development of computational methods to utilize expression data to reverse engineer gene networks in order to more completely model cellular biology, and the study of population genetics and its connection to human disease.

Graduates in bioinformatics can expect to engage in any combination of research, teaching, clinical service, and consultation. Within universities and research centers there is a growing need for bioinformatics researchers who can analyze new sources of high-throughput experimental data in biology, medicine, and bioengineering. Biotechnology and pharmaceutical companies also seek bioinformatics graduates for applied research on disease—and drug discovery. Medical centers are also increasingly hiring bioinformatics graduates as genomics data become important in medical research and clinical applications.

Graduate Major

Bioinformatics MS, PhD Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Bioinformatics Graduate Courses

201. Seminar: Advanced Methods in Computational Biology. (3) Seminar, one hour; discussion, one hour. Designed for advanced graduate students. Examination of computational methodology in bioinformatics and computational biology through presentation of current research literature. How to select and apply methods from computational and mathematical disciplines to problems in bioinformatics and computational biology; development of novel methodologies. S/U or letter grading.

202. Bioinformatics Interdisciplinary Research Seminar. (4) Seminar, two hours; discussion, two hours. Concrete examples of how biological questions about genomics data map to and are solved by methodologies from other disciplines, including statistics, computer science, and mathematics. May be repeated for credit. S/U or letter grading.

M221. Introduction to Bioinformatics. (4) (Same as Chemistry CM260A, Computer Science CM221, and Human Genetics M260A.) Lecture, four hours; discussion, two hours. Required: Program in Computing 10C with grade of C– or better, and one course from Civil and Environmental Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, or Statistics 100A. Prior knowledge of biology not required. Designed for engineering students as well as students from biological sciences and medical school. Introduction to bioinformatics and methodologies, with emphasis on concepts and inventing new computational and statistical techniques to analyze biological data. Focus on sequence analysis and alignment algorithms. S/U or letter grading.

M223. Statistical Methods in Computational Biology. (4) (Same as Biostatistics M271 and Statistics M254.) Lecture, three hours; discussion, one hour. Preparation: elementary probability. Required: Program in Computing 10C or Program in Computing 10C with grade of C– or better, Mathematics 33A, and one course from Civil Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, or Statistics 100A. Introduction to statistical methods developed and widely applied in several branches of computational biology, such as gene expression, sequence alignment, motif discovery, comparative genomics, and biological network models, with emphasis on understanding of basic statistical concepts and use of statistical inference to solve biological problems. S/U grading.

M224. Machine Learning Applications in Genetics. (4) (Same as Computer Science CM224 and Human Genetics CM224.) Lecture, four hours; discussion, two hours; outside study, six hours. Required: Computer Science 32 or Program in Computing 10C with grade of C– or better, Mathematics 33A, and one course from Civil Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, or Statistics 100A. Designed for engineering students as well as students from biological sciences and medical school. Introduction to computational analysis of genetic variation and computational interdisciplinary research in genetics. Topics include introduction to genetics, identification of genes involved in disease, inferring human population history, technologies for obtaining genetic information, and genetic sequencing. Focus on formulating interdisciplinary problems as computational problems and then solving those problems using computational techniques from statistics and computer science. Letter grading.

M225. Computational Methods in Genomics. (4) (Same as Computer Science M225 and Human Genetics M265.) Lecture, two and one half hours; discussion, two and one half hours; outside study, seven hours. Introduction to computational approaches in bioinformatics, genomics, and computational genetics and preparation for computational interdisciplinary research in genetics and genomics. Topics include genome analysis, regulatory genomics, association analysis, association study design, isolated and admixed populations, population substructure, human structural variation, model organisms, and genomic technologies. Computational techniques and methods include those from statistics and computer science. Letter grading.

M226. Machine Learning in Bioinformatics. (4) (Same as Biostatistics M226, Computer Science M226, and Human Genetics M226.) Lecture, four hours; outside study, eight hours. Enforced requisites: Computer Science 32 or Program in Computing in 10C with grade of C– or better, Mathematics 170A, or Statistics 100A. Familiarity with probability, statistics, linear algebra, and algorithms expected. Designed for engineering students as well as students from biological sciences and medical school.
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M202. Advanced Topics in Cryogenic Electron Microscopy. (3) Formerly numbered 202.) (Same as Molecular Biology M202.) Lecture, two hours; discussion, one hour. Students may take advanced topics in membrane protein biology, and learn both theory and practice of cryogenic electron microscopy (cryo-EM) as emerging technology in structural biology. Cryo-EM methodologies covered include cryo-electron microscopy, single-particle reconstruction, cryotranslography, and microcrystal electron defraction. Letter grading.

204. Human Biological Chemistry and Nutrition Laboratory. (3) Laboratory, four hours. Open to nonmedical students with consent of instructor. Experiments illustrating techniques and procedures in medically related biochemistry and nutrition, analysis of experimental results. S/U or letter grading.


BIOLOGICAL CHEMISTRY

David Geffen School of Medicine

310 Biomedical Sciences Research Building
Box 951737
Los Angeles, CA 90095-1737

Biological Chemistry 310-825-4625

Siavash K. Kordistanti, MD, Chair
John J. Colicelli, PhD, Vice Chair

Overview

Biological chemistry has grown to include studies of cellular, molecular, and developmental biology, molecular genetics and genetic engineering, and many aspects of the health sciences. The research activities of the department include these areas as well as the classic topics of metabolism, enzymology, and bioluminiscence. Courses and seminar programs are designed to provide students with the necessary background and approach to encourage their continuing growth in these rapidly changing areas of science.

Interaction with other graduate programs provides access to scientists in a variety of related disciplines. Through its primary affiliation with the Geffen School of Medicine, the Department of Biological Chemistry is also involved in the basic education of students who will be physicians, dentists, and other health professionals. Many of these students become involved in laboratory research in the department. In part because of this breadth of experience students find careers in many aspects of basic and applied scientific research and education.

Biological Chemistry faculty information is available from the department.

Biological Chemistry

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of controversial topics of current intellectual importance. Taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

M140. Cancer Cell Biology. (5) (Same as Molecular, Cell, and Developmental Biology M140.) Lecture, three hours; discussion, one hour. Requisite: Molecular, Cell, and Developmental Biology 165A. Cancer causes and genetics. Effects of cell transformation on cell growth and metabolism. Altered cell cycle, metabolism, and differentiation in cancer pathways. Tumor microenvironment contributions to cancer malignancy, including angiogenesis, metastasis, and immune system evasion. Letter grading.

149. Research Group Seminars: Biological Chemistry. (2 to 3) Seminar, two hours. Designed for undergraduates students who are part of research group. Discussion of research methods and current literature in field or of research of faculty members or students. May be repeated for credit. P/NP grading.

199. Directed Research or Senior Project in Biological Chemistry. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for maximum of 16 units. Individual contract required. P/NP or letter grading.

Graduate Courses

201A-201B. Biological Chemistry. (5-5) Lecture, five hours. Preparation: organic chemistry. Open to nonmedical students with consent of instructor. Introduction for first-year medical students and runs throughout School of Medicine’s second semester. General biochemistry with emphasis on mammalian systems. Structure, function, and metabolism of major cellular components. To receive credit, both courses must be taken together in same academic year. In Progress (201A) and S/U (201B) grading.

251A-251B-251C. Seminars: Transcriptional Regulation. (2-2-2) Seminar, two hours. Advanced courses on mechanisms of gene transcription in both eukaryotes and prokaryotes intended for students actively working or highly interested in transcription. S/U grading.
Faculty Committee

John J. Colicelli, PhD (Biological Chemistry)
Hilary A. Collier, PhD (Molecular, Cell, and Developmental Biology)
Stephanie M. Correa, PhD (Integrative Biology and Physiology)
Andrew Goldstein, PhD (Molecular, Cell, and Developmental Biology; Urology)
Thomas G. G. Graeber, PhD (Molecular and Medical Pharmacology)
Aldons J. Lusis, PhD (Human Genetics; Medicine; Microbiology, Immunology, and Molecular Genetics)
Karen M. Lyons, PhD (Molecular, Cell, and Developmental Biology; Orthopaedic Surgery)
Megan M. McEvoy, PhD (Society and Genetics)
Carlos Portera-Caillau, PhD (Neurobiology)
Margot E. Quinlan, PhD (Chemistry and Biochemistry)
Felix E. Schweizer, PhD (Neurobiology)

Overview

The Biomedical Research minor is designed to incorporate research into undergraduate science education at UCLA. Applications may be submitted by any UCLA student who meets the admission requirements and has the potential to satisfy the requirements. Students explore the scientific questions and experimental approaches of biomedical research. Faculty members and staff facilitate early placement of students into laboratories on campus for independent research. Students are trained to analyze research literature, present their research in oral and poster formats, and appreciate the ethical, historical, and philosophical issues facing biomedical research.

Undergraduate Minor

Biomedical Research Minor

Admission

Admission to the Biomedical Research minor is competitive, and application follows completion of Biomedical Research 5HA, 10H, Honors Collegium 70A, Molecular, Cell, and Developmental Biology 30H, or an approved alternative course. Applications (see the minor website) must be submitted no later than the first term of the junior year. Students must be in good academic standing and demonstrate a genuine interest in research. All degree requirements must be in addition to units for the minor. Successful completion of the minor is subject to approval. Students with a grade of less than B (3.0) in any minor course or a cumulative grade-point average of less than 3.0 are subject to dismissal from the minor.

Undergraduate Minor

Biomedical Research Minor

Admission

Admission to the Biomedical Research minor is competitive, and application follows completion of Biomedical Research 5HA, 10H, Honors Collegium 70A, Molecular, Cell, and Developmental Biology 30H, or an approved alternative course. Applications (see the minor website) must be submitted no later than the first term of the junior year. Students must be in good academic standing and demonstrate a genuine interest in research. All degree requirements must be in addition to units for the minor. Successful completion of the minor is subject to approval. Students with a grade of less than B (3.0) in any minor course or a cumulative grade-point average of less than 3.0 are subject to dismissal from the minor.

Policies

Transfer credit for any required course is subject to approval. Students with a grade of less than B (3.0) in any minor course or a cumulative grade-point average of less than 3.0 are subject to dismissal from the minor.

Each minor course must be taken for a letter grade. Successful completion of the minor is indicated on the transcript and diploma.

Biomedical Research Lower-Division Courses

1A. Science in Your Time. (5) Lecture, three hours; discussion, one hour. Exploration of current topics in biology from media sources like news organizations and TED Talks, tracing information back to primary research. Students learn to critically evaluate primary sources. Discussion of bias in science producing primary research from undergraduate education through tenure faculty, and medicine and national science funding (National Institutes of Health and National Science Foundation). Addresses lack of black and Latinx representation and its impact on science valued by current system. Letter grading.

5HA. Biomedical Research: Concepts and Strategies. (4) Lecture, three hours. Designed for freshmen/sophomores. Exploration of scientific concepts and experimental approaches through seminars by UCLA faculty members on their cutting-edge research. Topics may include areas of study such as cancer, stem cells, and infectious disease, as well as more basic research in cell and molecular biology. Letter grading.

5HB. Biomedical Research: Essential Skills and Concepts. (4) Lecture, three hours; discussion, one hour. Requisite: course 5HA. Designed for freshmen/sophomores. Exploration of scientific concepts and experimental approaches through seminars by UCLA faculty members on their cutting-edge research. Topics may include areas of study such as cancer, stem cells, and infectious disease, as well as more basic research in cell and molecular biology. Student investigation of one or more laboratories on campus and presentation of brief synopsis of each research project from one laboratory per letter grading.

10H. Research Training in Genetics, Genomics, and Biocomputing. (8) Lecture, 90 minutes; laboratory, six hours; computer laboratory, 90 minutes. Limited to 30 students. Basic training in biological research, including techniques in genetics, model organism, bioinformatics, functional genomics, electron microscopy.
Part of Undergraduate Research Consortium in Functional Genomics sponsored by Howard Hughes Medical Institute Professors Program. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion directed toward critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to Honors students. Designated as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Upper-Division Courses

100HA-100HB-100HC. Advanced Research in Genes, Genetics, and Genomics. (4-4-4) Lecture, two hours; laboratory, 10 hours. Requisite: course 10H. Course 100HA is requisite to 100HB, which is requisite to 100HC. Designed for undergraduates who are committed to pursuing research. Advanced research training in genetics, cell and developmental biology, bioinformatics, functional genomics. Techniques include electron microscopy, other light microscopies, immunohistochemistry. Part of Undergraduate Research Consortium in Functional Genomics sponsored by Howard Hughes Medical Institute Professors Program. Letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 85S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

193H. Journal Club Seminars: Current Topics in Biomedical Research. (2) Seminar, three hours. Limited to Biomedical Research minor students. Presentation and discussion of recent papers from primary literature in biosciences. Letter grading.

194H. Research Group Seminars: Data Presentation in Biomedical Research. (2) Seminar, three hours. Requisite: course 193H. Limited to Biomedical Research minor students. Preparation of oral presentations based on student laboratory research at UCLA. May be repeated for credit. Letter grading.

199. Directed Biomedical Research. (4) Tutorial, 12 hours. Limited to Biomedical Research minor students. Supervised individual research under guidance of faculty mentor. Culminating report describing progress and signed by student and faculty mentor required. May be repeated for credit. Individual contract required. Letter grading.

BIOSTATISTICS
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Biostatistics
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Department e-mail

Sudipto Banerjee, PhD, Chair
Thomas R. Belin, PhD, Vice Chair

Faculty Roster

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Thomas R. Belin, PhD
Ronald S. Brookmeyer, PhD
Catherine M. Crespi, PhD, in Residence
Michele Guindani, PhD
Grace H.J. Kim, PhD, in Residence
Gang Li, PhD
Jingyi Jessica Li, PhD
Honghu Liu, PhD
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Hua Zhou, PhD

Professors Emeriti
Abdelmonem A. Affi, PhD
William G. Cumberland, PhD
Dorota M. Dabrowska, PhD

Assistant Professors
Hilary J. Aralis, PhD, in Residence
Sean A. Darling-Hammond, PhD
Andrew J. Holbrook, PhD

Adjunct Professors
David Elashoff, PhD
David W. Gjertson, PhD

Martin L. Lee, PhD
Jason Hall Moore, PhD

Adjunct Associate Professor
Jin Zhou, PhD

Adjunct Assistant Professor
Zhe Fei, PhD

Overview
In recent years biostatistics has become one of the most stimulating areas of applied statistics. The field encompasses the methodology and theory of statistics as applied to problems in the life and health sciences. Biostatisticians are trained in the skilled application of statistical methods to the solution of problems encountered in public health and medicine. They collaborate with scientists in nearly every area related to health and have made major contributions to our understanding of AIDS, cancer, genetics, bioinformatics, and immunology, as well as other areas. Further, biostatisticians spend a considerable amount of time developing and evaluating the statistical methodology used in these projects. The Department of Biostatistics offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Biostatistics and, through the Fielding School of Public Health, Biostatistics MPH (see Public Health Schoolwide Programs). All students receive a balanced education, blending theory and practice.

A degree in biostatistics prepares students for work in a wide variety of challenging positions in government, industry, and education. Graduates have found careers involving teaching, research, and consulting in such fields as medicine, public health, life sciences, and survey research. There has always been a strong demand for well-trained biostatisticians; graduates have had little difficulty finding employment well suited to their particular interests.

Graduate Majors

Biostatistics MS, PhD

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Master of Data Science in Health

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.
Biostatistics

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1 Seminar) one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery. No L&LA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must have academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100A. Introduction to Biostatistics. (4) Lecture, three hours; discussion, one hour; laboratory, one hour. Preparation: one biological or physical sciences course. Suitable for juniors/seniors. Limited to nonmajors. Not open for credit to students with credit for course 120. Students who have completed courses in statistics may enroll only with consent of instructor. Introduction to methods and concepts of statistical analysis. Sampling situations, with special attention to those occurring in biological sciences. Topics include distributions, tests of hypotheses, estimation, types of error, significance and confidence levels, sample size. P/NP or letter grading.

100B. Introduction to Biostatistics. (4) Lecture, three hours; discussion, one hour; laboratory, one hour. Requisite: course 100A or Public Health 200A. Introduction to analysis of variance, linear regression, and correlation analysis. P/NP or letter grading.

120. Biostatistics in the Health Professions. (3) Lecture, three hours; discussion, one hour. Limited to Public Health majors. Not open for credit to students with credit for course 100A. Introduction to basic concepts in biostatistical analysis, presentation of data, and biostatistical aspects of design of public health studies. Special emphasis on application of biostatistical concepts to public health issues. Interpretation and communication of biostatistical findings is stressed. Focus or concepts and applications rather than mathematical theory. Letter grading.

197. Individual Studies in Biostatistics. (2 to 4) Tutorial, four hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200A. Methods in Biostatistics A. (4) Lecture, three hours; discussion, one hour; laboratory, one hour. First course in biostatistical methods intended for graduate students in biostatistics to prepare students pursuing careers as practicing biostatisticians. Prior knowledge of probability or statistics not assumed. Students should have working knowledge of calculus and be very comfortable with mathematical and algebraic reasoning. Introduction to basic concepts in analysis, presentation of data, and statistical aspects of design of studies. Special emphasis is given to application of statistical methods to public health, medical, biological, and health perception issues. Emphasis on methodology, applications, and concepts rather than mathematical statistics or probability theory. S/U or letter grading.


200C. Methods in Biostatistics C. (4) Lecture, three hours; discussion, one hour; laboratory, one hour. Pre-referred preparation: courses 200A, 200B, and previous courses in linear regression. Required for students pursuing graduate degrees in biostatistics. Generalized linear models, description, and analysis of discrete data with applications to public health. Students are trained to identify different types of discrete data; use statistical software to identify, summarize, and analyze data; use appropriate statistical techniques for analyzing public health data using generalized linear models; apply generalized estimating equations for analyzing longitudinal data; and write formal statistical report of data analysis for public health researcher. S/U or letter grading.

210A. Topics in Applied Regression. (4) Lecture, three hours; discussion, one hour; laboratory, one hour. Requisites: courses 100A and 100B, or 200A and 200B. Designed for master’s and doctoral students in fields outside biostatistics. Topics in linear regression and other related methods. When and how to use linear regression and related methods and how to properly interpret results. Heavy emphasis on practical application as opposed to theoretical development. S/U or letter grading.

210B. Topics in Applied Regression. (4) Lecture, three hours; discussion, one hour; laboratory, one hour. Requisite: course 201A. Further studies in multiple linear regression, including applied multiple regression models, diagnostics and model assessment, factorial and repeated measured analysis of variance models, nonlinear regression, logistic regression, propensity scores, matching versus stratification, Poisson regression, and classification tree applications. Applications to biomedical and public health scientific problems. Letter grading.

220A-220B. Mathematical Statistics A, B. (4–4) Lecture, three hours; discussion, one hour. Requisite for master’s and doctoral students in fields outside biostatistics. Special emphasis on theoretical development. S/U or letter grading.

220C. Theory of Bayesian Statistics. (4) Lecture, three hours; discussion, one hour. Requisites: courses 200A, 200B, 202A, 202B, or equivalent, or consent of instructor. Mathematical underpinnings of Bayesian approach to statistical inference; covered form computations; computational hierarchical models, model selection, hypothesis testing, confidence intervals, nonparametric methods. S/U or letter grading.

223A. Introduction to Data Management and Statistical Computing. (4) Lecture, three hours; laboratory, two hours. Prior knowledge of programming not assumed. Coverage of mechanics of converting data from whatever form it may arrive and preparing it for processing by statistical software. Letter grading.

223B. Introduction to Data Science. (4) Lecture, three hours; laboratory, two hours. Requisite: course 223A. Principles of data science. Topics include Health Insurance Portability and Accountability Act (HIPAA) and data ethics, database design and data retrieval, data merging and cleaning, data visualization and web presentation, reproducible research, collaborative research, cluster computing, and cloud computing. S/U or letter grading.

M208. Introduction to Demographic Methods. (4) (Same as Sociology M213A.) Lecture, four hours. Preparation: one introductory statistics course. Introduction to methods of demographic analysis. Topics include demographic rates, standardization, decomposition of differences, life tables, survival analysis, cohort analysis, birth interval analysis, models of population growth, stable populations, population projection, and demographic data sources. Letter grading.


230. Statistical Graphics. (4) Lecture, three hours; laboratory, one hour. Requisite: course 200A (may be taken concurrently). Graphical data analysis emphasizes use of visual displays of quantitative data to gain insight into data structure by exploring patterns and associations, and to enhance numerical analyses, especially assumption validity checking. Principles of graph construction, graphical methods, and perception issues. S/U or letter grading.

232. Statistical Power and Sample Size Methods for Health Research. (4) Lecture, three hours; laboratory, one hour. Requisites: courses 200A, 200B. Strongly recommended: variety of other graduate coursework. Sample size and power methods for common study designs, including comparison of means and proportions, ANOVA, time-to-event data, group sequential trials, linear regression, cluster randomized trials and multilevel data, with emphasis on designing randomized trials. Discussion also of multiple endpoints. S/U or letter grading.


233. Statistical Issues in Global Health. (4) Lecture, three hours. Requisite: course 200C. Recommended requisite or corequisite: course M215. Consideration of statistical issues in addressing contemporary global health challenges. Topics include statistical methods for analyzing public health surveillance data, methods and models for measuring and forecasting health of
populations, epidemic modeling, agent-based modeling, evaluating and addressing sampling issues in public health data, and design and analysis of large-scale observational studies such as vaccine trials and cancer screening programs. Applications to both infectious and noninfectious diseases. Case studies include HIV/AIDS, cancer, pandemic flu, and topical global health challenges such as recent outbreaks of emerging diseases.

M234. Applied Bayesian Inference. (4) (Same as Biomathematics M234.) Lecture, three hours; laboratory, one hour. Requisite: course 200B or another substantial regression course. Bayesian approaches to statistical inference, with emphasis on biomedical applications and concepts rather than mathematical theory. Topics include large sample Bayes inference from likelihoods, noninformative priors, empirical Bayes approaches to linear and nonlinear regression, model selection, Bayesian hypothesis testing, and numerical methods. S/U or letter grading.

M235. Causal Inference. (Same as Psychiatry M235.) Lecture, three hours; discussion, one hour. Requisite: courses 200C, 202B, or equivalent. Philosophy of causation, classical statistical and causal approaches to disease, causation in medicine, causal inference in observational studies, causal inference with potential outcomes, Rubin causal model, propensity scores, competing perspectives on path analysis and graphical/structural-equation models, experiments with noncompliance, regression adjustment, propensity scores, sensitivity analysis, causal mediation analysis, and principal strata. S/U or letter grading.

M236. Longitudinal Data. (4) (Same as Biomathematics M236.) Lecture, three hours; laboratory, one hour. Requisite: course 200B or another substantial regression course. Analysis of continuous responses for which multivariate normal model may be assumed. Derivation of basic results about longitudinal data, and how to specify mean and variance of longitudinal response. Advanced topics include introductions to clustered, multivariate, and discrete longitudinal data analysis. S/U or letter grading.

M237. Applied Genetic Modeling. (4) (Same as Bioinformatics M207B and Human Genetics M207B.) Lecture, three hours; laboratory, one hour. Requisite: course 200B or another substantial regression course. Introductory material on design and analysis of clinical trials, including adaptive designs for clinical trials, laboratory for hands-on computer analysis of genetic data; laboratory reports required. Course complements M232; students may take either and are encouraged to take both. S/U or letter grading.

M238. Methodology of Clinical Trials. (4) (Same as Biomathematics M284.) Lecture, three hours; discussion, one hour. Requisite: course 200B. Introductory material on design and analysis of clinical trials, including adaptive designs for clinical trials and computer-assisted randomization schemes. S/U or letter grading.

M239. Mathematical and Statistical Phylogenetics. (4) (Same as Biomathematics M211 and Human Genetics M207A.) Lecture, three hours; laboratory, one hour. Preparation: undergraduate course in statistics and probability. Theoretical models in molecular evolution focusing on phylogenetic techniques. Topics include statistical methodology underlying genetic analysis of both quantitative and phenotypic traits. Laboratory for hands-on computer analysis of genetic data; laboratory reports required. Course complements M272; students may take either and are encouraged to take both. S/U or letter grading.

M240. Advanced Probability and Statistics. (4) Lecture, three hours; discussion, one hour. Requisite: course 202A or equivalent. Basic concepts of random variables, functions of random variables, moment generating functions, central limit theorems, and large sample theory. S/U or letter grading.

M241. Spatial Modeling and Data Analysis for Health Sciences. (4) Lecture, three hours; discussion, one hour. Requisite: courses 200A, 200B, 202A, 202B. Introduction of various methods for exploring, modeling, and analyzing spatially referenced datasets, with emphasis on environmental/natural sciences and public health. Spatial statistical theory and foundations for carrying out principled and scientifically rigorous inference on spatially referenced datasets and computational methods and algorithms for executing statistical modeling in practice. Practical examples and applications demonstrated using open-source statistical software environment R and datasets from diverse fields, such as public health, environmental health, natural sciences, and public policy.

M244. Master’s Seminar and Research Resources for Graduating Biostatistics MS Students. (4) Seminar, three hours. Introduction to resources for finding statistical literature. Discussion of principles of making statistical inferences and reporting results. Includes writing abstracts and key words. Discussion of journal article preparation and submission format and refereeing process to help students make progress on their master’s reports. Letter grading.


M246. Doctoral Students Seminar. (2) Seminar, two hours. Requisites: courses 200C, 202B. Limited to Biostatistics majors. Biostatistics doctoral seminar, with presentations given by students on current research topics in biostatistics and feedback provided by instructor and peers. S/U grading.

M250A. Linear Statistical Models. (4) Lecture, three hours; discussion, one hour. Recommended preparatory work: statistical inference. Designed for students pursuing graduate degrees in biostatistics. Theoretical foundation for linear models with applications to different types of problems in biomedical field. Emphasis on understanding of theory and applications of linear models. Letter grading.

M250B. Linear Statistical Models. (4) Lecture, three hours; discussion, one hour. Requisites: courses 200A, 202A, 202B. Theoretical foundation for linear models with applications to different types of problems in biomedical field. Emphasis on mathematical training and understanding of theory of linear models, including matrix algebra. Topics may include theory and tests for various types of model misspecification, such as heteroscedasticity and outliers. Other selected topics may include ridge regression, Bayesian estimation in linear models, REML, prediction, and model selection issues. Some data analysis, instructions for STATA provided. Letter grading.

M250C. Multivariate Biostatistics. (4) Lecture, three hours; discussion, one hour. Requisites: courses 250A, 250B. Recommended requisites: courses 255A, 255B. Theory and methods for multivariate analysis with non-exclusive focus on biomedical applications. Topics include multivariate normal distribution, graphical models, component analysis, factor analysis, clustering, discriminant analysis, models for longitudinal and clustered data. S/U or letter grading.

M255A. Advanced Probability and Statistics. (4) Lecture, three hours; discussion, one hour. Requisites: course 202A or equivalent. Mathematics 131A or consent of instructor. Survey of probability theory, with special emphasis on applications to biostatistics. Topics include probability spaces and random variables, generating functions, conditioning, discrete-time martingales, applications to finite sample analysis of statistical procedures. S/U or letter grading.

M255B. Advanced Probability and Statistics. (4) Lecture, three hours; discussion, one hour. Requisites: course 255A or consent of instructor, Mathematics 131A. Survey of advanced topics in probability and mathematical statistics, with special emphasis on applications to biostatistics. Topics include laws of large numbers, central limit theorems, basic concepts from stochastic processes, and applications to large sample theory and to regression modeling.

M257. Computational Methods for Biostatistical Research. (4) Formerly numbered 257.) (Same as Biostatistics M257.) Lecture, three hours; discussion, one hour. Requisites: courses 200A, 200B, 202A, 202B. Introduction of various methods for exploring, modeling, and analyzing spatially referenced datasets, with emphasis on environmental/natural sciences and public health. Theoretical and foundational topics for carrying out principled and scientifically rigorous inference on spatially referenced datasets and computational methods and algorithms for executing statistical modeling in practice. Practical examples and applications demonstrated using open-source statistical software environment R and datasets from diverse fields, such as public health, environmental health, natural sciences, and public policy.

M269. Doctoral Students Seminar. (2) Seminar, two hours. Requisites: courses 200C, 202B. Limited to Biostatistics majors. Biostatistics doctoral seminar, with presentations given by students on current research topics in biostatistics and feedback provided by instructor and peers. S/U grading.


M272. Theoretical Genetic Modeling. (4) (Same as Biomathematics M207A and Human Genetics M207A.) Lecture, three hours; discussion, one hour. Requisites: Mathematics 115A, 131A, Statistics 100B. Mathematical models in statistical genetics. Topics include population genetics, genetic epidemiology, gene mapping, design of genetics experiments, DNA sequence analysis, and molecular phylogeny. S/U or letter grading.

M273. Machine Learning. (4) Lecture, three hours. Requisite: course 200C and Mathematics 115A. Covers theoretical underpinnings and practical applications of modern machine-learning and other data-intensive algorithms, including supervised learning, clustering, and random forest algorithms. Students learn to download and use variety of software tools that are available for free on web. S/U or letter grading.


M275. Advanced Survival Analysis. (4) Lecture, three hours. Discussion, one hour. Requisites: courses 200A, 200B. Time-to-event data arise in many fields, such as medicine, reliability theory, demography, sociology, economics, and astronomy. Overview of common stochastic process models and methods for analysis of such data. Examples include continuous-time Markov chain and semi-Markov models, and frailty and copula models. S/U or letter grading.

M276. Inferential Techniques that Use Simulation. (4) Lecture, three hours; discussion, one hour. Requisites: Statistics 200A, 200B. Recommended: course 213. Theory and application of recently developed techniques for statistical inference that use computer simulation. Topics include Markov chain Monte Carlo, data augmentation, stochastic relaxation, and sampling/importance resampling algorithm. S/U or letter grading.


M285. Advanced Topics: Recent Developments. (4) Lecture, three hours; discussion, one hour. Advanced topics and developments in biostatistics not covered in other courses. Possible topics include time-series analysis, classification procedures, correspondence analysis, etc. S/U or letter grading.

Biostatistics / 271
296. Seminar: Research Topics in Biostatistics. (1 to 4) Seminar, two hours. Advanced study and analysis of current topics in biostatistics. Discussion of current research and literature in research specialty of faculty member teaching course. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Teaching apprenticeship under active guidance and supervision of regular faculty member. Normally for graduate students at UCLA. Apprentices meet with faculty and other apprentice teachers to discuss both substance of curriculum and appropriate approaches to teaching, learning, and evaluation. May be repeated for credit. S/U grading.

400. Field Studies in Biostatistics. (4) Fieldwork, to be arranged. Field observation and studies in selected community organizations for health promotion or medical care. Students design field plans and re-program training documentation on form available from Student Affairs Office. May not be applied toward MS minimum course requirement; 4 units may be applied toward 44-unit minimum total required for MPH degree. Letter grading.


402B. Biostatistical Consulting. (4) Discussion, two hours; laboratory, two hours. Requisite: course 402A. Principles and practices of biostatistical consulting. May be repeated for credit. S/U grading.

406. Applied Multivariate Biostatistics. (4) Lecture, three hours; laboratory, one hour. Preparation: at least two upper-division research courses. Requisite: course 100B. Use of multiple regression, principal components, factor analysis, discriminant function analysis, logistic regression, and canonical correlation in biometrical analysis. S/U (optional only for non-division majors) or letter grading.

409. Doctoral Statistical Consulting Seminar. (2) Seminar, one hour; laboratory, four hours. Designed for doctoral students. Development of experience and expertise in collaborating with faculty in Schools of Public Health and Medicine. Students meet with investigators and develop design and protocol for data analysis, implement data protocol when data is obtained, and write up study with lead investigators. S/U grading.

410. Statistical Methods in Clinical Trials. (4) Lecture, three hours; discussion, two hours. Requisites: courses 100A, 100B. Study of design and analysis of clinical trials. Topics include: ethical considerations, randomization, placebo use, sample size determination, analysis of variance, survival analysis. S/U grading.


413. Introduction to Pharmaceutical Statistics. (4) Lecture, three hours; discussion, one hour. Requisites: courses 100A, 100B. Exploration of various types of statistical techniques used in pharmaceutical and related industries. Topics include bioassay and other assay techniques (e.g., ELISAs and FACS analysis), quality control techniques, and pharmacokinetic and pharmacodynamic modeling. S/U or letter grading.

414. Principles of Sampling. (4) Lecture, three hours; discussion, one hour. Requisite: course 100B, Epidemiology 100. Statistical aspects of design and implementation of sample survey. Techniques for analysis of data, including estimates and standard errors. Avoiding improper use of survey data. Letter grading.

485. Teacher Preparation in Biostatics. (2) Seminar, two hours. Preparation: 18 units of cognate courses in area of specialization. May not be applied toward master's degree minimum total course requirement. May be repeated for credit. S/U grading.

495. Effective Integration of Biostatistical Concepts in Public Health Research. (4) Tutorial, to be arranged. Enforced requisites: courses 110A, 110B, 400, 402A. Students meet weekly with their adviser and also work independently on their proposed projects. Course fosters abilities of student to select relevant design and analysis techniques, synthesize knowledge, and apply insights to address public health problems. Oral examination and written report describing how students have used biostatistical methods to assess data from public health study required. May be repeated for credit. S/U grading.

596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. Limited to graduate students. Individual guided studies under direct faculty supervision. Only 4 units may be applied toward MPH and MS minimum course requirement. May be repeated for credit. Letter grading.

597. Preparation for Master’s Comprehensive or Doctoral Qualifying Examinations. (2 to 12) Tutorial, to be arranged. Limited to graduate students. May not be applied toward any degree course requirements. May be repeated for credit. S/U grading.

599. Doctoral Dissertation Research. (2 to 12) Tutorial, to be arranged. May not be applied toward any degree course requirements. May be repeated for credit. S/U grading.

Overview
Issues of brain and behavioral health have become central to the understanding of human development, well-being, and productivity. Sometimes called translational science, the focus on evidence-based prevention and treatment programs at multiple levels—individual, family, school, community—has become a primary focus of the behavioral health fields. Key features of the approach include an understanding of the basic science of the brain and behavioral issues at hand, their interaction with contextual factors, the development of programs and policies derived directly from that science, and the rigorous evaluation of those programs and policies.

Undergraduate Minor
Brain and Behavioral Health Minor
The minor offers students the opportunity to learn about how to apply scientific advances to the promotion of brain and behavioral health across the lifespan. The Brain and Behavioral Health minor is intended to supplement the education of undergraduate students enrolled in the Cognitive Science, Human Biology and Society, Neuroscience, Psychobiology, and Psychology majors. As a minor, the program is able to take advantage of the core knowledge gained by students from their majors and focus on how to use that knowledge to develop programs and policies focusing on brain and behavioral health. The program offers students depth in a topic (e.g., autism, dementia) that is required when trying to solve a pressing problem.

Admission
To enter the minor students must have an overall grade-point average of 2.7 or better, have completed Psychiatry 79, and submit an application demonstrating interest in the application of science to improving brain and behavioral health by the end of the fall quarter of the student's third year.

The Minor
Required Lower-Division Courses (5 units): Psychiatry 79.

Required Upper-Division Courses (24 units): (1) Psychiatry 174 or 176; (2) three upper-division electives selected from Neuroscience CM123, C177, M187, 192CX, Physiological Sciences 140, Psychiatry 174 or 176 (whichever course was not applied above), 175, M182, Psychol M107, 127B, 129C, 152, 161, 164, Society and Genetics 102, 141, M144; (3) two capstone courses: Psychiatry 177A, 177B.

Policies
Each course must be completed with a grade of C or better. A minimum of 20 units applied toward the minor requirements must be in addition to units
applied toward major requirements or another minor. Each minor course must be taken for a letter grade. Successful completion of the minor is indicated on the transcript and diploma.

**CHEMICAL AND BIOMOLECULAR ENGINEERING**

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Panagiotis D. Christofides, PhD, Chair
Philippe Sautet, PhD, Vice Chair
Dante A. Simonetti, PhD, Vice Chair

Faculty Roster

Professors
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Panagiotis D. Christofides, PhD (William D. Van Vorst Professor of Chemical Engineering Education)
Yoram Cohen, PhD
James F. Davis, PhD
Vasilios I. Manoussiouthakis, PhD
Harold G. Monbouquet, PhD
Stanley J. Osher, PhD
Philippe Sautet, PhD (Levi James Knight, Jr. Term Professor of Excellence)
Yi Tang, PhD (Ralph M. Parsons Foundation Professor of Chemical Engineering)

Professors Emeriti
Vijay K. Dhir, PhD
Robert F. Hicks, PhD
Eldon L. Knuth, PhD
James C. Liao, PhD
Yunfeng Lu, PhD
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Assistant Professors
Nasim Annabi, PhD
Carissa N. Eisler, PhD
Yuzhang Li, PhD
Carlos G. Morales-Guio, PhD
Junyoung O. Park, PhD
Joseph Peterson, PhD
Samanvaya Srivastava, PhD
Thaiesha A. Wright, PhD

Overview
The Department of Chemical and Biomolecular Engineering conducts undergraduate and graduate programs of teaching and research that focus on the areas of biomolecular engineering, systems engineering, and advanced materials processing and span the general themes of energy/environment and nanotechnology. Aside from the fundamentals of chemical engineering (thermodynamics, transport phenomena, kinetics, reactor engineering and separations), particular emphasis is given to air pollution, biomaterials, biomanoengineering, chemical vapor deposition, environmental modeling, membrane science, metabolic engineering, molecular simulation, plasma processing, pollution prevention, polymer engineering, process systems engineering, protein engineering, semiconductor processing, and synthetic biology.

Students are trained in the fundamental principles of these fields while acquiring sensitivity to society’s needs—a crucial combination needed to address the challenge of continued industrial growth and innovation in an era of economic, environmental, and energy constraints.

The undergraduate curriculum leads to a Bachelor of Science (BS) in Chemical Engineering and includes the standard core curriculum, as well as biomedical engineering, biomolecular engineering, environmental engineering, and semiconductor manufacturing engineering options. The department also offers graduate courses and research leading to Master of Science (MS) and Doctor of Philosophy (PhD) degrees. Both graduate and undergraduate programs closely relate teaching and research to important industrial problems.

Undergraduate Major

Chemical Engineering BS

The Chemical Engineering curricula offer a high-quality, professionally oriented education in modern chemical engineering. The biomedical engineering, biomolecular engineering, environmental engineering, and semiconductor manufacturing engineering options provide students with an opportunity for exposure to a subfield of chemical and biomolecular engineering. In all cases, balance is sought between engineering science and practice.

The chemical engineering program is accredited by the Engineering Accreditation Commission of ABET.

Capstone Major

The Chemical Engineering major is a designated capstone major. The capstone project requires students to first work individually and learn how to integrate chemical engineering fundamentals taught in prior required courses; they then work in groups to produce a paper design of a realistic chemical process using appropriate software tools. Graduates should be able to design a chemical or biological system, component, or process that meets technical and economical design objectives, with consideration of environmental, social, and ethical issues, as well as sustainable development goals. In addition, they should be able to apply their knowledge of mathematics, physics, chemistry, biology, and chemical and biological engineering to analysis and design of chemical and biochemical processes and products; function on multidisciplinary teams; identify, formulate, and solve complex chemical and biological engineering problems; and communicate effectively, both orally and in writing.

Learning Outcomes

The Chemical Engineering major has the following learning outcomes:

- Application of knowledge of mathematics, physics, chemistry, biology, and chemical and biological engineering, especially to integration of molecular- to micro-scale information into macro-scale analysis and design of chemical and biochemical processes and products
- Design of a chemical or biological system, component, or process that meets technical and economical design objectives with consideration of environmental, social, and ethical issues, as well as sustainable development goals
- Identification, formulation, and solution of complex chemical and biological engineering problems
- Function as a productive member of a multidisciplinary team
- Effective oral and written communication

Requirements

Chemical Engineering Core Option

Preparation for the Major

Required: Chemical Engineering 10; Chemistry and Biochemistry 20A, 20B, 20L, 30A, 30AL, 30B; Civil and Environmental Engineering M20 or Mechanical and Aerospace Engineering M20; Mathematics 31A, 31B, 32A, 32B, 33A, 33B; Physics 1A, 1B, 1C, 4AL.

The Major

Required: Chemical Engineering 45, 100, 101A, 101B, 101C, 102A, 102B, 103, 104A, 104B, 106, 107, 109; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; two capstone analysis and design courses (Chemical Engineering 108A, 108B); and two elective courses (8 units) from Chemical Engineering 110, C111, C112, 113, CM114, C115, C116, C118, C119, C121, C125, C128, C135, C140.

For information on UC, school, and general education requirements, see the Samueli school section in College and Schools.

Biomedical Engineering Option

Preparation for the Major

Required: Chemical Engineering 10; Chemistry and Biochemistry 20A, 20B, 20L, 30A, 30AL, 30B; Civil and Environmental Engineering M20 or Mechanical and Aerospace Engineering M20; Mathematics 31A, 31B, 32A, 32B, 33A, 33B; Physics 1A, 1B, 1C, 4AL.
The Major

Required: Chemical Engineering 45, 100, 101A, 101B, 101C, 102A, 102B, 103, 104A, 104B, 106, 107, 109, Chemistry and Biochemistry 153A; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; two capstone analysis and design courses (Chemical Engineering 1115, 121, 121C, 121S, CM127, C135, or CM145 (another chemical engineering elective may be substituted with approval of the faculty adviser).

For information on UC, school, and general education requirements, see the Samueli school section in College and Schools.

Biomolecular Engineering Option

Preparation for the Major

Required: Chemical Engineering 10; Chemistry and Biochemistry 20A, 20B, 20L, 30A, 30AL, 30B; Civil and Environmental Engineering M20 or Mechanical and Aerospace Engineering M20; Mathematics 31A, 31B, 32A, 32B, 33A, 33B; Physics 1A, 1B, 1C, 4AL.

The Major

Required: Chemical Engineering 45, 100, 101A, 101B, 101C, 102A, 102B, 104A, 104D, 107, 109, C115, C125, CM145; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; two capstone analysis and design courses (Chemical Engineering 108A, 108B); and one biobimolecular elective course (4 units) from Bioengineering C105, C183, Chemical Engineering C112, Chemistry and Biochemistry C105, 153A, or C159 (another chemical engineering elective may be substituted with approval of the faculty adviser).

For information on UC, school, and general education requirements, see the Samueli school section in College and Schools.

Graduate Major

Chemical Engineering MS, PhD Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Chemical Engineering Lower-Division Courses

2. Technology and Environment. (4)
   Lecture, four hours; outside study, eight hours. Natural and anthropogenic flows of materials at global and regional scales. Case studies of natural cycles include global warming (CO₂ cycles), stratospheric ozone depletion (chlorine and ozone cycles), and global nitrogen cycles. Flow of materials in industrial economies compared and contrasted with natural flows; presentation of lifecycle methods for evaluating environmental impact of processes and products. P/NP or letter grading.

10. Introduction to Chemical and Biomolecular Engineering. (1)
   Lecture, one hour; outside study, two hours. General introduction to field of chemical and biomolecular engineering. Description of how chemical and biomolecular engineering analysis and design skills are applied for creative solution of current technological problems in production of microelectronic devices, design of chemical plants for minimum environmental impact, application of nanotechnology to chemical sensing, and genetic level design of recombinant microbes for chemical synthesis. Letter grading.

19. Fiat Lux Freshman Seminars. (1)
   Seminar, one hour. Discussion of critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

45. Biomedical Engineering Fundamentals. (4)
   Lecture, four hours; discussion, one hour; outside study, seven hours. Recommended requisites: Chemistry 20A, 20L, 30A, 30L. Intended for those students who have not taken Life Sciences 2, 3, and Chemistry 153A. Fundamentals of modern biomolecular engineering. Topics include structure and function of biomolecules, central dogma of molecular biology, cellular information and energy processing, and experimental methods, with strong emphasis on applications in medicine, industry, and bioenergy. Letter grading.

99. Student Research Program. (1 to 2)
   Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100. Fundamentals of Chemical and Biomedical Engineering. (4)
   Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: Chemistry 20B, 20L (not enforced), Mathematics 32B (may be taken concurrently), Physics 1A. Introduction to analysis and design of chemical processes. Material and energy balances. Introduction to programming in MATLAB. Letter grading.

101A. Transport Phenomena I. (4)

101B. Transport Phenomena II: Heat Transfer. (4)
   Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: course 101A. Introduction to analysis of heat transfer in chemical, biological, materials, and molecular processes. Fundamentals of thermal energy transport, molecular-level heat transfer in gases, liquids, and solids, forced and free convection, radiation, and engineering analysis of heat transfer in process systems. Letter grading.

101C. Mass Transfer. (4)
   Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: course 101B. Introduction to analysis of mass transfer in systems of interest to chemical engineering practice. Fundamentals of mixture species transport, Fick law of diffusion, diffusion in chemically reacting flows, interphase mass transfer, multicomponent systems. Letter grading.

102A. Thermodynamics I. (4)
   Lecture, four hours; discussion, one hour; outside study, seven hours. Introduction to thermodynamics of chemical and biological processes. Work, energy, heat, and first law of thermodynamics. Second law, extremum principles, entropy, and free energy. Ideal and real gases, property evaluation. Thermodynamics of flow systems. Applications of first and second laws in biological processes and living organisms. Letter grading.

102B. Thermodynamics II. (4)

103. Separation Processes. (4)
   Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: courses 100, 101B. Application of principles of heat, mass, and momentum transport to design and operation of separation processes such as distillation, gas absorption, filtration, and reverse osmosis. Letter grading.
104A. Chemical and Biomolecular Engineering Laboratory I. (4) Lecture, two hours; laboratory, six hours; outside study, four hours. Enforced requisite: course 100B. Recommended: course 102B. Investigation of basic transport phenomena in 10 predetermined experiments, collection of data for statistical analysis and individually written technical reports and group presentations. Design and execution of one original experimental study involving transport, separation, or another aspect of chemical and biomolecular engineering. Basic statistics, data evaluation, confidence limits, comparison of two means and of multiple means, single and multiple variable linear regression, and brief introduction to factorial design of experiments. Oral and poster presentations. Technical writing of sections of technical reports and their contents; writing clearly, concisely, and consistently; importance of word choices and punctuation in multicultural environment and of following required formatting. Letter grading.

104B. Chemical and Biomolecular Engineering Laboratory II. (6) Lecture, four hours; laboratory, eight hours; outside study, four hours; other, two hours. Enforced requisites: courses 101C, 103, 104A. Course consists of four experiments in chemical engineering unit operations, each of two weeks duration. Students present their results both written and orally. Written report includes conclusions on theory, experimental procedures, scale-up and process design, and error analysis. Letter grading.

104C. Semiconductor Processing. (3) Lecture, four hours; outside study, five hours. Enforced requisite: course 101C. Enforced corequisite: course 104A. Basic engineering principles of semiconductor unit operations, including fabrication and characterization of semiconductor devices. Investigation of processing steps involved in making CMOS devices, including wafer cleaning, oxidation, diffusion, lithography, chemical vapor deposition, plasma etching, metallization, and statistical design of experiments and error analysis. Presentation of class results in both written and oral form. Letter grading.

104CL. Semiconductor Processing Laboratory. (3) Laboratory, four hours; outside study, five hours. Enforced requisite: courses 101C, 101C1, 121C. Introduction of semiconductor and memory devices, transistors and other fabricate devices. Letter grading.

104D. Molecular Biotechnology Laboratory: From Gene to Product. (6) Lecture, two hours; laboratory, eight hours; outside study, eight hours. Enforced requisites: courses 101C, 121. Integration of molecular and engineering techniques in modern biotechnology. Cloning of protein-coding gene into plasmid, transformation of construct into E. coli, production of gene product in bioreactor, downstream processing of bioreactor broth to purify recombinant protein, and characterization of purified protein. Letter grading.

106. Chemical Reaction Engineering. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Recommended: courses 100A, 100C, 101C, 102B. Fundamentals of chemical kinetics and catalysis. Introduction to analysis and design of homogeneous and heterogeneous chemical reactors. Letter grading.

107. Process Dynamics and Control. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: courses 101C, 103 (or C125), 106 (or C115). Principles of dynamics modeling and stability analysis for chemical engineering processes. Chemical process control elements. Design and applications of chemical process computer control. Letter grading.

108A. Process Economics and Analysis. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: courses 103 (or C125), 104A, 106 (or C115). Integration of chemical engineering fundamentals such as transport phenomena, thermodynamics, separation operations, and reaction engineering and simple economic principles for purpose of designing chemical processes and evaluating alternatives. Letter grading.

108B. Chemical Process Computer-Aided Design and Analysis. (4, 4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: courses 103 (or C125), 106 (or C115), 108A, Civil and Environmental Engineering M20 (or Mechanical and Aerospace Engineering M20). Enforced corequisite: course C105A. Application of some mathematical and computing tools to chemical engineering design problems; use of simulation programs as automated method of performing steady state material and energy balance calculations. Letter grading.

109. Numerical and Mathematical Methods in Chemical and Biological Engineering. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 101C; course and Engineering M20 or Mechanical and Aerospace Engineering M20. Enforced corequisite: course 101A. Numerical methods for computation of solutions of systems of linear and nonlinear algebraic equations, non-linear ordinary differential equations, and partial equations. Chemical and biomolecular engineering examples used throughout to illustrate application of these methods. Use of MATLAB or another programming environment to write programs based on numerical methods to solve various problems arising in chemical engineering. Letter grading.

110. Introduction to Environmental Thermodynamics. (4) Lecture, four hours; outside study, eight hours. Enforced requisite: course 102B. Principles and engineering applications of statistical and phenomenological thermodynamics. Determination of partition function in terms of simple molecular models and spectroscopic data; nonideal gases; phase transitions and adsorption; nonequilibrium thermodynamics and coupled transport processes. Letter grading.

111C. Computer-Aided Process Design. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: courses 102A, 102B (or Materials Science 130). Fundamentals of cryogenics and cryoengineering science pertaining to industrial low-temperature processes. Basic approaches to analysis of cryofluids and envelopes needed for operation of cryogenic systems; low-temperature behavior of matter, optimization of cryosystems and other special conditions. Concurrency scheduled with course C211. Letter grading.

112. Polymer Processes. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: course 101C. Formation of polymers, criteria for selecting reaction scheme, polymerization techniques, polymer characterization, and mechanical properties. Rheology of macromolecules, polymeric foams, and other processible polymer systems. Polymers in biomedical applications and in microelectronics. Concurrently scheduled with course C212. Letter grading.

113. Air Pollution Engineering. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: courses 101C, 102B. Integrated approach to air pollution, including concentrations of atmospheric pollutants, air pollution standards, air pollution sources and control, and health, environmental, and economic factors used to design processes for isolating and purifying materials like whole cells, enzymes, food additives, or pharmaceuticals that are products of biological and biochemical processes. Concurrency scheduled with course C224. Letter grading.

114. Bioseparations and Bioprocess Engineering. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced corequisite: course 104A. Separation strategies, unit operations, and economic analysis of biological reactors. May be concurrently scheduled with course CM214. Letter grading.

115. Bioseparations and Bioprocess Engineering. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced corequisite: course 104A. Introduction to bioprocessing, biotechnology, and economic factors used to design processes for isolating and purifying materials like whole cells, enzymes, food additives, or pharmaceuticals that are products of biological and biochemical processes. Concurrency scheduled with course CM225. Letter grading.

116. Viruses and Biotechnology. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course C115. Introduction of virology and their varied roles in biotechnology, from utilization of viral enzymes to biotechnologies used to combat viral infectious diseases. Basic concepts of virology. Focus on use of viruses, including bacteriophages and viral proteins, in biotechnology. Examples include bacteriophage display, virus-based nanomaterials, and viral vectors for gene delivery, and vaccines. Covers case studies of viral diseases and biotechnological strategies for diagnosis, prevention,
and treatment. Examples include human immunodeficiency virus and coronaviruses. Students conduct literature searches and write papers on relevant topics of their choice. Concurrently scheduled with course C226. Letter grading.

CM127. Synthetic Biology for Biofuels. (4) (Same as Chemistry CM127.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: Chemistry 20A. Focus is on emerging complex phenotype is common goal of metabolic engineering and synthetic biology. Production of advanced biofuels involves designing and constructing novel metabolic pathways in cells. Such effort stability: profound understanding of biochemistry, protein structure, and biological regulations are aided by tools in bioinformatics, systems biology, and molecular biology. Fundamentals of metabolic biology, protein structure and function, and bioinformatics. Use of systems modeling for metabolic networks to design microorganisms for energy applications. Concurrently scheduled with course CM227. Letter grading.

C128. Hydrogen. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: Chemistry 20A. Electronic, physical, and chemical properties of hydrogen and hydrogen fuel cells. Advanced concepts of electrochemistry and engineering applications. Include classification of crystals and surfaces, analysis of structure and composition of crystals and their sur-
faces, electrodeposition, electrolysis, electrochemistry, and solid-state electrochemistry. May be concurrently scheduled with course CM114. Letter grading.

C135. Advanced Process Control. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 107. Introduction to advanced process control. Topics include (1) Lyapunov stability for autonomous nonlinear systems including consensus in (2) inputs to state interconnections, nonlinear systems, and small gain theorems, (3) design of nonlinear and robust controllers for various classes of nonlinear systems, (4) model predictive control of nonlinear systems, (5) advanced methods for tuning of classical controllers, and (6) introduction to control of distributed parameter systems. Concurrently scheduled with course C235. Letter grading.


CM145. Molecular Biotechnology for Engineers. (4) (Same as Bioengineering CM145.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 45 or Life Sciences 7C. Selected topics in molecular biology that form foundation of biotechnology and biomedical industry today. Topics include recombinant DNA technology, molecular re-
search tools, manipulation of gene expression, directed mutagenesis and protein engineering, DNA-based diagnostics and DNA microarrays, antibody and protein-based diagnostics, genomics and bioin-

C146. Systems Biology: Intracellular Network Iden-
tification and Analysis. (4) Lecture, four hours; out-
side study, eight hours. Requisites: computer skills, Mathematics 31A, 31B, 32A, 32B, 33B. Systems approach to intracellular network identification and analysis. Transcriptional regulatory networks, protein networks, and metabolic networks from epigenetics, gene expression, large-scale expression analysis, and high-throughput techniques provide bases for sys-
tem identification and analysis. Discussion of gene-

M153. Introduction to Microscale and Nanoscale Manufacturing. (4) (Same as Bioengineering M153, Electrical and Computer Engineering M153, and Mechanical and Aerospace Engineering M183E) Lecture, three hours; laboratory, four hours; outside study, five hours. Enforced requisite: Chemistry 20A, Physics 1A, 1B, 1C, 4AL. Introduction to general manufac-
turing processes, mechanisms, constraints, and micro-
fabrication and nanofabrication. Focus on concepts, physics, and instruments of various microfabrication and nanofabrication techniques that have been broadly applied in industry and academia, including various photolithography, physical and chemical deposition methods, and physical and chemical etching methods. Hands-on experience for fabricating microstructures and nanosystems in modern clean-room environment. Letter grading.

188. Special Courses in Chemical Engineering. (4) Seminar, four hours; outside study, eight hours. Spe-
tial topics in chemical engineering for undergraduate students. Topics vary each semester, such as those taught by resident and visiting faculty members. May be repeated once for credit with topic or instructor change. Letter grading.

194. Research Group Seminars: Chemical Engineer-
ing. (4) Seminar, four hours; outside study, eight hours. Designed for undergraduate students who are part of research group. Discussion of research methods and current literature in field. May be repe-
teated once for credit with topic.

199. Directed Research in Chemical Engineering. (2 to 8) Tutorial, to be arranged. Limited to juniors/se-
niors. Supervised individual research or investigation of specified topic. May be repeated for credit with mentor. Culminating project or paper required. May be repe-
teated for credit with mentor approval. Individual con-
tact required; enrollment petitions available in Office of Academic and Student Affairs. Letter grading.

Graduate Courses

200. Advanced Engineering Thermodynamics. (4) Lecture, four hours; discussion, one hour; outside study, eight hours. Requisite: course 102B. Phonon and statistical thermodynamics of chemical and physical systems with engineering applications. Presentation of role of atomic and molecular spectra and intermolecular forces in interpretation of thermodynamic properties of gases, liquids, solids, and plasmas. Letter grading.

201. Methods of Molecular Simulation. (4) Lecture, four hours; outside study, eight hours. Requi-
sites: course 200 or Chemistry C233A or Physics 215A. Modern simulation techniques for classical molecular systems. Monte Carlo and molecular dynamics in var-
ious ensembles. Applications to liquids, solids, and polymers. Letter grading.

210. Advanced Chemical Reaction Engineering. (4) Lecture, four hours; outside study, eight hours. Requi-
sites: courses 101C, 106. Principles of chemical re-
actor analysis and emphasis on si-
multaneous effects of chemical reaction and mass transfer on noncatalytic and catalytic reactions in fixed and fluidized beds. Letter grading.

C211. Cryogenics and Low-Temperature Processes. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Study, seven hours. Fundamentals of cryogenics and cryogenic engineering science pertaining to industrial low-
temperature processes. Basic approaches to analysis of cryogenic systems; low-temperature behavior of matter, optimization of cryosystems and other special conditions. Concurrently scheduled with course C111. Letter grading.

C212. Polymer Processes. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: course 101A. Chemistry 30A. Formation of polymers, criteria for selecting reaction scheme, poly-

CM214. Electrochemical Processes. (4) (Same as Materials Science CM263.) Lecture, four hours; dis-
cussion, one hour; outside study, seven hours. Requi-
sites: course 102B, Mechanical and Aerospace Engi-
neering 105A (or Materials Science 130). Fundamen-
tals of electrochemistry and engineering applications to industrial electrochemical processes. Primary em-
phasis on fundamental approach to analyze electro-
chemical processes. Specific topics include electro-
chemical reactions; electrode on surfaces, electrode
deposition, electrodessitization, electrochemistry, solid-state electrode chemistry. May be concurrently scheduled with course CM114. Letter grading.

CM215. Biochemical Reaction Engineering. (4) (Same as Bioengineering M215.) Lecture, four hours; discussion, one hour; outside study, seven hours. En-
focused requisite: course 101C. Uses previously learned concepts of biophysical chemistry, thermody-
amic, transport phenomena, and reaction kinetics to develop tools needed for technical design and eco-

C216. Surface and Interface Engineering. (4) Lec-
ture, four hours; discussion, one hour; outside study, seven hours. Introduction to surfaces and interfaces of engineering materials, particularly catalytic surface and thin films for solid-state electronic devices. Topics include classification of crystals and surfaces, analysis of structure and composition of crystals and their sur-
faces, electrodeposition, electroless deposition, various ensembles. Applications to liquids, solids, and plasmas. Letter grading.

217. Multimedia Environmental Assessment. (4) Lecture, four hours; discussion, one hour; preparation, two hours; outside study, five hours. Recommended requisites: courses 101C, 102B. Pollutant sources, es-
timation of source releases, waste minimization, trans-
pport and fate of chemical pollutants in environment, in-
termidia transfers of pollutants, multimedia modeling of chemical partitioning in environment, exposure as-

C219. Pollution Prevention for Chemical Processes. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 108A. Systematic methods for design of environment-
ferent processes. Concepts applied to mol-
ecular, unit-operation, and network levels. Synthesis of mass exchange, heat exchange, and reactor net-
works. Concurrently scheduled with course C119. Letter grading.

220. Advanced Mass Transfer. (4) Lecture, four hours; outside study, eight hours. Requisite: course 101C. Advanced treatment of mass transfer, with applica-
tions to industrial separation processes. Gas cleaning, pulmonary bioengineering, controlled release sys-
tems, and reactor design; molecular and constitutive theories of diffusion, interfacial transport, membrane transport, convective mass transfer, concentration boundary layers, turbulent transport. Letter grading.

C221. Membrane Science and Technology. (4) Lec-
ture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 101A. Fundamentals of membrane science and technology, with emphasis on separations at micro, nano, and molecular/angstrom scale with membranes. Relationship between structure/morphology of dense and porous membranes and their separation char-
acteristics. Use of nanotechnology for design of selec-
tive membranes and models of membrane transport (flux and selectivity). Examples provided from various bio-applications, including membrane bioreactors, filtration processes, and fuel cells. Letter grading.

222A. Stochastic Modeling and Simulation of Chemical Processes. (4) Lecture, four hours; dis-
cussion, one hour; outside study, eight hours. Introduction, definition, rationale of stochastic processes. Distribution, moments, correla-
tion. Mean square calculus. Wiener process, white
222B. Stochastic Optimization and Control. (4) Lecture, four hours; outside study, eight hours. Requisite: course 222A. Introduction to linear and nonlinear systems theory; methods for prediction, control, and filtering, smoothing of discrete and continuous systems. Stochastic control, systems with multiplicative noise. Applications to control of chemical processes. Stochastic optimization, stochastic linear and dynamic programming. S/U or letter grading.

223. Design for Environment. (4) Lecture, four hours; outside study, eight hours. Limited to graduate chemical engineering, materials science and engineering, or Master of Engineering program students. Design of products for meeting environmental objectives; life cycle inventories; lifecycle impact assessment; design for energy efficiency; design for waste minimization; computer-aided design tools, materials selection methods. Letter grading.

C224. Cell Material Interactions. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 45. Introduction to design and synthesis of biomaterials for regenerative medicine and tissue engineering. Topics include: extracellular matrix proteins, collagen, bone, and polymeric materials. Applications: wound healing, tissue regeneration, and drug delivery. S/U or letter grading.

CM225. Bioseparations and Bioprocess Engineering. (4) (Same as Bioengineering M225.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 101C. Separation and unit operations, and economic factors used to design processes for isolating and purifying materials like whole cells, enzymes, food additives, or pharmaceuticals. Examples include protein purification and production of biologic products. Concurrently scheduled with course C125. Letter grading.

CM226. Viruses and Biotechnology. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course CM145. Introduction of virology and the role of viruses in medicine and biotechnology. Topics include virology, virus structure and function, and viral disease. Applications: virology of RNA and DNA viruses, virology of viruses and viral pathogens. S/U or letter grading.

C228. Hydrogen. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced prerequisite: course 20A. Electronic, physical, and chemical properties of hydrogen. Various methods of production, including production through methane steam reforming, electrolysis, and thermochemical cycles, description in depth of several uses of hydrogen, including hydrogen combustion and hydrogen fuel cells. Concurrently scheduled with course C128. Letter grading.


231. Molecular Dynamics. (4) Lecture, four hours; outside study, eight hours. Requisite: course 106 or 110. Analysis and design of molecular-beam systems. Molecular-beam sampling of reactive mixtures in combustion chambers or gas jets. Molecular-beam studies of gas-surface interactions, including energy accommodation and heterogeneous reactions. Applications to air pollution control and to catalysis. Letter grading.

232. Combustion Processes. (4) Lecture, four hours; outside study, eight hours. Requisite: course 106, 200, or Mechanical and Aerospace Engineering C132A. Fundamentals: change equations for multicomponent reacting mixtures; heat and mass transfer; cascading reactions; flame propagation; autoignition, including burning of (1) premixed gases or (2) condensed fuels. Detonation. Sound absorption and attenuation. Letter grading.

233. Frontiers in Biotechnology. (2) Lecture, one hour. Requisite: Life Sciences 3. Integration of science and business in biotechnology. Academic research leading to licensing and founding of companies that turn research into marketable products. Invited lecturers from academia and industry cover emerging areas of biotechnology from combination of science, engineering, and business points of view. S/U or letter grading.

234. Plasma Chemistry and Engineering. (4) Lecture, four hours; outside study, eight hours. Designed for graduate chemistry or engineering students. Applications of chemistry, physics, and engineering principles to design and operation of plasma and ion-beam reactors used in etching, deposition, oxidation, and cleaning of materials. Examination of atomic, molecular, and ionic phenomena involved in plasma and ion-beam processing of semiconductors, etc. Letter grading.

235. Advanced Process Control. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced prerequisite: course 107. Introduction to advanced process control. Topics include (1) Lyapunov stability for autonomous nonlinear systems including converse theorems, (2) input to state stability, interconnected systems, and small gain theorems, (3) design of nonlinear and robust controllers for various classes of nonlinear systems, (4) model predictive control of linear and nonlinear systems, (5) advanced methods for tuning of classical controllers, and (6) introduction to control of distributed parameter systems. Concurrently scheduled with course C135. Letter grading.

236. Chemical Vapor Deposition. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 210, 216. Chemical vapor deposition is widely used to deposit thin films that comprise microelectronic devices. Topics include reactor design, transport phenomena, deposition Kinetics, structure and composition of deposited films, and relationship between process conditions and film properties. Letter grading.


CM245. Molecular Biotechnology for Engineers. (4) (Same as Bioengineering CM245.) Lecture, four hours; discussion, one hour; outside study, seven hours. Selected topics in molecular biology that form foundation of biotechnology and are linked to modern society today. Topics include recombinant DNA technology, molecular research tools, manipulation of gene expression, directed mutagenesis and protein engineering. DNA-based diagnostics and DNA microarrays, antibody and protein-based diagnostics, genomics and bioinformatics, isolation of human genes, gene therapy, and tissue engineering. Concurrently scheduled with course CM145. Letter grading.


250. Computer-Aided Chemical Process Design. (4) Lecture, four hours; outside study, eight hours. Requisite: course 108B. Application of optimization methods to chemical process design, including 3D computer aids in process engineering; process modeling; systematic flowsheet invention; process synthesis; optimal design and operation of large-scale chemical processing systems. Letter grading.


270. Principles of Reaction and Transport Phenomena. (4) Lecture, four hours; laboratory, eight hours. Focus on fundamentals of transport phenomena, chemical reaction kinetics, and thermodynamics at molecular level. Topics include Boltzmann equation, microscopic chemical kinetics, transition state theory, and statistical analysis. Examination of engineering applications related to state-of-art research areas in chemical engineering. Letter grading.

270R. Advanced Research in Semiconductor Manufacturing. (4) Laboratory, nine hours; outside study, nine hours. Limited to graduate chemical engineering students in MS semiconductor manufacturing option. Supervised research in processing semiconductor devices on modern equipment. Letter grading.

M280A. Linear Dynamic Systems. (4) (Same as Electrical and Computer Engineering M240A and Mechanical and Aerospace Engineering M270A.) Lecture, four hours; outside study, eight hours. Requisite: Electrical and Computer Engineering 141 or Mechanical and Aerospace Engineering 171A. State-space description of linear time-invariant (LTI) and time-varying (LTV) systems in continuous and discrete time. Linear algebra concepts such as eigenvectors and eigenvalues, singular values, Cayley-Hamilton theorem, Jordan form; solution of state equations; stability, controllability, observability, realizability, and minimality. Stabilization discussion. State feedback principle. Connections with transfer function techniques. Letter grading.
Undergraduate Study

The department offers four majors: Chemistry (with concentrations in chemistry and physical chemistry), Biochemistry, General Chemistry, and Chemistry/Materials Science. The Chemistry and Biochemistry majors are designed to prepare students for graduate studies in each field, for entry into professional schools in the health sciences, and for careers in industries and businesses that depend on chemically and biochemically based technology. The General Chemistry major is intended for students who wish to acquire considerable chemical background in preparation for careers outside chemistry. The Chemistry/Materials Science major provides appropriate preparation for graduate studies in fields that emphasize research involving chemistry, engineering, and applied science.

Each course used to fulfill any of the requirements for any of the departmental majors must be taken for a letter grade. Seminar courses, individual study courses, and research courses may not be applied toward the requirements for the majors.

Requirements for the majors are outlined below. For additional information, contact the Undergraduate Office, 4006 Young Hall.

Undergraduate Policies

Advanced Placement in Chemistry

Students who have taken the Advanced Placement (AP) Chemistry Examination and obtained a score of 3 or 4 receive 8 units of chemistry credit and may petition for chemistry and biochemistry equivalency, or may take course 20A at UCLA. If students received a score of 3 on the AP Chemistry Examination, they receive 8 units of chemistry credit but no course equivalency.

Credit Limitations

Students may not take or repeat a chemistry or biochemistry course for credit if it is a requisite for a more advanced course for which they already have credit. This applies in particular to the repetition of courses (e.g., if students wish to repeat Chemistry and Biochemistry 20A, they must do so before completing course 20B).

Undergraduate Majors

Chemistry BS

The Chemistry major is for students who intend to pursue a career in chemistry.

Learning Outcomes

The Chemistry major has the following learning outcomes:

- Demonstrated broad mastery of fundamental chemical knowledge, in-depth problem solving, critical thinking, and analytical reasoning in analytical, inorganic, organic, and physical chemistry, and in research
- Use of computers in data acquisition and processing
- Use of software tools for exploration and investigation of chemistry principles and models
- Understanding of the role of chemistry in addressing contemporary societal and global issues
- Performance of basic laboratory techniques, description of working principles, and knowledge of how to operate modern chemical instrumentation
- Use of chemical information to search chemical safety databases
- Conduct experimental work and handle all chemicals in a safe manner following OSHA-approved regulations and procedures
- Work effectively in groups and teams of diverse peers to solve scientific problems
- Search and access current and prior research
- Communication of chemical knowledge and experimental results through written reports and oral presentations

Entry to the Major

Admission

Students entering UCLA directly from high school who declare the Chemistry major at the time of application are automatically admitted to the major.

UCLA students who wish to enter the major must have a minimum grade of C- in each of the preparation for the major courses completed and a combined grade-point average of at least 2.0 in those courses. Grades in any completed courses for the major must also average at least 2.0.

Transfer Students

Transfer applicants to the Chemistry major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general chemistry with laboratory for majors, one and one half years of calculus, and either one year of calculus-based physics with laboratory or one year of organic chemistry for majors. Chemistry majors should have completed the equivalent of Mathematics 32B.

Entering transfer students who have successfully completed a year course (including laboratory) in general college chemistry intended for science and engineering students should enter course 30A. Transfer students should contact the Undergraduate Office, 4006 Young Hall, for assistance with the articulation of transfer coursework.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Chemistry Concentration

Preparation for the Major

Required: Chemistry and Biochemistry 20A (or 20AH), 20B (or 20BH), 20L, 30A, 30L, 30B, 30BL, 30C, 30CL; Mathematics 31A, 31B, 32A,
Physical Chemistry Concentration

The physical chemistry concentration is designed primarily for students who are interested in attending graduate school in physical chemistry or related areas.

Preparation for the Major

Required: Chemistry and Biochemistry 110A, 110B, 113A, 114 (or 114H), either 136 or 144, 153A, 153L, 171, C113B, and two other upper-division or graduate courses in the department, including at least one additional laboratory course from 136, 144, 154, C174, 184, 185.

Biochemistry BS

The Biochemistry major has the following learning outcomes:

- Understanding of chemical structures, bonding, and conformational properties of biological molecules
- Understanding of higher-level organization of cellular components, rules of subcellular organization, and compartmentalization
- Understanding of mechanisms and energetics of biochemical reactions and the basis for enzymatic catalysis, including the roles of organic cofactors and metals in such processes
- Understanding of ways that cellular events are energetically coupled in key processes
- Understanding of regulatory and response mechanisms that operate in biological systems to achieve homeostasis and conduct signaling within and between cells
- Understanding of the basis for molecular evolution and ways that genetic information is encoded and transmitted in biology
- Understanding of the roles of DNA and protein sequence information in inferring biological function and common ancestry
- Familiarity with laboratory methods for purifying, identifying, and characterizing biomolecules, including protein and nucleic acids
- Familiarity with assays for activity and binding
- Familiarity with basic laboratory methods for DNA manipulation
- Understanding of the roles of hypotheses and models in investigating scientific ideas
- Understanding of the critical importance of controls in interpreting experimental data

Transfer Students

Transfer applicants to the Biochemistry major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general chemistry with laboratory for majors, one and one half years of calculus, and either one year of calculus-based physics with laboratory or one year of organic chemistry for majors. Biochemistry majors must also complete courses equivalent to Life Sciences 7A, 7B, and 7C.

Entering transfer students who have successfully completed a year course (including laboratory) in general college chemistry intended for science and engineering students should enter course 30A. Transfer students should contact the Undergraduate Office, 4006 Young Hall, for assistance with the articulation of transfer coursework.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.
biology, Immunology, and Molecular Genetics 101 highly recommended).

**Honors Program**

The core of the program consists of at least one approved undergraduate seminar course from Chemistry and Biochemistry 193A or 193B and three research courses (12 units minimum) from 196A, 196B, or 198, culminating in a thesis.

**Computing Specialization**

Majors may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major, (2) completing Program in Computing 10A, 10B, and one course from 10C, 15, or 20A, and (3) completing two computational chemistry courses from Chemistry and Biochemistry C126A, C145, CM160A.

**Policies**

**The Major**

Refer to the Undergraduate Office website for a list of approved electives.

**Honors Program**

**Admission**

The honors program provides exceptional majors with the opportunity to do research culminating in an honors thesis. Junior and senior majors who have completed all university-level coursework, including all preparation courses and requirements for the major, with an overall grade-point average of 3.0 or better and a 3.5 GPA or better in the required major courses, may apply for admission. Students must have the sponsorship of an approved faculty adviser.

For additional information and application forms, students should contact the Undergraduate Advising Office, 4006 Young Hall, early in their educational planning. Completed applications must be submitted at least two weeks prior to the term in which students plan to begin the honors program.

**Requirements**

To qualify for graduation with departmental honors, students must satisfactorily complete all requirements for the honors program and the major and a specialization in Computing. On recommendation of the faculty sponsor, and with the approval of the thesis by the departmental honors committee, students are awarded honors, or highest honors.

Students who have a grade-point average of 3.6 or better, both overall and in the major, and demonstrated exceptional accomplishment on the research thesis are awarded highest honors at the discretion of the departmental honors committee.

**Computing Specialization**

Courses need to be completed with a combined grade-point average of at least 2.0. Students must petition for admission to the program and are advised to do so after they complete Program in Computing 10B (petitions should be filed in the Undergraduate Office).

Students graduate with a bachelor’s degree in their major and a specialization in Computing.

**General Chemistry BS**

The General Chemistry major is for students who wish to acquire considerable chemical background in preparation for careers in secondary school chemistry teaching. The major may be appropriate for some students who plan to enter other chemistry-related careers that involve teaching chemistry to nonchemists. This major cannot be taken as part of a double major or with the Science Education minor.

**Learning Outcomes**

The General Chemistry major has the following learning outcomes:

- Demonstrated mastery of fundamental chemical knowledge in analytical, inorganic, organic, physical chemistry, and biochemistry through in-depth problem solving, critical thinking, and analytical reasoning
- Effective communication of chemical knowledge through written materials, oral presentations, and teaching in a variety of settings
- Use of information resources for exploration and investigation of chemistry principles and models
- Understanding of the role of chemistry in addressing contemporary societal and global issues
- Ability to perform and teach basic laboratory procedures and techniques involving the synthesis of molecules
- Ability to perform and teach the measurement of chemical properties, structures, and phenomena
- Knowledge of how to handle chemicals in a safe manner following OSHA-approved regulations and procedures
- Knowledge of how to use information resources to search and access safety databases

**Entry to the Major**

**Transfer Students**

Transfer applicants to the General Chemistry major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general chemistry with laboratory for majors, one and one half years of calculus, and either one year of calculus-based physics with laboratory or one year of organic chemistry for majors.

Entering transfer students who have successfully completed a year course (including laboratory) in general college chemistry intended for science and engineering students should enter course 30A. Transfer students should contact the Undergraduate Office, 4006 Young Hall, for assistance with the articulation of transfer coursework.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

**Policies**

Students must declare the major before reaching 135 units.

**Requirements**

**Preparation for the Major**

Required: Chemistry and Biochemistry 20A (or 20AH), 20B (or 20BH), 20L, 30A, 30AL, 30B, 30BL, 30C, 30CL; Life Sciences 7A; Mathematics 31A, 31B, 32A, 32A; Physics 1A, 1B, and 1C (or 1AH, 1BH, and 1CH), and 4BL (or 5A, 5B, and 5C).

**The Major**

Required: Chemistry and Biochemistry 110A, 153A, 153L, 171, and 192A or 192B; three additional upper-division courses in the department (at least one must be a laboratory course); one course from Atmospheric and Oceanic Sciences 101, 102, 103, 104, Earth, Planetary, and Space Sciences 101, C113; three courses from Education M102, 105B, 106A, 107A, 107B, M108, C111, 126, 127, M131A, 132; one course from Environmental Health Sciences C152D, C164, Science Education 100XR.

**Honors Program**

The core of the program consists of at least one approved undergraduate seminar course from Chemistry and Biochemistry 193A or 193B and three research courses (12 units minimum) from 196A, 196B, or 198, culminating in a thesis.

**Computing Specialization**

Majors may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major, (2) completing Program in Computing 10A, 10B, and one course from 10C, 15, or 20A, and (3) completing two computational chemistry courses from Chemistry and Biochemistry C126A, C145, CM160A.

**Policies**

**Preparation for the Major**

Students must complete the preparation courses with at least a 2.0 grade-point average.

**The Major**

A 2.0 grade-point average is required in all upper-division courses in the department.

**Honors Program**

**Admission**

The honors program provides exceptional majors with the opportunity to do research culminating in an honors thesis. Junior and senior majors who have completed all university-level coursework, including all preparation courses and requirements for the major, with an overall grade-point average of 3.0 or better and a 3.5 GPA or better in the required major courses, may apply for admission. Students must have the sponsorship of an approved faculty adviser.

For additional information and application forms, students should contact the Undergraduate Advising Office, 4006 Young Hall, early in...
their educational planning. Completed applications must be submitted at least two weeks prior to the term in which students plan to begin the honors program.

Requirements
To qualify for graduation with departmental honors, students must satisfactorily complete all requirements for the honors program and the major and obtain a cumulative grade-point average of 3.5 or better in coursework required for the major. On recommendation of the faculty sponsor, and with the approval of the thesis by the departmental honors committee, students are awarded no honors, honors, or high-est honors.

Students who have a grade-point average of 3.6 or better, both overall and in the major, and demonstrated exceptional accomplishment on the research thesis are awarded highest honors at the discretion of the departmental honors committee.

Computing Specialization
Courses need to be completed with a combined grade-point average of at least 2.0. Students must petition for admission to the program and are advised to do so after they complete Program in Computing 10B (petitions should be filed in the Undergraduate Office). Students graduate with a bachelor’s degree in their major and a specialization in Computing.

Chemistry/Materials Science BS
The Chemistry/Materials Science major is designed for students who are interested in chemistry with an emphasis on material properties and provides students the opportunity to gain expertise in both chemistry and the science and engineering in materials such as semiconductors, photonic materials, polymers, biomaterials, ceramics, and nano-scale structures. Students explore the reactivity of such materials in different environments and gain understanding of how chemical compositions affect properties. The major provides appropriate preparation for graduate studies in many fields emphasizing interdisciplinary research, including chemistry, engineering, and applied science.

Learning Outcomes
The Chemistry/Materials Science major has the following learning outcomes:

- Understanding of the foundations of materials chemistry including nanoscience, materials synthesis, and materials processing
- Understanding of different methods for materials characterization, measurement of materials properties, and general structure/function relationships
- Familiarity with laboratory methods for materials chemistry and practical laboratory experience with such methods, including X-ray diffraction, optical absorption and fluorescence spectroscopies, electrical measurements, and electron and scanning probe microscopes
- Understanding of basic operational principles for a broad range of practical devices (e.g., LEDs, photovoltaics, electrochromics, etc.) from a fundamental materials perspective
- Safely and effectively work in a materials laboratory setting
- Knowledge of how to handle chemicals in a safe manner following OSHA-approved regulations and procedures
- Knowledge of how to use information resources to search and access safety databases
- Use of computers, including data acquisition and software tools for calculating and understanding materials properties
- Demonstrated broad mastery of materials chemistry including critical thinking, problem solving, working effectively in diverse groups
- Communication of knowledge through written reports and oral presentations

Entry to the Major
Admission
Students entering UCLA directly from high school who declare the Chemistry/Materials Science major at the time of application are automatically admitted to that major.

UCLA students who wish to enter the major must have a minimum grade of C– in each of the preparation for the major courses completed and a combined grade-point average of at least 2.0 in those courses. Grades in any completed courses for the major must also average at least 2.0.

Transfer Students
Transfer applicants to the Chemistry/Materials Science major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general chemistry with laboratory for majors, one and one half years of calculus, and either one year of calculus-based physics with laboratory or one year of organic chemistry with laboratory in addition to the other courses listed above.

Entering transfer students who have successfully completed a year course (including laboratory) in general college chemistry intended for science and engineering students should enter course 30A. Transfer students should contact the Undergraduate Office, 4006 Young Hall, for assistance with the articulation of transfer coursework.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements
Preparation for the Major
Required: Chemistry and Biochemistry 20A (or 20AH), 20B (or 20BH), 20L, 30A, 30AL, 30B, 30BL, 30C, 30CL, Mathematics 31A, 31B, 32A, 32B, 32B, 33B, Physics 1A, 1B, 1C, 4BL.

The Major
Required: Chemistry and Biochemistry 110A, 113A, 171, C117 or C180 or C181, 185, 4 units from 110B, C113B, C172, C174, C175, C176, C180, C181; Materials Science and Engineering 104, 110, 110L, 120, 150 or 160, 131, 8 units from C111, 121, 122, 132, 160, 162, CM180, 7 laboratory units from Chemistry and Biochemistry 114, 184, Materials Science and Engineering 121L, 131L, 161L.

Organic Materials Concentration
Preparation for the Major
Required: Chemistry and Biochemistry 20A (or 20AH), 20B (or 20BH), 20L, 30A, 30AL, 30B, 30BL, 30C, 30CL, Mathematics 31A, 31B, 32A, 32B, 32B, 33B, Physics 1A, 1B, 1C, 4BL.

The Major
Required: Chemistry and Biochemistry 110A, 113A, 136, 171, 185, 4 units from 110B, C113B, C143A, 144, C172, C174, C175, C176, C180, C181; Materials Science and Engineering 104, 110, 110L, 120, 150, 4 units from C111, 121, 122, 131, 132, 160, 162, CM180; 7 laboratory units from Chemistry and Biochemistry 114, 184, Materials Science and Engineering 121L, 131L, 161L.

Honor Program
The core of the program consists of at least one approved undergraduate seminar course from Chemistry and Biochemistry 193A or 193B and three research courses (12 units minimum) from 196A, 196B, or 199, culminating in a thesis.

Computing Specialization
Majors may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major, (2) completing Program in Computing 10A, 10B, and one course from 10C, 15, or 20A, and (3) completing two computational chemistry courses from Chemistry and Biochemistry C126A, C14S, CM160A.

Policies
The Major
The following courses may be applied only once toward the major: Chemistry and Biochemistry C172, C180, C181, Materials Science and Engineering 121, 150, 160.

Honors Program
Admission
The honors program provides exceptional majors with the opportunity to do research culminating in an honors thesis. Junior and senior majors who have completed all university-level coursework, including all preparation courses and requirements for the major, with an overall grade-point average of 3.0 or better and a 3.5 GPA or better in the required major courses, may apply for admission. Students must have the sponsorship of an approved faculty adviser.

For additional information and application forms, students should contact the Undergraduate Advising Office, 4006 Young Hall, early in their educational planning. Completed applications must be submitted at least two weeks prior to the term in which students plan to begin the honors program.
Applied Chemical Sciences

Graduate Courses

201A-201B. Modern Analytical Methods in Chemistry. (4–4) Laboratory, six hours; discussion, two hours. Introduction to and are advised to do so after they complete Program in Computing 10B (petitions should be filed in the Undergraduate Office). Students graduate with a bachelor’s degree in their major and a specialization in Computing.

Chemistry and Biochemistry

Lower-Division Courses

3. Material World. (4) Lecture, three hours; laboratory, two hours. Focus on most important advances made by humans in developing new molecules and materials, and how these discoveries affect our everyday lives. These include development of paints, polymers, metals, fuels, drugs, energetic materials, radioactive substances, poisons, and many more. Connexions are made between interplay of science, history, arts, and economics driving technological development. Laboratory sections focus on small-scale experiments relevant to everyday life and complementary to lecture topics. P/NP or letter grading.

4A. Chemistry and Your Health. (2) Lecture, two hours. Recent health trends and how they are portrayed in pop culture and media. Examination of scientific explanations behind current health crazes and determinate if there is validity to these claims. Discussion of chemical principles, such as basic arrow pushing mechanisms, radical oxidations, etc. Investigation of variety of topics including vitamins, health and beauty supplements, sugar alternatives, detox/cleanses, and traditional medicines. Relevant for students who have taken organic chemistry classes and those who are interested in learning basic organic chemistry concepts. No college-level chemistry is required. P/NP or letter grading.

4B. What’s Cooking Chemistry in the Kitchen. (4) Lecture, three hours. What is the difference between baking soda and baking powder? Why do some recipes call for butter, margarine, or shortening? Answers to these questions and more through dive into chemistry happening every day in your kitchen. Study of macromolecules that make up food (carbohydrates, proteins, and lipids), their structures, properties (hydrophobicity, pH, melting point, degree of saturation), and how to use these properties to control texture and taste in food. Chemical concepts are learned in fun, intuitive way, while use of scientific methods in improving food preparations is also learned. Opportunities to participate in scientific process through weekly at home experiments in kitchen, and creative research projects in P/NP or letter grading.

7. Nanoscience and Nanotechnology Laboratory. (2) Seminar, discussion, and laboratory, 32 hours. Limited to high school students. Key concepts of nanoscience and nanotechnology, including various applications to nanofabrication (bottom-up and top-down). Fabrication of nanostructures and devices, collection of scientific data using those devices, analysis of data, and presentations of student results. Offered in summer only. P/NP grading.

8. Applications of Nanoscience. (2 to 4) Seminar, discussion, laboratory, and field trip, 30 to 60 hours. Limited to high school students. Introduction of advanced concepts of nanoscience and nanotechnology, with emphasis on applications of nanoscience and nanotechnology in other research fields and industries. Laboratories introduce students to research methods, experiment development, scientific writing, and presentation skills. Students devise and execute their own exploratory nanoscience experiments, and present them to technical audience. Offered only as part of Summer Institute. P/NP grading.

14A. General Chemistry for Life Scientists. (4) Lecture, three hours; discussion, one hour. Preparation: high school chemistry or equivalent background and three and one half years of high school mathematics. Requirements: completion of Chemistry Diagnostic Test. Enforced corequisite: Life Sciences 30A or Mathematics 3A or 31A or score of 48 or better on Mathematics Diagnostic Test. Not open to students with credit for course 20A. Introduction to physical and
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general chemistry principles; atomic structure based on quantum mechanics; atomic properties; trends in periodic table; chemical bonding (Lewis structures, VSEPR theory, coordination and molecular orbital theory); coordination compounds; properties of inorganic and organic acids, bases, buffers. P/NP or letter grading.

14AE. General Chemistry for Life Scientists I—Enhanced. (3) Lecture, three hours; discussion, one hour. Enforced requisite: course 114A, 114AE, 20A, 20AH with grade of C– or better. Recommended: preparatory chemistry coursework. Life Sciences 30B or Mathematics 3B or 31B with grade of C– or better. Not open to students with credit for course 14A or 20A. Study of chemical principles, including catalysis, relationship of quantum mechanics and how these principles can be used to understand atomic and molecular structure and properties; how molecules interact; and properties of inorganic, organic, and biological acids, bases, and salts. Biological, environmental, and socially-relevant examples are used to illustrate central role that chemistry plays in our world. Emphasis on developing problem-solving skills; collaborative interaction and learning. P/NP or letter grading.

14B. General Chemistry for Life Scientists II. (3) Lecture, three hours; discussion, one hour. Enforced requisite: one course from 114A, 114AE, 20A, or 20AH with grade of C– or better. Enforced requisite or corequisite: Life Sciences 30B or Mathematics 3B or 31B with grade of C– or better. Not open to students with credit for course 114B, 20B, or 20BH. Chemical equilibria in inorganic systems, acid-base equilibria; phase changes; thermochromism; first, second, and third laws of thermodynamics; free energy changes; electrochemistry and its role as energy source; chemical kinetics, including enzyme catalysis, and reaction mechanisms. P/NP or letter grading.

14BE. General Chemistry for Life Scientists II—Enhanced. (3) Lecture, three hours; discussion, two hours. Enforced requisite: course from 114A, 114AE, 20A, 20AH with grade of C– or better. Enforced requisite or corequisite: Life Sciences 30B or Mathematics 3B or 31B with grade of C– or better. Not open to students with credit for course 114B, 20B, or 20BH. Introduction to concepts in thermodynamics and kinetics that are critical for understanding of molecular basis of life. Chemical equilibria in gases and liquids, acid-base equilibrium; phase changes; thermochromism; first, second, and third laws of thermodynamics; free energy changes; electrochemistry; chemical kinetics, including catalysis, and reaction mechanisms. Emphasis on developing problem-solving skills; collaborative interaction and learning. P/NP or letter grading.

14BL. General and Organic Chemistry Laboratory I. (3) Lecture, one hour; laboratory, three hours. Enforced requisite: course 114A or 20A or 20AH with grade of C– or better. Enforced corequisite: course 14B. Not open to students with credit for course 20L. Emphasis on developing laboratory skills. Use and preparation of buffers and pH meters. Synthesis and kinetics techniques using compounds of interest to students in life sciences. P/NP or letter grading.

14C. Structure of Organic Molecules. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 14B with grade of C– or better. Not open to students with credit for course 30A. Continuing studies in structure of organic molecules, with emphasis on biological applications. Resonance, stereochemistry, conjugation, and aromaticity; spectroscopy (NMR, IR, and mass spectrometry); introduction to effects of structure on physical and chemical properties; survey of biomolecular structure. P/NP or letter grading.

14CL. General and Organic Chemistry Laboratory II. (4) Lecture, one hour; laboratory, six hours. Enforced requisites: courses 14B and 14BL, or 20B and 20BL, with grades of C– or better. Enforced corequisite: course 14C. Synthesis and analysis of compounds; purification by extraction, chromatography, recrystallization, and sublimation; characterization by mass spectroscopy, UV, NMR, and IR spectroscopy, optical activity, electrochemistry, pH titration. P/NP or letter grading.

14D. Organic Reactions and Pharmaceuticals. (4) Lecture, three hours; discussion, four hours. Enforced requisite: course 14C with grade of C– or better. Organic reactions, nucleophilic and electrophilic substitutions and additions; electrophilic aromatic substitution; catalysis, molecular orbital theory; drug action, and organic chemistry of pharmaceuticals. P/NP or letter grading.

17. Chemical Principles. (4) Lecture, three hours; discussion, one hour. Introduction to chemical principles; numerical measurements, calculations, gas laws, solutions, acids, bases, and salts, molecular structure, and nomenclature. Collaborative learning and problem solving; introduction to chemistry laboratory practice. P/NP or letter grading.

19. Flat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in the disciplines and encompassing many paths of discovery at UCLA. P/NP or letter grading.

20A. Chemical Structure. (4) Lecture, three hours; discussion, one hour. Preparation: high school chemistry or equivalent background and three and one half years of high school mathematics. Enforced requisite: preparation: high school physics. Require: completion of Chemistry Diagnostic Test. Enforced corequisite: Mathematics 31A. Not open to students with credit for course 20BE, 20BH, or 20BH. Chemical equilibria in inorganic systems, acid-base equilibria; phase changes; thermochromism; first, second, and third laws of thermodynamics; free energy changes; electrochemistry and its role as energy source; chemical kinetics, including enzyme catalysis, and reaction mechanisms. P/NP or letter grading.

20BE. Chemical Structure (Honors). (4) Lecture, three hours; discussion, one hour. Preparation: high school chemistry or equivalent background, high school physics, and three and one half years of high school mathematics. Enforced corequisite: Mathematics 31A. Honors course parallel to course 20A. P/NP or letter grading.

20BH. Chemical Energy and Change. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 20A or 20AH, and Mathematics 31A, with grades of C– or better. Enforced corequisite: Mathematics 31B. Second term of general chemistry. Inter-molecular forces and organization, phase behavior, chemical thermodynamics, solutions, equilibria, reaction rates and laws. P/NP or letter grading.

20BH. Chemical Energetics and Change (Honors). (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 20A and Mathematics 31A with grades of C– or better. Honors course parallel to course 20B. Letter grading.

20L. General Chemistry Laboratory. (3) Lecture, one hour; laboratory, three hours. Enforced requisite: course 14A or 20A with grade of C– or better. Enforced corequisite: course 14B or 20B. Use of balance, volumetric techniques, volumetric and potentiometric analysis; Beer's law, applications for environmental analysis and materials science. P/NP or letter grading.


30AL. General Chemistry Laboratory II. (4) Lecture, one hour; laboratory, four hours. Enforced requisite: courses 20B or 20BH, 20L, and 30A or 30AH, with grades of C– or better. Qualitative and quantitative analysis of chemical reactions and compounds, kinetcs, separations, and spectroscopy. P/NP or letter grading.


30CL. Organic Chemistry Laboratory II. (4) Lecture, two hours; laboratory, six hours. Enforced requisite: courses 30AH and 30B or 30AH and 30C with grade of C– or better. Enforced corequisite: course 30C. Modern techniques in synthetic organic and analytical organic chemistry. Semi-preparative scale, multistep synthesis of organic and organometallic molecules, including asymmetric catalysts. One- and two-dimensional multinuclear NMR techniques. Written reports and proposals. P/NP or letter grading.

50. Computational Tools for Materials Modeling and Discovery. (4) Lecture, three hours. Enforced requisite: course 14A or 20A or 20AH, with grade of C– or better. Materials are central to many modern technologies, from industrial catalysis, to batteries, computer hard disks, and quantum computers. Computational modeling gains central stage in materials research and discovery, especially with emergence of artificial intelligence techniques and big data initiatives. Introduction to computational tools enabling materials modeling, analysis, predictions, and graphical visualization. Topics such as crystallography, solid state chemistry, and surface science. Together with a hands-on course to enable effective modeling of solid state. Basic concepts related to programming and scripting, and basis of computational chemistry included. P/NP or letter grading.

88A. Serendipity in Science. (2) Seminar, two hours. Limited to 20 freshmen. Inquiry into unexpected discoveries in science that have had significant impact on society and analysis of circumstances that brought these about, beginning with discovery of helium in solar corona by Janssen in 1868 (using newly developed field of spectroscopy). Discovery of X rays by Röntgen in 1895 and of radioactivity by Becquerel in 1896. Other topics include discoveries important to medicine, such as penicillin by Fleming in 1928 and cis-platin by Rosenberg in 1969. P/NP or letter grading.

89H. Honors Seminars. (1) Seminar, three hours. Limited to 15 students. Discussion: discovery lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.
96. Special Courses in Chemistry. (1 to 4) Tutorial, to be arranged. May be repeated for maximum of 8 units. P/NP or letter grading.

98XA. PEERS Collaborative Learning Workshops for Life Sciences Majors. (1) Laboratory, three hours. Corequisite: associated undergraduate lecture course in chemistry and biochemistry for life sciences majors. Limited to Program for Excellence in Education and Research (PEERS) students. Development of intuition and problem-solving skills in collaborative learning environment. May be repeated four times, but only 1 unit may be applied toward graduation. P/NP grading.

98XB. PEERS Collaborative Learning Workshops for Physical Sciences and Engineering Majors. (1) Laboratory, three hours. Corequisite: associated undergraduate lecture course in chemistry and biochemistry for physical sciences and engineering majors. Limited to Program for Excellence in Education and Research in Science (PEERS) students. Development of intuition and problem-solving skills in collaborative learning environment. May be repeated four times, but only 1 unit may be applied toward graduation. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division and upper-division students. Enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

C100. Genomics and Computational Biology. (5) Lecture, four hours; discussion, one hour. Introduction for biochemistry students of technologies and experimental data of genomics, as well as computational tools for analyzing them. Biochemistry and molecular biology dissected life into its component parts, one gene at a time, but lacked integrative mechanisms for putting this information back together to predict what happens next (e.g., over 80 percent of drug candidates fail in clinical trials). High-throughput technologies such as sequencing, microarrays, mass-spectrometry, and robotics have given biologists incredible new capabilities to analyze complete genomes, expression patterns, functions, and interactions across whole organisms, populations, and species. Use and analysis of such datasets becomes essential in biological and medical sciences. This course introduces principles and methodologies for analyzing genomics data to answer biological and medical questions, with focus on concepts that guide data analysis rather than algorithms. Concurrently scheduled with course C200. P/NP or letter grading.

101. Catalysis in Modern Drug Discovery. (4) Lecture, three hours. Enforced requisite: course 14D or 30B with a grade of C– or better. Overview of drug discovery process with focus on transition metal catalysis in synthesis of medicines. Discussion of process by which drugs are discovered, from lead optimization to process development. Introduction to transition metal catalysis, area of critical importance in modern drug development. Study of fundamental concepts of transition metal catalysis and how catalysis has played transformative role in modern medicinal chemistry. Particular attention throughout to discussion of case studies that emphasize broad impact of medicinal chemistry and importance of catalysis in drug discovery. Highlights how organic chemistry can impact world around us, particularly in development of pharmaceuticals. P/NP or letter grading.

103. Environmental Chemistry. (4) Lecture, four hours; discussion, one hour. Requisites: courses 30B, 30BL, 110A, 113A. Chemical aspects of pollution, acid rain, and water pollution, solid waste disposal, energy resources, and pesticide effects. Chemical reactions in environment and effect of chemical processes on environment. P/NP or letter grading.

C105. Introduction to Chemistry of Biology. (4) Lecture, three hours; discussion, one hour. Requisite: course 153A with grade of C– or better. Introduction to chemical biology. Topics include computational chemical biology, utility of synthesis in biochemical research, peptidomimetics, designed reagents for cellular imaging, natural product biosynthesis, protein engineering and directed evolution, cell biology of metal ions, imaging metal ions in cells, metal-containing drugs. Concurrently scheduled with course CM205A. Letter grading.

C107. Organometallic Chemistry. (4) Lecture/discussion, three hours. Enforced requisite or corequisite: course 20B. Understanding of mechanisms requires reactivity (emphasizing mechanistic approach) of compounds containing carbon bonded to elements selected from main group metals, metalloids, and transition metals, including inorganic complexes and metal carbonyls; applications in catalysis and organic synthesis. Concurrently scheduled with course C207. P/NP or letter grading.

C108. Mass Spectrometry for Chemists and Biochemists. (2) Lecture, one hour; laboratory, four hours. Requisite: course 153A. Introduction to principles and practice of organic and inorganic mass spectrometry. Topics include EI, CI, ICPMS, GC/MS, LC/MS, ESI, MALD1, MS/MS protein identification, and proteinomics. Concurrently scheduled with course C208. P/NP or letter grading.

110A. Physical Chemistry: Chemical Thermodynamics. (4) Lecture, three hours; discussion, one hour; tutorial. Requisites: courses 110A, 113A, Mathematics 32B, all with grades of C– or better. Kinetic theory of gases, principles of statistical mechanics, statistical thermodynamics, equilibrium structure and free energy, relaxation and transport phenomena, macroscopic chemical kinetics, molecular-scale reaction dynamics. P/NP or letter grading.

110B. Topics in Physical Chemistry. (4) Lecture, three hours; discussion, one hour; tutorial. Requisite: course 110A. Course C110B is requisite to C115B. Students entering course C115A are normally expected to take course C115B in following term. Designed for chemistry students with serious interest in quantum chemistry. Postulates and systematic development of nonrelativistic quantum mechanics; expansion theorems; wells; oscillators; angular momentum; hydrogen atom; matrix techniques; approximation methods; time dependent problems; atoms; spectroscopy; magnetic resonance; chemical bonding. May be concurrently scheduled with courses C121A-C121B. P/NP or letter grading.

C115C. Advanced Quantum Chemistry: Applications. (4) Lecture, three hours; discussion, one hour. Requisites: courses 113A, C115B. Topics in quantum chemistry selected from many areas such as structure, collision processes, theory of solids, symmetry and its applications, and theory of electromagnetic radiation. Concurrently scheduled with course C215C. P/NP or letter grading.

M117. Structure, Patterns, and Polyhedra. (5) Same as Honors Collegium M180B.) Lecture, four hours; activity, two hours. Exploration of structures and their geometric underpinnings, with examples and applications from architecture (space frames), biology (enzyme complexes, viruses), chemistry (symmetry, molecular cages), design (tiling), engineering (space fucking), and physics (topology). P/NP or letter grading.

118. Colloidal Dynamics Laboratory. (4) Lecture, two hours; laboratory, eight hours. Requisites: courses 110A and 110B, with grades of B or better, or equivalent standard mechanics courses from engineering, mathematics, or physics. One aspect of dispersions of microscopic particles in viscous liquids is that such dispersions can be used as visual model systems for studying phases that chemistry undergraduate students typically learn about for nanoscale and molecular systems. However, they do not see. Temperature continuous excitations molecules and causes rearrangements, giving dynamic views of macromolecules and particles in many fields, including cell and molecular biology, chemical engineering, materials science, and physics. Letter grading.


121. Special Topics in Physical Chemistry. (4) Lecture, four hours. Requisite: course 110B. Recommended for senior level. Topics of considerable research interest presented at level suitable for students who have completed junior-year courses in physical chemistry. P/NP or letter grading.

C122. Mathematical Methods for Chemistry. (4) Lecture, four hours; Enforced requisites: Mathematics 31A, 31B, 32A, 32B. Review of basic mathematics necessary to study physical chemistry at graduate level, with focus on review of vectors, linear algebra, elementary differential and partial equations. Development of problem-solving skills through homework based on these mathematical techniques, with examples from physical chemistry. Concurrently scheduled with course C222. P/NP or letter grading.

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C123A-C123B. Classical and Statistical Thermodynamics. (4–4) Lecture, four hours; discussion, one hour. Requisite: course 110B or 156. Recommended: course 113A. Rites, imperfect gas, nonideal solutions, solid and fluid states, phase equilibria, electric and magnetic effects, ortho-para hydrogen, chemical equilibria, reaction rates, gases, nonelectrolyte and electrolyte solutions, surface phenomena, high polymers, gravitation. May be concurrently scheduled with courses C223A-C223B, P/NP or letter grading.

125. Introduction to Python Programming and Machine Learning. (4) Lecture, three hours; laboratory, one hour. Requisite: course 14C or 30A, with grade of C– or better. Introduction to programming in Python and to machine learning and its many applications within chemical sciences. Topics include fundamentals of Python programming, routine numerical procedures such as optimization and linear regression, and overview of machine learning, with special emphasis on neural networks and deep learning, including implementation. Exploration of mainstream applications of machine learning to problems of chemical interest, including molecular simulation, protein structure determination, computational drug design and material design/discovery. Particular topics to be covered and projects to be completed may be decided in part based on student interest and input. P/NP or letter grading.

C126A. Computational Methods for Chemists. (4) Lecture, one hour; laboratory, four hours. Requisites: courses 110A, 113A, Mathematics 33A. Covers some basics of scientific coding. Introduction to advanced applications provided through commercially available computational packages. Includes quantum mechanical techniques for chemistry, reactivity, spectroscopy, solid state calculations; statistical mechanical techniques for chemistry; python coding, basic algorithms, machine learning, and numerical techniques. Concurrently scheduled with course C226A, P/NP or letter grading.

C127. Synthetic Biology for Biofuels. (4) (Same as Chemical Engineering CM127.) Lecture, four hours; discussion, one hour. Requisite: course 153A. Engineering microorganisms for complex phenotype is common goal of systems engineering and synthetic biology. Production of advanced biofuels involves designing and constructing novel metabolic networks in cells. Such efforts require profound understanding of biochemical processes and in silico and in vitro experimentation and are aided by tools in bioinformatics, systems biology, and molecular biology. Fundamentals of metabolic biochemistry, protein structure and function, and bioinformatics tools modeling for understanding of metabolic networks to design microorganisms for energy applications. Concurrently scheduled with course CM227. Letter grading.

C132A. Core Principles in Cell and Molecular Biology. (4) (Formerly Life Sciences 7A, 7B, 7C, 23L.) Students gain broad foundational knowledge and skills for rigorous research in emerging areas of cell and molecular biology. Focus on foundational knowledge of molecular and cellular biology research areas including cell cycle, cell signaling, cell metabolism, cell communication, cell states and fates, genomes, and proteomes. Focus on skills development for or careers in the field of cell and molecular biology. Students are equipped with theory of modern experimental approaches, and acquire hands-on skills training in designing experiments and analyzing data using these approaches to answer questions in areas of interest. Students are introduced to directing of intense, core facilities that specialize in these approaches to facilitate use of these approaches in their research. Continuation of in-depth analysis of rigorous experimental design and statistical analyses in cell and molecular biology. Concurrently scheduled with course C232A, P/NP or letter grading.

136. Organic Structural Methods. (5) Lecture, two hours; laboratory, eight hours. Requisites: courses 30C and 30CL, with grades of C– or better. Laboratory course in organic structure determination by chemical and spectroscopic methods; microtechniques. P/NP or letter grading.

C138. Natural Product Biosynthesis: Chemical Logic and Synthetic Challenges. (4) Lecture, three hours; discussion, one hour. Requisites: courses 30A, 30B, 30C, 153A. Covers fundamental chemical logic and enzyme mechanisms involved in biosynthesis of natural products including polyketides, nonribosomal peptides, terpenes, alkaloids. Emphasis on biosynthetic logic used by nature to form complex molecules. Discussion of several enzymes and enzyme families in context of biosynthesis, including assembly-line megasynthetases, group transferases, oxidoreductases, etc. Historical account of natural product isolation and characterization as a basis for understanding of synthetic and enzyme mechanisms involved in biosynthesis of natural products. Includes extensive survey of scientific literature in format of presentations and discussions. Concurrently scheduled with course C238. Letter grading.

C140. Bionanotechnology. (4) Lecture, three hours. Requisites: courses 30C, 110A. Basic physical, chemical, and biological principles in bionanotechnology; material and strategies for fabrication of bottom-up, ordered biologically derived molecules, characterization and detection techniques, and biomedical materials and applications at nanoscale. May be concurrently scheduled with course C240, P/NP or letter grading.

C143A. Structure and Mechanism in Organic Chemistry. (4) Lecture, three hours; discussion, one hour. Requisites: courses 30C and 30CL may be taken concurrently), 110A. Basic physical, chemical, and biological principles for understanding of organic reactions. Acidity and acid catalysis; linear free energy relationships; isotope effects. Molecular orbital theory and enzyme chemistry; pericyclic reactions. May be concurrently scheduled with course C243A, P/NP or letter grading.

C143B. Mechanism and Structure in Organic Chemistry. (4) Lecture, three hours; discussion, one hour. Requisites: course C143A with grade of C– or better. Mechanisms of organic reactions; structure and detection of reactive intermediates. May be concurrently scheduled with course C243B, P/NP or letter grading.

144. Practical and Theoretical Introductory Organic Synthesis. (5) Lecture, two hours; laboratory, eight hours. Enforced requisites: courses 30C and 30CL, with grades of C– or better. Lectures on modern synthetic reactions and processes, with emphasis on stereochemical methods for carbon-carbon bond formation. Laboratory methods of synthetic organic chemistry, including reaction techniques, synthesis of natural products, and molecules of theoretical interest. P/NP or letter grading.

C145. Theoretical and Computational Organic Chemistry. (4) Lecture, two hours; discussion, one hour; computer laboratory, one hour. Requisites: courses 30C, 113A. Applications of quantum mechanical methods and computational chemistry to prediction of organic structures and reactivities. Computational modeling methods, including laboratory experience with force-field and quantum mechanical computer calculations. Concurrently scheduled with course C245, P/NP or letter grading.

147. Careers in Chemistry and Biochemistry. (2) Seminar, two hours. Exploration of career development and career opportunities available to students. Different speakers give short presentations to describe their career paths in areas such as industry, government, research and development, education, medicine, and healthcare. Emphasis on how chemistry and biochemistry helped them become successful, and what actual chemistry was used in their particular profession. Students learn and understand real-life applications of chemical concepts found in their course work. P/NP or letter grading.

C150. Research Methods and Integrity in Cellular and Molecular Biology. (4) Lecture, two hours; discussion, two hours. Data analysis and management, statistical design and analysis, and ethical considerations. Students will be required to design and complete an experiment that entails data collection and literature searches and will write a formal paper for presentation. P/NP or letter grading.

151. Machine Learning for Chemistry. (4) (Formerly C151) Lecture, three hours; discussion, one hour. Requisite: courses 20B or 20BH, Mathematics 33A or 33AH. Introduction to machine learning and its many applications within chemical sciences. Topics include widely-used machine learning algorithms for modeling large data sets, including neural networks and deep learning, supervised and unsupervised learning, and dimensionality reduction. Exploration of mainstrea applications of machine learning to problems of chemical interest, including molecular simulation and computer-aided drug design and material discovery. Syllabus introduction to linear algebra and programming in Python. Recommended: courses to be completed may be decided in part based on student interest and input. P/NP or letter grading.

153A. Biochemistry: Introduction to Structure, Enzymes, and Metabolism. (4) Lecture, four hours; discussion, one hour. Requisite: course 140 or 30B, with grade of C– or better. Recommended: Life Sciences 2, 3, and 23L, or 7A. Structure of proteins, carbohydrates, and lipids; enzyme catalysis and principles of metabolism; inorganic biochemistry, including nucleotide and oxidative phosphorylation. P/NP or letter grading.

153AH. Biochemistry: Introduction to Structure, Enzymes, and Metabolism (Honors). (4) Lecture, three hours; discussion, one hour; tutorial, one hour. Requisite: courses 140 or 30B, with grade of C– or better. Recommended: Life Sciences 2, 3, 23L. Honors course parallel to course 153A, P/NP or letter grading.

153B. Biochemistry: DNA, RNA, and Protein Synthesis. (4) Lecture, three hours; discussion, one hour; tutorial, one hour. Requisite: course 153A or 153AH. Recommended: Life Sciences 2, 3, 23L, or 7A and 7B. Nucleotide metabolism; DNA replication; RNA repair; transcription machinery; regulation of transcription; RNA structure and processing; protein synthesis and processing, P/NP or letter grading.

153BH. Biochemistry: DNA, RNA, and Protein Synthesis (Honors). (4) Lecture, three hours; discussion, one hour; tutorial, one hour. Enforced requisites: course 153A or 153AH, Life Sciences 2, 3, 23L. Honors course parallel to course 153B, P/NP or letter grading.

153C. Biochemistry: Biosynthetic and Energy Metabolism and Its Regulation. (4) Lecture, three hours; discussion, one hour; tutorial, one hour. Requisite: course 153A or 153AH. Metabolism of carbohydrates, fatty acids, amino acids, and lipids; photosynthetic and amion energy metabolism; coenzyme and vitamins; regulation of these processes. P/NP or letter grading.

153CH. Biochemistry: Biosynthetic and Energy Metabolism and Its Regulation (Honors). (4) Lecture, three hours; discussion, one hour; tutorial, one hour. Requisite: course 153A or 153AH. Honors course parallel to course 153C, P/NP or letter grading.

153D. Introduction to Protein Structural Biology. (4) Lecture, three hours; discussion, one hour. Requisites: course 153A, Life Sciences 3 or 7A. Proteins are diverse set of macromolecules that perform critical functions within cells, ranging from enzymes that catalyze metabolic reactions to proteins that enable pathogens to cause disease. Introduction to protein structural biology, that seeks to understand molecular basis of protein function through visualizing atomic structures and by investigating how alterations in protein structure affects function. Students gain fundamental understanding of protein structure and its relationship to function and learn how experimental and computational methods are used to determine three-dimensional structures of proteins, Hands-on training in computer graphics programs and online tools used to visualize and analyze protein structures. Letter grading.

153E. Biochemical Methods. (4) Lecture, two hours: laboratory, four hours. Requisites: courses 14BL or 20L and 30AL, and 153A or 153AH (may be taken concurrently), with grades of C– or better. Integrated term–long project involving biotiful production in bacteria, Purification of key enzyme for alcohol production from bacteria via affinity chromatography. Assessment
of protein amount, purity, and activity of enzyme. Techniques include protein determination by Bradford assay, polyacrylamide gel electrophoresis, immunoblotting, and enzyme activity assays to determine en-
zyme activity (Km, Vmax, inhibitor studies). P/NP or letter grading.

154. Biochemical Methods II. (3) Lecture; two hours; laboratory; eight hours. Enforced requisites: courses 153A, 153H, 153B or 153BH, and 153L, with grades of C– or better. Recommended: course 153E. Two to three major laboratory projects using biochemical laboratory techniques to investigate contemporary problems in biochemistry. Topics include transduction of activation, molecular basis of DNA-protein interactions, biochemical basis of platelet activation, and ini-
tiation of blood clotting cascade. Experiments entail characterizing structure and function of proteins, nucleic acids, and lipids involved in these processes. P/NP or letter grading.

155. Mitochondria in Medicine, Biology, and Chemistry. (1) Seminar, two hours every other week. Open to undergraduate and graduate science majors considering or currently conducting research in areas related to mitochondria. Large number of physiological and pathophysiological processes involve mito-
chondria, and their disruption or dysfunction can lead to pathologies. Topics include trans-
duction of activation, molecular basis of DNA-protein interactions, biochemical basis of platelet activation, and initia-
tion of blood clotting cascade. Experiments entail characterizing structure and function of proteins, nucleic acids, and lipids involved in these processes. P/NP or letter grading.

C164. Free Radicals in Biology and Medicine. (2 to 4) Lecture, three hours. Enforced requisites: courses 153A and either 153B or 153C, with grades of C– or better. Biochemical reactions involving free radicals play a role in mitochon-
drial metabolism, neurodegenerative diseases, apoptosis, and aging. Discussion of radical re-
actions, how they are harnessed to achieve enzyme catalysis, and how free radicals contribute to or regu-
late cell signaling. Some of these radical reactions run amok under certain types of stress and can contribute to wide variety of diseases, including neuro-
degenerative disorders (e.g., Alzheimer’s, Parkinson’s, and Alzheimer’s disease), mitochondrial diseases, antherosclerosis, and aging. Concurrently scheduled with course C264. P/NP or letter grading.

C165. Metabolic Control by Protein Modification. (4) Lecture, three hours; discussion, one hour. Enforced requisites: courses 153A, 153B, 153C. Biochemical basis of con-
trolling metabolic pathways by posttranslational mod-
fication of proteins, including phosphorylation and translation reactions. Concurrently scheduled with course C265. Letter grading.

166. RNA Structure, Recognition, and Function. (4) Lecture, three hours; discussion, one hour. Requisites: courses 153A, 153B, Life Sciences 3 and 23L, or 7A. Requisites: course 153E. RNA secondary and tertiary structures are fundamental to gene expression and control at every level of gene expression pathways (transcription, RNA processing, translation, degrada-
tion). RNA molecules now being used as therapeutic agents in the clinic. Focus on role of RNA secondary and tertiary structures. Coverage of these various aspects and in-depth analysis of RNA structure and function, using primary research litera-

CM170. Biochemistry and Molecular Biology of Photosynthetic Apparatus. (2 to 4) (Same as Mole-
cular, Cell, and Developmental Biology M170.) Lecture, two to three hours; discussion, one hour to two hours. Requisites: courses 153A and 153B, or Life Sciences 3 and 23L, and course 153L. Recommended: courses 153C, 154, Life Sciences 4. Light harvesting, photo-
chemistry, electron transfer, carbon fixation, carbohy-
drate metabolism, pigment synthesis in chloroplasts and bacteria. Assembly of photosynthetic membranes and regulation of genes encoding those components. Emphasis on understanding of experimental ap-
proaches. Concurrently scheduled with course C270, P/NP or letter grading.

171. Intermediate Inorganic Chemistry. (4) Lecture, three hours; discussion, one hour. Requisite: course C172 with grade of C– or better. Systematic approach to modern inorganic chemistry, structure and bonding of inorganic molecules and solids, structure/reactivity relationships, vibrational spectra of complexes, electronic structure and ligand-
field theory, mechanisms of inorganic reactions, bonding and reactions on substrates, and catalysis. Concurrently scheduled with course C275. P/NP or letter grading.

C172. Advanced Inorganic Chemistry. (4) (Formerly numbered 172.) Lecture, three hours; discussion, one hour. Requisite: course 171 with grade of C– or better. Systematic approach to modern inorganic chemistry, structure and bonding of inorganic molecules and solids, structure/reactivity relationships, vibrational spectra of complexes, electronic structure and ligand-
field theory, mechanisms of inorganic reactions, bonding and reactions on substrates, and catalysis. Concurrently scheduled with course C272. P/NP or letter grading.

C173. Electrochemical Systems. (4) Lecture, three hours; discussion, two hours. Requisites: course 110A, Mathematics 33B. Introduction to principles of electrochemical systems commonly applied in re-
chargeable batteries, fuel cells, solar cells, and nanotechnology. With examples in recent literature and discussions of experimental practice, focus on qualitative and quantitative evaluation of information obtained. May be concurrently scheduled with course C172. P/NP or letter grading.

C174. Inorganic and Metalorganic Laboratory Meth-
ods. (5) Lecture, two hours; laboratory, eight hours. Enforced requisites: courses 30CL and 171, with grades of C– or better. Synthesis of inorganic compounds, including mechanistic studies; Schlenk techniques; chromatographic and ion exchange methods; spectroscopic characterization and litera-
ture application. Concurrently scheduled with course C274. P/NP or letter grading.

C175. Inorganic Reaction Mechanisms. (4) Lecture, three hours. Requisites: courses 110A, 110B, 113A, and 172, with grades of C– or better. Survey of inor-
ganic reactions, including air, water, and soil, with emphasis on understanding of these materials. May be concurrently scheduled with course C275. P/NP or letter grading.

C176. Group Theory and Applications to Inorganic Chemistry. (4) Lecture, three hours; discussion, one hour. Requisites: courses 113A and 172, with grades of C– or better. Group theoretical methods; molecular orbital theory; ligand-field theory; electronic spectroscopy. May be concurrently scheduled with course C276A. P/NP or letter grading.

C180. Solid-State Chemistry. (4) Lecture, three hours. Requisite: course 172 with grade of C– or better. Survey of solid-state methods for their prepara-
tion and characterization. Interplay of electron band theory and its relationship to chemical, optical, trans-
port, and magnetic properties, leading to deeper un-
derstanding of these materials. Concurrently sched-
uled with course C280. P/NP or letter grading.

C181. Polymer Chemistry. (4) Lecture, three hours; discussion, one hour. Requisites: courses 30B, 110A. Synthesis of organic and inorganic macromolecules, thermoplastic and semicrystalline polymers. descrip-
tions of unique properties of polymers, polymer char-
acterization methods, and special topics such as con-
ductive and biomedical polymers and polymeric re-
agents in synthesis. Concurrently scheduled with course C281. P/NP or letter grading.

184. Chemical Instrumentation. (5) Lecture, two hours; laboratory, eight hours. Enforced requisites: courses 30CL and 110A, with grades of C– or better. Theory and practice of instrumental techniques of chemical and structural analysis, including atomic absorption spectroscopy, gas chromatography, mass spectrom-
etry, nuclear magnetic resonance, polarography, X-ray fluorescence, and other modern methods. P/NP or letter grading.

185. Materials Chemistry Laboratory. (5) Lecture, two hours; laboratory, eight hours. Requisites: courses 30AL, 110A, 113A, 171. Materials synthesis and phys-
ics, properties of complex materials. Combination syn-
thetic skills with fundamental physical understanding and characterization in approximately equal propor-
tions to relate materials synthesis to materials func-
tion. Letter grading.

M186. Stochastic Processes in Biochemical Sys-
tems. (4) (Same as Computational and Systems Bi-
ology M175.) Lecture, three hours. Requisites: Life Sciences 2, 2B, and 3, and either 7B, 7J, or 20C, Mathe-
ematics 33B, Electrical and Computer Engineering 131A or Mathematics 170A or Statistics 100A. Covers random and stochastic processes in play in biochem-
ical systems, including ion channels, cytokines, signal migration and mitosis, gene expression networks, and signal transduction. Covers mathematical tools such as continuous and discrete Markov processes, first passage, time escape, and other stochastic processes. P/NP or letter grading.

C188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilita-
tors. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin prepa-
ration of syllabus. Individual contract with faculty mentor to be arranged. P/NP or letter grading.
### Graduate Courses

#### C200. Genomics and Computational Biology. (5)
*Lecture, four hours; discussion, one hour. Introduction for biochemistry students of technologies and experimental data of genomics, as well as computational tools for analyzing genomics data. How to develop curricula vitae, put together grant proposals, and write scientific proposals to be submitted to funding agencies. How to write scientific papers and present data to the computational chemistry community, focusing primarily on structural chemistry. S/U or letter grading.

#### 201. Scientific Proposal Writing. (2)
*Lecture, three hours. Designed for graduate biochemistry and molecular biology students. How to write scientific proposals to funding agencies. How to develop curricula vitae, put together grant proposals, and critique proposals. Letter grading.

#### 203B. Ethics in Chemical Research. (2)
*Lecture, one hour. Discussion of ethics in graduate education, teaching, and chemical research, including issues such as conflicts of interest, plagiarism, intellectual property, sexual harassment, and other topics related to ethical conduct of research. S/U grading.

#### C203C. Research Ethics and Genomics Research. (2)
*Lecture, 90 minutes. Data analysis and management, statistical methods, use of commercial reagents, microscopy data analysis, figure preparation, authorship, mentoring, human subjects protection, animal subject protection, and conflict of interest. May be repeated for credit. S/U grading.

#### 203D. Advanced Topics in Responsible Conduct in Cellular and Molecular Biology Research. (2)
*Lecture, two hours. Designed for cellular and molecular biology PhD students. Discussion of research in fields to reliably advance knowledge in disciplines and who are in stage of their careers where they are beginning to think of applying for postdoctoral fellowships and research and teaching positions. Course helps fulfill training requirement in research integrity and includes grants and individual NRSA awards. S/U grading.

#### 204. Student Research Seminar. (2)
*Lecture, one hour. Limited to students supported by UCLA program in Cellular and Molecular Biology Predoctoral Training. Research seminar presented by second- and third-year students. S/U grading.

#### C205A. Introduction to Chemistry of Biology. (4)
*(Same as Pharmacology M205A.) Lecture, three hours; discussion, one hour. Introduction to chemical biologists and their research programs. Includes the impact of chemical biology on drug discovery and targeted evolution, cell biology of metal ions, imaging metal ions in cells, metal-containing drugs. Concurrency required. May be repeated for maximum of 8 units. Individual contract required. P/NP or letter grading.

#### 206. Chemistry of Biology Seminar. (2)
*Lecture, one hour; assigned setting, six hours (course 206A). Selected talks and papers presented by training faculty on solving problems and utilizing tools in chemistry and molecular biology on challenges and opportunities presented by the expanding field of chemical biology. High-throughput technologies such as sequencing, microarrays, mass-spc, and robotics have given biologists incredible new capabilities to analyze complete genomes, expression patterns, functions, and interactions across whole organisms, populations, and species. Use and analysis of such datasets becomes essential daily activity for biomedical scientists. Core principles and methodologies for analyzing genomics data to answer biological and medical questions, with focus on concepts that guide data analysis rather than algorithmic details. S/U or letter grading.

#### 207. Organic metal chemistry. (4)
*Lecture/discussion, three hours. Requisite or corequisite: course 172. Survey of synthesis, structure, and reactivity (emphasis on mechanistic aspects) of metal ions in cells, metal-containing drugs. Concurrency required. May be repeated for maximum of 12 units. Individual contract required. P/NP or letter grading.

#### 208. Cell Mass Spectrometry for Chemists and Biochemists. (2)
*Lecture, one hour; assigned setting, six hours. Requisite: course 153A. Introduction to principles and practice of organic and inorganic mass spectrometry. Topics include EI, CI, ICPSM, GC/MS, LC/MS, ESI, MALDI, MS/MS protein identification, and proteomics. Concurrently scheduled with course C108. S/U or letter grading.

#### 209. Introduction to Research Chemistry. (2)
*Lecture, two hours. Half-hour presentations each session by three different chemists to introduce their research programs. S/U grading.

#### 210. Advanced Topics in Chemical Research. (2)
*Lecture, one hour. Designed for second-year graduate students to help them engage contemporary challenges in chemical research and their own research projects. Building of critical thinking skills and proposal writing skills. S/U grading.

#### C213B. Quantum Chemistry Methods. (4)
*Lecture, two hours; discussion, one hour. Requisite: course 113A. Complete introduction to electronic structure theory and methods used by general computational chemistry community, focusing primarily on ab initio methods. Students gain understanding of electronic structure methods and tools to identify which methods are suitable for which types of systems. Methods covered include Hartree Fock, density-functional theory, perturbative methods, and modern high-correlation methods; and highlight algo-
C215A-C215B. Quantum Chemistry; Methods. (4–4)
Lecture, four hours; discussion, one hour. Requisites: courses 113A, Mathematics 31A, 31B, 32A, 32B, 33A, with grades of C– or better. Recommended: knowledge of elementary quantum mechanics. Emphasis on new developments in quantum chemistry, topics selected from among: quantum chemistry of small molecules, quantum chemistry of large molecules, solid and fluid phases, phase equilibria, electric and magnetic effects of atoms, molecules, and crystals, surface properties, polycrystalline solids, computational techniques, and problems selected from chemistry, physics, geology, material science, and biology. Concurrently scheduled with course C215B. S/U or letter grading.

218. Chemistry Student Exit Seminar. (2) Seminar, two hours. Seminars presented by staff, outside speakers, postdoctoral fellows, and graduating students. May be repeated for credit. S/U grading.

219A. Seminars: Research in Physical Chemistry—Solution Spectroscopy of Materials (Physical Chemistry). (2) Seminar, three hours. Limited to chemistry graduate students. Discussion of recent progress in area of solution spectroscopy, with focus on materials and biophysics applications. Literature discussion, discussion of recent results, safety procedures, and guest lectures. S/U grading.

219E-219Z. Seminars: Research in Physical Chemistry. (2, each) Seminar, three hours. Advanced study and analysis of current topics in physical chemistry. Discussion of current research and literature in research specialty of faculty member teaching course. S/U grading.


221A-221Z. Advanced Topics in Physical Chemistry. (2 to 4 each) Lecture, two to four hours. Each course encompassing a specialized topic in physical chemistry, generally taught by faculty members whose research interests embrace that specialty. S/U or letter grading.

222. Mathematical Methods for Chemistry. (4) Lecture, four hours. Enforced requisites: Mathematics 31A, 31B, 32A, 32B. Review of basic mathematics necessary to study physical chemistry at graduate level, with focus on review of vectors, linear algebra, elementary complex analysis, and solution of ordinary and partial differential equations. Development of problem-solving skills through homework based on these mathematical techniques, with examples from physical chemistry. Concurrently scheduled with course C212. S/U or letter grading.

223A-223B. Classical and Statistical Thermodynamics. (4–4) Lecture, four hours; discussion, one hour. Requisite: course 110B or 156. Recommended: courses 113A and 113B. Emphasis on new developments in classical and statistical thermodynamics, selected from among: first and second laws of thermodynamics, properties of perfect and real gases, phase equilibria, ideal and nonideal solutions, phase diagrams, solution phenomena, high polymers, gravitation. May be concurrently scheduled with courses C213A-C213B. S/U or letter grading.


226A. Computational Methods for Chemists. (4) Lecture, one hour; laboratory, four hours. Requisites: courses 110A, 113A, Mathematics 33A. Covers some basics of scientific coding, introduction to advanced computational tools, and computational available in commercially available computational packages. Includes quantum mechanical techniques for chemistry, reactivity, spectroscopy, solid state calculations; statistical mechanical techniques for chemistry and biochemistry; python coding; basic algorithms, machine learning, and numerical techniques. Concurrently scheduled with course C216A. S/U or letter grading.

227. Synthetic Biofuels and Biofuels. (4) Same as Chemical Engineering 227F. Lecture, four hours; discussion, one hour. Requisite: course 153A. Engi- neering microorganisms for complex phenotype is common goal of metabolic engineering and synthetic biology. Production of advanced biofuels involves designing and constructing novel metabolic networks in cells. Such efforts require profound understanding of both biochemical and biological regulat- ions and are aided by tools in bioinformatics, systems biology, and molecular biology. Fundamentals of meta- abolic biochemistry, protein structure and function, and bioinformatics. Use of systems modeling for meta- bolic networks to design microorganisms for energy applications. Concurrently scheduled with course CM127. S/U or letter grading.

228. Physical Chemistry Seminar. (2) Seminar, two hours. Seminar, research, class presentations, and research topics. Seminar presentations by postdoctoral fellows and graduate students. May be repeated for credit. S/U or letter grading.

229. Introduction to Physical Chemistry Research. (2) Lecture, 90 minutes. Designed primarily for en- tering graduate physical chemistry students. S/U grading.


230B. Structural Molecular Biology. (4) Same as Molecular, Cell, and Developmental Biology M230B. Lecture, three hours; discussion, one hour. Requisites: Mathematics 3C, Physics 6C. Selected topics from principles of biological structure; structures of globular proteins, viruses, and ribonucleic acids; structure of fibrous proteins, nucleic acids, and polysaccharides; harmonic analysis and Fourier transforms; principles of electron, neutron, and X-ray diffraction; optical and computer filtering; three-dimensional reconstruction. S/U or letter grading.

230D. Structural Molecular Biology Laboratory. (2) Same as Molecular, Cell, and Developmental Bi- ology M230D. Laboratory, 10 hours. Corequisite: course M230B. Methods in structural molecular bi- ology for solving experimental structures utilizing single crystal X-ray diffraction, low angle X-ray diffraction, electron dif- fraction, optical diffraction, optical filtering, three-di- mensional reconstruction from electron micrographs, and X-ray and neutron diffraction. S/U or letter grading.

232A. Core Principles in Cell and Molecular Biolog- ies. (2) Lecture, four hours. Requisites: Life Sciences 7A, 7B, 7C, 23L. Students gain broad foundational knowledge of critical cell biology processes and applications provided through commercially available databases and software packages. Topics include cell cycle, cell signaling, cell morphology, cell communication, genome organization and evolution, and biomedical applications. S/U grading.

232B. Skills Development for Cell and Molecular Biologists. (2) Seminar, two hours. Students are trained to develop skills necessary to persist and thrive as research- ers and scholars in cellular and molecular bio- logy. Topics include resilience in science, balancing work/life, organizing research and career goals, writing impactful abstracts, and presenting great talks. S/U grading.

235A-235R. Seminars: Research in Organic Chem- istry and Biomaterials. (2) Seminar, research, class presentations, and research topics. Seminar presentations by postdoctoral fellows and graduate students. May be repeated for credit. S/U or letter grading.

235A-235R. Seminars: Research in Organic Chem- istry and Biomaterials. (2) Seminar, research, class presentations, and research topics. Seminar presentations by postdoctoral fellows and graduate students. May be repeated for credit. S/U or letter grading.

236. Spectroscopic Methods of Organic Chemistry. (4) Lecture, three hours. Requisite or corequisite: course M230A. Probes include IR, UV, visible, and carbon 13 magnetic resonance, infrared spec- troscopy, and mass spectrometry; new techniques in NMR, IR, and MS, with emphasis on Fourier transform NMR. S/U or letter grading.

239. Natural Product Biosynthesis: Chemical Logic and Enzymatic Machinery. (4) Lecture, three hours; discussion, one hour. Covers fundamental chemical logic and enzyme mechanisms involved in biosyn- thesis of natural products. Discussion of major classes
of natural product including polyketides, nonribosomal peptides, terpenes, alkaloids. Emphasis on biosynthetic logic used by nature to form complex molecules. Discussion of several important enzyme families in context of biosynthesis, including assembly-line enzymes, group transferences, oxidoreductases, etc. Historical account of natural product isolation and characterization, as well as modern account of synthetic biology and directed evolution efforts that are used in discovery of new natural products. Includes extensive survey of scientific literature in format of presentations and discussions. Concurrently scheduled with course C138. Letter grading.

C240. Bionanotechnology. (4) Lecture, three hours; discussion, one hour. Requisites: courses 30C, 110A. Basic physical, chemical, and biological principles in bionanotechnology; materials chemistry; synthesis; and nanotechnology. Fabrication of ordered biologically derived molecules, characterization and detection techniques, and biomimetic materials and applications at nanoscale. Concurrently scheduled with course C140. S/U or letter grading.

241A-241Z. Special Topics in Organic Chemistry. (2 to 4 each) Lecture, two to four hours. Requisite or corequisite: course C243A. Each course encompasses one special area in organic chemistry generally taught by faculty members whose research interests embrace that specialty. S/U or letter grading.

C243A. Strategy and Design in Organic Synthesis. (4) Lecture, three hours; discussion, one hour. Requisite: courses 30C and 30CL (may be taken concurrently). Broad area of organic synthesis, with emphasis on strategies for forming carbon-carbon bonds. Topics include small-molecule synthesis and organic chemistry generally taught by faculty members whose research interests embrace that specialty. S/U or letter grading.

244A. Organic Synthesis: Methodology and Stereochemistry. (4) Lecture, three hours; discussion, one hour. Modern synthetic reactions and transformations involving organic substrates. Special emphasis on reagents useful in asymmetric induction and stereoselective synthesis of structurally complex target molecules. S/U or letter grading.

244B. Biopolymers and Biomolecular Recognition. (4) Lecture, two hours; discussion, two hours. Introduction to the chemistry of biopolymers and biomolecular recognition. Emphasis on the role of these interactions in biological function. S/U or letter grading.

245. Computational Organic Chemistry. (4) Lecture, two hours; discussion, one hour; computer laboratory, one hour. Requisites: courses 30C, 113A. Application of quantum mechanical concepts and methods to understand and predict organic structures and reactivities. Computational modeling methods, including laboratory experience with force-field and quantum mechanical computer calculations. Concurrently scheduled with course 145S. S/U or letter grading.


248. Organic Chemistry Student Seminar. (2) Seminar, four hours. Seminars presented by staff, outside speakers, postdoctoral fellows, and graduate students. May be repeated for credit. S/U or letter grading.

249A. Methods of Materials Chemistry: Synthesis, Characterization, Physical Properties, Applications, and Devices. (2) Seminar, two hours. Designed for first-year graduate students to teach advanced problem-solving skills and critical thinking, with focus on problems and recent literature pertaining to materials chemistry. How materials are synthesized and characterized. Discussion of important physical properties, as well as broad range of applications and behaviors in materials chemistry. S/U or letter grading.

249B. Methods of Chemical Synthesis: Organic/Inorganic/Organometallic. (2) Seminar, two hours. Designed for first-year graduate students to teach advanced problem-solving skills and critical thinking, with focus on problems and recent literature pertaining to chemical synthesis of organic, inorganic, and organometallic compounds. S/U grading.

249C. Methods of Physical/Theoretical/Biophysical Chemistry. (2) Seminar, two hours. Designed for first-year graduate students to teach advanced problem-solving skills and critical thinking, with focus on problems and recent literature pertaining to physical, theoretical, and biophysical chemistry. S/U grading.

250. Research Methods and Integrity in Cellular and Molecular Biology. (4) Lecture, two hours. Data analysis and management, statistical methods, use of antibody and kit reagents, figure preparation, authorship, mentoring, human subject regulations. Concurrently scheduled with course C130. Letter grading.

252. Mitochondria in Medicine, Biology, and Chemistry. (1) (Same as Biological Chemistry M252.) Seminar, two hours every other week. Open to undergraduate and graduate science majors considering or currently conducting research in areas related to mitochondria. Large-scale and pathological processes involve mitochondrial function and dysfunction. Focus on understanding how mitochondria metabolize, form, and function impact health and disease. Focus on study of healthy and dysfunctional mitochondria critically assessed at subcellular, cellular, tissue, and organismal levels. Topics include in-depth analyses of literature and original research. Students will develop design and methods of current research. May be repeated for credit. Concurrently scheduled with course C155. S/U grading.


257. Physical Chemistry of Biological Macromolecules. (4) Lecture, one hour; discussion, one hour; laboratory, four hours. Requisite: course 153A. Theory of hydrodynamic, thermodynamic, and optical techniques used to study structure and function of biological macromolecules. S/U or letter grading.

258. Advanced Topics in Biochemistry and Molecular Biology. (4) Lecture, two hours; Critical analysis of experimental design and methods in biochemistry and molecular biology. In-depth analysis of literature in one or more areas of current research. May be repeated for credit. S/U or letter grading. 259A. Biochemistry. 259B. Mechanisms of Gene Regulation. (4) (Same as Biological Chemistry M259.) Lecture, four hours. Requisite: course 153B. RNA polymerase structures and mechanisms; promoter recognition and transcription cycle; mechanisms of activation; transcriptional poising and elongation control; Mediator of transcription; chromatin remodeling and modification; epigenetic regulation; cotranscriptional and transcription-coupled RNA processing; transcriptional control on DNA processing and stability; nuclear export of mRNA. Concurrently scheduled with course C159. S/U or letter grading.

260A. Introduction to Bioinformatics. (4) (Same as Bioinformatics M221, Computer Science CM221, and Human Genetics M260A.) Lecture, four hours; discussion, two hours. Requisites: Computer Science CM160A or Program in Computing 10C or better, and one course from Civil and Environmental Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, Mathematics 170E, or Statistics 180. Prior knowledge is required. Designed for engineering students as well as students from biological sciences and medical school. Introduction to bioinformatics and methodologies, with emphasis on concepts and exploring new computational and statistical techniques to analyze biological data. Focus on sequence analysis and alignment algorithms. Concurrently scheduled with course CM160A. S/U or letter grading.


261. Biochemistry and Molecular Biology of Protein Translocation Systems. (4) Three seminars, two hours; discussion, two hours. Requisites: courses 269A through 269D. Protein translocation into nucleus, mitochondrion, peroxisome, chloroplast, endoplasmic reticulum, and protein export in bacteria. Letter grading.

262. Seminars in Chemical Biology. (2) Seminar, two hours. Seminars in chemical biology (broadly defined) presented by outside speakers, graduate students, postdoctoral fellows, and faculty/staff from diverse scientific areas. May be repeated for credit. S/U or letter grading.

264. Free Radicals in Biology and Medicine. (2) Lecture, three hours. Enforced prerequisites: courses 135A and either 153B or 153C, with grades of C- or better. Introduction to chemical reactions and free radicals, their role in metabolic control, mitochondrial metabolism, neurodegenerative diseases, apoptosis, and aging. Discussion of radical reactions, how they are harnessed to achieve enzyme catalysis, and how free radicals contribute to or regulate essential biological processes. These same reactions run amok under certain types of stress and can contribute to wide variety of diseases, including neurodegenerative diseases (e.g., Huntington’s, Parkinson’s, and Alzheimer’s diseases), mitochondrial diseases, atherosclerosis, and aging. Concurrently scheduled with course C164. S/U or letter grading.


267. Nanoscience and Chemistry. (4) Lecture, four hours. Enforced prerequisites: courses 110A, 113A, 171, 172. Designed for advanced undergraduate and graduate students. Why nanoscience is important and in-
268. Biochemistry Research Seminar. (2) Seminar, two hours. Seminars presented by staff, outside speakers, postdoctoral fellows, and graduate students on topics of current biochemistry research interest. May be repeated for credit. S/U or letter grading.


270A. Chemistry of Materials. (2) Lecture, five hours; discussion, one hour. Requisite: course 171 with grade of C– or better. Systematic approach to modern inorganic chemistry, structure and bonding of inorganic molecules and solids, structure/reactivity relationships, vibrational spectra of complexes, electronic properties in inorganic materials, and characterization methods. Letter grading.

272A. Inorganic Chemistry. (2) Lecture, three hours; discussion, one hour. Requisite: course 171 with grade of C– or better. Systematic approach to modern inorganic chemistry, structure and bonding of inorganic molecules and solids, structure/reactivity relationships, vibrational spectra of complexes, electronic properties in inorganic materials, and characterization methods. Letter grading.

272A-272N. Seminars: Research in Inorganic Chemistry. (2 each) Seminar, three hours. Advanced study and analysis of current topics in inorganic chemistry. Discussion of current research and literature in research specialty of faculty member teaching course. S/U grading.


272D. Theory and Practice of Modern Crystallography. (2) Lecture, three hours; discussion, one hour. Requisites: courses 113A and 172, with grades of C– or better. Course for teaching assistants designed to deal with problems and techniques of teaching college chemistry. S/U grading.

277. Crystal Structure Analysis. (4) Lecture, four hours. Theory and practice of modern crystallography, with emphasis on practical experience in structure determination. Topics include crystallographic symmetry, scattering theory, data collection, Fourier analysis, heavy atom techniques, direct methods, isomorphous replacement, synchrotron radiation, and common pitfalls. Letter grading.

278. Inorganic Chemistry Student Seminar. (2) Seminar, two hours. Seminars presented by staff, outside speakers, postdoctoral fellows, and graduate students. May be repeated for credit. S/U or letter grading.

280. Solid-State Chemistry. (4) Lecture, three hours. Requisite: course 172 with grade of C– or better. Survey of new materials and methods for their preparation and characterization, with emphasis on band theory and its relationship to chemical, optical, transport, and magnetic properties, leading to deeper understanding of these materials. Concurrently scheduled with course 172. S/U or letter grading.

281. Polymer Chemistry. (4) Lecture, three hours; discussion, one hour. Requisites: courses 30B, 110A. Synthesis of organic and inorganic macromolecules, thermodynamic and statistical mechanical description of polymer solutions, polymer characterization methods, and special topics such as conductive and biomedical polymers and polymeric reagents in synthesis. Concurrently scheduled with course 121H. S/U or letter grading.

282. Introduction to Inorganic Chemistry Research. (2) Lecture, 90 minutes. Discussion of current research in inorganic chemistry, designed primarily for entering graduate inorganic chemistry students. S/U grading.


287. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

400. Safety in Chemical and Biochemical Research. (2) Lecture, two hours. Survey of safe laboratory practices for experimental research in organic, inorganic, and physical chemistry and biochemistry. Topics include laser safety, cryogenic hazards, high- and low-pressure experimentation, gas and carcinogen handling, chemical spills, fire extinguishing, and chemical disposal. S/U grading.

469. Teaching College Chemistry. (2) Seminar, two hours; discussion, two hours; 20 hours training during week prior to Fall Quarter. Course for teaching assistants designed to deal with problems and techniques of teaching college chemistry. S/U grading.

599. Research for and Preparation of PhD Dissertation. (2 to 16) Tutorial, to be arranged. Each faculty member supervises research of MS students and holds research group meetings, seminars, and discussions with students. May be repeated for credit. S/U or letter grading.

599. Research for and Preparation of PhD Dissertation. (2 to 16) Tutorial, to be arranged. Each faculty member supervises research of PhD students and holds research group meetings, seminars, and discussions with students. May be repeated for credit. S/U or letter grading.
Studies

Central American

Abel Valenzuela, Jr., PhD
Veronica Terríquez, PhD
Daniel G. Solórzano, Jr., PhD
Laura E. Gómez, PhD
Alicia Gaspar de Alba, PhD
Jason P. De León, PhD
Héctor V. Calderón, PhD
Charlene Villaseñor Black, PhD

As well as new directions in the study of Chicanas/Chicanos and Latinas/Latinos, including border and transnational studies; expressive arts; history, literature, and language of Americas; and labor, law, and policy studies.

Departmental faculty members, situated in one of the most diverse cities in the world, utilize Los Angeles as a laboratory for studying the social transformations taking place in California, the Southwest, and the U.S. The department provides students with the interdisciplinary research tools necessary to advance knowledge in the field, provide academic leadership, and serve community needs with academic resources.

Mission

The mission of the César E. Chávez Department of Chicana/o and Central American Studies is to train a new generation of scholars to research and analyze the life, history, and culture of Mexican-origin people within the U.S. as well as of other Latina/Latino and indigenous populations in the Americas.

Undergraduate Major

Chicana and Chicano Studies BA

The BA program in Chicana and Chicano Studies is committed to the practice of different forms of scholarship and pedagogy and to the promotion of critical thinking about such issues as gender, sexuality, social action, language, race, ethnicity, class, assimilation/acculturation paradigms, and indigenous traditions. The literary and visual arts often function as vehicles for social change and creative empowerment, and so they constitute one focus of the curriculum, that aims to strike a balance among the social sciences, humanities, arts, and the professions. The major prepares students for graduate education in academic and professional fields and for a variety of positions that involve community and social service in the U.S. and abroad.

Capstone Program

The Chicana and Chicano Studies major is a designated capstone program. Students have options for completing a senior honors thesis, individual research, or senior project under the direction of a faculty member. Alternatively, students may elect to complete an upper-division course that includes an additional coursework culminating in completion of a capstone paper or creative project. Through their capstone work, students are expected to demonstrate working knowledge of the major findings and methods of the disciplines from which they have drawn their Chicana and Chicano studies coursework, show their capacities for conceiving and executing a research or creative project on a self-selected topic as well as identifying and evaluating relevant documentation pertaining to that project, demonstrate appropriate levels of scholarly discourse on their selected topic, and develop greater capacity to be of lifelong service to the Chicana/Chicano and Latina/Latino community and to global society in the tradition of César Chávez and scholar-activist exemplars.

Learning Outcomes

The Chicana and Chicano Studies major has the following learning outcomes:

• Demonstrated skills and expertise, including research, analysis, and writing
• Demonstrated familiarity and competence in a range of interdisciplinary methodologies and approaches
• Demonstrated ability to identify and analyze appropriate primary and secondary sources, material evidence, and other primary documents
• Demonstrated mastery and integration of knowledge and learned abilities
• Demonstrated ability to use knowledge gained in classroom to conceive and execute projects
• Demonstrated broad knowledge of fundamentals acquired through coursework, as formed by race, class, gender, and sexuality paradigms
• Conceptualization and execution of an original research project that identifies and engages with a topic relevant to the student’s area of concentration
• Presentation of work to peers for discussion and critique

Entry to the Major

Transfer Students

Transfer applicants to the Chicana and Chicano Studies major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one interdisciplinary Chicana/Chicano history and culture course, one interdisciplinary Chicana/Chicana social structure and contemporary conditions course, and five quarter terms of Spanish.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Chicana/o and Central American Studies 10A, 10B, Spanish 5 or equivalent.

The Major

Required: A total of 11 upper-division courses, including Chicana/o and Central American Studies 101; one service learning course from 100XP or M170XP or from the approved list available in the department office each term; two related study courses from the approved list of courses outside the department (related study includes courses that provide a comparative perspective to Chicana and Chicano studies and/or a contextualization of Chicana and Chicano communities in the world); one advanced seminar course from 191 or another course by petition to the department chair; and a concentration of four courses in one area listed below and two courses in a second area:
Border and Transnational Studies: Chicana/o and Central American Studies CM110, 120, M124, M125, M126, M132, 143, M144, CM147, 151, 152, 153A, M154, M155A, M156A, 163, 176, 184, 191

Honors Program
The proposal, research, data collection, analysis, and writing of the thesis (or the creative equivalent) take place in Chicana/o and Central American Studies 198A, 198B, and 198C, which may not be applied toward the major requirements. An honors thesis of at least 30 pages or a significant creative project is required.

Optional Multidisciplinary Senior Thesis
Chicana and Chicano Studies majors have the option during their senior year to enroll in two 199 courses with the intention of producing an undergraduate thesis. The first term includes thesis conceptualization and formulation, along with preliminary data collection for the thesis. The second term entails completion of the data collection, analysis of the data, and writing of the thesis. Enrollment in the two 199 courses is with the advice and consent of a faculty member.

Policies
The Major
No more than 8 units of 188, 191, and 199 courses may be applied toward the major; enrollment in the courses must be approved in writing by the department chair. Each major course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

Honors Program
The Chicana and Chicano Studies honors program provides the opportunity for motivated and dedicated students to undertake a year-long research or creative project with the guidance and supervision of a faculty member. The program is open to all juniors and seniors who have a 3.5 grade-point average in the major, a cumulative GPA of 3.0 or better, and completed 90 or more total units, including Chicana/o and Central American Studies 10A, 10B, 101, and one course from 89, 89HC, 189, or 189HC.

Undergraduate Minors

Central American Studies Minor
Admission To enter the minor, students must have an overall grade-point average of 2.0 or better.

The Minor
Required Lower-Division Course (5 units): Chicana/o and Central American Studies 20 with a grade of C or better.

Policies
A maximum of 4 units of special studies courses (197, 199) approved by the adviser may be applied toward the minor.
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.
Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

Chicana and Chicano Studies Minor
Admission To enter the minor, students must have an overall grade-point average of 2.0 or better, have completed 45 units, and file a petition with the student adviser in 7351 Bunche Hall.

The Minor
Required Lower-Division Courses (10 units): Chicana/o and Central American Studies 10A, 10B.
Required Upper-Division Courses (20 units minimum): Chicana/o and Central American Studies 101 and four elective courses (20 units minimum) selected from the approved list (available in the department office each term).

Policies
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.
Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Major
Chicana and Chicano Studies MA, PhD
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Chicana/o and Central American Studies
Lower-Division Courses
10A. Introduction to Chicana/Chicano Studies: History and Culture. (Formerly numbered Chicana and Chicano Studies 10A.) Lecture, three hours; discussion, one hour. Interdisciplinary survey of diverse historical experiences, cultural factors, and ethnic/racial paradigms, including indigenousness, gender, sexuality, language, and borders, that help shape Chicana/Chicano identities. Emphasis on critical reading and writing skills. Letter grading.
10B. Introduction to Chicana/Chicano Studies: Social Structure and Contemporary Conditions. (Formerly numbered Chicana and Chicano Studies 10B.) Lecture, three hours; discussion, one hour. Multidisciplinary examination of representation, ideologies, and material conditions of Chicanas/Chicanos, including colonialism, race, labor, immigration, poverty, assimilation, and patriarchy. Emphasis on critical reading and writing skills. Letter grading.
M18. Leadership and Student-Initiated Retention. (Same as African American Studies M18, American Indian Studies M18, and Asian American Studies M18.) Seminar, two hours. Limited to freshmen/sophomores/first-year transfer students. Not open for credit to students with credit for course M118. Exploration of issues in retention at UCLA through lens of student-initiated and student-run programs, efforts, activities, and services. Focus on populations with his-
torically low graduation rates targeted by Campus Retention Committee. May not be applied toward departmental major or minor elective requirements. May be repeated with topic change or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.


88. Sophomore Seminars: Chicana/o and Central American Studies. (2) (Formerly numbered Chicana and Chicano Studies 88.) Seminar, two hours. Limited to lower-division students. Readings and discussions designed to introduce students to current research in Chicana/o and Central American Studies. Participation project may be required. May not be applied toward departmental major or minor requirements. May be repeated for credit with topic change or letter grading.

89. Honors Freshman Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

97. Variable Topics in Chicana/o and Central American Studies. (2) (Formerly numbered Chicana and Chicano Studies 97.) Seminar, two hours. Requisite: course 10A or 10B. Current topics and particular research interests to be announced. Topics to be determined by Chicana and Chicano Studies through readings and other assignments. May be repeated for credit. P/NP or letter grading.

98. Professional Schools Seminars. (2) (Formerly numbered Chicana and Chicano Studies 98.) Seminar, two hours. Limited to 20 students. Introduction to issues of professional (nonacademic) settings and careers through readings and other assignments. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in required lower-division course. Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100XP. Barrio Organization and Service Learning. (5) (Formerly numbered 100SL.) Seminar; two hours; discussion, two hours; field placement, six hours. Limited to juniors/seniors. Service learning placement in community-based organization, labor union, or service-oriented nonprofit organization. Study of role that these organizations play in improvement and change of Chicana/Chicana communities. Students meet on regular basis with instructors and provide periodic reports of their experience. Letter grading.

101. Theoretical Concepts in Chicana/Chicano Studies. (5) (Formerly numbered Chicana and Chicano Studies 101.) Lecture; four hours; discussion, one hour. Offered in spring, fall, and winter as needed. P/NP grading.

M102. Mexican Americans and Schools. (4) (Formerly numbered Chicana and Chicano Studies M102.) Seminar, four hours; discussion, two hours. Theoretical and empirical overview of Chicana and Chicano educational issues in U.S., with special emphasis on disenfranchising effects of race, gender, class, and immigrant status on Chicana/o educational attainment and achievement. Examination of how historical, social, political, and economic forces impact Chicana/o educational experience. P/NP or letter grading.

M103C. Origins and Evolution of Chicano Theater. (5) (Formerly numbered Chicana and Chicano Studies M103C.) (Same as Theater M103C.) Lecture, three hours. Designed for juniors/seniors. Exploration of development of Chicano theater from its beginning in 1970s, with particular emphasis on how queer and feminist activism as well as Central and South American migration have shaped 21st-century Chicano/a/o and Latino/a/o theater. Offered in fall. P/NP or letter grading.

M103D. Contemporary Chicano Theater: Beginning of Chicano Theater Movement. (5) (Formerly numbered Chicana and Chicano Studies M103D.) (Same as Theater M103D.) Lecture, three hours. Analysis and discussion of historical and political events from 1965 to 1980 as well as 1980s that led to emergence of Chicano theater. Letter grading.


104. Comedy and Culture: Your Humorous Life. (4) (Formerly numbered Chicana and Chicano Studies 104.) Lecture, four hours. How to mine unique humorous life adventures from students' cultural identities and turn those distinct experiences into humorous literature. Students acquire skills to read their stories out loud, with emphasis on comedy in their pieces through art of storytelling and performance. P/NP or letter grading.

104A. Art of Performance. (4) (Formerly numbered Chicana and Chicano Studies 104A.) Seminar, four hours. Examination of seminal works of Latina/o/o/x theater artists with particular focus on creating and embodying personal passion and perspective. Features dramatic plays, autobiographical texts, and ensemble devised works that reflect changing nature of Latina/o/x cultural landscape. Introduction to basic elements of acting, including collaborative group performance, physical storytelling, and voice/speech exercises designed to free creative voice. Examination of performance of cultural expression, political tool, and personal identity. P/NP or letter grading.

M105A. Early Chicana/Chicano Literature, 1400 to 1920. (5) (Formerly numbered Chicana and Chicano Studies M105A.) (Same as English M105A.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 4H. Survey of Chicana/Chicano literature from poetry of Triple Alliance and Aztec Empire through end of Mexican Revolution (1920), including oral and written forms (poetry, cobija, folklore, novels). Short stories, and drama) by writers such as Nezahualcóyotl (Huéngy Coyote), Cabaza de Vaca, Lorenzo de Zavala, Maria Amparo Ruiz de Burton, Eusebio Chacon, Daniel Venegas, and Lorenza Villegas de Magón. P/NP or letter grading.

M105B. Chicana/Chicano Literature from Mexican Revolution to el Movimiento, 1920 to 1970s. (5) (Formerly numbered Chicana and Chicano Studies M105B.) (Same as English M105B.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Chicana/Chicano literature from 1920s through Great Depression and World War II, Chicana/o/o/x civil rights movement. Oral and written narratives by writers including Conrado Espinoza, Jovita González, Cleofas Jaramillo, Angelico Chávez, María Sáez, Astra Acosta, and Evangelina Vigil. P/NP or letter grading.

M105C. Chicana/Chicano Literature since el Movimiento: 1970s to Present. (5) (Formerly numbered Chicana and Chicano Studies M105C.) (Same as English M105C.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Survey of Chicana/Chicano literature since 1970s, with particular emphasis on how queer and feminist activism as well as Central and South American migration have shaped 21st-century Chicana/o/o/x and Latino/a/o/o/x literature. Offered in spring. P/NP or letter grading.

M105D. Introduction to Latino/Latina Literature. (5) (Formerly numbered Chicana and Chicano Studies M105D.) (Same as English M105D.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Survey of U.S. Latina/Latina literature and introduction to its many cultural threads, with particular emphasis of Caribbean, Mexican, South American, and Central American origin. Representative works read in relation to such topics as relationship between Latina/Latina politics and world literature, Latina/o/o/x diaspora, emerging Latina/Latino majority. P/NP or letter grading.

M105E. Studies in Chicana/o and/or Latina/o Latina Literature. (5) (Formerly numbered Chicana and Chicano Studies M105E) (Same as English M105E.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Variable topics course to give students broad introduction to issues and themes in Chicana/o/o/x studies, Latina/o/o/x literature or Latina/o/o/x diaspora, immigration, revolution, language, gender, sexuality, and diaspora, among others. May be repeated for credit with topic or instructor change. P/NP or letter grading.

105F. Gender, Fiction, and Social Change. (4) (Formerly numbered Chicana and Chicano Studies 105F) Lecture, four hours. Requisite: English Composition 3. Study of essays, novels, short narratives, and plays written when Chicana/Latina/o/o/x authors emerged as cultural voice, women repre- sent writers with focus on themes of identity, ethnicity, gender, and cross-border experiences leading to so- cial change. Critical reading and analysis of work, including author's and social/cultural contexts, to point out unique contribution of each work to greater body of U.S. liter- ature. P/NP or letter grading.

M105XP Seminar: Chicana/o and/or Latina/o Latina Literature—Community-Engaged Learning. (5) (Formerly numbered M105SL) (Same as English M105XP) Seminar, three or four hours; field placement, three or four hours. Enforced requisite: English Composition 3. Specialized studies in Chicana/Chicana/o and/or Latina/o/o/x literature. In-depth study of various topics related to Chicana/Latina communities in Southern California, including Chicana/Chicana/o/o/x voices of Los Angeles; immigration, migration, and mujerista autobiography and historical change; Chicana/Chicana/o/o/x journalism; and labor and literature. Service learning component includes minimum of 20 hours of meaningful work with agency involved with Chicana/Chicana/o/o/x issues and selected by instructor. P/NP or letter grading.

M106B. Diversity in Aging: Roles of Gender and Ethnicity. (4) (Formerly numbered Chicana and Chicano Studies M106B) (Same as Gender Studies M104C, Gerontology M104B, Social Work M131, and Social Welfare M104C.) Lecture, four hours. Exploration of complexity of variables related to diversity of aging population and variability in aging process. Examination of gender and ethnicity within context of both physical and social aging, in multidisciplinary perspective of gender and ethnicity within context of both population and variability in aging process. Examination of complexity of variables related to diversity of aging process. Lecture grading.

C107. Latina/Latino Families in U.S. (4) (Formerly numbered Chicana and Chicano Studies M107.) Lecture, four hours; discussion, one hour (when scheduled). Study of how intersections of race, class, and gender help shape experiences of Latina/Latino families in the U.S., investigating how these intersections help shape individual experiences within families. Examination of family, race, class, and gender as sociological concepts. Readings about family experiences of Mexican and Central American groups in U.S., with special emphasis on immigrants, and analysis of how race, class, and gender together play important roles in shaping these experiences. Discussion of roles of structural inequality in each context. Concurrently scheduled with course C212. P/NP or letter grading.

M108A. Music of Latin America: Mexico, Central America, and Caribbean Isles. (5) (Formerly numbered Chicana and Chicano Studies M108A) (Same as Ethnomusicology M108A.) Lecture, four hours; discussion, one hour. Survey of traditional and contemporary music culture. P/NP or letter grading.

109. Chicano/Latino Film. (4) (Formerly numbered Chicana and Chicano Studies 109.) Lecture, four hours. Examination of roots of Chicana/Chicano folklore in Mexican oral tradition in mid-19th century and development of Chicana/Chicano folklore to present day. P/NP or letter grading.

CM110. Chicana Feminism. (4) (Formerly numbered Chicana and Chicano Studies CM110.) (Same as Gender Studies CM132A.) Lecture, four hours. Enforced requirement; course 112A or Gender Studies 10. Examination of theories and practices of women who identify as Chicana feminist. Analysis of writings of Chicanas who do not identify as feminist but whose practices attend to gender inequities faced by Chicanas both within Chicana/Chicano community and dominant society. Attention to Anglo-European and Third World women. Concurrently scheduled with course CM110. P/NP or letter grading.

111. Chicana/Chicano and Latino Intellectual Traditions. (5) (Formerly numbered Chicana and Chicano Studies 111.) Lecture, five hours. General view of philosophical, cultural, and social thought as well as intellectual traditions of writers, intellectuals and Chicana and Chicano other influencers and manifestations of this ritual. Special attention to Nahautl language and worldview related to this ancient calendar systems. Designed to motivate critical thinking about what is observed in arts today and impact globalization has on tradition. P/NP or letter grading.

113. Day of Dead Ritual. (4) (Formerly numbered Chicana and Chicano Studies 113.) Lecture, four hours; discussion, one hour (when scheduled). Introduction to philosophical roots and evolution of traditional celebration of Day of Dead ritual. Contemplation of indigenous, Spanish, Mexican, Chicano, and other influencers and manifestations of this ritual. Special attention to Nahautl language and worldview related to this ancient calendar systems. Designed to motivate critical thinking about what is observed in arts today and impact globalization has on tradition. P/NP or letter grading.

M114. Chicanos in Film/Video. (5) (Formerly numbered Chicana and Chicano Studies M114.) (Same as Film and Television M1117.) Lectures/screenings, five hours; discussion, one hour. Goal is to gain nuanced understanding of Chicano cinema as political, socio-economic, and aesthetic expression. Examination of representation of Mexican Americans and Chicanos in four Hollywood genres—silent greaser films, social problem films, Westerns, and gang films—that are may be compared to Mexican Americans produced between 1908 and 1980. Examination of recent Chicoan-produced films that subvert or signify on these Hollywood genres, including Chicanos-Latinos in community. P/NP or letter grading.

115. Musical Aesthetics in Los Angeles. (4) (Formerly numbered Chicana and Chicano Studies M115.) (Same as Ethnomusicology M115.) Lecture, three hours. Confronting aesthetics from classical perspective of art as an outcrop cultural basis of diverse musical contexts within vast multicultural metropolis of Los Angeles, with focus on various musical networks and specific experiences of Chicanos/Latinos. P/NP or letter grading.

116. Chicano/Latino Music in U.S. (5) (Formerly numbered Chicana and Chicano Studies M116.) (Same as Ethnomusicology M116.) Lecture, four hours; discussion, one hour. Historical and analytical examination of musical expression of Latino peoples who have inhabited present geographical boundaries of U.S. P/NP or letter grading.

117. Chicana/Chicano Images in Mexican Film and Literature. (4) (Formerly numbered Chicana and Chicano Studies 117.) Lecture, four hours. Preparation: adequate understanding of Spanish-language films without English subtitles. Throughout this rich history, spanning more than 100 years, Mexican cinema has produced great variety of films that deal with Chicana/Chicano experience. Like its U.S. counterpart, Mexican cinematic discourse portrayal of Chicanas/Chicanos has been plagued by use of stereotypes that limit visual representation of Chicanas/Chicanos. Examination of cinematic representation. P/NP or letter grading.

118. Student-Initiated Retention and Outreach Issues in Higher Education. (4) (Formerly numbered Chicana and Chicano Studies M118.) (Same as African American Studies M118, Chicana and Chicano Studies M118, and Asian American Studies M118.) Lecture, four hours. Exploration of issues in outreach and retention of students in higher education, especially through student-initiated programs, efforts, activities, and services, with focus on UCLA as case. May be repeated twice for credit. Letter grading.


120. Immigration and Chicano Community. (4) (Formerly numbered Chicana and Chicano Studies 120.) Lecture, three hours. Discussion on relationship between international immigration and development of Chicano/Chicano community. Examination of U.S. immigration policies, economic, social, and political impact. Letter grading.

121. Issues in Latina/Latino Poverty: Mexican and Central American Voices from Los Angeles. (4) (Formerly numbered Chicana and Chicano Studies 121.) (Same as Labor Studies M121 and Urban Planning M140.) Lecture, four hours. Examination of key issues (work, housing, and neighborhoods) in urban poverty, with particular focus on Mexican and Central American immigrant populations in Los Angeles. Exploration of major theoretical models that explain urban poverty and application of them in comparative context while exploring different experiences of Mexican and Central American immigrants. Social conditions and forces that help us understand lives of poor people in comparative context while looking at differences between major Latino immigrant communities in Los Angeles. Critical analysis of new forms of urban poverty in comparative American society. Letter grading.

M122. Planning Issues in Latina/Latino Communities. (4) (Formerly numbered Chicana and Chicano Studies M122.) (Same as Labor Studies M122 and Urban Planning M171.) Lecture, four hours. Examination of community and economic development, role of assets in community development, and unique synergies and pitfalls that enable or disable communities from developing to their potential. How to strengthen and how to preserve community resources in Pico-Union neighborhood in Los Angeles. Research entails historical analysis, reviews, interviews, electronic asset mapping, focus groups, use of data processing and analysis, oral and written reports, and cyber-based research. Letter grading.

123. Applied Research Methods in Latina/Latino Communities. (4) (Formerly numbered Chicana and Chicano Studies M123.) (Same as Social Science M123.) Lecture, four hours. Critical introduction to U.S. immigration policies and politics, and political impacts on Latina/Latino communities. Examination of local context, including important data that can be used for critical analysis and policy recommendations. Letter grading.

124. Latino Immigration History and Politics. (4) (Formerly numbered Chicana and Chicano Studies M124.) (Same as Humanities M143.) Lecture, four hours. Historical and social context of U.S. immigration policies and politics, and political impacts on Latina/Latino communities. Topics include some of root causes of Latin American migration; federal, state, and local immigration lawmaking; and how race, gender, and sexual identity and are impacted by immigration policies (e.g., legalization, border militarization, deportation) and (from voting to activism). P/NP or letter grading.

M125. U.S./Mexico Relations. (4) (Formerly numbered Chicana and Chicano Studies M125.) (Same as Labor Studies M125.) Lecture, four hours. Examination of complex dynamics in relationship between Mexico and U.S., using political economy approach to study of NAFTA, international integration of advanced industrial economies and developing countries. P/NP or letter grading.

M126. Politics of Crisis: Migration, Identity, and Religion. (4) (Formerly numbered Chicana and Chicano Studies M126.) (Same as Honors-Collegium M145.) Lecture, three hours. Examination of individual and collective religious response of Latin Americans and Latinos/Latinos in U.S. to dislocations, displacement, and fragmentation produced by conquest, colonization, underdevelopment, globalization, and migration. Letter grading.

M127. Farmworker Movements, Social Justice, and United Farm Workers. (4) (Formerly numbered Chicana and Chicano Studies M127.) (Same as Labor Studies M127.) Lecture, four hours. Designed for juniors/seniors. Introduction to history and organization of labor movement in U.S. and North America. Discussion of race, class, and gender issues
raised within movement, and various strategies for so-
cial change and economic equity pursued through or-
ganized labor and other means. Letter grading.

131. Barrio Popular Culture. (4) (Formerly numbered Chicana and Chicano Studies 131.) Lecture, three hours. Construction of model by which to organize stu-
dents to focus on barrio as metaphor for community. Examination of beliefs, myths, and values of Chicana/Chicano culture and representations in icons, heroes, legends, stereotypes, and popular art forms through a long historical period. Film, video, music, mass media, and oral history. Letter grading.

M132. Border Consciousness. (4) (Formerly numbered Chicana and Chicano Studies 132.) (Same as Les-
bian, Gay, Bisexual, Transgender, and Queer Studies M132.) Lecture, three hours; discussion, one hour (when scheduled). Investigation through history, pop-
ular culture, and mass media of bicultural and biliteracy ide-
ities produced by geographical and cultural space between Mexico and U.S. Special attention to border consciousness as site of conflict and resis-
tance. Letter grading.

M133. Chicana Lesbian Literature. (4) (Formerly numbered Chicana and Chicano Studies M133.) (Same as Les-
bian, Transgender, and Queer Studies M133.) Lecture, four hours. Exploration of intersection of radical first and third waves from Chicana lesbian per-
spective and its relationship to Chicana identity, represen-
tation of lesbianism in Chicana literature, meaning of family in Chicana lesbian lives, and impact of Chicana lesbian theory on Chicana/chicana studies. Letter grading.

M134X.P. Engaging Immigrants and Their Families. (5) (Formerly numbered Chicana and Chicano Studies M134X.P.) (Same as Community Engagement and So-
cial Change M134XP and Labor Studies M134XP) Lecture, two hours; discussion, two hours; field place-
ment, two hours. Survey and exploration of immigrant lan-
dscape in Los Angeles—true global city acting in part to buffer, settle, and incorporate immigrants in daily life. Focus on social city to explore multiple forms of interventions and impacts that take place in the city. Service learning partnerships focus on organizations ad-
dressing immigration concerns. Letter grading.

CM135. Bilingual Writing Workshop. (4) (Formerly numbered Chicana and Chicano Studies CM135.) (Same as Gender Studies M135, Gay, Bisexual, Transgender, and Queer Studies M135.) Seminar, four hours. Limited to seniors/juniors. Writing sample required; access to course web page manda-
 tory; not be repeated for credit; satisfies College's writing re-
quirement. P/NP or letter grading.

M136. Censored! Art on Trial. (4) (Formerly numbered Chicana and Chicano Studies M136.) (Same as Les-
bian, Gay, Bisexual, Transgender, and Queer Studies M136.) Lecture, four hours. Limited to juniors/seniors. Writing sample required; access to course web page manda-
tory; not be repeated for credit; satisfies College's writing re-
quirement. P/NP or letter grading.

M137B. Barrio Suburbanism. (4) (Formerly numbered Chicana and Chicano Studies 137B.) Seminar, four hours. Examination of barrio suburbanism, in which Chicana/Chicana and Chicano families move from impact-
working- and middle-class suburbs to reshape geog-
raphy of metropolitan centers. Building upon urban studies of roles of public policy and planning in forma-
 tion of suburbs, explore how subversion of the national mul-
multi-ethnic and regional context. Points of intersection and conflict that illuminate how Chicana/Chicana and Latina/Latino populations have impacted economic, social, and political contours of suburbs in Los An-
geles metropolitan region. Major themes include urban policy, planning history, mapping, immigration, rela-
tionships, racial formations, and pursuit of regional democ-
ocracy. P/NP or letter grading.

M159. Topics in Chicana/Chicana/ and/or Latina/
Latino Literature. (5) (Formerly numbered Chicana and Chicano Studies M159.) (Same as English M159.) Seminar, three or four hours. Enforced requi-
site: English Composition 3. Variable specialized studies course in Chicana/Chicana/ and/or Latina/
Latino literature. Topics may include labor and litera-
ture; Chicana/Chicana visions of Los Angeles; immi-
grant, movement, and exile; autobiography and his-
torical change; Chicana/Chicana journalism; literary New Mexico; specific literary genres. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M140A. Diasporic Nonfiction: Media Engagements with Memory and Displacement I. (4) (Formerly numbered Chicana and Chicano Studies M140A.) (Same as African American Studies M140A.) Seminar, three or four hours. Video production course, with emphasis on au-
tobiographical, critical, and performance-based modes of nonfiction media making, drawing on prac-
tices of diasporic filmmakers who have grappled with supressed collective memories of displacement, trauma, exile, and migration. What does it mean to make videos about memory in places where direct cues to remembering cannot be seen? Introduction to concepts from films and readings. Production assign-
ments and screenings, with focus on questions of how to represent history, memory, family dynamics, and political contours of diasporic individuals. In Progress grading (credit to be given only on completion of course M140B). M140B. Diasporic Nonfiction: Media Engagements with Memory and Displacement II. (4) (Formerly numbered Chicana and Chicano Studies M140B.) (Same as African American Studies M170B.) Seminar, three hours. Enforced requisite: course M140A. Stu-
dents complete 20- to 30-minute video projects about their personal experiences according to perspectives and inter-
est of diasporic subjects. In Progress grading (credit to be given only on completion of course M140B).

CM139A. Art History CM139A. Seminar, three hours. Enforced requisite: course CM139A. Study of painting and sculpture from 14th to 19th centuries. Requ-
ired: course CM139A. P/NP or letter grading.
write poetry and spoken word about immigrant experience, and work to collectively develop student publication on immigrant students in higher education. P/NP or letter grading.

M156B. Research on Immigration Rights, Labor, and Higher Education. (Formerly numbered Chicana and Chicano Studies M156B.) (Same as Asian American Studies M166B and Labor Studies M166B.) Seminar, three hours; discussion, one hour. Enrolled by permission of instructor. Research conducted by students in course M156A involving oral histories, research on immigration/labor/higher education, and evaluation of legislation and legal issues impacting undocumented students. Letter grading.

M156C. Research on Immigrant Students and Higher Education. (Formerly numbered Chicana and Chicano Studies M156C.) (Same as Asian American Studies M166C and Labor Studies M166C.) Seminar, three hours. Enrolled by permission of instructor. Expansion of research conducted by students in courses M156A and M156B involving oral histories, research, reflection, and evaluation of legislation and legal issues impacting undocumented students. Designed around class project, where students work on showcasing all material collected through research, reading, and discussion. Letter grading.

157. Chicano Movement and Its Political Legacies. (Formerly numbered Chicana and Chicano Studies 157.) Lecture, four hours. Collective examination of Chicano Movement of 1960s and 1970s and analysis of its political legacies. Grounded in historiographic inquiry and social movement theory, investigation of mobilization of diverse sectors of el movimiento, including student groups, youth, community activists, and women. Exploration of myriad issues and struggles that compelled Chicanas/Chicanos to resist such as land and labor rights, education, anti-war movements, community autonomy, police brutality, political inclusion, cultural recovery, race, sexism, and class exploitation. Investigation of diverse ideologies, debates, and legacies of Chicano Movement through analysis of Chicana/Chicano materials, including testimonio, oral histories, and public discourse of Chicana/Chicano communities associated with political and social movements, using field of rhetoric (study of public speech and persuasion) as vehicle for highlighting speaking skills and abilities, P/NP or letter grading.

160. Introduction to Chicana/Chicano Speech in American Society. (4) (Formerly numbered Chicana and Chicano Studies 160.) Lecture, three hours. Survey of course prerequisites of Chicano language use, including history of Chicano languages, types and social functions of Chicano speech (pachuco, caló, Spanglish), sexist language, and multilingualism and monolingualism and (2) major social issues associated with language use by Chicanos and other urban ethnic populations. Letter grading.

161. Chicana and Chicano Rhetoric. (Formerly numbered Chicana and Chicano Studies 161.) Lecture, four hours; discussion, one hour. Requisite: course 160. Investigation of diverse Chicana and Chicano public discourse and other contemporary public discourse of Chicana/Chicano communities associated with social and political movements, using field of rhetoric (study of public speech and persuasion) as vehicle for highlighting speaking skills and abilities, P/NP or letter grading.


164XP. Oral History: Latino New Immigrant Youth. (5) (Formerly numbered 164SL.) Seminar, three hours; tutoring, three hours. Theory, methodology, and practice of oral history, together with background information on Mexican, Central American, and Latino immigration. Emphasis on historical and testimonial methods. P/NP or letter grading.

165. Latinas and Latinos in Public Education. (4) (Formerly numbered Chicana and Chicano Studies 165.) Lecture, four hours. Examination of language issues pertinent to educational systems, including language inequity, literacy, and sociolinguistics, as well as institutional ideologies. Letter grading.

166. Paulo Freire for Chicana/Chicana Classroom. (Formerly numbered Chicana and Chicano Studies 166.) Seminar, four hours. Introduction to the ideas of Paulo Freire and historical and contemporary problems concerning Chicana/Chicana education. Central focus to offer Freirian alternative to answer theoretical, methodological, practical, and policy questions about schooling of Chicanas/Chicanos in U.S. P/NP or letter grading.

M167XP. Taking it to Street: Spanish in Community. (Formerly numbered Chicana and Chicano Studies M167XL.) Lecture, three hours; fieldwork, 10 hours. Enrolled requisite: Spanish 25 or 27. Service learning course to give students opportunity to use cultural and linguistic knowledge acquired in Spanish classes in real-world settings. Students required to spend minimum of eight to 10 hours per week at agreed on site in Latino community. P/NP or letter grading.

168A. Latinas: Print Media. (4) (Formerly numbered Chicana and Chicano Studies 168A.) Lecture, four hours. Examination of systemic (mis)representations of Latinos by print media source (Los Angeles Times) by means of critical discourse analysis and metaphor theory. Indian narratives of racism in language in this context. Student projects range from immigration to education and crime to culture. Letter grading.

168B. Latinas: Television News. (4) (Formerly numbered Chicana and Chicano Studies 168B.) Lecture, four hours. Requisite: course 168A. Study of multi-modal (visual, graphic, spoken, audio, and text) image disseminated by television news programs to learn how nation comes to their understanding of Latinos. Development of critical visual interpretive ability through semiotic training and analysis of actual television news stories. Letter grading.

169. Representations of Indigenous Peoples in Americas. (4) (Formerly numbered Chicana and Chicano Studies 169.) Lecture, four hours. Limited to juniors/seniors. Research seminar organized around readings and engaged discussion of critical topic of interest in field. Exploration of issue, its theoretical implication for field, and practical implications for communities. Addresses Xican@ indigeneity. Exploration of historical and contemporary character of Xican@ peoples; what it means to be indigeneous, Indian mestiza/o; relationship to and between cultural and linguistics memories, continuities, legacies, and change; investigation of indigenous epistemologies, decolonization, and the perspectiva Xican@. Final research project required. P/NP or letter grading.

M170XP. Topics in Community Engagement. (5) (Formerly numbered Chicana and Chicano Studies M170SL.) (Same as Spanish M172XP.) Seminar, four hours; field project; four to six hours. Requisite: Spanish 4 or consent of instructor. Introduction to community engagement in various forms. Exploration of methods of community involvement and change making processes within variety of professional contexts in community. Students develop experiential knowledge and learning to broaden their understanding of Spanish-speaking and Latinx communities. Students have opportunity to use cultural and linguistic knowledge acquired in Spanish classes in real-world settings. Topics may include oral tradition, indigenous narratives, visual culture and community, language and identity in community, urban spaces, etc. May be repeated for credit with topic change. P/NP or letter grading.

171. Humor as Social Control. (Formerly numbered Chicana and Chicano Studies 171.) Lecture, four hours. Hegemonic humor directs laughter of more powerful people against those with less power. In this case laughter becomes weapon used against Latinos and immigrants. With rise of Latinos in last decade, there has been increase of various guises of anti-Latino humor in commercial mass-mediated popular culture. Exploration of theorizing, as well as today’s myriad examples, of how humor to develop critical literacy of social work it accomplishes. Letter grading.

172. Chicana and Chicano Ethnography. (4) (Formerly numbered Chicana and Chicano Studies 172.) Lecture, four hours. Culture change theory encompasses such issues as innovation, syncretism, colonized peoples, and acculturation. Examination of methods anthropologists/ethnographers use in studying and analyzing culture change within ethnohistorical background of Chicana and Chicano communities. May be repeated for credit with topic change. P/NP or letter grading.

M173. Nonviolence and Social Movements. (4) (Formerly numbered Chicana and Chicano Studies M173.) (Same as African American Studies M173 and Labor Studies M173.) Lecture, three hours; discussion, one hour. Overview of nonviolence and its impact on social
movements both historically and in its present context in contemporary society, featuring lectures, conversations, films, readings, and guest speakers. Exploration of some of the struggles of Chicano/a youth and role of nonviolent action throughout recent U.S. history. Examination of particular lessons of nonviolent movements as they impact social change organizing in Los Angeles. P/NP or letter grading.

174AX. Civic Identity: Understanding, Using, and Resolving Conflict. (5–6) (Formerly numbered Chicana and Chicano Studies 174AX) Lecture, four hours; discussion, three hours. Course 174AX is enforced requisite to 174BX. Designed for students who want to learn principles of dialogue and mediation, as alternatives to violence, and practice how to apply them in educational settings. In Progress grading.

174BX. Civic Identity: Understanding, Using, and Resolving Conflict. (5–6) (Formerly numbered Chicana and Chicano Studies 174BX) Lecture, four hours; discussion, three hours. Course 174BX is enforced requisite to 174AX. Designed for students who want to learn principles of dialogue and mediation, as alternatives to violence, and practice how to apply them in educational settings. In Progress grading.


182. Understanding Whiteness in American History and Culture. (4) (Formerly numbered Chicana and Chicano Studies CM182.) (Same as History M151C.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. History, construction, and representation of whiteness in American society. Readings and discussions trace evolution of white identity and explore its significance to historical construction of race class in American history. Concurrently scheduled with course C256. Letter grading.

183. History of Los Angeles. (4) (Formerly numbered Chicana and Chicano Studies M183.) (Same as History M155.) Lecture; three hours; discussion, one hour when scheduled. Designed for juniors/seniors. Social, economic, economic, cultural, and political development of Los Angeles and its environs from time of its founding to present. Emphasis on diverse peoples of area, changing physical environment, various interpretations of city, and Los Angeles’ place among American urban centers. P/NP or letter grading.

184. History of U.S./Mexican Borderlands. (4) (Formerly numbered Chicana and Chicano Studies M184.) (Same as History M156.) Lecture, four hours. Survey of historic and geographic diversity of Chicana/Chicano identity and culture, with emphasis on regional communities of California, New Mexico, and Texas and changing borders as situated within U.S. national context. Letter grading.

185. Whose Monument Where?: Course on Public Art. (4) (Formerly numbered Chicana and Chicano Studies M185.) (Same as Art M185 and World Arts and Culture M126.) Lecture, four hours. Required course: Corequisite: course M186A, M186B, or M186C. Examination of public monuments in U.S. as basis for cultural insight and critique of American values from perspective of Chicana/o Chicano Artists. Analyzes how text book in urban space issues such as who is public, what is public space at end of 20th century, what defines neighborhoods, and do different ethnic populations use public space differently. P/NP or letter grading.

186A. Beyond Mexican Mural: Beginning Muralism and Community Development. (4) (Formerly numbered Chicana and Chicano Studies M186A.) (Same as Art M186A and World Arts and Culture M125A) Studio/lecture, four hours. Corequisite: course M186B. Investigation of muralism as method of public action, development, and empowerment. Exploration of issues through development of large-scale collaborative digitally created image and/or painting for placement in community. Students research, design, and work with community participants. Continuation of project through stages of production to full scale and community approval. P/NP or letter grading.

186B. Beyond Mexican Mural: Advanced Muralism and Community Development. (4) (Formerly numbered Chicana and Chicano Studies M186B.) (Same as Art M186B and World Arts and Culture M125B) Studio/lecture, six hours. Course: Corequisite: course M186B. Continuation of investigation of muralism as method of community education, development, and empowerment. Exploration of issues through development of large-scale collaborative digitally created image and/or painting for placement in community. Students research, design, and work with community participants. Continuation of project through stages of production to full scale and community approval. P/NP or letter grading.

187. Latino Metropolis: Architecture and Urbanism in Badlands. (4) (Formerly numbered Chicana and Chicano Studies M187.) (Same as History M151E and Urban Planning M187.) Lecture, four hours. Introduction to history of architecture and urbanism in American cities from fabled frontier to border to barrios of 21st-century Los Angeles and Miami. Emphasis on role of cities in Latino/Latina experience and uses of architecture and city planning to forge new social identities rooted in historical experiences of conquest, immigration, nationalization, and revolution. P/NP or letter grading.

187B. Colonial Latin American Art. (4) (Formerly numbered Chicana and Chicano Studies M187B.) (Same as Art History M187B) Lecture, four hours. Corequisite: course M187B. Survey of Mexican art to 20th century, one hour (when scheduled). Art and architecture of colonial Americas from 16th to 18th century. P/NP or letter grading.

187C. Aztec Art. (4) (Formerly numbered Chicana and Chicano Studies M187C.) Lecture, four hours. Corequisite: course M187C. Survey to Aztecs through analysis of art in different media including sculpture, featherworks, polychrome pottery, manuscripts, and architecture. Readings from ethnohistoric sources compiled in early colonial period by indigenous scribes and Spanish officials (friars, soldiers, chroniclers, and administrators). Study of Aztec’s art, their civilization, and major topics discussed in existing, scholarship, including calendar, foundational and creation myths, stories of migration, human sacrifice, rulership, warfare, gender, religion, philosophy, and art and architecture. Assessment of validity of scholarly assumptions about Aztec’s art, and society in light of available sources. P/NP or letter grading.

188. Special Courses in Chicana/o and Central American Studies. (4–6) (Formerly numbered Chicana and Chicano Studies M188.) Seminar, three hours. Some sections may require prior coursework. Departmentally sponsored experimental or temporary course topics taught by visiting faculty members. May be repeated for credit. P/NP or letter grading.

188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Consent USIE 2015. Limited to 15 USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar
of research of faculty members or students. Use of specific research method on selected topic. May be repeated for credit with topic change. P/NP grading.

195. Community Internships in Chicana/o and Central American Studies. (4) (Formerly numbered Chicana and Chicano Studies 195.) Tutorial, two hours; weekly field placement, eight hours. Limited to juniors/seniors. Internship in supervised setting in community agency or business under direction of instructor with periodic reports of their experience. May be repeated for credit. Individual contract with supervising faculty member required. P/NP or letter grading.

M195CE. Comparative Approaches to Community and Corporate Internships. (4) (Formerly numbered Chicana and Chicano Studies M195CE.) (Same as African American Studies M195CE.) Seminar, three hours. May not be repeated. Limited to juniors/seniors. Internship in corporate, governmental, or nonprofit setting. Designed to provide apprenticeship for upper-division students under guidance of faculty mentor. May be repeated for credit. Individual contract with supervising faculty member required. P/NP or letter grading.

Graduate Courses

200. Theoretical Paradigms in Chicana/o and Central American Studies. (4) (Formerly numbered Chicana and Chicano Studies 200.) Seminar, three hours. Limited to graduate students. Examination of several approaches and important theoretical frameworks in the field of Chicana and Chicano studies. Exploration of changes that have taken place around four key theoretical areas—coloniality, nationhood, inequality studies, and genders and sexualities. S/U or letter grading.

201. Activist Scholarship and Intersectional Methodologies Seminar. (4) (Formerly numbered Chicana and Chicano Studies 201.) Seminar, three hours. Limited to graduate students. Exploration of critical research methodologies, and the implications of that methodology in applying justice and social transformation. S/U or letter grading.

202. Qualitative Methods in Study of Chicanas/Chicanos and Latinas/Latinos. (4) (Formerly numbered Chicana and Chicano Studies 202.) Seminar, three hours. Limited to graduate students. Methods course that takes students through entire empirical research cycle. Students required to collectively develop interesting research questions, conduct qualitative research, analyze original data, and write final papers that contextualize findings within the scientific literature. To answer research questions, students select from theoretical frameworks discussed in readings. S/U or letter grading.

M206. Politics of Hood. (4) (Formerly numbered Chicana and Chicano Studies M206.) (Same as Public Policy M231.) Seminar, three hours. Limited to graduate students. Investigation of root causes and consequences of critical problems impacting people who live in the hood including gentrification, segregation, welfare, public education, health disparities, and social justice. S/U or letter grading.

207. Racial Geographies. (4) (Formerly numbered Chicana and Chicano Studies 207.) Seminar, three hours. Interdisciplinary examination of spatial turn in social sciences and humanities. Drawing upon readings from geography, history, ethnic, and American studies, use of analytic of space to investigate questions of race in U.S. Focus on production of space, geographic approaches to racial formation, and anti-racist, place-based struggles. Study foregrounds intersections with Chicana and Chicano studies and models of relational racialization. S/U or letter grading.

208. Research Design and Methods in Chicana/Chicana and Chicano Studies. (4) (Formerly numbered Chicana and Chicano Studies 208.) Seminar, three hours. Research design and methodologies in Xican@ studies grounded in perspectiva Chicana/Chicana@ perspectiva. Study of knowledge production and scholarship in Chicana/Chicana@ studies, how it is done, and how it can be evaluated. Includes critical comparison with Chicano/a and identity studies, and associated biases, flaws, and fatal flaws. S/U or letter grading.

209. Service Learning: Theory and Practice. (4) (Formerly numbered Chicana and Chicano Studies 209.) Seminar, three hours. Limited to graduate students. Examination of approaches and theories that underpin service learning and exploration of ways in which service learning can be utilized in academic disciplines (second and foreign language instruction, education, ethnic studies, labor studies, women’s studies, public health, literature, public art, political
210. Queer of Color Genealogies, (4) (Formerly numbered Chicana and Chicano Studies 210.) Seminar, three hours. Art of community-making by those multiply marginalized by categories of race, gender, class, citizen status, national origin and other forms of normative forms of belonging. Tracking of genealogies of queer of color communities through alternative archives of desire, love, affect, memory, performance, and politics. Reading about queer of color theories and practices, with special focus on oral history, digital storytelling, and forms of social documentation methodologies.

211. Immobilizing Immigrants: Detention and Deportation in U.S. (4) (Formerly numbered Chicana and Chicano Studies 211.) Seminar, three hours. History of detention and deportation policy in U.S. as it affects Mexicans and other Latinas/Latinos. Consolidation of this legal authority and its deployment across 20th century, S/U or letter grading.

C212. Latina/Latino Families in U.S. (4) (Formerly numbered Chicana and Chicano Studies 212.) Lecture, four hours; discussion, one hour (when sched- uled). Cross-cultural views of race, class, and gender help shape experiences of Latina/Latino fami- lies in U.S. and how these intersections also help shape communities and families (including a- mination of family, race, class, and gender as socio- logical concepts. Readings about family experiences of Mexican and Central American groups in U.S., with special emphasis on immigrants, and analysis of how race, class, and gender together play important roles in shaping these experiences. Discussion of roles of structure and space for agency in each context. Con-currently scheduled with course C107. Letter grading.

M213. Asian-Latino(s). (4) (Formerly numbered Chi- cana and Chicano Studies M213.) (Same as Asian American Studies 213.) Seminar, three hours. Lim- ited to graduate students. Examination of historical and contemporary populations of Asian-Latinas in Latin America and U.S. Review and critique of nascent Asian-American and Chicana/o and Central American Studies / 301

214. Chicana/o Feminism. (4) (Formerly numbered Chicana and Chicano Studies CM214.) (Same as Gender Studies CM232A.) Lecture, four hours. En- forced requisite; course 10A or Gender Studies 10. Examination of theories and practices of women who identify as Chicana feminist. Analysis of writings of Chicanas who do not identify as feminist but whose practices attend to gender inequities faced by Chi- canas both within Chicana/Chicana community and dominant society. Attention to Anglo-European and Third World women. Concurrently scheduled with course CM110. S/U or letter grading.

C215. Transnational Women’s Organizing in Ameri- cas. (4) (Formerly numbered Chicana and Chicano Studies C215.) Lecture, four hours. Feminist theories of transnational organizing. Examination of gender and race as central to processes of globalization and essential to economic and political struggles encompassed in transnational power relations. Exploration of how questions of race and gender influence global economic scenarios between local actors and transnational communities. In time when people, capital, cultures, and technologies cross national borders with growing frequency, discussion of process of accelerated glo- balization has been linked to feminization of labor and migration, environmental degradation, questions of di- aspora, sexuality, and cultural displacement, as well as growing global militarization. Problems and issues created by transnational cultural, social, and political responses envisioned by transnational organizing. Concurrently scheduled with course CM147. Letter grading.

216. Product of Immigrant Illegality. (4) (Formerly numbered Chicana and Chicano Studies 216.) Sem- inar, three hours. Limited to graduate students. Based mostly on U.S. immigration conformity and genealogy studies. Study of history of immigration policies and enforcement practices along with key empirical and theoretical contributions to understand how immi- grant illegality is produced. S/U or letter grading.

C217. S. Diasporic Arts and Cultural Diversity. (4) (Formerly numbered Chicana and Chicano Studies 217.) Seminar, three hours. Lim- ited to graduate students. Exploration of indigenous, indigeneous/aboriginal, and Latin American, mulattaje, ladinization and other racialized con- structs in Central America by critically engaging scholar- ship, census data, and oral histories to understand Central American communities. Study of how migration took place in their origins and how these race-gendered stratifica- tions were naturalized through cultural practices. En- gages cultural practices as strategies of survival for populations working against historical erasure espe- cially enacted by nation-state. For example, why is Blackness erased in national narrative of El Salvador, why problematize Costa Rica’s claim of racial equality, why and how do Garifuna communities assert their diginity while also engaging multiple practices and discourses of Blackness? Examination also of how these communities face genocide, ethnocide, feminize, and strategies of racial passing and resistance. S/U or letter grading.

M218. Latinx Photoethnography. (4) Same as An- thropology M239R.) Seminar, three hours. Hands-on introduction to using photography as ethnographic field methods. Students will conduct research on a topic of their choice with review of key and relevant literature from fields of sociocultural anthropology, visual anthropology, and photographic theory. Exploration of technical, ethical, and aesthetic aspects of photography in relation to their relation- ship to anthropological field methods, participant observation, and issues of representation—especially among Latinx communities. Student-led discussions of assigned readings and hands-on learning. Quarterly photoethnography project focused on Latinx issues in greater Los Angeles. S/U or letter grading.

222. Aesthetics of Place in Chicana/Chicano Ex- presive Culture. (4) (Formerly numbered Chicana and Chicano Studies 222.) Seminar, three hours. Ex- amination of several place-based aesthetic traditions, including indigenous, saltadora, diastyle, and Antillean aestheti- cisms, in Chicana/Chicano visual art, film, perform- ance, and literature. Special focus on place as site of identity, history/memory, and creative production. S/U or letter grading.

223. Community Cultural Development in Public Art: From Neighborhood to Global. (4) (Formerly numbered Chicana and Chicano Studies 223.) Seminar, three hours; laboratory, one hour. Designed for grad- uate students. Artist approaches to transformations of local and global communities through aesthetic prac- tices in visual arts, spoken word, visual performance, music, and dance that include participatory audience inclusion and foster civic dialogue and community ad- vocacy and activism. Issues of cultural democracy based in cultural retention and affirmation. Case studies of artist projects in community cultural develop- ment. Provides a framework for involving local and national foci in the field of work and basis for critical analysis. S/U or letter grading.

234. New Social Media and Activist Art. (4) (Formerly numbered Chicana and Chicano Studies 234.) Studio, four hours. Limited to graduate students. Hands-on learning and production experience as essential to full understanding of modern media. Promotion of prag- matic style of humanistic and social scientific scholar- ship that promotes critical and pro- ductively about media form, content, and context while learning to effectively use social media. S/U or letter grading.

C235. Bilingual Writing Workshop. (4) (Formerly numbered Chicana and Chicano Studies C235.) Sem- inar, four hours. Limited to graduate students. Writing sample required; access to course web page manda- tory; need not be bilingual to enroll. Technical instruc- tion, analysis, and theoretical discussion of bilingual creative expression through genre of short fiction. Bi- lingualism as both politics and aesthetics to be central theme. Discussion and analysis of Chicana/Chicana and Latinxs short story collections. Peer critique of writing/assisting in building narrative techniques such as characterization, plot, conflict, setting, point of view, and dialogue, and magical re- alism as prevailing Chicanas/Latinas /meridians. Style, biographical information to produce manuscript preparation, public reading, and publication. Concurrently sched- uled with course CM135. Letter grading.

236. Latinx Noir and City at Night. (4) (Formerly numbered Chicana and Chicano Studies 236.) Seminar, three hours. Noir literary and cinematic genre is char- acterized by gritty realism, social disorder, violence, and nocturnal meanderings in darkest, meanest streets of Latin American and Chicano/Latina/Latino Short Story collections. Peer critique and analysis of Los Angeles in mainstream and Chi- cana/Latina literature and film. S/U or letter grading.

M237. Hemispheric and Transnational Approaches to Contemporary Art in Americas. (4) (Formerly num- bered Chicana and Chicano Studies M237.) (Same as Art History M243.) Seminar, three hours. Maps current state and future of research, teaching, and museum practice in contemporary art of Americas, with focus on the postcolonial and transnational. Study of influential theoretical texts from literary studies and critical examination of recent publications in arts, in- cluding museum exhibition catalog, as hemispheric and transnational approaches to Latin American and Latin American arts is posited. Focus intersects with other related topics, including art post-1968; comparative indigeneities in Americas; art, globalization, and biennials; decolonial turn; transnational femi- nisms; and New American counter narratives. S/U or letter grading.

238. New Directions in Chicana and Latinx Art. (4) (Formerly numbered Chicana and Chicano Studies 238.) Seminar, three hours. Focus on current state and future of research, teaching, and museum practice in Chicana and Latinx art history. Examination of various topics and recent developments in Chicana and Latinx art history, as well as versus global perspectives on Latinx art: indigeneity and Chicana art; politics and publics of prints and graphics; public murals and monuments; race and place in Los Angeles; queer and feminist approaches to Chicana and Latinx art; and collecting and display of Chicana art by museums, galleries, and private col- lectors. Particular emphasis on decolonial, feminist, critical race, and poststructuralist approaches. Stu- dents prepare weekly readings for discussion, and complete final presentation and research project. Pa- rameters of project to be determined in consultation with professor. Expository or creative project, research paper, teaching portfolio, comprehensive historio- graphic review, or creative project. S/U or letter grading.

239. Digital Methods for Research and Presenta- tions (Fall). (4) (Formerly numbered Chicana and Chicano Studies 239.) Laboratory, four hours. Students learn how to think about one’s own research in visual way, and how to develop digital skills to produce images and videos for more professional and compelling re- search presentations and job talks that do not infringe upon copyrighted materials. Students learn how to lo- cate high-resolution images, and how to use Photo- shop to manipulate and translate visual illustra- tions. Students learn how to use Prezi as oral presen- tation software and archiving method for gathering and organizing visual materials on their research. Each student creates and receives personal website based on specificity of their research, for example, mapping software, or video editing for oral history projects, or subtitling/ translating for documentary videos. Stu- dents learn how to use tools such as iMovie or QuickTime to produce short videos that can be incorporated into their presentations. For their final project, students are required to present mock confer- ence talks utilizing their own manipulated images and short videos. S/U or letter grading.

240. U.S. Central Americans Making Art and Memo- rial. (4) (Formerly numbered Chicana and Chicano Studies 240.) Seminar, three hours. Limited to graduate students. Memory is trope through which U.S. Central American writers, performance, visual, media,
and public artists and activists communicate across social, national, and phenomenological borders. Through contemporary theories on memory and narrativizing, Chicana/o and Latino cultural workers, artists, cultural activists, and historical figures. Exploration of issues including civil war, postwar, race, class, sex, gender, globalization, immigration, and identity formations. Students have option to create art, media projects, and essays that interpret readings and these relate to their lives vis-à-vis U.S. Central American cultural production. S/U or letter grading.

M247. Chicano Literature. (4) (Formerly numbered Chicana and Chicano Studies M247.) (Same as Spanish M247.) Lecture, three hours. Study of major movements and authors of Mexican American literature. S/U or letter grading.

C251. Chicana and Latin American Women’s Narrative. (4) (Formerly numbered Chicana and Chicano Studies C251.) Lecture, four hours. Preparation: reading knowledge of Spanish (level 4). Analyses, comparisons, and discussion of narrative literary productions—oral, colonial studies, neo-romanticism, consciousness, and feminist theories. Study of these cultural productions as expression of intersectionalities and differences among Latinamerican and Chicano counterparts in English and Spanish, with particular focus on how each group deals with gender, ethnic, and class issues. Concurrently scheduled with course C141. Letter grading.

C252. Cultural Representations in Americas. (4) (Formerly numbered Chicana and Chicano Studies 252.) Seminar, three hours. Analysis of Latina/Latino and Latin American cultural workers, films, with emphasis on gender issues, diasporas, and global transformation. Use of aesthetic and formal analytical perspectives and several conceptual frameworks—oral, colonial studies, neo-romanticism, consciousness, and feminist theories. Study of these cultural productions as expression of intersectionalities and differences among Latina/Latino and Latin American cultural workers, as well as among diverse populations and changing experiences their works refer to. S/U or letter grading.

C253. Tenth Muses of Chicana Theory. (4) (Formerly numbered Chicana and Chicano Studies 253.) Seminar, three hours. Analysis of Latina/Latino and Latin American cultural workers, as well as among diverse populations and changing experiences their works refer to. S/U or letter grading.

254. Los Angeles: History, Space, and Culture. (4) (Formerly numbered Chicana and Chicano Studies 254.) Seminar, three hours. Exploration of significance of Los Angeles as birthplace of Chicana/Chicana legacy and historical development of Mexican American culture and community in Southern California. History-ography of Los Angeles from Spanish conquest to present, with emphasis on labor, immigration, art culture, and politics. Survey of current literature on socioeconomic condition of Mexican Americans in Los Angeles, and historical, cultural and political history of Latino Los Angeles at outset of 21st century. S/U or letter grading.

255. Mass Media Research Methods. (4) (Formerly numbered Chicana and Chicano Studies 495.) Seminar, three hours. Limited to graduate students. Survey of range of qualitative and quantitative communication methods and findings regarding Chicana/Chicana and Latina/Latina topics in English and Spanish. Critical evaluation of research findings across this expansive field and design of complex research problems. S/U or letter grading.

C256. Understanding Whiteness in American History and Culture. (4) (Formerly numbered Chicana and Chicano Studies C256.) Lecture, three hours; discussion, one hour (when scheduled). Designed for graduate students. History, construction, and representation of whiteness in American society. Readings and discussions trace evolution of white identity and explore its significance to historical construction of race classes in America. Concurrently scheduled with course CM182. Letter grading.

M257. Chicana/o and Intersectional Marxisms. (4) (Formerly numbered Chicana and Chicano Studies M257.) Seminar, three hours. Examination of relationship between Marxism, intersectionality, and early-Chicana/o Marxism influenced intellectual thought. Focus on key debates and texts that explore connections between race, gender, sexuality, and capitalism. Review of key articles and books examining Chicana/o identity, labor, family, sexuality, and activism through Marxist theoretical framework. S/U or letter grading.

258. Laughter, Political Humor, and Social Control. (4) (Formerly numbered Chicana and Chicano Studies 258.) Seminar, three hours. Limited to graduate students. Investigation of power of political humor, one social practice that illuminates historical hierarchies in interpersonal settings and mass media. With goal of developing set of principles to investigate its manifestations, reading of outstanding humanists, contributions to social and political function and power, development of classification of types and settings of political humor, and critical evaluation of recent social scientific models of its nature. S/U or letter grading.

259. Critical Discourse Analytic Methods. (4) (Formerly numbered Chicana and Chicano Studies 259.) Seminar, three hours. Limited to departmental graduate students. Two critical discourse analytic (CDA) methods taught to document language of public figures. Students teams employ one method (conceptual metaphor CDA or discourse historical approach) to analyze current public discourse surrounding one controversial issue. Empirical study of discourses that are based on independently developed research enterprises can be valuable tool for variety of graduate student research. S/U or letter grading.

C274. Language Politics and Policies in U.S.: Comparative History. (4) (Formerly numbered Chicana and Chicano Studies C274.) Lecture, four hours. Historical overview of national language policies, especially school-based language programs across history of its social and development of language policies in U.S.; demographic profile of language diversity, and current language and educational policy issues in U.S. Comparisons with selected international cases. Concurrently scheduled with course C179. S/U or letter grading.

C276. Health in Chicano/Latino Population. (4) (Formerly numbered Chicana and Chicano Studies C276.) Lecture, four hours; discussion, one hour. Designed for graduate students. Examination of Chicana/Latino health status through life expectancy, causes of death, reportable diseases, services utilization, provider supply, and risk behaviors within demographic/immigration-related changes. Students conduct qualitative research in U.S. and Mexico. Concurrently scheduled with course CM106. Letter grading.

C277. Latino Social Policy. (4) (Formerly numbered Chicana and Chicano Studies C277.) Lecture, three hours; discussion, one hour (when scheduled). Examination of social welfare of Latinos (Chicanos, Puerto Ricans, and Cubans) in U.S. through assessment and critical analysis of social policy issues affecting them. Survey of social, economic, cultural, and political circumstances affecting ability of Latinos to access public benefits and human services. Concurrently scheduled with course CM106. Letter grading.

M278. Immigration Policy and Activism. (4) (Same as Public Policy M230.) Seminar, three hours. High-lighting roles of race, gender, sexuality, and citizenship status, exploration of how immigrant rights activists organize for legalization and against deportation, detention, and border militarization. Letter grading.

279. Globalization and Transnationalism. (4) (Formerly numbered Chicana and Chicano Studies 279.) Seminar, three hours. Interdisciplinary seminar that integrates political-economic, historical-sociological, and anthropological-cultural perspectives to help students understand complex analysis of interplay between globalization (flows of people, material goods, information, and political-cultural influences) and localized transnational dynamics that together are giving meaning and constructing new social identities and strategies for struggle throughout world. S/U or letter grading.

280. Urban Social Inequality. (4) (Formerly numbered Chicana and Chicano Studies 280.) Seminar, three hours. Through empirical research and theoretical frameworks, students develop an understanding of inequalities based on migration and integration experiences of Central American immigrants in greater Los Angeles area. Students conduct qualitative research, analyze conceptual data, and write final papers that contextualize findings within existing social scientific literature. S/U or letter grading.

281. Central American Migration and Integration. (4) (Formerly numbered Chicana and Chicano Studies 281.) Seminar, three hours. Through empirical research and theoretical frameworks, students develop an understanding of inequalities based on migration and integration experiences of Central American immigrants in greater Los Angeles area. Students conduct qualitative research, analyze conceptual data, and write final papers that contextualize findings within existing social scientific literature. S/U or letter grading.

282. Chicana/Latina Legal History. (4) (Formerly numbered Chicana and Chicano Studies 282.) Seminar, three hours. Legal history of Chicanas/Chicanos in U.S. from mid-19th century to present, with emphasis on critical race theory. Examination of landmark legal cases and key approaches that have impacted Chicano/Latino community. Topics include critical race theory, Treaty of Guadalupe-Hidalgo, legal construction of Mexican American racial identity, historic educational segregation, contemporary educational issues, jury rights, Chicano movement, and undocumented immigration. S/U or letter grading.

M289. Studies in Chicana/Latina Literature. (4) (Formerly numbered Chicana and Chicano Studies M289.) (Same as English M289.) Seminar, three to five hours; discussion, one to two hours (when scheduled). Intensive research and study of major authors, and issues in Chicana/Latina literature and culture. Examination of political, aesthetic, economic, and cultural context that embroiled Chicana/o discourse; limits of investigation set by individual instructor. May be repeated for credit. S/U or letter grading.

291. Variable Topics Research Seminars: Chicana/o and Central American Studies. (4) (Formerly numbered Chicana and Chicano Studies 291.) Seminar, three hours. Limited to graduate students. Research seminar organized around readings and engaged discussion of critical topic of interest in field. Exploration of issues, its theoretical implication for field, and practical implications for communities. Topics vary each semester; specific seminar organized around readings. May be repeated for credit with consent of director of graduate studies. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) (Formerly numbered Chicana and Chicano Studies 375.) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U or letter grading.

495. Learner-Centered Teaching in Chicana/o and Central American Studies. (4) (Formerly numbered Chicana and Chicano Studies 495.) Seminar, four hours. Designed for graduate students and required of all new department teaching apprentices. Interactive forum for discussing learner-centered teaching in Chi-
Civil and Environmental Engineering

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Professors

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Shaily Mahendra, PhD
Steven A. Margulis, PhD
Ali Mosleh, PhD, NAE (Evalyn Knight Professor of Engineering)
Sriram Narasimhan, PhD
Gaurav N. Sant, PhD (Pritzker Professor of Sustainability)
Michael K. Stenstrom, PhD, PE
Jonathan P. Stewart, PhD, PE
Ertugrul Tacioglu, PhD
John W. Wallace, PhD
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Professors Emeriti

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Richard L. Perrine, PhD
Moshe F. Rubinstein, PhD
Keith D. Stolzenbach, PhD, PE
Mladen Vucetic, PhD
William W-G. Yeh, PhD, NAE (Richard G. Newman AECOM Endowed Professor Emeritus of Civil Engineering)

Associate Professors

Mathieu Bauchy, PhD
Henry V. Burton, PhD, SE (President Endowed Professor of Structural Engineering)
Timu W. Gallien, PhD
David Jassby, PhD
Jiaqi Ma, PhD

Assistant Professors

Tierra S. Bills, PhD
Alvar Escriva-Bou, PhD
Sanjay K. Mohanty, PhD
Regan F. Patterson, PhD

Adjoint Professor

Thomas A. Sabol, PhD, SE

Adjoint Associate Professors

Donald R. Kendall, PhD, PE
Issam Najm, PhD, PE

Overview

The Department of Civil and Environmental Engineering programs at UCLA include civil engineering materials, earthquake engineering, environmental engineering, geotechnical engineering, hydrology and water resources engineering, structural engineering, and structural mechanics.

Undergraduate Study

The undergraduate curriculum leads to a BS in Civil Engineering, a broad-based education in environmental engineering, geotechnical engineering, hydrology and water resources engineering, and structural engineering and mechanics. This program is an excellent foundation for entry into professional practice in civil engineering or for more advanced study. The department also offers the undergraduate Environmental Engineering minor.

Graduate Study

At the graduate level, MS and PhD degree programs are offered in the areas of civil engineering materials, environmental engineering, geo-technical engineering, hydrology and water resources engineering, and structures (including structural/earthquake engineering and structural mechanics). In these areas, research is being done on a variety of problems ranging from basic physics and mechanics problems to critical problems in earthquake engineering and in the development of new technologies for pollution control and water distribution and treatment.

Undergraduate Major

Civil Engineering BS

The civil engineering program is accredited by the Engineering Accreditation Commission of ABET.

Capstone Major

The Civil Engineering major is a designated capstone major. In each of the major field design courses, students work individually and in groups to complete design projects. To do so, they draw on their prior coursework, research the needed materials and possible approaches to creating their device or system, and come up with creative solutions. This process enables them to integrate many of the principles they have learned previously and apply them to real systems. In completing their projects, students are also expected to demonstrate effective oral and written communication skills, as well as their ability to work productively with others as part of a team.

Learning Outcomes

The Civil Engineering major has the following learning outcomes:

- Understanding of, and ability to apply, basic mathematical and scientific concepts that underlie the field
- Ability to contribute meaningfully to design projects
- Critical thinking skills, problem-solving abilities, and familiarity with computational procedures essential to the field
- Ability to work productively as a member of a team
- Effective oral and written communication skills

Requirements

Preparation for the Major

Required: Chemistry and Biochemistry 20A, 20B, 20L; Civil and Environmental Engineering 1, M20 (or Computer Science 31); Mathematics 31A, 31B, 32A, 32B, 33A, 33B (or Mechanical and Aerospace Engineering 82); Physics 1A, 1B, 1C, 4A; one natural science course selected from Civil and Environmental Engineering 58X, Earth, Planetary, and Space Sciences 3, 15, 16, 17, 20, Environment 12, Life Sciences 7A, Microbiology, Immunology, and Molecular Genetics 5, 6, or Neurosciences 10.

The Major

Required: Chemical Engineering 102A or Mechanical and Aerospace Engineering 105A,
Civil and Environmental Engineering 91 (or Mechanical and Aerospace Engineering 101), 102, 103, C104 (or Materials Science and Engineering 104), 108, 110 (or C111), 120, 135A, 150, 153, 190, Mechanical and Aerospace Engineering 103; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; and at least eight major field elective courses (32 units) from the lists below with at least two design courses, one of which must be a capstone design course and two of which must be laboratory courses. The laboratory courses must be taken from two distinct areas (both 120L and 129L may be taken to satisfy the two-laboratory requirement). Courses applied toward the required course requirement may not also be applied toward the major field elective requirement.

Civil Engineering Materials: Civil and Environmental Engineering C104, C105, C106, C111, C182; laboratory course: 108L.

Environmental Engineering: Civil and Environmental Engineering 154, 155, C159, C164, M165, M166; laboratory courses: 156A, 156B; capstone design courses: 157B, 157C.

Geotechnical Engineering: Civil and Environmental Engineering 125; laboratory courses: 120L, 129L; design courses: 121, 123 (capstone).


Structural Engineering and Mechanics: Civil and Environmental Engineering 125, 130, 135B, M135C, C137, 142; laboratory courses: 108L, 135L, 140L; design courses: 141, 143, 144 (capstone), 147 (capstone), 148.

Transportation Engineering: Civil and Environmental Engineering 180, C181, C182, C185, C186.

Additional Elective Options: Courses selected from an approved list available in the Office of Academic and Student Affairs.

For information on UC, school, and general education requirements, see the Samueli school section in College and Schools.

Undergraduate Minor

Environmental Engineering Minor

The Environmental Engineering minor is designed for students who wish to augment their major program of study with an exposure to engineering methods applied to key environmental problems facing modern society in developed and developing countries. The minor also offers students a brief experience and understanding of the roles that environmental engineering methods play in solving environmental problems.

Admission

To enter the minor, students must be in good academic standing (2.0 grade-point average or better) and file a petition in the Office of Academic and Student Affairs, 6426 Boelter Hall.

The Minor

Required Lower-Division Course (4 units): Mathematics 3C or 32A.

Required Upper-Division Courses (24 units minimum):


Policies

Credit for Chemical Engineering 102A and Mechanical and Aerospace Engineering 105A is not allowed. At least 20 upper-division units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor, and at least 16 units applied toward the minor must be taken in residence at UCLA.

Transfer credit for any of the above is subject to departmental approval; consult with the undergraduate counselors before enrolling in any courses for the minor.

Each minor course must be taken for letter grade, and students must have a minimum grade of C (2.0) in each and an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Major

Civil Engineering MS, PhD

The Master of Science degree has the following areas of study: civil engineering materials, environmental engineering, geotechnical engineering, hydrology and water resources engineering, structural/earthquake engineering, structural mechanics, structures and civil engineering materials, transportation engineering.

The Doctor of Philosophy degree has the following major fields or subdisciplines: civil engineering materials, environmental engineering, geotechnical engineering, hydrology and water resources engineering, structural/earthquake engineering, structural mechanics, and transportation engineering.

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Civil and Environmental Engineering

Lower-Division Courses

1. Civil Engineering and Infrastructure. Lecture, two hours; outside study, four hours. Examples of infrastructure, its importance, and manner by which it is designed and constructed. Role of civil engineers in infrastructure development and preservation. P/NP grading.

2. Fiat Lux Freshman Seminars. Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

M20. Introduction to Computer Programming with MATLAB. (Same as Mechanical and Aerospace Engineering M20.) Lecture, two hours; discussion, two hours; laboratory, two hours; outside study, six hours. Requisite: Mathematics 33A. Fundamentals of computer programming taught in context of MATLAB computing environment. Basic data types and control structures, input/output, functions, data visualization, MATLAB-based data structures. Development of efficient code. Introduction to object-oriented programming. Examples and exercises from engineering, mathematics, and physical sciences. Letter grading.

58XP. Climate Change, Water Quality, and Ecosystem Functioning. (Formerly numbered 58CE.) Lecture, four hours; service learning, two hours; outside study, nine hours. Science related to climate change, water quality, and ecosystem health. Topics include the nutrient cycling, hydrologic cycle, ecosystem structure and services, biodiversity, basic aquatic chemistry, and impacts of climate change on ecosystem functioning and water quality. Participation in series of science education projects to elementary or middle school audience. Letter grading.

91. Statics. Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: Mathematics 31A, 31B, Physics 1A. Newtonian mechanics, vector representation, and resultant forces and moments. Free-body diagrams and equilibrium, internal loads and equilibrium in trusses, frames, and beams. Planar and nonplanar systems, distributed forces, determining and indeterminate force systems, shear and moment diagrams, and axial force diagrams. Letter grading.

97. Variable Topics in Civil and Environmental Engineering. (2 to 4) Seminar, two hours. Current topics and research methods in civil and environmental engineering. May be repeated for credit. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

102. Dynamics of Particles and Bodies. Lecture, two hours; discussion, two hours; outside study, two hours. Requisite: course 91 or Mechanical and Aerospace Engineering 101, Physics 1B. Introduction to fundamentals of dynamics of single particles, system of particles, and rigid bodies. Topics include kinematics and mechanics of particles, work and energy, impulse and momentum, multiparticle systems, kinetics and kinematics of rigid objects in two- and three-dimensional motions. Letter grading.

103. Applied Numerical Computing and Modeling in Civil and Environmental Engineering. Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course M20 (or Computer Science 31), Mathematics 33B or Mechanical and Aerospace Engineering 82 (either may be taken concurrently). Introduction to numerical computing with specific applications in civil and environmental engineering. Topics

C110. Machine Learning and Artificial Intelligence for Civil Engineering. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: course M20, Chemistry 20A, 20B, Mathematics 31A, 31B, 32B, Physics 1A, 1B, 1C. Corequisite: course 108. Discussion of aspects of cement and concrete materials, including manufacture of cement and production of concrete. Aspects of cement composition and basic chemical reactions, microstructure, properties of plastic and hardened concrete, chemical admixtures, and acceptance testing. Development and testing of fundamentals for complete understanding of overall response of all civil engineering materials. By end of term, successful utilization of fundamental materials science concepts to understand, explain, analyze, and describe engineering performance of civil engineering materials. Concurrently scheduled with course C204. Letter grading.


C106. Modeling and Simulation of Civil Engineering Materials. (4) Lecture, four hours; outside study, eight hours. Requisites: Chemistry and Biochemistry 20A, 20B, Mathematics 31A, 31B, 32B, Physics 1A, 1B, 1C. Provided understanding of modeling and numerical simulations for civil engineering materials. Largely focused on practical examples and applications. By course end, students are expected to be able to independently run simulations at scale relevant to targeted problems. Concurrently scheduled with course C206. Letter grading.


110. Introduction to Probability and Statistics for Engineers. (4) Lecture, four hours; discussion, one hour (when scheduled); outside study, seven hours. Requisites: Mathematics 32A, 33A. Recommended: course M20. Introduction to fundamental concepts and applications of probability and statistics in civil engineering, with focus on how these concepts are used in experimental design and sampling, data analysis, risk and reliability analysis, and project design under uncertainty. Topics include basic probability concepts, random variables and analytical probability distributions, functions of random variables, estimating parameters from observational data, regression, hypothesis testing, and Bayesian concepts. Letter grading.

C111. Structural Analysis. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: course M20, Chemistry 20A, 20B, Mathematics 31A, 31B, 32B. Provides theoretical and practical introduction to computational and mechanical learning for civil engineering problems. Focus on practice and problem-solving skills. By course end, student should be able to independently run machine learning analysis. Concurrently scheduled with course C211. Letter grading.

120. Principles of Soil Mechanics. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 108. Soil as foundation for structures and as material of construction. Soil formation, classification, physical and mechanical properties, soil compaction, earth pressures, consolidation, and shear strength. Letter grading.

120L. Soil Mechanics Laboratory. (Formerly numbered 128L.) Lecture, one hour; laboratory, six hours; outside study, five hours. Requisite or corequisite: course 120. Laboratory experiments to be performed by students to study soil for design purposes. Consequent design problems. Soil classification, grain size distribution, Atterberg limits, specific gravity, compaction, expansion index, consolidation, shear strength determination, foundation problems, laboratory report writing. Letter grading.

121. Design of Foundations and Earth Structures. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: course M20 or (Computer Science 31), 108. Introduction to structural analysis; classification of structural elements; analysis of statically determinate trusses, beams, and frames; discussions in elementary structures; virtual work; analysis of indeterminate structures using force method; introduction to displacement method and energy concepts. Letter grading.

135. Intermediate Structural Analysis. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 135A. Analysis of truss and frame structures using matrix methods; matrix force method; coordinates in element method; analysis of concepts based on theorem of virtual work; moment distribution. Letter grading.

M135G. Introduction to Finite Element Methods. (4) (Same as Mechanical and Aerospace Engineering M168L.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 130 or Mechanical and Aerospace Engineering 156A or 166A. Introduction to basic concepts of finite element methods (FEM) and applications to structural and solid mechanics and heat transfer. Direct matrix structural analysis; weighted residual, least squares, and Ritz approximation methods; shape functions; convergence properties; isoparametric formulation of multidimensional heat flow and elasticity; numerical integration. Practical use of FEM software: geometric and analytic modeling; preprocessing techniques; term projects with computers. Letter grading.


C137. Elementary Structural Dymamics. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 129, 137. Elastodynamics course for civil engineering students. Elastic free and forced vibrations of single degree of freedom systems, introduction to response history and response spectrum analysis approaches for single and multidegree of freedom systems. Axial, bending, and torsional vibration of beams. Concurrently scheduled with course C229. Letter grading.

137L. Structural Dynamics Laboratory. (4) Lecture, two hours; laboratory, six hours; outside study, four hours. Requisite or corequisite: course 137. Calibration of instrumentation for dynamic measurements. Determination of natural frequencies and damping factors from free vibrations. Determination of natural frequencies, mode shapes, and damping factors from forced vibrations. Dynamic simulation. Letter grading.

140L. Structural Components and Systems Testing Laboratory. (4) Lecture, two hours; laboratory, six hours; outside study, four hours. Requisites: courses M20, 165A. Limited enrollment. Elastodynamic tests focus on assessment of periods, mode shapes, and modal damping factors from the test of small-scale structures. Pronorm and load factors for high-strength steel structures. Letter grading.

C142. Comparison of Experimental Results with Theoretical Solutions. (4) Lecture, four hours; discussion, six hours. Requisite: course 142. Comparison of experimental results with theoretical solutions. Letter grading.

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130. Elementary Structural Mechanics. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: course 108. Analysis of stress and strain, phenomenological material behavior, extension, bending, and transverse shear. Use of beams with general cross-sections, shear center, deflection of beams, torsion of beams, warping, column instability and failure. Letter grading.

13SA. Elementary Structural Analysis. (4) Lecture, four hours; discussion, one hour; outside study, six hours. Enforced requisites: courses M20 (or Computer Science 31), 108. Introduction to structural analysis; classification of structural elements; analysis of statically determinate trusses, beams, and frames; deflections in elementary structures; virtual work; analysis of indeterminate structures using force method; introduction to displacement method and energy concepts. Letter grading.

13SB. Intermediate Structural Analysis. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 135A, 165A. Analysis of truss and frame structures using matrix methods; matrix force method; coordinates in element method; analysis of concepts based on theorem of virtual work; moment distribution. Letter grading.

M135G. Introduction to Finite Element Methods. (4) (Same as Mechanical and Aerospace Engineering M168L.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 130 or Mechanical and Aerospace Engineering 156A or 166A. Introduction to basic concepts of finite element methods (FEM) and applications to structural and solid mechanics and heat transfer. Direct matrix structural analysis; weighted residual, least squares, and Ritz approximation methods; shape functions; convergence properties; isoparametric formulation of multidimensional heat flow and elasticity; numerical integration. Practical use of FEM software: geometric and analytic modeling; preprocessing techniques; term projects with computers. Letter grading.


C137. Elementary Structural Dynamics. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 129, 137. Elastodynamics course for civil engineering students. Elastic free and forced vibrations of single degree of freedom systems, introduction to response history and response spectrum analysis approaches for single and multidegree of freedom systems. Axial, bending, and torsional vibration of beams. Concurrently scheduled with course C229. Letter grading.

137L. Structural Dynamics Laboratory. (4) Lecture, two hours; laboratory, six hours; outside study, four hours. Requisite or corequisite: course 137. Calibration of instrumentation for dynamic measurements. Determination of natural frequencies and damping factors from free vibrations. Determination of natural frequencies, mode shapes, and damping factors from forced vibrations. Dynamic simulation. Letter grading.

140L. Structural Components and Systems Testing Laboratory. (4) Lecture, two hours; laboratory, six hours; outside study, four hours. Requisites: courses M20, 165A. Limited enrollment. Elastodynamic tests focus on assessment of periods, mode shapes, and modal damping factors from the test of small-scale structures. Pronorm and load factors for high-strength steel structures. Letter grading.
shapes, and damping. Development of communication skills through preparation of laboratory reports and oral presentations. Letter grading.

141. Steel Structures. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 135A. Introduction to building codes. Fundamentals of load and resistance factor design of steel elements. Design of tension and compression members. Design of beam columns. Selection of connection design. Introduction to computer modeling methods and design process. Letter grading.


142L. Reinforced Concrete Structural Laboratory. (4) Lecture, two hours; laboratory, six hours; outside study, four hours. Requisite: Code ISE 135B, 142. Limited enrollment. Design considerations used for reinforced concrete beams, columns, slabs, and joints evaluated using analysis and experiments. Links between theory and experimental results. Students demonstrate accuracy and limitations of calculation procedures used in design of reinforced concrete structural systems. Letter grading.

143. Design of Prestressed Concrete Structures. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: courses 135A, 142. Equivalents: 143A, 143B. Design of pretensioned and posttensioned systems in tensile and shear strength design, including secondary effects in indeterminate systems. Design of indeterminate posttensioned beam using both hand calculations and commercially available computer program. Discussion of external post-tensioning, one- and two-way slab systems. Letter grading.

144. Structural Systems Design. (4) Design, four hours; discussion, two hours; outside study, six hours. Requisites: courses 141 or 142, and 190. Design course for civil engineering students, with focus on design and performance of complete building structural systems. Introduction to structural design principles; structural system design and computer model for architectural design. Letter grading.


150. Introduction to Hydrology. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course M20 or (Computer Science 31), Mechanical Engineering 103. Study of hydrologic cycle and relevant atmospheric processes, water and energy balance, radiation, precipitation formation, infiltration, evaporation, vegetation transpiration, groundwater flow, storm runoff, and flood processes. Letter grading.

151. Introduction to Water Resources Engineering. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 150, Mechanical Engineering 103. Recommended: courses 103, 110. Principles of hydraulics, flow of water in open channels and pressure conduits, reservoirs and dams, hydraulic machinery, hydroelectric power. Introduction to system analysis and design applied to water resources engineering. Letter grading.

152. Hydraulic and Hydrologic Design. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: courses 150, 151, 190. Analysis and design of hydrologic systems, including stormwater management systems, potable and recycled water distribution systems, wastewater collection systems, and constructed wetlands. Emphasis on practical design components, including reading/interpreting professional drawings and documents, environmental impact reports, permitting, agency coordination, and engineering ethics. Project-based course including use of alternative design software, use of engineering economics, and preparation of written engineering reports. Letter grading.

153. Introduction to Environmental Engineering Science. (4) Lecture, four hours; discussion, one hour (when scheduled); outside study, seven hours. Recommended requisite: Mechanical and Aerospace Engineering 103. Water, air, and soil pollution: sources, transformations, effects, and processes for removal of contaminants. Water and wastewater treatment, waste disposal, air pollution, global environmental problems. Field trip. Letter grading.

154. Chemical Fate and Transport in Aquatic Environments. (4) Lecture, two hours; outside study, six hours. Recommended requisite: course 153. Fundamental physical, chemical, and biological principles governing movement and fate of chemicals in surface waters and groundwater. Topics include physical transport in various aquatic environments, air-water exchange, acid-base equilibria, oxidation-reduction chemistry, chemical sorption, biodegradation, and chemical transformation. Practical quantitative problems solved considering both reaction and transport of chemicals in environment. Letter grading.

155. Unit Operations and Processes for Water and Wastewater Treatment. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 153. Biological, chemical, and physical methods used to modify water quality. Fundamentals of phenomena governing design of engineered systems for water and wastewater treatment systems. Field trip. Letter grading.

156A. Environmental Chemistry Laboratory. (4) Lecture, four hours; laboratory, four hours; outside study, six hours. Requisite: course 153 (may be taken concurrently). Study of the chemical and physical techniques in analytical chemistry related to water and wastewater analysis. Selected experiments include gravimetric analysis, titrimey spectrophotometry, redox systems, pH and electrical conductivity. Concepts to be applied to analysis of real water samples in course 156B. Letter grading.

156B. Environmental Engineering Unit Operations and Processes Laboratory. (4) Lecture, two hours; laboratory, six hours; outside study, four hours. Requisite: Chemistry 20A, 20B. Applied to water resources engineering. Letter grading.

157A. Hydrologic Modeling. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 150 or 151. Introduction to hydrologic modeling. Topics selected from areas of (1) open-channel flow, including one-dimensional steady flow and unsteady flow, (2) pipe flow and water distribution systems, (3) rainfall-runoff modeling, and (4) groundwater flow and contaminant transport modeling, with focus on use of industry and/or research standard models with locally relevant applications. Letter grading.

157B. Design of Water Treatment Plants. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 155, 190. Water quality standards and regulations, overview of water treatment plants, design of unit operations, predesign of water treatment plants, hydraulics of plants, process control, and cost estimation. Letter grading.

157C. Design of Wastewater Treatment Plants. (4) Lecture, four hours; outside study, six hours. Requisites: courses 155, 190. Process design of wastewater treatment plants, including primary and secondary treatment, detailed design review of existing plants, and new plant design. Letter grading.

157L. Hydrologic Analysis. (4) Lecture, two hours; laboratory, five hours; outside study, five hours. Requisite: course 150. Collection, compilation, and interpretation of data for quantification of components of hydrologic cycle, that would not only mitigate adverse impact of climate change, but also remain resilient under extreme weather conditions expected due to climate change. Concurrently scheduled with course 252A. Letter grading.

159. Green Infrastructure. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 150, 153, 157. Introduction to green infrastructure, and ecological principles to designing green infrastructure for stormwater management. Students design green infrastructure based on current practices, perform engineering calculations to calculate its performance, and develop critical thinking skills needed to design innovative or futuristic green infrastructures that would not only mitigate adverse impact of climate change, but also remain resilient under extreme weather conditions expected due to climate change. Concurrently scheduled with course 252A. Letter grading.

164. Sustainable Waste Management. (4) (Formerly numbered 164.) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 153. Introduction to environmental engineering. Management of solid wastes, some of which are hazardous, is integral part of infrastructure development, and it is required to achieve environmental sustainability. Study of all aspects of hazardous and municipal solid waste management technologies, and their potential impacts on reuse of some wastes for alternative applications or energy production. Students are expected to integrate economic, environmental, regulatory, policy, and legal considerations in their investigation of the environmental designs of sustainable waste management. Student teams design sustainable remediation or waste management plans. Concurrently scheduled with course 252A. Letter grading.

M165. Environmental Nanotechnology: Implications and Applications. (4) (Same as Engineering M165.) Lecture, four hours; discussion, two hours; outside study, six hours. Recommended requisite: Environmental Engineering M103. Introduction to potential implications and applications of nanotechnology to environmental systems as well as potential application of nanotechnology to environmental protection. Technical considerations include three multidisciplinary areas: (1) physical, chemical, and biological properties of nanomaterials, (2) transport, reactivity, and toxicity of nanoscale materials in natural environmental systems, and (3) use of nanotechnology for general and water problems, including environmental protection, monitoring, and remediation. Letter grading.

M166. Environmental Microbiology. (4) (Same as Environmental Health Sciences M166.) Lecture, four hours; discussion, two hours; outside study, six hours. Recommended requisite: course 153. Microbial cell and its metabolic capabilities, microbial genetics and its potentials, growth of microbes and kinetics of growth, microbial ecology and diversity, fundamentals of wastewater treatment, probing of microbes, public health microbiology, pathogen control. Letter grading.
Lecture, one hour; laboratory, two hours; outside study, six hours. Introduction to construction engineering theory, management, and techniques. Implementation of academic texts and project case discussions. Study of building systems, building components, project delivery methods, documentation control, critical path method scheduling, labor management, quality management, estimating, sustainability, and cost controls. Letter grading.

180. Introduction to Transportation Engineering. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Designed for juniors/senior Civil Engineering, Environmental Engineering, and Student Affairs graduate students. General characteristics of transportation systems, including streets and highways, rail, transit, air, and water. Capacity considerations, including planning, design, and construction. Determination of roadway design, including horizontal and vertical alignment, cross sections, and pavements. Letter grading.

181. Traffic Engineering Systems: Operations and Control (formerly 181). Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 180. Traffic operations including traffic data collection and analysis, safety and crash studies, traffic flow theory, highway capacity analysis, signalized intersection design and analysis, and simulation modeling. Students gain understanding of basic traffic flow theory, learn to conduct traffic data collection and analysis, and to apply capacity analysis methods and simulation modeling for both highway and signalized intersections. Concurrently scheduled with course C281. Letter grading.

C182. Rigid and Flexible Pavements: Design, Materials, and Serviceability. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 180. Transportation researchers and practitioners are motivated by desire to explain spatial interactions that resulted in movement of people or goods from place to place. Such interactions include traffic behavior and new technologies that emerge. To explore and perceive these intricate interactions, understanding of essential nature of transportation systems to analyze and optimize design such systems is of utmost importance. Letter grading. Introduction to fundamental concepts, methods, and principles underlying transportation systems analysis. Includes two modules, each of which focuses on one level of system analysis: user and network. Concurrently scheduled with course C285. Letter grading.

C186. Intelligent Transportation Systems. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 185. Introduction to basic elements of intelligent transportation systems (ITS), focusing on technological, systems, and institutional aspects. Topics include systems engineering processes, advanced travel information systems, transportation network operations, commercial vehicle operations and intermodal freight, public transportation applications, ITS and regional strategic transportation planning, travel demand management, electronic toll collection, and dynamic travel time information for vehicles (CAT), data access and exchanges, cybersecurity for ITS, and other smart mobility technologies. Concurrently scheduled with course C286. Letter grade or pass/no pass grading.

189. Special Courses in Civil and Environmental Engineering. (4) Lecture, to be arranged; discussion, to be arranged (when scheduled); outside study, to be arranged. Special topics in civil engineering for undergraduate students taught on experimental, temporary basis, such as those taught by resident and visiting faculty members. May be repeated for credit with topic or instructor change. Letter grading.

190. Professional Practice. (2) Lecture, two hours; discussion, one hour; outside study, three hours. Requisite: one course from 121, 141, 142, 151, 155 (may be taken concurrently). Sustainability in design (e.g., LEED certification for building projects), professional licensure (PE, SE, and GE), project management (proposals, scheduling, and budgeting), business, public policy, leadership, ethics, earthquake loads, wind loads, load combinations, and environmental impact reports. Letter or pass/fail grading.

194. Research Group Seminars: Civil and Environmental Engineering. (2 to 8) Seminar, two to eight hours; outside study, four to 16 hours. Designed for undergraduate students to gain experience in a research group. Discussion of research methods and current literature in field or of research of faculty members or students. May be repeated for credit. Letter grading.

199. Directed Research in Civil and Environmental Engineering. (2 to 8) Tutorial, to be arranged. Limited to graduate students taught on experimental or temporary basis. A written report or project required. May be repeated for credit. Letter or pass/fail grading.
235B. Finite Element Analysis of Structures. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: courses 130, 235A. Direct energy formulations for deformable systems; solution methods for linear equations; analysis of structural systems with one-dimensional elements; introduction to variational calculus; discrete element displacement, force, and mixed methods for membrane, plate, shell structures; instability effects. Letter grading.

235C. Nonlinear Structural Analysis. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 235B. Classification of nonlinear effects; material non-linearities; conservative, nonconservative material behavior; geometric nonlinearities, Lagrangian, Eulerian description of motion; finite element methods in geometrically nonlinear problems; postbuckling behavior of structures; solution of nonlinear equations; incremental, iterative, programming methods. Letter grading.


239. Elementary Structural Dynamics. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 235B. Basic structural dynamics course for civil engineering students. Elastodynamic properties of single degree of freedom systems, introduction to response history and response spectrum analysis approaches for single and multidof systems. Flexural, axial, and torsional vibration of beams. Concurrently scheduled with course C137. Letter grading.


243A. Behavior and Design of Reinforced Concrete Structural Elements. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 135B. Recommended: course 135B. Review of matrix force and displacement methods of structural analysis; virtual work theorem, virtual forces, and displacement fields; determination of values of total and complementary potential energy, minimum total potential energy, Maxwell/Betti theorems, effects of approximations, introduction to finite element analysis. Letter grading.

243B. Response and Design of Reinforced Concrete Structural Systems. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: courses 243A, 246. Information on response and behavior of reinforced concrete buildings to earthquake ground motions. Topics include use of elastic and inelastic response spectra, role of strength, stiffness, and ductility in design, use of prescriptive versus performance-based design methodologies, and application of elastic and inelastic analysis techniques for new and existing construction. Letter grading.

244. Structural Reliability. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: courses C137, 141, 142, 235A. Spectral analysis of ground motions: response, time, and Fourier spectra. Response of structures to ground motions due to earthquakes. Computational methods to evaluate stochastic characteristics of ground motions and perform reliability calculations related to performance-based engineering. Letter grading.

245. Earthquake Ground Motion Characterization. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: courses C137, 141, 142, 235A. Earthquake fundamentals, including plate tectonics, fault types, seismic waves, and magnitude scales. Characterization of earthquake ground motion magnitude range and rate of future earthquakes. Ground motion prediction equations and site effects on ground motion. Seismic hazard analysis. Ground motion reduction and modification for response history analysis. Letter grading.

246. Structural Response to Ground Motions. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: courses C137, 141, 142, 235A. Exploration of response of structures to ground motions. Computational methods to evaluate stochastic characteristics of ground motions and perform reliability calculations related to performance-based engineering. Letter grading.

247. Earthquake Hazard Mitigation. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: courses 130, and M237A or 245. Concept of seismic isolation, linear theory of base isolation, visco-elastic and hysteretic behavior, elastomeric bearings, under compression, sliding of bearings, sliding bearings, passive energy dissipation devices, response of structures with isolation and passive energy dissipation devices, static and dynamic analysis procedures, earthquake-resistant design methods for seismically isolated structures. Letter grading.

250A. Surface Water Hydrology. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 150. In-depth study of surface water hydrology, including discussion and interrelationship of major topics such as rainfall and evaporation, soils and infiltration properties, runoff and snowmelt processes, Introduction to rainfall-runoff modeling, floods, and policy issues involved in water resource engineering and management. Letter grading.


250C. Hydrometeorology. (4) Lecture, four hours; discussion, two hours; outside study, eight hours. Requisite: course 250A. In-depth study of hydrometeorological processes. Role of hydrology in climate system, precipitation and evaporation processes, atmospheric radiation, exchange of mass, heat, and momentum between soil and vegetation surface and overlying atmosphere, flux and transport in turbulent boundary layer, basic remote sensing principles. Letter grading.
250D. Water Resources Systems Engineering. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 250A, 251B. Introduction to hydrologic modeling concepts, including rainfall-runoff analysis, input data, uncertainty analysis, lumped and distributed modeling, parameter estimation and sensitivity analysis, and application of modern techniques for prediction of streamflows in water resource applications. Letter grading.


255B. Biological Processes for Water and Wastewater Treatment. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 254A, 255A. A discussion of the biological treatment of drinking water and wastewater, including activated sludge, gas transfer, fixed-film processes, aerobic and anaerobic digestion, sludge disposal, and biological nutrient removal. Letter grading.

C258. Coastal Engineering. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: course 151 and Mechanical and Aerospace Engineering 103. Covers coastal water areas (tides, climate variability, storms, sea level rise, resonance), surface gravity waves (characteristics, transformation, spectra), coastal processes (overtopping, erosion, flooding, coastal protection, wave nourishment, dunes, berms, nature-based infrastructure), coastal modeling. Concurrently scheduled with course C158. Letter grading.

256A. Membrane Separations in Aquatic Systems. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 254A. Applications of membrane separations to desalination, water reclamation, brine disposal, and ultrapure water systems. Discussion of inverse osmosis, nanofiltration, and other desalination and water-quality exchange technologies from both practical and theoretical standpoints. Letter grading.

C259. Green Infrastructure. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 50, 250C. Overview of fundamental science, engineering, and ecological principles to designing green infrastructure for stormwater management. Students design green infrastructure based on current guidelines, perform engineering calculations to determine its performance, and develop critical thinking skills needed to design innovative or futuristic green infrastructure systems. Emphasis on the adverse impact of climate change, but also remain resilient under extreme weather conditions expected during climate change. Concurrently scheduled with course C159. Letter grading.

260. Advanced Topics in Hydrology and Water Resources. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 250A, 250B, 250D. Current research topics in inverse problem of parameter estimation, experimental design, conjunctive use of surface and groundwater, multiobjective water resources planning, and optimization of water resources systems. Topics may vary from term to term. Letter grading.

261. Colloidal Phenomena in Aquatic Systems. (4) Lecture, four hours; discussion, two hours; outside study, eight hours. Requisites: courses 254A, 255A. Colloidal interactions, colloid stability, colloidal hydrodynamics, surface chemistry, adsorption of pollutants on colloidal surfaces, transport of colloids in aquatic systems, and particle deposition. Consideration of applications to colloidal processes in aquatic environments. Letter grading.

264. Sustainable Waste Management. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Introduction to environmental engineering. Management of solid wastes, some of which are hazardous. Development and use of sustainable waste management technologies. Student teams design sustainable remediation or waste management plans. Concurrently scheduled with course C164. Letter grading.

266. Environmental Biotechnology. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 151, 153, 254A. Environmental biotechnology—concept and potential, biotechnology of pollutant control, bioremediation, biocatalysis, biosensor development, and environmental biotechnology modeling. Letter grading.

267. Environmental Applications of Geochemical Modeling. (4) Lecture, four hours; outside study, eight hours. Requisite: course 254A. Geochemical modeling is important tool for predicting environmental impacts of contamination. Hands-on experience in modeling using geochemical software packages commonly found in environmental consulting industry to gain better understanding of governing geochemical principles and their application to movement and transformation of contaminants. Types of modeling include speciation, mineral solubility, surface complexation, reaction path, input data balance, mass balance, and transport models. Case studies involve acid mine drainage, nuclear waste disposal, bioavailability and risk assessment, mine tailings and mining waste, deep well injection, landfill leachate, and microbial respiration. Research/modeling project required. Letter grading.

C281. Traffic Engineering Systems: Operations and Control. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 180. Traffic operations including traffic data collection and analysis, safety and crash studies, traffic flow theory, highway capacity analysis, signalized intersection design and analysis, and simulation modeling. Students gain hands-on experience in applying traffic operations. Letter grading.

M262A. Introduction to Atmospheric Chemistry. (4) (Same as Atmospheric and Oceanic Sciences M203A.) Lecture, three hours. Requisite for undergraduates: Chemistry 208. Principles of chemical ki- netics, thermochromy, spectroscopy, and photochemistry; chemical composition and history of Earth’s atmosphere; biogeochemical cycles of key atmospheric constituents; basic photochemistry of troposphere and stratosphere; impact of atmospheric chemical processes; air pollution; chemistry and cli- mate. S/U or letter grading.

M262B. Atmospheric Diffusion and Air Pollution. (4) (Same as Atmospheric and Oceanic Sciences M224B.) Lecture, three hours. Nature and sources of atmospheric pollution; diffusion from point, line, and area sources; pollution dispersion in complex environments; theoretical tools for field pollution; the role of meteorological aspects of air pollution. S/U or letter grading.

263A. Physics of Environmental Transport. (4) Lecture, four hours; outside study, eight hours. Designed for graduate students. Transport processes in surface water, groundwater, and atmosphere. Emphasis on exchanges across phase boundaries: sediment/water interface; air/water gas exchange; particles, droplets, and aerosols; and other processes. Study of the effect of reactions on transport; linkages between physical, chemical, and biological processes. Letter grading.

263B. Advanced Topics in Transport in Environmental Interfaces. (4) Lecture, four hours; outside study, eight hours. Requisite: course 250B. Study of in-depth treatment of selected topics involving transport phenomena at environmental interfaces between solid, fluid, and gas phases, such as aquatic sediments, po- rous aggregates, and vegetation.字母 grading.

C264. Sustainable Waste Management. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Introduction to environmental engineering. Management of solid wastes, some of which are hazardous. Development and use of sustainable waste management technologies. Student teams design sustainable remediation or waste management plans. Concurrently scheduled with course C164. Letter grading.

266. Environmental Biotechnology. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 151, 153, 254A. Environmental biotechnology—concept and potential, biotechnology of pollutant control, bioremediation, biomass conversion: composting, biocatalysis, and photobiological model systems. Letter grading.

267. Environmental Applications of Geochemical Modeling. (4) Lecture, four hours; outside study, eight hours. Requisite: course 254A. Geochemical modeling is important tool for predicting environmental impacts of contamination. Hands-on experience in modeling using geochemical software packages commonly found in environmental consulting industry to gain better understanding of governing geochemical principles and their application to movement and transformation of contaminants. Types of modeling include speciation, mineral solubility, surface complexation, reaction path, input data balance, mass balance, and transport models. Case studies involve acid mine drainage, nuclear waste disposal, bioavailability and risk assessment, mine tailings and mining waste, deep well injection, landfill leachate, and microbial respiration. Research/modeling project required. Letter grading.

C281. Traffic Engineering Systems: Operations and Control. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 180. Traffic operations including traffic data collection and analysis, safety and crash studies, traffic flow theory, highway capacity analysis, signalized intersection design and analysis, and simulation modeling. Students gain hands-on experience in applying traffic operations. Letter grading.
C282. Rigid and Flexible Pavements: Design, Materials, and Environmental Impact. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Correlation, analysis, and metrication of aspects of pavement design, including materials selection and traffic loading analysis. Special attention to aspects of pavement distress/serviceability and factoring of these into metrics of pavement performance. Discussion of potential choices of pavement materials (i.e., asphalt and concrete) and their specific strengths and weaknesses in paving applications. Unification and correlation of different variables that influence pavement performance and highlight their relevance in pavement design. Concurrently scheduled with course C182. Letter grading.

C285. Transportation Systems Analysis. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 180. Transportation researchers and practitioners are motivated by desire to explain spatial interactions that resulted in movement of people or goods from place to place. Such interactions become more intricate as new technologies emerge. To explore and perceive these intricate interactions, understanding of essential nature of transportation systems to analyze and optimally design such systems is needed more than ever. Introduction to fundamental concepts, methods, and principles underlying transportation systems analysis. Includes two modules, each of which focuses on one level of system analysis: traveler behavior and network. Concurrently scheduled with course C185. Letter grading.

C286. Intelligent Transportation Systems. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 180. Introduction to basic elements of intelligent transportation systems (ITS), focusing on technological, systems, and institutional aspects. Topics include systems engineering processes, advanced traveler information systems, transportation network operations, commercial vehicle operations and intermodal freight, public transportation applications, ITS and regional strategic transportation planning, travel demand management, electronic toll collection, and road-pricing, connected and automated vehicles (CAV), data access and exchanges, cybersecurity for ITS, and other smart mobility technologies. Concurrently scheduled with course C186. Letter grading.

M287. Travel Behavior Analysis. (4) (Same as Public Policy M221 and Urban Planning M223) Lecture, three hours. Requisites: Public Policy 201 or M201A, and 203, or Urban Planning 207 and 220B. Descriptions of travel patterns in metropolitan areas, recent trends and projections into future, overview of travel forecasting methods, trip generation, trip distribution, mode split traffic assignment, critique of traditional travel forecasting methods and new approaches to travel behavior analysis. Letter grading.

296. Advanced Topics in Civil Engineering. (2 to 4) Seminar, to be arranged. Discussion of current research and literature in research specialty of faculty member teaching course. S/U grading.

298. Seminar: Engineering. (2 to 4) Seminar, to be arranged. Limited to graduate civil engineering students. Seminars may be organized in advanced technical fields. If appropriate, field trips may be arranged. May be repeated with topic change. Letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Teaching Assistant Training Seminar. (2) Seminar, two hours. Preparation: appointment as teaching assistant in Civil and Environmental Engineering Department. Seminar on communication of civil engineering principles, concepts, and methods; teaching assistant preparation; organization, and presentation of material, including use of visual aids; grading, advising, and rapport with students. S/U grading.

596. Directed Individual or Tutorial Studies. (2 to 8) Tutorial, to be arranged. Limited to graduate civil engineering students. Petition forms to request enrollment may be obtained from assistant dean, Graduate Studies. Supervised investigation of advanced technical problems. S/U grading.

597A. Preparation for MS Comprehensive Examination. (2 to 12) Tutorial, to be arranged. Limited to graduate civil engineering students. Reading and preparation for MS comprehensive examination. S/U grading.

597B. Preparation for PhD Preliminary Examinations. (2 to 16) Tutorial, to be arranged. Limited to graduate civil engineering students. Reading and preparation for PhD preliminary examination. S/U grading.

598. Research for and Preparation of MS Thesis. (2 to 12) Tutorial, to be arranged. Limited to graduate civil engineering students. Supervised independent research for MS candidates, including thesis prospectus. S/U grading.

599. Research for and Preparation of PhD Dissertation. (2 to 16) Tutorial, to be arranged. Limited to graduate civil engineering students. Usually taken after students have been advanced to candidacy. S/U grading.

Overview

The civilizations of ancient Greece and Rome are the focus of research and teaching in the Department of Classics. These areas of study are important in their own right and for their contributions to the political, cultural, intellectual, and artistic development of the Western world. To this end, the department offers a wide variety of interdisciplinary courses in classical civilization (multiple-listed in the departments of art history, philosophy, and political science), as well as elementary and advanced courses in ancient Greek and Latin language, literature, and linguistics. Classical civilization courses include such topics as Greek and Latin literature in translation (genres of epic, comedy, tragedy, biography), classical mythology, religion, law, gender and sexuality, politics, philosophy, art and archaeology, and the reception of the ancient world in modern cultures (cinema and classics).

Undergraduate Study

Students considering a major in the department should consult with the adviser as soon as possible in their UCLA career, but in no case later than the point at which they are about to take upper-division courses.

Note: Students in the Greek, Latin, and Greek and Latin majors are permitted to take Greek 200A, 200B, 200C and Latin 200A, 200B, 200C with consent of the instructor.

Graduate Study

Students can earn Master of Arts degrees in Classics (Greek and Latin), in Greek, or in Latin only after they have been admitted to the PhD program.

Undergraduate Majors

Classical Civilization BA

The civilizations of ancient Greece and Rome have made important contributions to the political, social, artistic, and intellectual development of the Western world. The purpose of the Classical Civilization major is to provide students with a formal and balanced introduction to the historical and cultural experiences of the ancient Greeks and Romans. The program of study is structured, yet not rigid. Lower-division survey courses and requirements in elementary language study, ancient history, and classical art establish an essential background of knowledge, while electives encourage individual and specialized interests. The program offers a
broad range of courses in the fields of language, literature, history, mythology, religion, philosophy, art, and archaeology. The major serves as excellent and rewarding preparation for a professional career in medicine, law, business, journalism, communications, or the arts.

**Capstone Major**
The Classical Civilization major is a designated capstone major. Undergraduate students take a capstone seminar in which they use the skills and expertise acquired in earlier coursework to research, analyze, and complete a written paper or project. They identify and analyze ancient classical documents, material evidence, or other forms of primary sources and demonstrate their critical skills by engaging in presentations and weekly discourse with their peers.

**Learning Outcomes**
The Classical Civilization major has the following learning outcomes:
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Identification and analysis of appropriate ancient sources, material evidence, and other primary documents appropriate to the field
- Engagement with peers through presentation, discussion, and critique of student work
- Conception and execution of a project that identifies and engages with a specialized topic
- Working knowledge of scholarly discourse relative to a specialized topic

**Entry to the Major**

**Transfer Students**
Transfer applicants to the Classical Civilization major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one classical Greek culture course, one Roman civilization course, and one course in Greek or Roman literature in translation, classical mythology, or classical archaeology.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

**Requirements**

**Preparation for the Major**
**Required:** Classics 10, 20, Greek 3 or 16 or Latin 3 or 16, and one course from 30, 40W, 41W, 42, 51A, 51B, 60, 88GE.

**The Major**
**Required:** (1) Nine upper-division courses in the department (courses in related fields not of the department may be substituted by petition and with approval of the undergraduate adviser)—no more than three may be selected from Greek 100 through 133 or Latin 100 through 133, and Classics 198A and 198B may be applied as only one course toward the major and (2) one capstone seminar (Classics 191).

**Honors Program**

**Requirements**
All honors students are required to take Classics 191 (or an equivalent undergraduate seminar) in their junior year before beginning work on the honors thesis. Students must then enroll in Classics 198A and 198B in consecutive terms, in which they write the thesis under the direct supervision of a faculty member. They may take courses 198A and 198B concurrently or be exempt from course 198A only with approval of the faculty undergraduate adviser. In course 198A students submit an annotated bibliography and preliminary outline of their thesis. In course 198B, they submit at least one initial draft and the final revised version of the thesis. Only course 198B may be applied toward the upper-division classical civilization requirement for departmental majors.

**Policies**

**The Major**
All other courses in the 190 series may be substituted only by petition.

**Honors Program**

**Admission**
The honors program is open to Classical Civilization majors with a cumulative grade-point average of 3.5 or better in departmental courses and an overall GPA of 3.25 or better. Students with lower GPAs may petition for admission to the program, but these grade-point averages must be achieved before graduation in order to qualify for honors.

**Requirements**
To qualify for graduation with departmental honors, students must (1) have a cumulative grade-point average of 3.5 or better in departmental courses and an overall GPA of 3.25 or better and (2) complete Classics 198A and 198B with grades of A– or better.

To qualify for graduation with departmental honors, students must (1) have a cumulative GPA of 3.85 or better in departmental courses and an overall GPA of 3.65 or better and (2) complete Classics 198A and 198B with grades of A– or better.

**Greek BA**

**Capstone Major**
The Greek major is a designated capstone major. Undergraduate students take a capstone seminar in which they use the skills and expertise acquired in earlier coursework to research, analyze, and complete a written paper or project. They identify and analyze ancient classical documents, material evidence, or other forms of primary sources and demonstrate their critical skills by engaging in presentations and weekly discourse with their peers.

**Learning Outcomes**
The Greek major has the following learning outcomes:
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Identification and analysis of appropriate ancient sources, material evidence, and other primary documents appropriate to the field
- Engagement with peers through presentation, discussion, and critique of student work
- Conception and execution of a project that identifies and engages with a specialized topic
- Working knowledge of scholarly discourse relative to a specialized topic

**Entry to the Major**

**Transfer Students**
Transfer applicants to the Greek major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one year of Greek and related courses in civilization, culture, history, linguistics, literature, and closely related languages.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

**Requirements**

**Preparation for the Major**
**Required:** Classics 10, 20; Greek 1, 2, 3, 20, or equivalent. Greek 16 may be substituted for Greek 1, 2, 3.

**The Major**
**Required:** (1) Seven upper-division Greek courses, including course 110; Greek 197 and 199 may be applied only by petition; (2) three upper-division courses in classical civilization and/or ancient history (History 112A through M112E, 113A, 113B, 114A, 114B, 114C, 115); (3) one capstone seminar (Classics 191).

**Honors Program**

**Requirements**
All honors students are required to take Classics 191 (or an equivalent undergraduate seminar) in their junior year before beginning work on the honors thesis. Students must then enroll in Classics 198A and 198B in consecutive terms, in which they write the thesis under the direct supervision of a faculty member. They may take courses 198A and 198B concurrently or be exempt from course 198A only with approval of the faculty undergraduate adviser. In course 198A students submit an annotated bibliography and preliminary outline of their thesis. In course 198B, they submit at least one initial draft and the final revised version of the thesis. Only course 198B may be applied toward the upper-division classical civilization requirement for departmental majors.

**Policies**

**The Major**
Courses in related fields not offered by the department may be substituted by petition and with approval of the faculty undergraduate adviser.
Honors Program

Admission
The honors program is open to Greek majors with a cumulative grade-point average of 3.5 or better in departmental courses and an overall GPA of 3.25 or better. Students with lower GPAs may petition for admission to the program, but these grade-point averages must be achieved before graduation in order to qualify for honors.

Requirements
To qualify for graduation with departmental honors, students must (1) have a cumulative grade-point average of 3.5 or better in departmental courses and an overall GPA of 3.25 or better and (2) complete Classics 198A and 198B with grades of A– or better.

To qualify for graduation with departmental honors, students must (1) have a cumulative GPA of 3.85 or better in departmental courses and an overall GPA of 3.65 or better and (2) complete Classics 198A and 198B with grades of A.

Greek and Latin BA

Capstone Major
The Greek and Latin major is a designated capstone major. Undergraduate students take a capstone seminar in which they use the skills and expertise acquired in earlier coursework to research, analyze, and complete a written paper or project. They identify and analyze ancient classical documents, material evidence, or other forms of primary sources and demonstrate their critical skills by engaging in presentations and weekly discourse with their peers.

Learning Outcomes
The Greek and Latin major has the following learning outcomes:

- Demonstrated specific skills and expertise, including research, analysis, and writing
- Identification and analysis of appropriate ancient sources, material evidence, and other primary documents appropriate to the field
- Engagement with peers through presentation, discussion, and critique of student work
- Conception and execution of a project that identifies and engages with a specialized topic
- Working knowledge of scholarly discourse relative to a specialized topic

Entry to the Major

Transfer Students
Transfer applicants to the Greek and Latin major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one year of Greek and of Latin and related courses in civilization, culture, history, linguistics, literature, and closely related languages.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Latin BA

Capstone Major
The Latin major is a designated capstone major. Undergraduate students take a capstone seminar in which they use the skills and expertise acquired in earlier coursework to research, analyze, and complete a written paper or project. They identify and analyze ancient classical documents, material evidence, or other forms of primary sources and demonstrate their critical skills by engaging in presentations and weekly discourse with their peers.

Learning Outcomes
The Latin major has the following learning outcomes:

- Demonstrated specific skills and expertise, including research, analysis, and writing
- Identification and analysis of appropriate ancient sources, material evidence, and other primary documents appropriate to the field
- Engagement with peers through presentation, discussion, and critique of student work
- Conception and execution of a project that identifies and engages with a specialized topic
- Working knowledge of scholarly discourse relative to a specialized topic

Entry to the Major

Transfer Students
Transfer applicants to the Latin major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one year of Latin and related courses in civilization, culture, history, linguistics, literature, and closely related languages.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Classics 10, 20; Greek 1, 2, 3, 20 and Latin 1, 2, 3, 20, or equivalent. Greek 16 may be substituted for Greek 1, 2, 3.

The Major

Required: (1) Eight upper-division Greek and Latin courses (of which at least four must be in each language), including Greek 110 or Latin 110; Greek and/or Latin 197 and 199 may be applied only by petition; (2) three upper-division courses in classical civilization and/or ancient history (History 112A through M112E, 113A, 113B, 114A, 114B, 114C, 115); (3) one capstone seminar (Classics 191).

Honors Program

Requirements

All honors students are required to take Classics 191 (or an equivalent undergraduate seminar) in their junior year before beginning work on the honors thesis. Students must then enroll in Classics 198A and 198B in consecutive terms, in which they write the thesis under the direct supervision of a faculty member. They may take courses 198A and 198B concurrently or be exempt from course 198A only with approval of the faculty undergraduate adviser. In course 198A students submit an annotated bibliography and preliminary outline of their thesis. In course 198B, they submit at least one initial draft and the final revised version of the thesis. Only course 198B may be applied toward the upper-division classical civilization requirement for departmental majors.

Policies

The Major

Courses in related fields not offered by the department may be substituted by petition and with approval of the faculty undergraduate adviser.

Honors Program

Admission
The honors program is open to Greek and Latin majors with a cumulative grade-point average of 3.5 or better in departmental courses and an overall GPA of 3.25 or better. Students with lower GPAs may petition for admission to the program, but these grade-point averages must be achieved before graduation in order to qualify for honors.

Requirements
To qualify for graduation with departmental honors, students must (1) have a cumulative grade-point average of 3.5 or better in departmental courses and an overall GPA of 3.25 or better and (2) complete Classics 198A and 198B with grades of A– or better.

To qualify for graduation with departmental highest honors, students must (1) have a cumulative GPA of 3.85 or better in departmental courses and an overall GPA of 3.65 or better and (2) complete Classics 198A and 198B with grades of A.
may take courses 198A and 198B concurrently or be exempt from course 198A only with approval of the faculty undergraduate adviser. In course 198A students submit an annotated bibliography and preliminary outline of their thesis. In course 198B, they submit at least one initial draft and the final revised version of the thesis. Only course 198B may be applied toward the upper-division classical civilization requirement for departmental majors.

Policies

The Major
Courses in related fields not offered by the department may be substituted by petition and with approval of the faculty undergraduate adviser.

Honors Program
Admission
The honors program is open to Latin majors with a cumulative grade-point average of 3.5 or better in departmental courses and an overall GPA of 3.25 or better. Students with lower GPAs may petition for admission to the program, but these grade-point averages must be achieved before graduation in order to qualify for honors.

Requirements
To qualify for graduation with departmental honors, students must (1) have a cumulative grade-point average of 3.5 or better in departmental courses and an overall GPA of 3.25 or better and (2) complete Classics 198A and 198B with grades of A– or better.

To qualify for graduation with departmental highest honors, students must (1) have a cumulative GPA of 3.85 or better in departmental courses and an overall GPA of 3.65 or better and (2) complete Classics 198A and 198B with grades of A or better.

Undergraduate Minors

Classical Civilization Minor
The Classical Civilization minor is designed to recognize a serious commitment to the study of the cultures and civilizations of ancient Greece and Rome. Lower-division survey courses in historical studies, classical literature, mythology, and film provide an essential introduction to the imagination and power of the ancient world. Students may fulfill upper-division requirements from a variety of courses in classical civilization and related fields, including political and social history, literature, art and archaeology, religion, mythology, philosophy, and cultural studies of ethnicity, gender, and sexuality in antiquity.

Admission
To enter the minor, students must have an overall grade-point average of 2.0 or better.

The Minor
Required Lower-Division Courses (15 units):
Classics 10, 20, and one course from 30, 40W, 41W, 42, 51A, 51B, 60.

Required Upper-Division Courses (20 units):
Five upper-division courses in classical civilization offered by the department.

Policies
One course in a related field may be substituted with approval of the faculty undergraduate adviser. Classics 191 may be applied, but all other courses in the 190 series may be substituted only by petition.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Greek Language and Culture Minor
The Greek Language and Culture minor is designed to recognize a serious commitment to the study of ancient or modern Greek. After completing either lower-division ancient Greek (Greek 2, 3, 20) or modern Greek (Greek 9A, 9B, 9C), students select departmental upper-division courses centered on Greek texts, culture, and contexts. Students may take reading courses in ancient Greek prose and poetry that provide close analysis of individual texts, with attention to their historical, literary, and cultural context and/or they may choose to take courses in translation that ground their language training within the broader scope of Hellenic studies.

Admission
To enter the minor, students must have an overall grade-point average of 2.0 or better.

The Minor
Required Lower-Division Courses (12 or 14 units):
Greek 2, 3, and 20, or 9A, 9B, and 9C, or equivalent.
Greek 16 may be substituted for Greek 2 and 3.

Required Upper-Division Courses (20 units):
Two courses selected from Greek 100 through 187; three additional upper-division courses in Greek or classical civilization.

Policies
Courses in related fields not offered by the department may be substituted by petition and with approval of the undergraduate adviser. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Latin Language and Culture Minor
The Latin Language and Culture minor is designed to recognize a serious commitment to the study of the Latin language. After a year of elementary Latin (Latin 1, 2, 3) or its equivalent, students select departmental upper-division reading courses in classical (and/or late antique and medieval) Latin prose and poetry that provide close analysis of individual texts, with attention to their historical, literary, and cultural context and/or they may choose to take courses in translation that ground their language training within the broader scope of Roman studies and classical reception.

Subjects of study include Roman comedy, epic, lyric, elegy, satire, history, rhetoric, philosophy, epistemology, and the novel.

Admission
To enter the minor, students must have an overall grade-point average of 2.0 or better.

The Minor
Required Lower-Division Courses (14 units):
Latin 2, 3, 20, or equivalent. Latin 16 may be substituted for Latin 2 and 3.

Required Upper-Division Courses (20 units):
Two courses selected from Latin 100 through 187; three additional upper-division courses in Latin or classical civilization.

Policies
Courses in related fields not offered by the department may be substituted by petition and with approval of the undergraduate adviser. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Majors

Classics MA, CPhil, PhD

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announce-
Greek MA

The Master of Arts degree in Greek may only be earned after students have been admitted to the PhD program in Classics.

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Latin MA

The Master of Arts degree in Latin may only be earned after students have been admitted to the PhD program in Classics.

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Classics

Lower-Division Courses

10. Discovering Greeks. (5) Lecture, three hours; discussion, one hour. Knowledge of Greek not required. Study of Greek life and culture from age of Homer to Roman conquest. Readings focus on selections from works of ancient authors in translation. Lectures illustrated with images of art, architecture, and material culture. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP or letter grading.

20. Discovering Romans. (5) Lecture, three hours; discussion, one hour. Knowledge of Latin not required. Study of Roman life and culture from time of city’s legendary foundations to end of classical antiquity. Readings focus on selections from works of ancient authors in translation. Lectures illustrated with images of art, architecture, and material culture. P/NP or letter grading.

30. Classical Mythology. (5) Lecture, three hours; discussion, one hour. Introduction to myths and legends of ancient Greece and/or Rome, role of those stories in their societies, and modern approaches to studying them. P/NP or letter grading.

40W. Reading Greek Literature: Writing-Intensive. (5) Lecture, two hours; discussion, two hours. Requisite: English Composition 3. Exploration in detail and from variety of critical perspectives of carefully selected literary texts characteristic of ancient Greece and significant in Western literary tradition. Satisfies Writing I requirement. Letter grading.

41W. Reading Roman Literature: Writing-Intensive. (5) Lecture, two hours; discussion, two hours. Requisite: English Composition 3. Exploration in detail and from variety of critical perspectives of carefully selected literary texts characteristic of ancient Rome and significant in Western literary tradition. Satisfies Writing II requirement. Letter grading.

Classics

Upper-Division Courses

M114A. History of Ancient Mediterranean World. (4) (Same as History M112C.) Lecture, five hours. Intensive on-site study of history and culture of ancient Rome from founding of city to conversion of Christianity. Part of UCLA Summer Travel Program. P/NP or letter grading.

M114B. History and Monuments of Rome: Field Studies. (4) (Same as History M112E.) Fieldwork, five hours. On-site study of history and culture of ancient Rome through daily lectures and guided tours of archaeological sites. Field trips outside Rome to Pompeii, Hadrian’s Villa, and ancient Ostia. P/NP or letter grading.

M121. Ancient and Medieval Political Theory. (4) (Same as Political Science M119A.) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Study of how Western culture has conceived and reinterpreted political thought of ancient Greeks and Romans. Topics include examination of influential case(s) of modern reception of classical antiquity. P/NP or letter grading.

M125. Invention of Democracy. (5) (Same as Political Science M112B.) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Democracy was invented in ancient Greece as political form grounded on equality before law, citizenship, and freedom. It came into existence as struggle by demos, people, aware of its excellence and proud of its power, kratos. It became only regime capable of including all members of community while disregarding wealth, status, and diverging interests. Examination of how history of ancient democracy. P/NP or letter grading.

130. Race, Ethnicity, Identity in Greco-Roman World. (4) Lecture, two and one half hours; discussion, one hour. Issues include cultural relativism, what makes space either familiar or alien, re-building of home in fantastic territories, methods of travel (both fantastic and mundane), methods of measuring time and distance across space, modern classifications of fantasy, and to what extent these terms are applicable to ancient world. P/NP or letter grading.

B8A-B8Z. Lower-Division Seminars. (4 each) Seminar, three hours. Variable topics; consult Schedule of Classes or department for topics to be offered in specific term. P/NP or letter grading.

B8GE. General Education Seminar Sequences. (5) Seminar, three hours. Focused study of one aspect of ancient Greek and/or Roman culture or civilization. Topics are interdisciplinary in nature (literature, arts, religion, politics, culture) and make connections between ancient and postclassical eras. Topics include rediscovery of Pompeii and Herculaneum; Roman religion and literature; pleasures of Greek or Roman body; and 18th-century British literature and reception of classics. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

90HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

98. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.
within dominant cultures (e.g. Egyptian identity in Hellenistic Egypt, Greek, Syrian, and Jewish identity in Roman Empire). P/NP or letter grading.

M133. Ancient Historiography: Theory and Practice. (4) (Same as History M113C.) Lecture, three hours. Study of theory, practice, and development of writing history in cultures of ancient Greece and Rome. Focus is literary, centered on questions of genre and rhetoric. Encourages appreciation for how ancient historiography relates to other ancient genres (epic, biography, oratory). Readings may draw widely from various authors, including Herodotus, Thucydides, Livy, Tacitus, and others. P/NP or letter grading.

137. Ancient Lives: Art of Biography. (4) Lecture, three hours. Study of origins, development, and practice of writing lives (i.e., biography) represented in cultures of ancient Greece and Rome. Readings include examples from Greek and Roman lives of Plutarch and lives of Roman Emperors (Caesars) by Suetonius. Comparisons with modern biographical traditions in literature and film. P/NP or letter grading.


140. Topics in History of Greek Literature. (4) Lecture, three hours. Required: course 10 or 40W. Investigation of specific issue in understanding of Greek literature, usually a genre or evaluation of a particular author. May be repeated for credit with topic change. P/NP or letter grading.

141. Topics in History of Latin Literature. (4) Lecture, three hours. Required: course 20 or 41W. Investigation of specific issue in interpretation of Latin literature, such as definition of one genre or evaluation of a particular author. May be repeated for credit with topic change. P/NP or letter grading.

142. Ancient Epic. (4) Lecture, three hours. Required: one course from 10, 20, 30, 40W, or 41W. Homer’s Iliad and Odyssey; Vergil’s Aeneid, and Ovid’s Metamorphoses, studied in translation. P/NP or letter grading.

143A. Ancient Tragedy. (4) Lecture, three hours. Required: course 10 or 40W. Survey of tragedy from 8th-century Athens through later antiquity. P/NP or letter grading.

143B. Ancient Comedy. (4) Lecture, three hours. Required: course 20 or 41W. Survey of comedy as it developed in Greek and Roman worlds. P/NP or letter grading.

144. Topical Studies in Ancient Culture. (4) Lecture, three hours. Required: one course from 10, 20, 30, 40W, or 41W. Investigation of one problem of ancient culture that involves discussion of both Greek and Roman material. May be repeated for credit with topic change. P/NP or letter grading.

M145A. Ancient Greek and Roman Philosophy. (4) (Same as Philosophy M103A.) Lecture, three hours. Study of some major Greek and Roman philosophical texts, including those of pre-Socratics, Plato, Aristotle, and Hellenistic philosophers, with emphasis on historical and cultural setting of texts, their literary form, interrelations, and contribution to discussion of basic philosophical issues. P/NP or letter grading.

M145B. Later Ancient Greek Philosophy. (4) (Same as Philosophy M103B.) Lecture, three hours. Required: one course from M145A, Philosophy 1, 100A, M101B, or M102. Study of some major texts in Greek philosophy of Hellenistic and Roman periods. Readings will include works by Stoics, skeptics, philsophers of science, Neoplatonists, etc. P/NP or letter grading.

M146A. Plato—Earlier Dialogues. (4) (Same as Philosophy M101A.) Lecture, three hours; discussion, one hour. Philosophy course. Study of selected topics in early and middle dialogues of Plato. P/NP or letter grading.

M146B. Plato—Later Dialogues. (4) (Same as Philosophy M101B.) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Study of selected topics in middle and later dialogues of Plato. P/NP or letter grading.

M147. Aristotle. (4) (Same as Philosophy M102L.) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Study of selected works of Aristotle. P/NP or letter grading.


M149. Bodies in Antiquity. (4) (Same as Disability Studies M122) Lecture, three hours. Investigation of individuals and groups that compose ancient Greek and Roman societies and relationship they have with larger social body, with particular focus on marginalized or minority groups such as women, noncitizens (resident aliens and provincials), slaves, children, elderly, and disabled. Examination of ways these groups contribute to or detract from our understanding of ancient society as whole. May be repeated for credit with topic change. P/NP or letter grading.

150A. Feminists in Greek Literature and Culture. (4) Lecture, three hours. Required: course 10. Interdisciplinary study of concept of female in Greek literature and culture. P/NP or letter grading.

150B. Female in Roman Literature and Culture. (4) Lecture, three hours. Required: one course from 10, 20, 51A, SIB, Art History 20, or History 1A. Knowledge of Greek and Latin not required. General introduction to study of Aegean, Greek, and Roman archetypes, sculptures, and paintings for credit with department consent. P/NP or letter grading.

153L. Greco-Roman Architecture; M153J. Greco-Roman Sculpture; M153K. Greco-Roman Painting.

153L. Late Antique Art and Architecture. (4) (Same as Art History M115A-M114B-M114C.) Lecture, three hours. Required: one course from 10, 20, 51A, SIB, Art History 20, or History 1A. Knowledge of Greek and Latin not required. General introduction to study of Roman Empire and its Empire from circa 100 BC to end of Roman Republic. P/NP or letter grading.

153H. Late Roman Art. (4) (Same as Art History M113C.) Lecture, three hours. Required: course 20 or SIB, Art History 20. Art of late Roman Empire and its Empire from 2nd through 4th century (AD); P/NP or letter grading.


161. Women’s History in Ancient Mediterranean. (4) Lecture, three hours. Overview of approaches to problems of writing women’s history in the ancient Mediterranean world. Topics include law, medicine, work, religion (pagan, Christian, Jewish), and literature, with particular attention to themes of war, slavery, and sex trafficking. Exercises train students in critical use of primary documents and ancient sources, including inscriptions and other forms of material culture. P/NP or letter grading.

162. Reception of Ancient Myth. (4) Lecture, three hours. Traces reading and re-use of myth from antiquity to present, including global receptions in areas such as literature, philosophy, art, film, and politics. May be repeated once for credit with topic change. P/NP or letter grading.

163. Ovid and Consequences. (4) Lecture, three hours. Study of Ovid’s Metamorphoses and persistence and extent of Roman poet’s influence on subsequent literatures, art, history, cooking, fashion, and popular culture. Exercises train students in close reading of classical text before turning to poem’s classical, medieval, Renaissance, and modern imitators, from Apuleius to Shakespeare to Picasso and beyond. P/NP or letter grading.


165. Ancient Athletics. (4) Lecture, three hours. Required: course 10 or History 1A. Study of athletic games of the ancient Hellenistic world, and their connections with religion, politics, literature, and art. P/NP or letter grading.

166A. Greek Religion. (4) Lecture, three hours. Required: course 10 or 30. Study of religion of ancient Greeks. P/NP or letter grading.

166B. Roman Religion. (4) Lecture, three hours. Required: course 20. Exploration of art of influencing natural course of
events by occult means as practiced in ancient world. Source material includes
ancient cultures of ancient world. Source material includes
elements. P/N or letter grading.

168. Comparative Literature (3) Lecture, three hours. Requisites: course 30, GE Clusters 30A, 30B, and 30CW. Religious, mythical, and/or historical traditions of Greece and Rome compared with each other and with other traditions worldwide. P/N or letter grading.

169. Sex in Ancient World. (4) Lecture, three hours. Requisite: course 10 or 20 or History 1A. Examination of sex and gender systems of Greek and Roman cultures in ancient Mediterranean world. What Greek and Roman sex/gender systems were, how they changed over time, and difference it makes. Readings include both modern theories about sex and history as foundation for course and broad range of ancient texts in translation. P/N or letter grading.


175. Classics in Central and South America. (4) Lecture, three hours. Introduction to topics in classical reception through investigation of influence of Greco-Roman poetry on poetry of Central and South America of colonial period and beyond. From Horner to Vergil, poets of classical antiquity established robust tradition of epic with well-established literary tropes and nationalistic aims, cultural voice contributing to development of unified sense of national identity. Classical definition of epic as genre and sense of epic as vehicle for affirming and questioning national identity persisted with variations in uses in Latin and vernacular Spanish. Techniques of archaeological research in field, in master's and doctoral level courses. Letter grading.

180. Introduction to Classical Linguistics. (4) Lecture, three hours. Requisite: Greek 3 or Latin 3. Linguistic approach to Greek and Latin, including Indo-European background, etymology, pronunciation, alphabets, sociolinguistics (dialects, bilingualism), and applications to classical literature. P/N or letter grading.


189. Advanced Honors Seminars. (1) Seminar. three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/N or letter grading.

189HC. Honors Contracts. (1) Tutorial. three hours. Limited to 5 students in College Honors Program. Designed as adjunct to upper-division lecture course. In-
dividual study with lecturer course instructor to explore topics in greater depth through supplemental read-
ings, papers, or other activities. May be repeated for a maximum of 4 units. Individual honors contract re-
quired. Honors content noted on transcript. Letter grading.

190. Research Colloquia in Classics. (1) Seminar, one hour. Limited to juniors/seniors. Designed to bring together students and instructor in formal tutorial or research group setting. Research group setting. Faculty member to be identified in advance. May be repeated for credit. P/N or letter grading.

191. Capstone Seminar: Classics. (5) Seminar, three hours. Requisites: courses 10, 20, at least four upper-division major courses. Limited to declared junior/se-
nior departmental majors; minors may be admitted with consent of instructor. Preparation for final research paper or project. May be repeated for credit. Letter grading.

193. Local Club Seminars: Classics. (1) Seminar, one hour. Limited to undergraduate students. Group discussion of readings and topics selected from current issues in classics and related disciplines. May be repeated for credit. P/N or letter grading.

197. Individual Study in Classics. (2 or 4) Tutorial, two hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assignment and Angela evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/N or letter grading.


199. Directed Research in Classics. (2 to 4) Tutorial, two hours. Limited to juniors/seniors. Supervised indi-
vidual research or investigation under guidance of fac-
ulty mentor. Culminating paper or project required. May be repeated for credit. Individual contract re-
quired. P/N or letter grading.


201B. Topics in Ancient History: Roman World. (2 or 4) Seminar, three hours. Introduction to basic methods and approaches to study of Roman history by intensive examination of selected topics, including read-
ings of ancient texts and modern scholarship. S/U or letter grading.

201B. Topics in Ancient History: Roman World. (2 or 4) Seminar, three hours. Introduction to basic methods and approaches to study of Roman history by intensive examination of selected topics, including read-
ings of ancient texts and modern scholarship. S/U or letter grading.

201B. Topography and Monuments of Rome. (2 or 4) Seminar, three hours. Topography and monuments of Rome, combining evidence of literature, inscriptions, and actual remains. S/U or letter grading.

203. Topography and Monuments of Rome. (2 or 4) Lecture, two or four hours. Detailed studies in topog-
raphy and monuments of ancient Rome, combining evidence of literature, inscriptions, and actual remains. S/U or letter grading.

206. Topics in Ancient Religion. (2 or 4) Seminar, three hours. S/U or letter grading.

207. Graduate Colloquium in Classical Literature. (2) Seminar, three hours. Survey of basic methods of and approaches to classical scholarship, including textual criticism, literary interpretation, and theory, hermeneutics, interdisciplinary studies, and computer applications to classics. Emphasis varies from year to year, depending on instructor(s). May be repeated for credit with topic change. S/U grading.

208. Literary Theory. (2 or 4) Discussion, three hours. Designed for graduate students. Introduction to chief texts in literary theory and criticism for readers of clas-
sical literature, with application to classical texts. S/U or letter grading.

209. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice person-
nel employment as teaching assistant, associate, or fellow. Teaching apprentice course under the joint guid-
ance and supervision of regular faculty member re-
sponsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.
Greek Lower-Division Courses

1. Elementary Greek. (5) Lecture, three hours; discussion, two hours. P/NP or letter grading.

2. Elementary Greek. (5) Lecture, three hours; discussion, two hours. Enforced requisite: course 1. P/NP or letter grading.

3. Elementary Greek. (5) Lecture, three hours; discussion, two hours. Enforced requisite: course 2. P/NP or letter grading.

4. Reading Scholarly Modern Greek. (4–4–4) Lecture, three hours. Course 9A is enforced requisite to 9B, which is enforced requisite to 9C. Introductory modern Greek sequence, with emphasis on spoken modern Greek. P/NP or letter grading.

5. Reading Scholarly Modern Greek. (4) Lecture, two and one half hours. Designed for students who wish to develop literary competence in order to read modern Greek scholarly texts. No prior knowledge of modern Greek is required. Covers grammatical concepts and forms necessary to comprehend written academic Greek. Students gain familiarity with various academic genres in Greek (among others, articles, chapters, reviews, lecture transcripts). Emphasis on grammar and reading strategies that enable location, selection, and comprehension of texts central to research needs. Students are familiarized with major stylistic features of contemporary academic modern Greek, and economic writing styles. Syllabus is designed to develop reading, translating, and writing activities. Familiarization with basic aspects of modern Greek life and culture. P/NP or letter grading.

6. Intermediate Modern Greek. (4–4–4–4) Lecture, three hours. Course 9A is enforced requisite to 9B, which is enforced requisite to 9C. Intermediate-level modern Greek language study from communicative and task-based approach. Continued development of student understanding and use of Greek syntax and morphology through oral and written activities, reading, and listening. Students master basic communicative skills, communicate in everyday real-life situations, comprehend simple passages, announcements, and advertisements, master basic rules of modern Greek grammar and syntax, read fluently, and write accurately. P/NP or letter grading.

7. Elementary Modern Greek. (12) Lecture, 18 to 19 hours. Eight-week intensive introduction to principles of speaking, reading, and writing modern (demotic) Greek. Offered in summer only. P/NP or letter grading.

8. Intensive First-Year Greek. (12) Lecture, 19 hours. Eight-week intensive introduction to Greek language equivalent to courses 1, 2, and 3. Offered in summer only. P/NP or letter grading.

9. Flat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

10. Intermediate Greek. (4) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course 3 or 16. Formal review of Greek grammar and syntax and development of skills in reading original texts of Greek prose. Readings selected to introduce literature and culture of ancient Greece. P/NP or letter grading.

11. Honors Seminars, (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to the honors lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

12. Survey of Byzantine Literature. (4) Lecture, three hours. Requisite: course 100. Topics vary from year to year and include Procopius, Agathias, Michael Psellus, Alexiad of Anna Comnena, and Digenis Akritas. P/NP or letter grading.

13. Readings in Byzantine Literature. (4) Lecture, three hours. Requisite: course 100. Topics vary from year to year and include Procopius, Agathias, Michael Psellus, Alexiad of Anna Comnena, and Digenis Akritas. P/NP or letter grading.

Upper-Division Courses

100. Readings in Greek Prose and Poetry. (4) Lecture, three hours. Requisite: course 20. Introduction to developing skills of reading longer, continuous passages of original Greek prose and poetry texts, with attention to literary and cultural background. Course is normally requisite to other courses in Greek 100 series. May be repeated for credit with change of assigned instructor and with consent of instructor. P/NP or letter grading.


103. Aeschylus. (4) Lecture, three hours. Requisite: course 100. P/NP or letter grading.

104. Sophocles. (4) Lecture, three hours. Requisite: course 100. P/NP or letter grading.


107. Hesiod. (4) Lecture, three hours. Requisite: course 100. Reading of Theogony and excerpts from Works and Days, with emphasis on Hesiod’s place in Greek literature and his role in transmission of Greek mythology. P/NP or letter grading.

110. Study of Greek Prose. (4) Lecture, three to four hours. Requisite: course 100. Work in sight reading and grammatical analysis of Attic prose texts; writing Attic prose. P/NP or letter grading.

111. Herodotus. (4) Lecture, three hours. Requisite: course 100. P/NP or letter grading.

112. Thucydides. (4) Lecture, three hours. Requisite: course 100. P/NP or letter grading.


115. Xenophon. (4) Lecture, three hours. Requisite: course 100. Reading of one major work of Xenophon—Memorabilia, Cyropaedia, Anabasis, Hellenica, or Symposium. May be repeated for credit. P/NP or letter grading.

121. Plato. (4) Lecture, three hours. Requisite: course 100. P/NP or letter grading.


131. Readings in Later Greek. (4) Lecture, three hours. Requisite: course 100. Topics vary from year to year and include Longinus, On Sublime; Marcus Aurelius; Arrian; Second Sophistic; Plutarch; later epic; epic; epigram; epistolography; Greek; P/NP or letter grading.

133. Readings in Byzantine Literature. (4) Lecture, three hours. Requisite: course 100. Topics vary from year to year and include Procopius, Agathias, Michael Psellus, Alexiad of Anna Comnena, and Digenis Akritas. P/NP or letter grading.

140. Topics in Greek Language and Culture. (4) Seminar, three hours. Requisite: course 100. BC. Covers topics in modern Greek language, culture, and history. Assigned materials are predominantly in modern Greek. Topics and geographical focus are diverse, ranging from literature and cinema to culture and history of Greek America. May be repeated for credit with topic change. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

197. Individual Studies in Greek. (2 to 4) Tutorial, two hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research in Greek. (2 to 4) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200A-200B-200C. History of Greek Literature. (4–4–4) Lecture, three hours. Lectures on history of Greek literature, supplemented by reading of Greek texts in original language. Examinations may be taken independently for credit. S/U or letter grading.

201A-201B. Homer: Iliad. (2 or 4 each) Lecture, three hours. Course 201A is requisite to 201B. S/U (2-unit course) or letter (4-unit course) grading.
202A-202B. Homer: Odyssey and Epic Cycle. (2 or 4 each) Lecture, three hours. Course 202A is requisite to 202B. S/U (2-unit course) or letter (4-unit course) grading.

203. Hesiod. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

204. Homeric Hymns. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

205. Aeschylus. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

206A-206B. Sophocles. (2 or 4 each) Lecture, three hours. Course 206A is requisite to 206B. S/U (2-unit course) or letter (4-unit course) grading.

207A-207B. Euripides. (2 or 4 each) Lecture, three hours. Course 207A is requisite to 207B. S/U (2-unit course) or letter (4-unit course) grading.

208A-208B. Aristophanes. (2 or 4 each) Lecture, three hours. Course 208A is requisite to 208B. S/U (2-unit course) or letter (4-unit course) grading.

209A-209B. Seminars: Hellenistic Poetry. (2 or 4 each) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.


211A-211B. Herodotus. (2 or 4 each) Lecture, three hours. Course 211A is requisite to 211B. S/U (2-unit course) or letter (4-unit course) grading.

212A-212B. Thucydides. (2 or 4 each) Lecture, three hours. Course 212A is requisite to 212B. S/U (2-unit course) or letter (4-unit course) grading.

213. Greek Historiography. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

214. Demosthenes. (2 or 4) Lecture, three hours. S/U (2-unit course) or letter (4-unit course) grading.

215. Early Greek Orators. (2 or 4) Seminar, three hours. Studies in works of Antiphon, Andocides, and Lysias. S/U (2-unit course) or letter (4-unit course) grading.

216. Menander. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

217A-217B. Greek Lyric Poetry. (2 or 4 each) Seminar, three hours. Each course may be taken independently for credit. S/U (2-unit course) or letter (4-unit course) grading. 217A. Archaic Lyric. Study of lyric poetry of Archaic period, both choral and monodic, with emphasis on development of epicin.

218. Greek Novel. (2 or 4) Seminar, three hours. Study of Greek romance and its place in Greek literature. Two texts (Cicero's 'De Amicitia' and Callimachus' 'Daphnis and Chloe') studied in detail. S/U (2-unit course) or letter (4-unit course) grading.

219. Pre-Socratic Philosophers. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

222A-222B. Plato. (2 or 4 each) Lecture, three hours. Course 222A is requisite to 222B. S/U (2-unit course) or letter (4-unit course) grading.

223A-223B. Aristotle. (2 or 4 each) Lecture, three hours. Course 223A is requisite to 223B. S/U (2-unit course) or letter (4-unit course) grading.

224. Post-Aristotelian Philosophy. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

225. Homeric Greek Literature. (2 or 4) Seminar, three hours. Study of Greek literature of Roman Empire with attention to various authors, genres, and themes. S/U or letter grading.


89H. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100. Intermediate Latin: Introduction to Reading Latin (4) Lecture, three hours. Enforced requisite: course 20 (may be taken concurrently). Introduction to developing skills of reading longer, continuous passages of original Latin prose and poetry texts, with attention to grammatical and cultural background. Course is requisite to advanced reading courses. May be repeated for credit twice with change of assigned readings and with consent of instructor. P/NP or letter grading.


103. Lucretius. (4) Lecture, three hours. Requisite: course 100. P/NP or letter grading.

104. Ovid. (2) Lecture, three hours. Requisite: course 100. P/NP or letter grading.

105A. Beginning Vergil: Selections from Aeneid I-VI. (4) Lecture, three hours. Requisite: course 100. Reading of one or more poems from first half of Aeneid, designed especially for students with only limited experience in reading Latin poetry. May be repeated for credit with change in readings and consent of instructor. P/NP or letter grading.

105B. Advanced Vergil. (4) Lecture, three hours. Requisite: course 105A. Reading and discussion of Vergil's Eclogues, Georgics, and/or second half of Aeneid. May be repeated for credit with change in readings and consent of instructor. P/NP or letter grading.


108. Roman Elegy. (4) Lecture, three hours. Requisite: course 100. Selections from first half of Petronius' Satyricon, designed especially for students with only limited experience in reading Latin poetry. May be repeated for credit with change in readings and consent of instructor. P/NP or letter grading.

109. Roman Satire. (4) Lecture, three hours. Requisite: course 100. Readings from author(s) of Roman satire, including Horace, Persius, and Juvenal, or related satiric texts. May be repeated for credit with change in readings and consent of instructor. P/NP or letter grading.


111. Livy. (4) Lecture, three hours. Requisite: course 100. P/NP or letter grading.

112. Tacitus. (4) Lecture, three hours. Requisite: course 100. P/NP or letter grading.


115. Caesar. (4) Lecture, three hours. Requisite: course 100. Reading and discussion of Petronius' Satyricon or Apuleius' Metamorphoses and
development of genre of prose novel in antiquity. May be repeated for credit with change in author and text. P/NP or letter grading.


119A. Readings in Roman Prose. (4) Lecture, three hours. Requisite: course 100. Readings of selected Roman prose authors. Topics may vary from year to year and may be organized in terms of chronology (Republican or imperial), literary genre (Roman biography, antiquarian learning, or science), and/or theme. May be repeated for credit with topic change. P/NP or letter grading.

119B. Readings in Roman Poetry. (4) Lecture, three hours. Requisite: course 100. Readings of selected Roman poetry author(s). Topics may vary from year to year and may be organized in terms of chronology (Republican or imperial), genre (e.g., elegy, lyric, elegy, and/or satire). May be repeated for credit with topic change. P/NP or letter grading.


121. Patristic Texts. (4) Lecture, three hours. Requisite: course 100. Close study of selected portions of patristic texts (especially works of Ambrose, Augustine, and/or Jerome), with emphasis on specific features of patristic, as opposed to classical, Latin. P/NP or letter grading.


189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities, under the direction of lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for credit. Honor contracts require. P/NP or letter grading.

197. Individual Studies in Latin. (2 to 4) Tutorial, two hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tutorial study require mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research in Latin. (2 to 4) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses


201. Roman Epic Tradition. (2 or 4) Seminar, three hours. Close study of one epic poet other than Vergil (e.g., Ennius, Lucan, Valerius Flaccus, Statius, Silius Italicus), with attention to epic. May be repeated for credit with topic change. S/U (2-unit course) or letter (4-unit course) grading.

202. Seminar: Catullus. (2 or 4) Seminar, three hours. Detailed consideration of entire Catullan corpus. S/U (2-unit course) or letter (4-unit course) grading.

203A. Elegiac Poetry. (2 or 4) Lecture, three hours. S/U (2-unit course) or letter (4-unit course) grading.

203B. Propertius. (2 or 4) Lecture, three hours. Course 203A is not requisite to 203B. S/U (2-unit course) or letter (4-unit course) grading.

204A-204B. Vergil's Aeneid. (2 or 4) Lecture, three hours. Course 204A is requisite to 204B. S/U (2-unit course) or letter (4-unit course) grading.

205A. Seminar: Vergil's Bucolics. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

205B. Seminar: Vergil's Georgics. (2 or 4) Seminar, three hours. Course 205A is not requisite to 205B. Close reading of Vergil’s text; careful evaluation of influential criticism on poem, much of it recent; examination of works within tradition of rural poetry. S/U (2-unit course) or letter (4-unit course) grading.

206. Horace. (2 or 4) Lecture, three hours. S/U (2-unit course) or letter (4-unit course) grading.

207. Roman Comedy. (2 or 4) Seminar, three hours. Survey of history of Roman comedy. S/U (2-unit course) or letter (4-unit course) grading.

208. Ovid. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

209. Seminar: Roman Satire. (2 or 4) Seminar, three hours. Detailed study of one individual satirist, with attention to his position in development of satirical genre in Roman literature. Choice of author varies from year to year. Close study of text, of characteristics of work as social critic and artist, and of contemporary literary and social environment. S/U (2-unit course) or letter (4-unit course) grading.


211A-211B-211C. Seminars: Roman Historians. (2 or 4 each) Seminar, three hours. Study of considerable portions of writings of following historians. Each course may be taken independently for credit. S/U (2-unit course) or letter (4-unit course) grading. 211A. Sallust; 211B. Livy; 211C. Tacitus.


215. Seminar: Roman Novel. (2 or 4) Seminar, three hours. Works such as Petronius’ Satyrica and Apuleius’ Metamorphoses: study of literary problems. May be repeated for credit with topic change. S/U (2-unit course) or letter (4-unit course) grading.

216. Roman Rhetoric. (2 or 4) Seminar, three hours. Close study of one rhetorical text (e.g., Rhetorica ad Herennium, Cicero’s De Oratore, Seneca’s Controversiae or Scaevolae, Quintilian’s Institutiones), with attention to its place in rhetorical tradition. May be repeated for credit with topic change. S/U (2-unit course) or letter (4-unit course) grading.

220. Cicero’s Orations. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

221A. Cicero: De Natura Deorum. (2 or 4) Lecture, three hours. Course 221A is not requisite to 221B. S/U (2-unit course) or letter (4-unit course) grading.

222. Seminar: Roman Stoicism. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

223. Lucretius. (2 or 4) Lecture, three hours. S/U (2-unit course) or letter (4-unit course) grading.

224. Seneca. (2 or 4) Seminar, three hours. Detailed study of one work of prose or poetry by younger Seneca. May be repeated for credit with topic change. S/U (2-unit course) or letter (4-unit course) grading.

225. Latin Prose Style. (2 or 4) Seminar, three hours. Grammar review, vocabulary development, and translation skills practice in reading Latin texts across variety of genres and periods. S/U or letter grading.

231A-231B. Seminars: Medieval Latin. (2 or 4 each) Seminar, three hours. Preparation: at least one upper-division Latin course. Course 231A is not requisite to 231B. Studies in various areas of language and literature of medieval Latin. May be repeated for credit with consent of instructor. S/U (2-unit course) or letter (4-unit course) grading.

232. Vulgar Latin. (2 or 4) Lecture, three hours. History and characteristics of popular Latin; its development into early forms of Romance languages. S/U or letter grading.

235. Late Latin Poetry. (2 or 4) Seminar, three hours. Close study, with attention to literary and historical background, of work of one or several poets who flourished between death of Tacitus and fall of Roman Empire. May be repeated for credit with change in author. S/U or letter grading.

236. Late Latin Prose. (2 or 4) Seminar, three hours. Close study, with attention to literary and historical background, of work of one or several prose authors who flourished between death of Tacitus and fall of Roman Empire. May be repeated for credit with change in author. S/U or letter grading.

240. History of Latin Language. (2 or 4) Lecture, three hours. Development of Latin from earliest monuments until its emergence in Romance languages. S/U or letter grading.


243. Seminar: Latin Palaeography. (2 or 4) Seminar, three hours. Studies in development of book hand in Latin manuscripts earlier than invention of printing. S/U (2-unit course) or letter (4-unit course) grading.

245. Neo-Latin. (2 or 4) Seminar, three hours. Preparation: at least two upper-division Latin courses. Requisite: course 100. Survey of texts by one or more authors from Renaissance to present, written on related topics. S/U or letter grading.

250. Topical Studies of Ancient Rome. (2 or 4) Seminar, three hours. Advanced study of some aspect of Latin language or literature or Roman culture. May be repeated for credit with topic change. S/U (2-unit course) or letter (4-unit course) grading.

495. College Teaching of Latin. (2) Seminar, three hours. Studies in development of book hand in Latin manuscripts earlier than invention of printing. S/U (2-unit course) or letter (4-unit course) grading.

596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. S/U grading.

597. Study for MA Comprehensive Examination or PhD Qualifying Examinations. (2 to 8) Tutorial, to be arranged. S/U grading.

Faculty Committee
Jeffrey L. Decker, PhD (English)  
Anthony R. Frisica, PhD (Integrative Biology and Physiology)  
Sarah L. Gibbons, PhD (Society and Genetics)  
Paul T. Hsu, MPH, PhD (Epidemiology)  
Jennifer A. Jay, PhD (Civil and Environmental Engineering, Environment and Sustainability)  
Jared McBride, PhD (History)  
Vilma Ortiz, PhD (Sociology)  
Michelle A. Rensel, PhD (Society and Genetics)  
Steven J. Strossner, PhD (Communication)  
Luke B. Yarbrough, PhD (Near Eastern Languages and Cultures)

Overview
Cluster courses are an option for satisfying both general education and Writing II requirements. Clusters are yearlong, collaboratively taught, interdisciplinary courses that focus on a topic of timely importance, such as the global environment or intercultural issues. The courses are taught by some of the most distinguished UCLA faculty members and seasoned graduate students. During fall and winter quarters, students attend lecture courses and small discussion sections and/or laboratories. In spring quarter, the same students enroll in one of a number of satellite seminars dealing with topics related to the cluster theme.

Freshman clusters are designed to strengthen the writing, quantitative reasoning, critical thinking, and information literacy skills that students need to excel at UCLA. At the conclusion of the entire yearlong cluster, students complete 40 to 50 percent of their general education course requirements (if they maintain a D- or better each quarter) and fulfill the Writing II requirement (if they earn a C or better in spring quarter). Cluster students are eligible for three terms of honors credit, with the spring quarter seminar granting Honors Collegium credit.

For the current cluster course offerings and general education credit, refer to the Cluster Program website.

Clusters
Lower-Division Courses

M1A-M1B-M1CW. Food: Lens for Environment and Sustainability. (6–6–6) (Same as Environment M1A-M1B-M1CW.) Course M1A is requisite to M1B, which is enforced requisite to M1CW. Limited to first-year freshmen. M1A-M1B. Lecture, three hours; discussion, two hours. Food as lens for local and global environmental and sustainability issues. Integration of environmental, social, economic, and technological solutions for fair, sustainable, and healthy food production, food security, and access. Focus on human impacts on Earth’s biological and physical systems, including how food production and consumption contributes to, and is impacted by, global problems, including climate change, pollution, and over-population. Laboratory exercises included in discussions. P/NP or letter grading. M1CW. Special Topics, Seminar, three hours. Enforced requisite: course M1B. Examination of specialized environmental and sustainability topics as they relate to food, including air, water, biodiversity, climate change, food access, food security, and health. Satisfies Writing II requirement. Letter grading.

10A-10B-10CW-10WX. Data, Justice, and Society. (6–6–6–6) Course 10A is requisite to 10B, which is requisite to 10CW or 10WX. Limited to first-year freshmen. 10A. Lecture, three hours; discussion, two hours. Data-based computation (i.e., algorithms, artificial intelligence, predictive modeling) increasingly play a dominant role in shaping everyday experiences of culture and society. Data and data analytics define everything from social norms and public policy to juridi- cal status and market logistics. Introduction to poli- tics, ethics, applications, history, critiques, and social impact of data. Introduction to how data interacts with philosophical inquiries about justice, (in)equality, power, and freedom. Students obtain deeper historical and critical view of data in society, while gaining un- derstanding of different facets of analysis. P/NP or letter grading. 10B. Lecture, three hours; discussion, two hours. Data-based computation (i.e., algorithms, artificial intelligence, predictive modeling) increasingly play a dominant role in shaping everyday experiences of culture and society. Data and data analytics define everything from social relations and public policy to juridical status and market logistics. Topics. Seminar, two hours. Discussion sections and/or laboratories. In- troduction of the politics, ethics, applications, history, critique, and social impact of data. Further review, analysis of how data technologies either impede or work toward social justice. Study continues to provide guidance on honing writing skills in order to produce excellent college essays. Satisfies Writing II requirement. Letter grading.

20A-20B-20CW. Race and Indigeneity in U.S. (6–6–6) Course 20A is enforced requisite to 20B, which is enforced requisite to 20CW. Limited to first-year freshmen. 20A-20B. Lecture, three hours; discussion, two hours. Examination of nature and meaning of race in American society through study of history, literature, and law. Consideration, among other topics, of con- struction of race and cultural categorization among two or more groups and exploration of ways in which race has shaped understanding of American citizenship. P/NP or letter grading. 20CW. Special Topics, Seminar, three hours. Community-engaged learning course with in-depth examination of the politics, ethics, applications, history, crises, and social impact of data. Further review, analysis, and discussion of how data technologies either impede or work toward social justice. Study continues to provide guidance on honing writing skills in order to produce excellent college essays. Satisfies Writing II requirement. Letter grading.

21A-21B-21CW. History of Modern Thought. (6–6–6) Course 21A is enforced requisite to 21B, which is enforced requisite to 21CW. Limited to first-year freshmen. 21A-21B. Lecture, three hours; discussion, two hours. Examination of nature and meaning of race in American society through study of history, literature, and law. Consideration, among other topics, of con- struction of race and cultural categorization among two or more groups and exploration of ways in which race has shaped understanding of American citizenship. P/NP or letter grading. 21CW. Special Topics, Seminar, three hours. Course 21A is enforced requisite: course 21B. Consideration of how experience, de- bates, and issues of race are represented and under- stood in historical, legal, linguistic, and literary con- texts. Satisfies Writing II requirement. Letter grading.

22A-22B-22CW. Toward World Economy: Perils and Promise of Globalization. (6–6–6) Course 22A is enforced requisite to 22B, which is enforced requisite to 22CW. Limited to first-year freshmen. Letter grading. 22A-22B. Lecture, three hours; discussion, two hours. Exploration of causes of globalization as well as its consequences. Critical examination of globalization theories, international institutions of trade, finance, governance, and overall impact of global- ization on human society. 22CW. Special Topics, Seminar, three hours. Enforced requisite: course 22B, and English Composition 3 or 3H as English as a Second Language 36. Topics may include global gov- ernmental development, and health. Satisfies Writing II requirement.

23A-23B-23CW. Inside Performing Arts: Interdisci- plinary Exploration of Performance in Society and Culture. (5–5–5) Course 23A is enforced requisite to 23B, which is enforced requisite to 23CW. Limited to first-year freshmen. Letter grading. 23A-23B. Lecture, four hours; discussion, two hours. Introduction to his- torical development and evolution of performing arts, aesthetic theories and practices, and social, political, and cultural contexts within which performance has evolved. 23CW. Special Topics, Seminar, three hours. Enforced requisite: course 23B, and English Compo- sition 3 or 3H as English as a Second Language 36. Topics include origins and ideas of performance, art and performance, and music as cultural expression. Satisfies Writing II requirement.

M24A-M24B-M24CW. Work, Labor, and Social Jus- tice in East Asia. (6–6–6) Course 24A is enforced requisite to 25B, which is enforced requisite to 25CW. Limited to first-year freshmen. Letter grading. 24A-24B-24CW. Lecture, three hours; discussion, two hours. Exploration of ways in which work has been transformed over last century, impact of this transformation on working people, and role of labor movement as force for social change. 24CW. Special Topics, Seminar, three hours. Enforced requisite: course 24B. Topics include labor law/history, gender, race, and workplace. Satisfies Writing II requirement.

25A-25B-25CW. Politics, Society, and Urban Culture in East Asia. (6–6–6) Course 25A is enforced requisite to 25B, which is enforced requisite to 25CW. Limited to first-year freshmen. Letter grading. 25A-25B. Lecture, three hours; discussion, two hours. Introduction to comprehen- sive exploration of historical evolution of popular East Asian urban culture and interrelationship of East Asian politics, social life, and economic and urban cultural perspectives. 25CW. Special Topics, Seminar, three hours. Enforced requisite: course 25B. In-depth examina- tion of issues in historical and contemporary East Asian popular culture. Satisfies Writing II requirement.

26A-26B-26CW. Poverty and Health in Latin Ameri- ca. (6–6–6) Course 26A is enforced requisite to 26B, which is enforced requisite to 26CW. Limited to first-year freshmen. Letter grading. 26A. Lecture, three hours; discussion, two hours. Introduction to social determinants of health, ways in which historical, socioeconomic, public health, medical, political, and artistic context of poverty in modern Latin America and on different local, national, and regional impacts to health inequities. Major trends and debates that have shaped and continue to define issues related to poverty and health in region. 26B. Lecture, three hours; discussion, two hours. En- forced requisite to course 26A. Responses to health in- equities and possible solutions to promote improved health outcomes and to social determinants of health illustrated through examples of current programs and policies. Major areas for addressing health inequity in- clude governance, community action, social justice and human rights movements, health sector and public health programs, and global priorities. Introduc- tion to topics to promote equitable healthcare in Latin America. Focus on one particular area of Latin America or one local Latin American community to reflect field study sites to eventually be offered and serve as preparation for seminar and field study component. Satisfies Writing II re- quirement.

M27A-M27B-M27CW. Global Islam. (6–6–6) (For- merly numbered 27A-27B-27CW) (Same as Islamic Studies M27A-M27B-M27CW) Course M27A is en- forced requisite to 27B, which is enforced requisite to 27CW. Introduction to Islam, immensely diverse
global tradition which is second largest religion. Study of Islam and Muslims within framework of study of global religious traditions and emphasis on profound diversity of interacting belief systems and practice found across world. Examination of Islam’s evolution across 15 centuries, from late antiquity—when it emerged as localized religion in Central Arabia—to modern era where it is practice from U.S. to Indonesia. Concentration on broad analytical categories in study of religion such as text, culture, history, and prophecy. Students transition to more complex analyses through chronological overview and thematic study. Study also of complementary Muslim global networks in areas such as art, music, literature, and political thought. M27A-M27B. Lecture, three hours; discussion, one hour. P/N/P or letter grading. Special Topics. Seminar, three hours. Satisfies Writing II requirement. Letter grading.

30A-30B-30CW. Never-Ending Stories: Multidisciplinary Perspectives on Myth and Folklore. (6–6–6) Course 30A is enforced requisite to 30B, which is enforced requisite to 40CW. Limited to first-year freshmen. Lent. Lecture, three hours; discussion, two hours. In-depth examination of depth of various issues of evolution from life sciences perspective. Satisfies Writing II requirement. Letter grading.

40A-40B-40CW. Chinese Classics, Their Legacy in East Asia, and Reimagined in Modern Times. (6–6–6) Course 40A is enforced requisite to 40B, which is enforced requisite to 40CW. Limited to first-year freshmen. Letter grading. 40A-40B, Lecture, three hours; discussion, two hours. Learning in traditional China was defined through mastery of canon of classic texts that students memorized as part of their education. These classics were also taught in Vietnam and Korea and served to connect cultural ties across Asia. Many more texts came to be considered classics—works of enduring value, read by large numbers of people across centuries, including religious scriptures, legal codes, novels, paintings, and performances. Exploration of how Chinese classics have been used and reimagined in different places and times to demonstrate enduring importance of these texts as historical artifacts. Emphasis on how these works were interpreted throughout East Asia, relationship with past, and how shared history is seen as informing. M27A-M27B. Special Topics. Seminar, three hours. Enforced requisite: course 40B. In-depth examination of Chinese classic texts and their reimagining in modern times. Satisfies Writing II requirement. Letter grading.

48A-48B-48CW. Political Violence in Modern World: Causes, Cases, and Consequences. (6–6–6) Course 48A is requisite to 48B, which is requisite to 48CW. Limited to first-year freshmen. 40A-40B, Lecture, three hours; discussion, two hours. In-depth examination of reasons for political violence. P/N/P or letter grading. Special Topics. Seminar, three hours. Satisfies Writing II requirement. Letter grading.

57A-57B-57CW. Biotechnology and Society. (6–6–6) (Same as Society and Genetics M71A-M71B-M71CW) Course M71A is enforced requisite to M71B, which is enforced requisite to M71CW. Limited to first-year freshmen. Letter grading. M71A-M71B, Lecture, three hours; discussion, two hours. Examination of evolution of universe, galaxy, solar system, and Earth in course 70A; focus on evolution of life in course 70B. P/N/P or letter grading. 70CW, Special Topics in Life and Physical Sciences. Seminar, three hours. Enforced requisite: course 70B. Not open for credit to students with credit for or completion of course 48A. Enforced requisite: course 70B. In-depth examination of many issues of evolution from life sciences perspective. Satisfies Writing II requirement. Letter grading.

65A-65B-65CW. Brain, Bodymind, and Society: All in Your Head? (6–6–4) Course 73A is enforced requisite to 73B, which is enforced requisite to 73CW. Limited to first-year freshmen. 73A-73B, Lecture, three hours; discussion, two hours. Drawing on several disciplines including disability studies, literary film analysis, neurobiology, philosophy, and psychology, development of interdisciplinary account of how we relate our increasingly sophisticated knowledge of brain to contexts and meanings of subjectivity, mental health, and disease. Students may take interdisciplinary perspective of courses of study in contemporary and historical understandings of brain structure and function; biological, psychological, and philosophical approaches to consciousness; and neurophilosophical approaches to consciousness; and neurophilosophical approaches to consciousness; and neurophilosophical approaches. Satisfies Writing II requirement. Letter grading.
The major in Communication is an interdisciplinary curriculum leading to a Bachelor of Arts (BA) degree. It seeks to provide students with comprehensive knowledge of the nature of human communication at multiple levels of analysis. The major coursework includes content from the natural and social sciences, as well as the humanities. Four areas of focus are offered: communication technology and digital systems, interpersonal communication, mass communication and media institutions, and political and legal communication.

Learning Outcomes

The Communication major has the following learning outcomes:

- Demonstrated mastery of substantive areas of the field, including mass communication and media institutions, interpersonal communication, communication technology and digital systems, and political and legal communication.
- Placement of particular communication events or examples in the context of broader patterns of human activity.
- Critical evaluation of arguments based on evidence.
- Design and implementation of original research projects.
- Completion, using acquired knowledge and skills, of a project that demonstrates core competencies in the field.
- Active participation in learning-in-practice opportunities.
- Evaluation and critique of oral presentations.
- Demonstrated mastery of conceptualization, formulation, and oral presentation of the student’s own ideas.

Entry to the Major

Admission

Enrollment in the major is limited. Admission to the major is by application to the committee in charge. Applications are available on the department website to regularly enrolled UCLA students during spring quarter.

Transfer Students

Transfer applicants to the Communication major with 90 or more units must complete at least four of the following seven lower-division required courses: Communication 101, 102, 103A, 103B, 104, 109, 133, 141C, 141E. Required Practicum Course: One course from Communication 101, 102, 103A, 103B, 104, 109, 111, 116, M117, 155, 160, M176, 188, or Sociology 132, 141B (or Sociology 133), 141C, 141E.

Required Practicum Course: One course from Communication 101, 102, 103A, 103B, 104, 109, 111, 116, M117, 155, 160, M176, 188, or Sociology 132, 141B (or Sociology 133), 141C, 141E.

Honors Program

The departmental honors program provides exceptions for advanced research and study, under the guidance of a faculty member, that leads to the completion of an honors thesis. To qualify for graduation with departmental honors, students must (1) complete all requirements for the major; (2) have a cumulative grade-point average of 3.6 or better in upper-division coursework in the major and an overall GPA of 3.3 or better in all completed UC coursework; (3) complete Communication
198A, 198B, and 198C, and (4) produce a completed satisfactory honors thesis (as determined by a recommendation of their thesis advisor and final approval by the department chair). Contact the student affairs officer for more information.

Computing Specialization

Majors in Communication may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the major, (2) completing Program in Computing 10A and 10B, or Computer Science 31 and 32, and (3) completing four courses (at least one of which must be in communication) from Communication 122, 129, 131, 151, 153, 154, 155, 156, 158, Program in Computing 10C, 16A, 16B, 20A, 40A.

Courses need to be completed with a grade of C− or better in each course and a combined grade-point average of at least 2.0. Students must petition for admission to the program and are advised to do so after they complete Program in Computing 10B or Computer Science 32 (petitions should be filed in the Counseling Office). Students graduate with a bachelor’s degree in Communication and a specialization in Computing.

Graduate Major

Communication MS, PhD

The program’s core areas of specialization include: communication and cognition, political communication, and computational communication. Students are trained in the core of communication scholarship by engaging in coursework and research that aligns with the broader discipline.

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Communication

Lower-Division Courses

1. Principles of Oral Communication. (4) Lecture, four hours. Enforced requisite: satisfaction of Entry-Level Writing requirement. Examination of foundations of communication and public speaking. Consideration of number of basic theories related to study of communication and development of skills to enable composition and delivery of speeches in accordance with specific rhetorical concepts. Improvement of ability to analyze, organize, and critically think about communicative messages while becoming better equipped to articulate ideas. P/NP or letter grading.

2. Public Speaking for Nonnative Speakers. (4) Lecture, four hours. Designed for nonnative speakers of English to increase fluency and vocabulary while improving presentation skills, language usage, reasoning, style, and delivery. Conversation and pronunciation practice. Focus on theory and practice of public speaking, including selection of content, organization of ideas, language, and delivery. Practice in extemporaneous and manuscript speaking. Critical analysis of speeches in both contemporary and historical settings. Special emphasis on group discussions, evaluations, practice of both public and private speaking skills. Offered in summer only. P/NP or letter grading.

3. Learning American English and Culture from Movies. (4) Lecture, four hours. Advancement of students’ fluency in conversational English while increasing their awareness of American popular culture. Primer on sex/gender, American English, and nuances of contemporary customs and values offered through guided immersion in popular cinema. Offered in summer only. P/NP or letter grading.

4. Introduction to Communication. (5) Lecture, four hours; discussion, one hour. Introduction to study of interpersonal and mass communication using interdisciplinary approach. Exploration of basic methods and theoretical perspectives that social scientists and others use to study interpersonal and mass communication, and basic concepts used to describe and explain that communication. Historical overview of each major mass media. Study of significant current topical issues related to means of communication that reach large numbers of people. Letter grading.

5. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in the College. Students will be examining many paths of discovery at UCLA. P/NP grading.

6. M72A-M72B-M72C2W. Sex from Biology to Gendered Society. (6-6-6) [Same as Clusters M72A-M72B-M72C2W. Societies and Sexuality M72A-M72B-M72C2W, and Sociology M72A-M72B-M72C2W] Course M72A is enforced requisite to M72B, which is enforced requisite to M72C2W. Limited to first-year freshmen. Letter grading. M72A-M72B-Lecture, three hours; discussion, two hours. Examination of many ways in which sex and sexual identity shape and are shaped by biological and social forces, approached from a multidisciplinary perspective. Corequisites may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

7. M72A-M72B-M72C2W. Sex from Biology to Gendered Society. (6-6-6) [Same as Clusters M72A-M72B-M72C2W. Societies and Sexuality M72A-M72B-M72C2W, and Sociology M72A-M72B-M72C2W] Course M72A is enforced requisite to M72B, which is enforced requisite to M72C2W. Limited to first-year freshmen. Letter grading. M72A-M72B-Lecture, three hours; discussion, two hours. Examination of many ways in which sex and sexual identity shape and are shaped by biological and social forces, approached from a multidisciplinary perspective. Corequisites may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

8. Sophomore Seminars: Communication Studies. (4) Seminar, three hours. Limited to maximum of 20 lower-division students. Readings and discussions designed to introduce students to current research in discipline. Culminating project may be required. P/NP or letter grading.

9. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Individual study with lecture instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

10. Communication and Identity. (4) Lecture, three hours. Study of relationships among communication, culture, and identity, and examination of ways in which texts (broadly construed) constitute experience, difference, and subjectivity. Focus on function of language, representation and meaning in construction of self, social collectives, and world views. Consideration of how communication is performative endeavor for humans seeking to construct identity. Concepts are prepared to describe and explain theories that detail performance as communicative form, analyze ways language and discourse function as texts that work to produce and sustain social identities, and describe specific principles, motivations, and theoretical categories within interdisciplinary study of culture that produce identity. Letter grading.

11. Entrepreneurial Communication. (4) Lecture, four hours. Study of communication from foundations in internal and external communication and development of data analysis, interpretation, and presentation of information that exists, as well as in development of, contemporary, and analytic businesses. P/NP or letter grading.

12. Gender and Communication. (4) Lecture, four hours. Understanding gender is fundamental part of understanding who we are as human beings. Exploration of crucial role of gender in spheres of life involving communication sciences. Exploration of theoretical and methodological approaches that bridge major areas of current interdisciplinary communication research. P/NP or letter grading.

13. Principles of Oral Communication. (4) Lecture, four hours. Analysis of legal, political, and philosophical issues entails right of free expression, access to audience, and access to information. Study of court decisions governing freedom of communication in U.S. P/NP or letter grading.


15. Media Conspiracy Theories in U.S. and Middle East. (4) Lecture, three hours. Through mass and digital media, conspiracy theories are reshaping politics and society around world. Although conspiracy theories are globally widespread, they find particularly fertile ground in Middle East and in U.S. Definition, identification, and analysis of conspiracy theories as they appear in media of Western democracies and Muslim majority societies. Interdisciplinary approach to study of conspiracy theories. Case studies, such as conspiracies about 9/11, taken from Middle Eastern media sources in English translation. Background knowledge of Middle East not required. P/NP or letter grading.

16. Reporting America. (4) Lecture, three hours. Introduction to main western European and Middle Eastern news media, with materials in English. Exploration of how U.S. is represented in Europe, Middle East, Iran, and Afghanistan, with focus on three comparative case studies of Britain, Spain, and Germany. In-depth coverage of American news as reflected in Europe and Middle East. P/NP or letter grading.

17. Terrorism in Journalism. (4) Lecture, three hours. How does media outlets in Middle East represent Islamic terrorism? How does media manipulate, analyze, and comment on suicide attacks? Focus on Arab, Afghan, and Iranian media discussions of this phenomenon to explore evolution of meaning of terrorism in Muslim societies. P/NP or letter grading.

18. Communication and Identity. (4) Lecture, three hours. Study of relationships among communication, culture, and identity, and examination of ways in which texts (broadly construed) constitute experience, difference, and subjectivity. Focus on function of language, representation and meaning in construction of self, social collectives, and world views. Consideration of how communication is performative endeavor for humans seeking to construct identity. Concepts are prepared to describe and explain theories that detail performance as communicative form, analyze ways language and discourse function as texts that work to produce and sustain social identities, and describe specific principles, motivations, and theoretical categories within interdisciplinary study of culture that produce identity. Letter grading.

19. Communication and Identity. (4) Lecture, three hours. Study of relationships among communication, culture, and identity, and examination of ways in which texts (broadly construed) constitute experience, difference, and subjectivity. Focus on function of language, representation and meaning in construction of self, social collectives, and world views. Consideration of how communication is performative endeavor for humans seeking to construct identity. Concepts are prepared to describe and explain theories that detail performance as communicative form, analyze ways language and discourse function as texts that work to produce and sustain social identities, and describe specific principles, motivations, and theoretical categories within interdisciplinary study of culture that produce identity. Letter grading.

20. Communication and Identity. (4) Lecture, three hours. Study of relationships among communication, culture, and identity, and examination of ways in which texts (broadly construed) constitute experience, difference, and subjectivity. Focus on function of language, representation and meaning in construction of self, social collectives, and world views. Consideration of how communication is performative endeavor for humans seeking to construct identity. Concepts are prepared to describe and explain theories that detail performance as communicative form, analyze ways language and discourse function as texts that work to produce and sustain social identities, and describe specific principles, motivations, and theoretical categories within interdisciplinary study of culture that produce identity. Letter grading.

21. Communication and Identity. (4) Lecture, three hours. Study of relationships among communication, culture, and identity, and examination of ways in which texts (broadly construed) constitute experience, difference, and subjectivity. Focus on function of language, representation and meaning in construction of self, social collectives, and world views. Consideration of how communication is performative endeavor for humans seeking to construct identity. Concepts are prepared to describe and explain theories that detail performance as communicative form, analyze ways language and discourse function as texts that work to produce and sustain social identities, and describe specific principles, motivations, and theoretical categories within interdisciplinary study of culture that produce identity. Letter grading.

22. Communication and Identity. (4) Lecture, three hours. Study of relationships among communication, culture, and identity, and examination of ways in which texts (broadly construed) constitute experience, difference, and subjectivity. Focus on function of language, representation and meaning in construction of self, social collectives, and world views. Consideration of how communication is performative endeavor for humans seeking to construct identity. Concepts are prepared to describe and explain theories that detail performance as communicative form, analyze ways language and discourse function as texts that work to produce and sustain social identities, and describe specific principles, motivations, and theoretical categories within interdisciplinary study of culture that produce identity. Letter grading.

23. Communication and Identity. (4) Lecture, three hours. Study of relationships among communication, culture, and identity, and examination of ways in which texts (broadly construed) constitute experience, difference, and subjectivity. Focus on function of language, representation and meaning in construction of self, social collectives, and world views. Consideration of how communication is performative endeavor for humans seeking to construct identity. Concepts are prepared to describe and explain theories that detail performance as communicative form, analyze ways language and discourse function as texts that work to produce and sustain social identities, and describe specific principles, motivations, and theoretical categories within interdisciplinary study of culture that produce identity. Letter grading.
communication and role and origins of gender differences in communication. Contexts of communication include family, workplace, sexuality, and intimate relationships. Focus on mediating influence of gender, P/NP or letter grading.

111. Conflict and Communication. (4) Lecture, three hours. Analysis of when and why conflict is prevalent in daily lives (including mass media) and how communication and conflict are part of our evolutionary heritage. How well we handle various conflicts affects, to great degree, our success or failure wherever we interact with others, including intimate relations, school, and workplace. P/N or letter grading.

112. Current Issues in Vocal Communication. (4) Seminar, three hours. Requisite: course 118 or 120 or 125. Examination of contemporary issues in evolution of communication research. Topics include design of communication systems, animal signaling, social communication, and speech production and perception. P/N or letter grading.

M113. Nonverbal and Communication Body Language. (4) (Same as Phonology M137B.) Lecture, three hours. Examination of how various forms of nonverbal communication convey meaningful information to perceivers, with focus on both production and perception of communication formats (e.g., facial expression of face and body, gesture, and kinesics), with strong emphasis on body language. Readings from variety of related fields. P/N or letter grading.

114. Understanding Relationships. (4) Lecture, four hours. Explanation of types of communication that occur in close relationships, especially romantic relationships. Emphasis on communication and interpersonal relationships, why we choose to get involved with some people as opposed to others, flirting, and self-disclosure. P/N or letter grading.

115. Interpersonal Dynamics. (4) Lecture, three hours. Survey of recent scientific approaches to dyadic communication and relationships. Surveys selection of experimental, observational, and quantitative methods, and how they can be applied to key issues in dyadic communication and interpersonal relationships. Topics include recent technological techniques for measuring and influencing dyads, including role of peripheral devices and or other wearable devices. Consideration of dyadic processes including influence, mimicry, leadership, active listening, and more. Consideration also of how findings apply beyond dyads to larger groups. P/N or letter grading.

116. Communication and Conflict in Couples and Families. (4) Lecture, three hours. Examination of (1) dysfunctional communication and conflict in couples and families and (2) relationship of these processes to individual and family psychopathology, marital discord, and families and (3) relationship of these processes to individual and family psychopathology, marital discord, and families. P/N or letter grading.

M117. Negotiation. (4) (Same as Labor Studies M117T.) Lecture, four hours. Art and science of negotiation in securing agreements between independent parties. Theory and practice that underlies successful negotiation. Experiential course in which students learn broad array of negotiation skills, including identifying one's own (and others') communication style, identifying and incorporating components of successful negotiation, and resolving conflict between parties. Letter grading.

118. Language and Music. (4) Lecture, three hours. Cognitive science exploration of structure and evolution of language and music and their relationships to communication, cognition, and culture. P/N or letter grading.

119. Voice and Its Perception. (4) Lecture, four hours. Focus on how human voice conveys information about identity of speakers, physical characteristics, personality, intimacy, and empathetic, and on how listeners utilize this information to make judgments about speakers. Letter grading.

120. Group Communication. (4) Lecture, four hours. Examination of group communication from perspectives of evolutionary psychology, cybernetics, and psycholinguistics. Topics include evolution of cooperation, ingroup and outgroup dynamics, gossip, music improvisation, and conversational behavior. P/N or letter grading.

121. Communication Development. (4) Lecture, three hours. Focus on method development of human interpersonal communication, including production and perception of communicative signals at different ages, methods for studying communication development, physiological and social mechanisms, cross-cultural similarities and differences in communication development, effects of media and technology, and disorders. Letter grading.

122. Visual Communication. (4) Lecture, three hours; discussion, one hour. Exploration of visual basis of communication through study of social minds of infants, adults, and nonhuman primates. Letter grading.

M123. Social Cognition. (4) (Formerly numbered 123.) (Same as Psychology M137M.) Lecture, three hours. Surveys of empirical research in social cognition, with emphasis on understanding cognitive processes involved in interpersonal and intergroup communication. Topics include attention, interpretation, evaluation, judgment, attribution, and memory processes. Consideration of both controlled and automatic processes. Discussion of roles of motives, goals, and affective variables. P/N or letter grading.

M124R. Evolution of Language. (4) As Anthropology M124R.) Lecture, three hours; discussion, one hour (when scheduled). Recommended preparation: Anthropology 1 or 4 or Linguistics 1. Designed for juniors/seniors. Practical implications of human language. How did language evolve? Examination of origin of human language from biological, comparative, developmental, social and computational perspectives. Topics include evolutionary theory, linguistic structure, gesture and speech, animal communication, language learning, language disorders, and computational models of language emergence. P/N or letter grading.

M125. Talk and Social Institutions. (4) (Same as Sociology CM125.) Lecture, three hours; discussion, one hour. Designed for juniors/seniors. Practices of communication and social interaction in number of major institutional sites in contemporary society. Setting topics may include emergency services, police and courts, medicine, news interviews, and political oratory. P/N or letter grading.

126. Evolution of Interpersonal Communication. (4) Lecture, four hours. Examination of current issues in interpersonal communication, including topics of evolutionary psychology and biology. Topics include coevolution of signaler and receiver adaptations, nonverbal communication, courtship behavior, miscommunication between people and implied language use, and deception. Letter grading.

M127. Animal Communication. (4) (Same as Anthropology M128G.) Lecture, three hours. Designed for Anthropology students. Topics include evolutionary psychology, evolution of communication channels, communication systems such as bird song, dolphin calls, whale songs, primate social signals, and human language. P/N or letter grading.

128. Play and Entertainment. (4) Lecture, three hours. Entertainment is significant component of both interpersonal and general mass communication. Examination of evolutionary history, cognitive mechanisms, and social dimensions of play. Topics include functions, design, and diversity of animal communication systems such as bird song, dolphin calls, whale song, primate social signals, and human language. P/N or letter grading.

129. Evolution of Interpersonal Communication. Lecture, three hours. Entertainment is significant component of both interpersonal and general mass communication. Examination of evolutionary history, cognitive mechanisms, and social dimensions of play. Topics include functions, design, and diversity of animal communication systems such as bird song, dolphin calls, whale song, primate social signals, and human language. P/N or letter grading.

130. Science of Language. (4) Lecture, three hours. Introduction to scientific psychology, linguistics, and connections to applied issues in communication. Survey of various scientific methods, and how they are applied to key issues in language and communication. Emphasis on understanding meanings of words, complexity of sentences, and study of how these are processed (and produced) during communication. Includes some hands-on exercises, including learning some scientific tools that can be used both in future research and in field. Letter grading.

131. Computer Models of Communicators. (4) Lecture, three hours. Introduction to computerized methods to model communication processes. Survey of various computational methods, and how to apply these in hands-on exercises. Exercises help set up simulated conversations of computer communication. Covers computer models for individual communicators, dyads, groups, and collective (mass) systems. Letter grading.


133. Decoding Media Strategies. (4) Lecture, three hours; discussion, one hour. Today's mass media are thriving business, central part of cultural identity, and vital component of democracy. How do these different and often conflicting functions determine content of mass media? Examination of psychological dynamics of advertising, nature of entertainment and mass culture, practice of propaganda, and changing patterns of media ownership. Assessment of impact of mass media on individuals and social institutions. Letter grading.

136. Media Portrayals of Gays and Lesbians. (4) Lecture, three hours. How are gays and lesbians represented in media? How are gays and lesbians portrayed at all. Exploration not only of how gays and lesbians have been represented, but also why certain portrayals have tended to dominate. P/N or letter grading.

140. Theory of Persuasive Communication. (4) Lecture, four hours. Dynamics of communication designed to influence human conduct; analysis of structure of persuasive discourse; integration of theoretical material from relevant disciplines of humanities and social sciences. Letter grading.

141. Films of Persuasion: Social and Political Advocacy in Mass Society. (4) Lecture, three hours; discussion, one hour. Films often provide commentary on critical issues. How do they communicate to large audiences about history, society, and politics. Critical evaluation of these works to understand power and limitations of films as social persuasion. Letter grading.

143. Rhetoric of Popular Culture. (4) Lecture, three hours. Rhetorical approach to study of U.S. popular culture. Examination, both at theoretical level and through specific case study, of how popular cultural texts perform rhetorically to influence political and social struggles shaping everyday life. How do popular artifacts or communicative texts constitute source for (re)newations of cultural meanings as well as greater understanding of ways language functions as vehicle for human action. Letter grading.

M144A-M144B. Conversational Structures I, II, III. (4-4-4) (Same as Sociology CM124A-M124B.) Lecture, three hours; discussion, one hour. How do people communicate? How are conversations structured? Introduction to various structures employed in organization of conversational interaction, such as turn-taking, action sequencing, and repair. M144B. Requisite: course M144A. Consideration of some expanded sequence structures, story structures, topical sequences, and overall structural organization of single conversations.

145. Situation Comedy and American Culture. (4) Lecture, three hours. Historical analysis of sitcom genre from its beginning in late 1940s to present. Investigation of how sitcoms have influenced American life and culture and how American life and culture have influenced sitcoms. Exploration of issues of family, race and ethnicity, class and economy, gender roles, and political culture. P/N or letter grading.

146. Evolution of Mass Media Images. (5) Lecture, four hours; discussion/lab; one hour. Analysis of evolutionary psychology as basis for images se-
lected by media portraying women and/or minorities in entertainment, advertising, and informational communication. Letter grading.

M147. Sociology of Mass Communication. (4) (Same as Sociology M149.) Lecture, four hours; discussion, one hour (when scheduled). Studies in relationship between mass communication and social organization. Topics include history and organization of major journalistic functions that dominate mass communication such as news-gathering, production, distribution of mass media news and entertainment, selected studies in media content, and effects of media on society. P/NP or letter grading.

146. Marketing Communications. (4) Lecture, three hours. Examination of key concepts and methods in marketing communications in both traditional and digital media. Development and execution of communications strategies, with primary emphasis on consumer insight, branding, market segmentation and positioning, message strategy, promotion, and execution of marketing communications through appropriate media technologies. Letter grading.

M149. Media, Gender, Race, Class, and Sexuality. (5) (Same as Gender Studies M149 and Labor Studies M149.) Lecture, four hours; activity, one hour. Limited to junior/senior Communication and Gender Studies majors and Labor Studies minors. Examination of manner in which media culture produces social processes that shape the lives of women and marginalized groups. Emphasis on theories of stereotyping and politics of representation through use of media, guest presentations, lectures, class discussions, and readings. Introduction to theory and practice of cultural studies. Letter grading.


153. Introduction to Data Science. (4) Lecture, three hours. Required: one course from Computer Science 31, 32, Program in Computing 10A, 10B with grade of C+ or better, or equivalent. Examination of how large-scale data can be used to systematically measure various aspects of human activities. Review of series of computational and statistical methods which enable scalable analysis and cost reduction. Students learn to interpret and understand research findings and implications from published work. Review of ethical issues in data science, such as privacy and model biases, limitations of limitations and risks of current methods. Discussion of various ways to improve transparency and accountability of data-driven research. Letter grading.

154. Social Communication and New Technology. (4) Lecture, four hours; discussion, one hour. Required: Computer Science 31 or 32 or Program in Computing 10A or 10B with grade of C+ or better. Artificial intelligence (AI) and machine learning (ML) have made rapid progress in recent years on various fronts. Many of their advanced techniques are being transferred to new domains, transport of medical data, advertisement, military operations, and social media, and aiding our decision making, planning, reasoning, and forecasting. Review of origin and modern development of artificial intelligence and its recent impact on social media, marketing communications, and evolving media. AI and ML are changing the landscape of modern state forms, and changing expectations about freedom and responsibility for both communication and information gathering. From mobile applications, knock-off phones, manipulated communication media, evolving media, and law, has become part of our life, on scale and to extent that would have been unthinkable just a few years ago. Letter grading.


159. Artificial Intelligence and Society. (4) Lecture, three hours. Impact of artificial intelligence (AI) on society is growing rapidly. Exploration of questions of what if superhuman AI is achieved, will it free humans from tedious jobs or cause mass unemployment, and how to guarantee AI safety so that it will not annihilate human civilization. Letter grading.

160. Political Communication. (4) Lecture, four hours; discussion, one hour. Exploration of how political communication—speech and written word—functions and affects our perceptions of international publics. Exploration of political communication, its role in international relations, and its impact on domestic and international publics. Letter grading.


165. Agitational Communication. (4) (Same as Labor Studies M176.) Seminar, three hours; discussion, one hour (when scheduled). Theory of agitation; agitation as force for change in existing institutions and policies in democratic society. Intensive study of selected agitation texts and exploration of content of their communications. Letter grading.


168. Communication and Media Law. (4) Lecture, three hours. Focus on sample of most important intersection between law and communication: copyright, trademarks, freedom of speech, privacy, secrecy, surveillance, and publicity rights. Law and communication have been intertwined since introduction of book censorship and licensing in late 16th century, and blasphemy laws before that. That relationship has grown increasingly complex in time in response to technical and cultural changes in communication media, evolution of modern state forms, and changing expectations about freedom and responsibility for both communication and information gathering. From mass communication, knock-off phones, manipulated communication media, and law, has become part of our life, on scale and to extent that would have been unthinkable just a few years ago. Letter grading.

170. Legal Communication. (4) Lecture, three hours; discussion, one hour. Review of Fifth Amendment privilege against self-incrimination, including analysis of Miranda warnings, police interrogation procedures, coerced confessions, and due process, examples of evolving rulings on same-sex marriage, abortion, and right to die. Use and misuse of grand juries in police misconduct cases, including Eric Brown, Michael Gans, and Bremerton Tailor cases. Questions of judicial activism, legal precedent, and standards of review. Letter grading.


173. Affect and Emotion in Political Communication. (4) Lecture, three hours. There is growing body of work in political communication that emphasizes importance of affect, emotion, and personality in politics. Sensitivity to threat or disgust; reactions of fear, anger, or happiness; tendencies more than on positive information—each of these can impact feelings about candidates, and positions on wide range of domestic and foreign issues. Many of these feelings are in reaction to unacknowledged information; and changing media technologies likely increase volume of affective or emotional content reaching public. Review of recent work on these themes, drawn from both media psychology and political communication. Letter grading.

174. Entertainment and Politics. (4) Lecture, three hours. Research in political communication often focuses on news coverage. Our ideas about world around us do not just come from news content, however—we are affected by wide range of entertainment media as well. Consideration of how changes in media technology have increasingly broken down division between news and entertainment affect work on impacts that entertainment-focused media—including television shows, movies, and music—have on political preferences. Letter grading.

175. Criticism and Public Discourse. (4) Lecture, four hours; discussion, one hour (when scheduled). Introduction to methods and problems of criticism in public arts. Study of several types of critical methods: formalistic, aesthetic, pragmatic, and aesthetic criticism. Topics include definition of art and criticism, aesthetic media, genre and resources of film, television, theater, and public discourse, varieties of critical method, problems of critical judgment, letter grading.

176. Visual Communication and Social Advocacy. (4) (Same as Labor Studies M176.) Lecture, four hours. Visual communication reaches diverse audiences in communicating major social and political topics. Cartoons, posters, murals, and documentary
photography have had powerful world impact. Survey of all four genres of visual communications as features of modern mass media. Letter grading.


177. Images of U.S. (4) Lecture, four hours. Awareness of international role of U.S. necessitates clear understanding of way our nation is perceived by others. Exploration of roots of U.S. images in minds of people abroad. Analysis of influences that contribute to images and ways in which images affect practical matters. P/NP or letter grading.


183. Media and Mind. (4) Lecture, three hours. Investigation of media persuasion and entertainment appeal through three intersecting approaches: study of cognition, of mass communication experience, and hands-on analysis of television, film, and radio. Topics include perception, imagination, narrative, play, emotion, and dreams. Students collaborate with each other to develop their own theory of imagination, and create their own short stories. P/NP or letter grading.

185. Field Studies in Communication. (2 to 4) Lecture, two hours. Designed for juniors/seniors. Fieldwork in communication. Students participate in two-hour semi-weekly sessions and spend seven hours in approved community settings each week for each 2 units of credit. May be taken for maximum of 4 units per term. P/NP grading.

186. Media, Ethics, and Digital Age: Case-Study Approach. (4 to 6) Seminar, three hours. To publish or not to publish? Study addresses questions of media ethics—and ethics more broadly—using case-study method to debate pressing issues from actual newsrooms. Students participate in Socratic discussion of fairness, bias, and personal and societal implications of printed, broadcast, and digitized word. Letter grading.

187. Ethical and Policy Issues in Institutions of Mass Communication. (4) Lecture, three hours. Intensive examination of ethical and policy issues arising from interaction of media institutions (print, film, broadcasting, and new technologies) and societal institutions (Corporations, courts, schools, churches, political action groups, advertisers, and audiences). P/NP or letter grading.

188. Careers in Communication. (1) Seminar, two hours. Rigorous study of communication theories, research methods, and applications prepares students to succeed in multiple fields, including technology, entertainment, journalism, non-profit, law, education, politics/government, and management. Provides practical research and development that helps students transition to being professional in workplace. Consultation of successful industry professionals from variety of fields to understand how they leveraged their education to excel within their organizations. P/NP grading.

188A. Variable Topics in Mass Communication and Media Institutions. (4) Lecture, four hours. Variable topics; consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit with topic change. Letter grading.

188B. Variable Topics in Interpersonal Communication. (4) Lecture, three hours. Variable topics; consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit with topic change. Letter grading.

188C. Variable Topics in Communication Technology and Digital Systems. (4) Lecture, four hours. Variable topics; consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit with topic change. P/NP or letter grading.

188D. Variable Topics in Political and Legal Communication. (4) Lecture, four hours. Variable topics; consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit with topic change. P/NP or letter grading.

188E. Variable Topics: Practicum. (4) Lecture, three hours. Practicum lectures on selected topics in communication. Reading, writing, discussion, and development of culminating project. May be repeated for credit with topic change. P/NP or letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Enforced corequisite: Honors Colloquium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Seminar, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191A. Variable Topics Research Seminars: Mass Communication and Media Institutions. (4) Seminar, three hours. Research seminars on selected topics in mass communication. Reading, discussion, and development of culminating project. May be repeated for credit with topic change. P/NP or letter grading.

191B. Variable Topics Research Seminars: Interpersonal Communication. (4) Seminar, three hours. Research seminars on selected topics in interpersonal communication. Reading, discussion, and development of culminating project. May be repeated for credit with topic change. P/NP or letter grading.

191C. Variable Topics Research Seminars: Communication Technology and Digital Systems. (4) Seminar, three hours. Research seminars on selected topics in communication technology and digital systems. Reading, discussion, and development of culminating project. May be repeated for credit with topic change. P/NP or letter grading.

191D. Variable Topics Research Seminars: Political and Legal Communication. (4) Seminar, three hours. Research seminars on selected topics in political and legal communication. Reading, discussion, and development of culminating project. May be repeated for credit with topic change. P/NP or letter grading.

191DC. CAPP Washington, DC, Research Seminars. (8) (Same as History M191DC, Political Science M191DC, Public Affairs M191DC, and Sociology M191DC). Seminar, three hours. Limited to CAPP Program students. Intensive research projects for undergraduate students in Center for American Politics and Public Policy’s program in Washington, DC. Focus on development and execution of original empirical research based on experiences from Washington, DC-based field placements. Study of variety of qualitative methods (observation, interviewing, etc.), with comparison to quantitative analysis. Examination of features of solid and significant research; intensive writing. P/NP grading.

191E. Variable Topics Research Seminars: Practicum. (4) Seminar, three hours. Practicum seminars on selected topics in communication. Reading, writing, discussion, and development of culminating project. May be repeated for credit with topic change. P/NP or letter grading.

194. Research Group Seminars: Communication Studies. (2) Seminar, two hours. Designed for graduate students who are part of research group. Discussion of research methods and current literature in field or of research of faculty members or students. May be repeated for credit. P/NP grading.

195. Summer Internships. (4) Tutorial, to be arranged. Internship in supervised setting in community agency or business. Students meet with adviser and provide final reports of their experiences. May be repeated for credit. Individual contract with supervising faculty member required. Offered in summer only. P/NP grading.

195DB. UCLA Daily Bruin and Student Media Internship. (2) Tutorial, one hour. Limited to students participating in Daily Bruin. Internship provides students insight and most benefit from their internship experience with UCLA student media. Students meet biweekly with instructor, provide periodic reports on their experience, and engage with industry mentors. May be taken for maximum of 12 units. P/NP grading.

197. Individual Studies in Communication Studies. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject area required. May be repeated for credit. Individual contract required. P/NP or letter grading.

198A-199B. Honors Research in Communication Studies. (4 to 4) Tutorial, to be arranged. Limited to junior/senior majors. May be repeated for credit. Individual contract required. Letter grading. 198A. Requisite: courses 10, 150. Development of comprehensive research project under direct supervision of faculty member. 199B. Requisite: course 198A. Continuation of work initiated in course 198A. Presentation of summary of data gathered and relevant progress to supervising faculty member. May be repeated for credit. S/U or letter grading.


Graduate Courses

200. Theories in Communication Science. (4) Seminar, three hours. Exploration of theoretical and methodological approaches that bridge major areas of current interdisciplinarity in communication science research. S/U or letter grading.

205. Professional Pathways. (1) Seminar, one hour. Exploring PhD in any of allied social, cognitive, and computational sciences and/or career paths. Doctoral students are exposed to range of career pathways. Each meeting focuses on one possible career path and features guest speaker who works in this particular industry. S/U grading.


215. Communication Research Laboratory. (1) Research group meeting, one hour. Limited to graduate students. Designed for graduate students in social and natural sciences. Discussion of current research
issues and preliminary findings. Opportunities for feedback on current and proposed research activity. Assigned readings included. May be repeated for credit. S/U grading.

220. Research Methods in Communication Science. (4) Seminar, three hours. Study of how communication science research is conducted with focus on quantitative methodology. Students gain understanding of tools used in conduct research, and experience with these tools through formulating own research ideas and projects. S/U or letter grading.

230. Communication and Cognition. (4) Seminar, three hours. Exploration of how cognitive processes underlie multiple aspects of communication, including its evolutionary and biological underpinnings, its relevance for broad types of communication (e.g., interpersonal and mass media), and its integrative capacity across multiple areas of social science research. S/U or letter grading.

231. Advances in Science of Interpersonal Human Communication. (4) Seminar, three hours. Examination of quantitative approaches to interpersonal communication processes. Topics include measuring human interactive behavior, experimentation and observational research contexts, and testing theories of human interactive behavior using computational models and computer simulation. S/U or letter grading.

232. Infant Communication. (4) Seminar, three hours. Topics include introduction to acoustic phonetics, an analysis of the infant vocalizations and social vision, with emphasis on how observers utilize visible cues in face and body to form impressions of other people and how these perceptions are moderated by existing knowledge structures and motivations. S/U or letter grading.

233. Evolution, Sex/Gender, and Communication. (4) Seminar, three hours. Examination of theories about how political parties operate in countries around world. Covers topics including normative role of parties in modern democracies, reasons why parties exist, party competition, electoral systems, variation in number and types of parties across countries, party identification, voting, and internal party dynamics. S/U or letter grading.

234. Social Vision. (4) Seminar, three hours. Exploration of how we apprehend social and biological relevance. It influences our interactions, preferences, social strategies, and our communication with others. It also influences what others expect from us. Within context of this course, term gender refers to one's location on continua of femininity (female-typical) and masculinity (male-typical). S/U or letter grading.

235. Evolution of Vocal Communication. (4) Seminar, three hours. Study demonstrates how to build artificial intelligence revealed by cognitive science, including learning from small data, expressing causality of physical world, and inferring mental states for intuitive social interactions. Draws from statistical modeling, cognitive science, artificial intelligence, computer vision, and robotics. S/U or letter grading.


250. Political Communication. (4) Seminar, three hours. Consideration of determinants of media content and degree to which media's editorial opinions and actions are influenced by that content. Specific topics include history of media, recent media trends, theories of attitude formation and change, media bias, role of sources in news, economic interests, and news production and consumption, ways in which media shape public perceptions of political world, campaign communication, and general role of mass media in democratic process. S/U or letter grading.

251. Presidential Communication. (4) Seminar, three hours. Examination of one vital source of presidency's burgeoning power: president's unmatched communication power. Study of historical evolution of presidents' communication environment, resources, and strategies. Exploration of how presidential candidates communicate has evolved over time, and implications of this evolution for how presidents govern. S/U or letter grading.

252. Political Parties and Strategic Partisan Communication. (4) Seminar, three hours. Examination of theories about how political parties operate in countries around world. Covers topics including normative role of parties in modern democracies, reasons why parties exist, party competition, electoral systems, variation in number and types of parties across countries, party identification, voting, and internal party dynamics. S/U or letter grading.

253. Affective Political Communication. (4) Seminar, three hours. Consideration of role that affects play in production and consumption of political news, and in political communication, behavior, and psychology. S/U or letter grading.

270. Computational Communication. (4) Seminar, three hours. New computational methods developed and applied for communication research along with massive datasets and computing infrastructure enable large-scale quantitative analyses on human communication and activities at scale. Introduction to state-of-art methods in computational social science and how they can be applied in communication research. S/U or letter grading.


272. Cognitive Artificial Intelligence. (4) Seminar, three hours. Study demonstrates how to build artificial intelligence revealed by cognitive science. These principles include learning from small data; capturing causality of physical world; inferring others' mental states for intuitive social interactions. To achieve this goal, tools are drawn from cognitive science, social sciences, artificial intelligence, computer vision, and robotics. S/U or letter grading.

273. Big Data Analysis with Machine Learning. (4) Seminar, three hours. Preparation: familiarity with coding (Python or R) and basic statistical analysis. Introduction to advanced machine learning methods that can apply to large-scale datasets in text, audio, and visual data modalities. Students learn how to develop, train, and validate machine learning models and apply methods to their own research. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Limited to Communication graduate students. Directed study on variable topics in consultation with faculty member. S/U or letter grading.

596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. Limited to Communication graduate students. Directed study on variable topics in consultation with faculty member. S/U or letter grading.

597. Preparation for PhD Qualifying Examination. (2 to 12) Tutorial, to be arranged. Limited to Communication PhD graduate students. Reading and preparation for PhD qualifying examination. Mandatory and supplemental reading lists approved by student advisory committee. May be repeated for credit as necessary with consent of advisor. S/U grading.

599. Research for PhD Dissertation. (2 to 12) Tutorial, to be arranged. Preparation: successful completion of qualifying examinations. Limited to Communication PhD graduate students. May be repeated for credit. S/U grading.
engagement takes place. The minor can be paired with any major as an applied and active way of putting disciplinary tools to use, and is intended for highly motivated students of any ideological perspective who are committed to education among a broader community of learners.

Students complete a core curriculum, elective courses, a course on a strategy of social change, and a community-engaged capstone research project examining a social issue in a specific Los Angeles community context.

Undergraduate Minor
Community Engagement and Social Change Minor

The minor is an interdisciplinary program that creates a unique opportunity for students to examine social inequality and strategies for social change through sustained community engagement in Los Angeles and beyond. It complements any major.

Students have a lower-division or upper-division option for their gateway community-engaged course in the minor, then choose two additional community-engaged learning experiences, a strategy for social change course, and an upper-division elective.

Capstone

Students complete a two-quarter capstone course series in which they learn about different forms of community-engaged research that is conducted with and to benefit a community partner. Working in collaboration with a nonprofit organization, students prepare a community-engaged research proposal and then complete a research paper. Integrated into the capstone course, students develop an e-Portfolio that conveys their journey through the minor.

Admission

To enter the minor, students must have an overall grade-point average of 2.0 or better, submit a completed application, and submit an overall grade-point average of 2.0 or better.

To enter the minor, students must have an overall grade-point average of 2.0 or better, submit a completed application, and submit an overall grade-point average of 2.0 or better.

The Minor


Required Capstone (8 units): Community Engagement and Social Change 191AX, 191BX, with grades of B or better.

Policies

Students may petition to apply one lower-division community-engaged course, one upper-division community-engaged course, or one upper-division elective not listed above toward the minor. Transfer students may petition to have a community-engaged course taken at a previous institution applied toward the minor. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 3.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Capstone

Community Engagement and Social Change 191AX and 191BX must be completed with grades of B or better. Students must have completed the core courses requirement, and at least one other community-engaged course prior to enrolling in the Community Engagement and Social Change 191AX.

Community Engagement and Social Change Lower-Division Courses

10. Introduction to Engaged Scholarship. (2) Seminar, two hours. Limited to students participating in preapproved UCLA civic engagement programs. Introduction to history, research, and philosophy of engaged University/community partnerships, as well as specific opportunities for active engagement by undergraduate students at UCLA. Offered in summer only. P/NP grading.

18. Bruin Leaders: Model for Social Change. (1) Lecture, two hours; fieldwork, one hour. Introduction to leadership development and civic engagement through community service. Based on nonhierarchical mode of leadership developed by UCLA Graduate School of Education and Information Studies. Topics include diversity issues, organizational skills and team-building development, and personal growth and community service goals. Participation in first-week orientation session required. Consult Schedule of Classes for topics to be offered in specific term. May not be repeated for credit. P/NP grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20. Engaging Los Angeles. (5 Formerly numbered 50SL) Lecture, two hours; discussion, two hours. Community-engaged learning course with focus on diverse communities of Los Angeles. Analysis of general shared history of Los Angeles. Comparing or contrasting of experiences of different racial/ethnic groups. Engagement in meaningful work off campus to reflect on assets, injustices, and inequities that have shaped experiences of native or immigrant communities. Analysis of Los Angeles in which residents coexist and interact while managing tensions and social justice issues inherent in minority/majority city. Letter grading.

89. Honors Seminars. (1) Seminar, three hours, limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, one hour. Limited to 30 students. College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental read-
ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

95A-95B. Introduction to Community-Based Internships. (2–4) Tutorial, one hour; fieldwork, four hours (course 95A) and 10 hours (course 95B). Course 95A is not requisite to 95B. Introduction to community-based internships. Supervision of specialized UCLA internship programs. Platform for preplanned, organized, structured, and supervised off-campus experiences with academic context. Acceptable placements include corporate, nonprofit, and governmental organizations that meet criteria for undergraduate internships as established by Center for Community Engagement. Individual contract with supervising faculty member required. P/NP or letter grading.

95CE. Introduction to Community-Based Internships. (2) Tutorial, one hour; fieldwork, four hours. Introduction to community-based work for third- term freshman/sophomore students who have not completed 90 units. Platform for preplanned, organized, structured, and supervised off-campus experiences with academic context. Acceptable placements include corporate, nonprofit, and governmental organizations. Individual contract required. May be repeated for credit with a change in the agreement. Letter grading.

102. Reflections on Alternative Spring Break. (2) Limited to juniors/seniors. (Formerly numbered 102SL.) Seminar, three hours; fieldwork, 10 hours. Limited to juniors/seniors. Service learning course for undergraduate students and community partners through which student and community partners study, plan, and carry out evaluation of nonprofit organizations in Los Angeles by research teams. Offered in summer only. Letter grading.

107. Counseling Multicultural Communities. (Seminar, two hours. Limited to students who have participated in UCLA Community Service Commission Alternative Spring Break immediately prior to Spring Quarter. Discussion of role of higher education institutions that meet criteria for undergraduate internships as established by Center for Community Engagement. Individual contract with supervising faculty member required. P/NP or letter grading.

98A. Leadership and Social Change. (2) Seminar, two hours. Exploration of different modes of leadership and consideration of how effective leadership can bring about social change. We live in an extraordinary period of extraordinary opportunity and challenge—in which breathtaking technological advances sit alongside breathtaking cynicism and corruption. Examination of how effective and inspiring leaders can lead in such a period, if it is possible to make difference and effect change in face of deep structural inequality, criteria that make effective leader, and if each of us bears within us the potential. Exploration of past models of successful leadership and different models of present-day leadership, drawing on inspirations from social activism, politics, religion, law, philanthropy, and education. Students are encouraged to formulate their own models of leadership. Three to four day experiential learning opportunity in leadership development off campus. P/NP grading.

98B. Organizational Analysis and Workforce Readiness. (2) Seminar, two hours. Requisite: course 98A. Analytic training on how to study institutions and organizations. Students identify, contact, and interview practitioners to gain interest. Site visits to various working environments in Los Angeles area. Analytics training on how to study institutions and organizations and prepare research briefs on organizations/institutions to be visited. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100XP. Perspectives on Civic Engagement for Social Justice. (Formerly numbered 100SL.) Lecture, three hours. Community-building course. Examination of theories and concepts of civic engagement as means to achieve social justice. Exploration of how civic engagement influences student learning and change. Reflection on these concepts through work in collaboration with select community-based organizations dedicated to changing status quo with regard to power and privilege. Letter grading.

102. Reflections on Alternative Spring Break. (2) Seminar, two hours. Limited to students who have participated in USAC Community Service Commission Alternative Spring Break immediately prior to Spring Quarter. Discussion of role of higher education institutions that make specific attention to reflection on Alternative Spring Break experiences. P/NP or letter grading.

105XP. Client-Based Program Evaluation and Research. (Formerly numbered 105SL). Seminar, three hours; fieldwork, 10 hours. Limited to juniors/seniors. Service learning course for undergraduate students and community partners through which students and community partners study and carry out evaluation of nonprofit organizations in Los Angeles by research teams. Offered in summer only. Letter grading.

110. Civic Engagement and Communication in Global Workplace. (Seminar, three hours. Students enrolled in international summer internships draw on their own and each other’s experiences to critically think about intercultural communication, and to draw insights from that academic literature to define and build intercultural communication competencies in context of workplace environment. P/NP or letter grading.

113XP. Topics in Community-Engaged Research: Theory and Practice. (Same as formerly numbered 133SL.) Seminar, three hours; fieldwork, two hours. Service learning course that examines variables related to theory and practice of community-based research. Students prepare for experience in partnership with community stakeholders selected in advance by instructor and Center for Community Learning. May be repeated for credit with topic or instructor change. Letter grading.

M134XP. Engaging Immigrants and Their Families. (Formerly numbered M134SL.) Lecture, three hours; fieldwork, eight hours. Limited to students who are participating members of Jumpstart AmeriCorps literacy program. Service learning course on roles of literacy in community engagement and civic engagement. Overview of child development theory as well as examination of policies and systems that impact practice of preschool education. Discussion and case study of civic engagement as community movement designed to engage diverse groups of committed stakeholders in reaching common goal. P/NP or letter grading.

M110XP. Community-Based Studies of Popular Literature. (Formerly numbered M110SL) Seminar, three hours; fieldwork, eight hours. Limited to students who are participating members of Jumpstart AmeriCorps literacy program. Service learning course on roles of literacy in community engagement and civic engagement. Overview of child development theory as well as examination of policies and systems that impact practice of preschool education. Discussion and case study of civic engagement as community movement designed to engage diverse groups of committed stakeholders in reaching common goal. P/NP or letter grading.

M115. Citizenship and Public Service. (Same as Political Science M115C.) Lecture, three hours; discussion, two hours. Focus on civic engagement and development of one or more genres of popular literature, with attention to contemporary communities of readers and writers and formation of civil society. Topics vary and may include children’s literature and childhood literacy, mass market fiction and book club culture, or science fiction and science policy. Service-learning component includes meaningful work with local nonprofit organizations selected by instructor. May be repeated for credit with topic change. P/NP or letter grading.

M121. Race, Gender, and Data. (Same as Digital Humanities M121.) Seminar, three hours. Requisite: Digital Humanities 101. Data plays a crucial role in political representation, governmental resource allocation, and policy making. Investigations of how data does or does not ascribe a quantitative value to a human life by employing a community-engaged emphasis to study how emerging digital models link data with social justice outcomes. Students learn to read datasets produced by governmental entities such as the U.S. Census Bureau, Bureau of Labor Statistics, and Department of Health and Human Services. Assemble strategies and datasets relevant to racial and gender justice themes; and to generating data visualizations, digital stories, and maps using the latest software tools. No prior knowledge of statistics or quantitative analysis is required. P/NP or letter grading.


145. Conflict, Power, Inequality, and Change. (4) Lecture, four hours. Broad historic trend of systems in conflict since beginnings of colonialism, including colonialism and urbanism. Examination of modalities and theories of conflict and transformation, with emphasis on three primary forms of societal conflict: social movements, war, and terrorism. Study of resource scarcity through two specific dimensions: how it is leveraged to meet political ends, and how it can be harnessed for conflict intervention, resolution, transformation, and prevention. P/NP or letter grading.

147. Critical Analysis of Strategies toward Environmental Justice. (Same as Environment M147.) Lecture, three hours. Exploration of and engagement in critical analyses of strategies toward environmental justice focusing on environmental, civic ecology, environmental stewardship, policy advocacy campaigns, citizen science, community engagement, community planning, and urban tree canopy. Strategies are interrogated across four interconnected modules: community exposure to harm; access to ecosystem benefits and services; lack of diversity and engagement; and utilization of social-ecological systems approach. Students conduct case study analysis of strategies employed in efforts to move toward environmental justice, and develop collective course resource on environmental justice strategies. P/NP or letter grading.

150. Social Innovation Theory and Application. (4) Seminar, three hours. Limited to students in UCLA Summer Social Innovation Research Program. Study of social innovation as theory of civic engagement, with particular emphasis on how social innovators have transformed way we address entrenched social issues. Study of elements of existing social innovation models and engagement of students in the design and implementation of social change on campus and in communities. Offered in summer only. Letter grading.

151. Documentary Film Making as Strategy for So- cial Change. (4) Lecture, two hours; discussion, two hours. Emphasis of selecting documentary films di- verse in genre (advocacy, observational, essayistic, ego document, archival) and subject (war, exploitation, incarceration, ecosystem collapse, revolution, genocide). Discussion of films in their historical and artistic
context, and in way they are vehicles for community engagements and social change. P/NP or letter grading.

152. Exploring Social Change: Critical Analysis through Lens of Community Organizing. (4) Lecture, four hours. Exploration of theories driving social change and how visions and agendas get organized toward common efforts. Analysis of organizing frameworks that are the foundation for movements for social, economic, and political change. Introduction to praxis, defined by Paulo Freire in Pedagogy of the Oppressed as "reflection and action directed at the structures to be transformed through organizing." P/NP or letter grading.

163SL. Civic Engagement and Public Use of Knowledge: Special Topics. (5) Seminar, three hours; fieldwork, three hours. Limited to juniors/seniors. Service-learning course that examines variable topics related to University of California, Los Angeles, and community education in higher education. May be repeated for credit with topic or instructor change. Letter grading.

165XP. Storytelling for Social Justice: Research and Writing with Nonprofit Organizations. (5) Formerly numbered 165SL. Seminar, three hours; fieldwork, two hours. Limited to juniors/seniors. Exploration of how nonprofit organizations use storytelling strategies to advance social justice. Offers opportunity to use research and writing skills telling stories of social justice through print and online media. Students collaborate with nonprofit organizations to complete research and community engagements on how storytelling can empower individuals and communities and advance equity in diverse urban centers like Los Angeles. Letter grading.

M170XP. Storytelling for Social Justice: Research and Writing with Nonprofit Organizations. (5) Formerly numbered 165SL. Seminar, three hours; fieldwork, two hours. Limited to juniors/seniors. Exploration of how nonprofit organizations use storytelling strategies to advance social justice. Offers opportunity to use research and writing skills telling stories of social justice through print and online media. Students collaborate with nonprofit organizations to complete research and community engagements on how storytelling can empower individuals and communities and advance equity in diverse urban centers like Los Angeles. Letter grading.

M176XP. Making Films about Food. (Formerly numbered M176SL.) (Same as Food Studies M176XP and Public Affairs M176XP.) Lecture, three hours. Introduction to documentary video production and distribution of films, or other activities related to smaller groups to create 8- to 10-minute video about one of several Los Angeles partner organizations that advocate for healthy, local, sustainable food. Consideration includes production challenges posed by existing farming, ranching, and distribution methods, and strategies these groups are pursuing to create more sustainable food pathways. Students look at social media companies to help think through intervention in face of historically entrenched industrial food production and regulations that remain favorable to mass-produced, processed food items. P/NP or letter grading.

180. Access to Justice: Hope and Reality. (4) Seminar, three hours. Limited to UCLA students who are members of JusticeCorps program through AmeriCorps. JusticeCorps was established as innovative approach to solving the justice issues faced by courts around country today: providing equal access to justice. Examination of promise of justice system in America to provide meaningful access to courts for all who need it. What's structure of U.S. legal system? Exploration of sociopolitical context for current legal system, including origins and current status of legal services and self-help movements, including role of JusticeCorps. Were these strategies designed to make promise of equal justice a reality or have they inadvertently, or intentionally, resulted in two-tiered legal system— one for those with means and another for those without? P/NP or letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 885 course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

M188XP. Practicum in Social Entrepreneurship. (4) Formerly numbered M188X. (Same as Economics M188XP.) Seminar, three hours. Enrollment by consent of instructor. Offers opportunity to use research and writing skills telling stories of social justice through process of researching historical and contemporary social issues and efforts to bring about change in local communities. Letter grading.

191AX. Capstone Research Seminar. (4) Formerly numbered 191A.) Seminar, three hours. Provides students with analytical and applied framework for process of researching historical and contemporary social issues and efforts to bring about change in local communities. Letter grading.

195CE. Community and Corporate Internships in Community Engagement and Social Change. (4) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

M190A. Introduction to Community-Engaged Research Methods. (Same as Labor Studies M190A.) Seminar, three hours. Enrollment by consent of instructor. Designed for students participating in Astin Community Scholars Program. Introduction of principles of community engagement and collaboration of intentions behind doing research with community residents and organizations, our responsibilities when conducting research in historically disenchanted communities, and relationship between socially just research outcomes and methodologies. P/NP or letter grading.

M190B. Community-Engaged Research in Practice: Community Scholars. (Same as Labor Studies M190B.) Seminar, three hours. Requisite: course M190A. Enrollment by consent of instructor. Designed for students participating in Astin Community Scholars Program. Students learn from faculty, community stakeholders, graduate students, and key academic experts about emerging organizing models, best practices, and changing landscape in chosen topic. Provides students with opportunity to work with leaders from key community and labor organizations across Los Angeles on six-month dynamic participatory research project. Focus on current topic affecting Angelinos and neighboring communities. Key outcomes may include production of policy reports, popular education materials, and/or book publication by UCLA Labor Center and collaborative partners. Primary focus on engaging policy makers and other change agents. P/NP or letter grading.

M190C. Community-Engaged Research in Practice: Community Scholars. (Same as Labor Studies M190C.) Seminar, three hours. Requisites: courses M190A, M190B. Enrollment by consent of instructor. Designed for students participating in Astin Community Scholars Program. Students learn from faculty, community stakeholders, graduate students, and key academic experts about emerging organizing models, best practices, and changing landscape in chosen topic. Provides students with opportunity to work with leaders from key community and labor organizations across Los Angeles on six-month dynamic participatory research project. Focus on current topic affecting Angelinos and neighboring communities. Key outcomes may include production of policy reports, popular education materials, and/or book publication by UCLA Labor Center and collaborative partners. Primary focus on engaging policy makers and other change agents. P/NP or letter grading.

191AX. Capstone Research Seminar. (4) Formerly numbered 191A.) Seminar, three hours. Provides students with analytical and applied framework for process of researching historical and contemporary social issues and efforts to bring about change in local communities. Letter grading.

195CE. Community and Corporate Internships in Community Engagement and Social Change. (4) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.
Weekly meetings with graduate student instructor, and write final research paper. Faculty mentor and graduate student instructor construct series of reading assignments that explore issues related to internship site. May be repeated for credit with consent of Center for Community Engagement. Individual contract with supervising faculty member required. P/NP or letter grading.

M195DC, Quarter in Washington, DC, Internships. (4) [Same as History M195DC, Political Science M195DC, Public Affairs M195DC, and Sociology M195DC.] Tutorial, four hours. Limited to junior/senior quarter in Washington program students. Internships in Washington, DC, through Center for American Politics and Public Policy. Students meet on regular basis with instructor and provide periodic reports of their experiences. Individual contract with supervising faculty member required. P/NP grading.

198. Honors Research in Civic Engagement. (4) Tutorial, one hour. Development and completion of honors thesis or comprehensive research project under direct supervision of faculty member. Individual contract required. Letter grading.

199. Directed Research or Senior Project in Civic Engagement. (4) Tutorial, to be arranged. Supervised individual research or investigation under guidance of faculty mentor. Culuminating paper or project required. May be repeated once for credit. Individual contract required. Letter grading.

Graduate Course

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

Overview

The Department of Community Health Sciences is concerned with health equity and well-being for all individuals and communities. To understand and foster optimal health among diverse communities, the mission of the department is to prepare students to be interdisciplinary global leaders who can effectively address persistent and emerging public health issues, conduct and disseminate innovative research on the social determinants of health, translate the findings for public health practice, and collaborate with communities in research and training.

Graduate Study

The department offers schoolwide professional (MPH) and academic (MS and PhD) degree programs. Graduates of the professional programs assume positions in the planning, administration, and evaluation of public health programs and policies in the U.S. and abroad. Graduates of the academic programs assume teaching, research, and managerial positions in universities, government agencies, nongovernmental organizations, international health agencies, and research centers.

Graduate Majors

Community Health Sciences MS, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Master of Public Health for Health Professionals

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Community Health Sciences

Lower-Division Courses

18. Flat Tax Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

48. Nutrition and Food Studies: Principles and Practice. (5) Lecture, three hours; discussion, one hour. Overview of nutritional sciences and public health nutrition. Examination of basic science concepts of nutrition and application of them to student lives and real-world issues through lectures, videos, diet analysis, activities, reports, discussion of video and reading assignments, and reviews of community programs that apply nutrition and behavior theory to improve health of public. Students use observational research methods to create and answer questions about nutrition question in their cohort. P/NP or letter grading.

60. Intergroup Dialogue: Peer Dialogue. (2) Seminar, two hours. Discussion on issues of difference, conflict, and community to facilitate understanding between social/cultural groups. Student participation in semi-structured face-to-face meetings with students from other social identity groups to learn from each others’ perspectives, read and discuss relevant reading material, and explore their own and other groups’ experiences in various social and institutional contexts. Exploration of ways of taking action to create change and bridge differences at interpersonal and social/community levels. P/NP or letter grading.
Upper-Division Courses

100. Introduction to Community Health Sciences. (4) Lecture, four hours. Limited to junior/senior non-majors and with permission to undergraduates in Public Health minor. Not open for credit to students with credit for course 210. Introductory course to provide students with broad and comprehensive overview of concepts, empirical research, and public health practice in community health sciences, with emphasis on social context and determinants of population health, and principles of planning interventions and programs to improve health. Includes ways to define and measure health and illness, social construction of illness, social and behavioral determinants of health, and health disparities. Discussion also of social and behavioral theories of health-related behavior change, health promotion strategies and methods, and public policy. Case studies of evidence-based health promotion programs provided. Letter grading.

130. Nutrition and Health. (4) Lecture, three hours; laboratory, one hour. Preparation: one biology course, one chemistry course. Basic and clinical nutrition theory and practice for students in health sciences curriculum. P/NP or letter grading.

131. Healthy Food Access in Los Angeles: History and Practice of Urban Agriculture. (4) Lecture, three hours; laboratory, 90 minutes. History and recent re-vival of urban agriculture (gardening) in Los Angeles area. Exploration of how urban gardening is response to crises such as U.S. obesity epidemic and resulting health problems. Critiques of industrial agriculture in California and elsewhere in U.S. Exploration of how urban agriculture springs from healthy food/active living and communities. Enforced requisite: that advocate access to locally grown, in-season, affordable food. Biweekly hands-on gardening laboratory in Sunset Canyon Recreation Center Organic Garden. P/NP or letter grading.

132. Health, Disease, and Health Services in Latin America. (4) Lecture, four hours. Introduction to health, disease, and health services in Latin America, with emphasis on epidemiology, health administration, medical anthropology, and nutrition. P/NP or letter grading.

M140. Health Issues for Asian Americans and Pacific Islanders: Myth or Model? (4) Same as Asian American Studies 148A. Lecture, four hours; fieldwork, one hour. Introductory overview of mental and physical health issues of Asian Americans and Pacific Islanders; identification of gaps in health status indicators and barriers to health care. Experiential learning and research for these populations. Letter grading.

160. Intergroup Dialogue: Theory and Practice of Peer Facilitation. (4) Lecture, four hours. Recommended requisite: course 60. Discussion on issues of difference, conflict, and prejudice to facilitate understanding between social/cultural groups. Peer facilitator training course to develop understanding of theoretical and research foundations of intergroup dialogue, peer-facilitated discussions involving relationships building (and coalition building) through thoughtful engagement around different social identity issues. Study of variety of techniques, tools, and strategies to support students in their capacity to implement sustained dialogues with other from social identity groups. Letter grading.

161. Intergroup Dialogue: Training Practicum. (4) Seminar, four hours; course 160. Application and further development of content and skills learned in course 160. Co-facilitation of weekly dialogues with students on specific identity theme and further development of knowledge and techniques in areas of group dynamics, confrontation, communication and community, and mental health effects of structural inequality as they relate to discussions of social justice and multicultural issues. Readings in these areas and discussions of ongoing dialogue dynamics. May be repeated once for credit. Letter grading.


180. Field Studies in Cancer Control. (4) Lecture, two hours; discussion, one hour; fieldwork, four hours. Requisite: Molecular, Cell, and Developmental Biology 50. Designed for juniors/seniors. Opportunity for students to become involved in cancer control through classroom discussion, lectures, service in field, and guided research. Biology of cancer, its prevention, detection, treatment, and rehabilitation. Letter grading.

181. Campus/Community Health and Wellness Promotion: From Theory to Practice. (4) Lecture, two hours; discussion, two hours. Limited to juniors/seniors. Theory, training, and experience in health/wellness promotion and health/wellness education in selected campus communities. Participation in supervised small-group program planning project. Letter grading.

187A-187B. Introduction to Interventions for At-Risk Populations. (2 to 4) Lecture, three hours; committee meetings/community service, two to six hours. Course 187A is required to 187B. Designed for juniors/seniors. Health and social needs/services from primarily public health perspective, drawing on related academic/professional disciplines. Community-based service learning strategy used to enhance knowledge of concepts covered. As part of service portion, students trained as caseworkers and committee members. Letter grading.

188A-188B. Special Courses in Community Health Sciences. (5) Lecture, two hours (188A) and three hours (188A). Examination of current topics or particular subfields or experimental or temporary courses in community health sciences. Specific topic areas vary with instructor. May be applied toward honors credit with topic change. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors and departmental honors programs. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

91. Peer Health Counselor Training. (4) Lecture, four hours. Limited to students in Peer Health Counselor Program. Analysis of student healthcare issues as related to campus healthcare delivery system and to healthcare delivery system. Identification of health needs and determination of appropriate resources, delivery of preventive and self-care education, and delineation of peer health counselor’s role. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work). Three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated, P/NP grading.

Graduate Courses

200. Global Health Problems. (4) Lecture, two hours; discussion, two hours. Overview of health profile of world in the century. Global health problems and methodologies by which they have been addressed. Examined the impact of Alma Ata goal of health for all by 2000. Letter grading.
205. Immigrant Health. (4) Lecture, two hours; discussion, one hour. Limited to graduate students. Overview of key topics in public health for documented and undocumented persons and refugees in U.S. Demographics, health status, behavioral risk factors, and social determinants, health and human rights, and access to healthcare and prevention services. Analysis of public policy across topics. Builds skills necessary to think critically about health of immigrants and refugees. Letter grading.

210. Community Health Sciences. (4) Lecture, four hours. Preparation: one introductory statistics course. Introduction to methods of demographic analysis. Topics include demographic rates, standardization, decomposition of differences, life tables, analytic techniques to compare and categorize data, assessing validity and quality of data, as well as summarizing and presenting qualitative findings. Lectures, discussion of readings, and practical exercises. Explores methods of demographic analysis of population growth, stable populations, population projection, and demographic data sources. Letter grading.

211A-211B. Program Planning, Research, and Evaluation in Community Health Sciences. (4-4) Lecture, three hours; discussion, one hour. Preparation: one social sciences course. Basic concepts, relationships, and policy issues in field of community health, variability in definitions of health and illness, correlates of health and illness, health care delivery, community structure on health status, major contemporary approaches to health promotion and health education at community level. Use of comparative international perspectives. Letter grading.

211A. Program Planning, Research, and Evaluation in Community Health Sciences. (4) Lecture, three hours; discussion, one hour; reading and research paper, one hour. Requisites: courses 211A, 211B, Biostatistics 100B, 406. Problems of health survey design and data collection; measurement issues in data analysis and interpretation; use of computer for analysis of large-scale survey data using various statistical techniques. Letter grading.

212. Advanced Social Research Methods in Health. (4) Lecture, four hours; laboratory, two hours; outside assignments, eight hours. Course 211A is requisite to 212B. Development, planning, and administration of public health programs in community settings. Introduction to range of research methods and techniques used in designing and conducting health research, with particular emphasis on evaluation of community-based public health programs. Course organized into three modules. Letter grading. 211A. Requisites: course 212A. 211B. Requisites: courses 211A, 211B, Biostatistics 100B, 406. Problems of health survey design and data collection; measurement issues in data analysis and interpretation; use of computer for analysis of large-scale survey data using various statistical techniques. Letter grading.

213. Research in Community and Patient Health Education. (4) Lecture, three hours; discussion, two hours. Requisite: course 210. Application of conceptual, theoretical, and evaluation skills to community-based public health education research. Computer applications, data management, and research methodologies taught through microcomputer and mainframe computer. Credit/no credit grading. Examination of program databases. Letter grading.

214. Issues in Program Evaluation. (4) Discussion, three hours; reading and research paper, one hour. Requisite: course 212A. Advanced seminar that explores problems of planning and implementing evaluation research in context of local demonstration projects. Letter grading.

216A. Qualitative Research: Design and Data Collection. (4) Formerly numbered M216A. (Same as Anthropology 216.) Lecture, three hours; laboratory, one hour. Intensive seminar/field course in qualitative research methodology. Emphasis on using qualitative methods and techniques in research and evaluation related to health care. Letter grading.

216B. Qualitative Research: Analysis and Dissemination. (4) Same as Anthropology 216B. Lecture, three hours. Hands-on approach to qualitative data analysis. Students learn how to conduct all steps of thematic analysis, including developing codes and coding procedures, to transform data into a coherent narrative and to categorize data, assessing validity and quality of data, as well as summarizing and presenting qualitative findings. Lectures, discussion of readings, and practical exercises. Explores methods of qualitative analysis of community health data. Letter grading.

217. Current Issues in Food Studies. (4) Same as Urban Planning 212L. Seminar, three hours. Limited to Food Studies Graduate Certificate Program students. Food is complex subject given that production, procurement, preparation, consumption, and exchange of edible matter is biologically vital to human growth, development, and function and critical to many aspects of society and culture. Food studies is growing cross-disciplinary field of research, teaching, and advocacy that encompasses and draws from cultural anthropology and geography, food law and policy, sociology, nutrition, public health, environmental science, and social science studies. Three hours discussion. Limited to graduate students. Letter grading.

218. Questionnaire Design and Administration. (4) Same as Epidemiology 218L. Lecture, four hours. Requisites: course 212B, or Epidemiology 200B and 200C. Design, testing, and use, and administration of data collection instruments, with particular emphasis on questionnaires. Letter grading.

219. Theory-Based Data Analysis. (4) Seminar, three hours. Enforced requisites: course 212B, 270B, 270A, Biostatistics 100B, 406, Public Health 200A, 200B, or permission of instructor. Limited to Community Health Sciences PhD students. Translation of theory into data analysis. Focus on data collection and interpretation of results obtained through multivariate analysis. Analysis of quantitative data using range of multivariate techniques, such as linear multiple regression and logistic regression. Analysis of theoretical problem using student quantitative data or public use data. Letter grading.

220. Racism and Public Health: Social Epidemiologic Approaches. (4) Seminar, two hours; discussion, one hour. Exploration of social epidemiologic methods and critical approaches to study of racial stratification and public health, with focus on (1) conceptualizing racism-related factors as social determinants of health, (2) critical analysis of racial inequality and structural determinants of health, (3) developing critical self-consciousness to better understand how personal racial–ritual-related perspectives and experiences might inform their research. Letter grading.

221. African American Health across Life. (4) Seminar, two hours. Requisite: course 210. Critical examination of social, psychological, and biological pathways to health/illness among African Americans through engagement with empirical research from multiple disciplines (public health, sociology, psychology, public health). Focus on methodological competence for conducting research on racism as a social determinant of health, and (3) developing critical self-consciousness to better understand how personal racial–ritual-related perspectives and experiences might inform their research. Letter grading.

222. Understanding Fertility: Theories and Methods. (4) Same as Sociology 229B. Lecture, three hours. Preparation: one formal or social demography course. Requisite: Biostatistics 100A. Application of demographic theories and methods to describe fertility trends and differentials and social and proximate determinants of fertility, with emphasis on understanding key proximate determinants. For advanced students interested in population, demography of health, and social demography. Letter grading.

224. Social Determinants of Nutrition and Health. (4) Lecture, three hours. Preparation: one basic nutrition course. Health promotion strategies aimed at reducing chronic disease burden. Social and environmental influences have not been particularly successful in addressing needs of socioeconomic disadvantaged groups. Overview of literature supporting relationship between socioeconomic disadvantage and health conditions such as obesity, diabetes, and osteoporosis. Critical examination of plausible pathways from perspectives of multidisciplines (economics, nutrition, sociology, anthropology, and medicine), with focus on linkages between social and physical environment (including built environment) and food equity/access. Discussion of how food may be catalyst for improving social capital and health. Discussion of examples of local and international efforts to improve access to healthy foods and/or limit access to unhealthy foods. Exploration of methods for assessing social capital and food-related aspects of neighborhood environments. Letter or S/U grading.

225. Writing for Publication in Public Health. (4) Seminar, four hours. Requisite: course 219, two graduate biostatistics courses, one graduate epidemiology course, and one graduate public health course. Prepares students in writing peer-review-quality research papers, with focus on theoretically informed empirical research papers. Examination of other types of manuscript writing and review. Letter grading.


227. Conceptualizing and Measuring Structural Racism. (4) Lecture, three hours. Limited to graduate students. How structural racism and other forms of systematic inequality may contribute to health inequities. Moves beyond interpersonal experiences of racism to focus on ways to conceptualize, measure, and investigate racism perpetuated and maintained by social institutions. Letter grading.

228. Introduction to Mixed Methods Research. (4) Same as Health Policy and Management M228. Seminar, three hours; discussion, two hours; outside assignments, eight hours. Limited to graduate students. Highly recommended: Health Policy and Management 225A and 225B, or completion of coursework in basic research design and methods introduction. Introduction to mixed methods research with emphasis on its application to public health research. Equips students with skills to critique mixed method research designs and to design mixed methods research investigation for health issue of interest. Study of different mixed methods research designs commonly used in public health and health services research, including feasibility studies, convergent parallel design, sequential mixed methods, and multiphase studies. Use of combination of didactic and applied techniques. S/U or letter grading.

229. Policy and Public Health Approaches to Violence. (4) Lecture, three hours. Limited to graduate students. Focus on (1) conceptualizing risk-related factors as social determinants of violence, (2) critical analysis of research, and (3) developing critical self-consciousness to better understand how personal experiences of violence/violent injury. Letter grading.

230. Family and Sexual Violence. (4) Lecture, three hours; community, three to four hours. Examination of definitions, prevalence, and etiology. Focus on relationships that every day experiences that can influence incidence and prevalence of gender violence and sexual violence. Focus on violence against women. Letter grading.

231. Maternal and Child Nutrition. (4) Lecture, four hours. Focus on nutrition of mother, infant, and child in countries at various levels of socioeconomic development; measures for prevention and treatment of protein/calorie malnutrition; relationship between nutrition and human growth; stable populations, population projection, and demographic data sources. Letter grading.
and mental development; impact of ecological, socio-economic, and cultural factors on nutrition, nutrition education, and service. Letter grading.

M232. Determinants of Health. (4) (Same as Health Policy M242.) Lecture, three hours; discussion, one hour. Designed for graduate students. Critical analysis of models for what determines health and evidence for social, economic, environmental, genetic, health system, and other factors that influence health of populations and defined subgroups. Letter grading.

233. Hunger and Food Insecurity as Public Health Issues. (4) Lecture, three hours. Designed for graduate students. Public health aspects of hunger and food insecurity in both international perspectives, including measurement and identification of vulnerability, prevention, and options for relieving acute food shortage. Letter grading.

M234. Obesity, Physical Activity, and Nutrition Seminar. (4) Seminar, three hours; outside study, one hour. Designed for graduate students. Multidisciplinary introduction at graduate level to epidemiology, physiology, and current state of preventive diet and nutrition research. Letter grading.

235. Influence of Social and Physical Environment on Racial Health Disparities. (4) Seminar, three hours. Preparation: at least one biostatistics or epidemiology course. Limited to graduate students. Examination of how community environments, neighborhood, and sources may contribute to health disparities. Discussion of multiple factors that contribute to environmental injustice and their potential solutions. Do health disparities caused by race/ethnicity and income low income populations live in harmful environments? Is relationship between environment and health disparities merely one of potential exposure to chemical/physical hazards? Are there psychosocial mechanisms at community level that act above or beyond effects of physical environment? Letter grading.

M237. Evolving Paradigms of Prevention: Interventions in Early Childhood. (4) (Same as Health Policy M239.) Seminar, three hours. Designed for graduate students. Introduction to use of early childhood interventions as means of preventing adverse health and developmental outcomes. Concepts of health disparities and vulnerable populations and potential prevention and intervention strategies that have been developed to address these behaviors. Building of skills to work with adolescent populations and in community-based settings. Letter grading.

M239. Race, Ethnicity, and Culture as Concepts in Practice and Research (Same as American Studies M239.) Seminar, three hours. Integration of cross-cultural findings in healthcare with current American (U.S.) healthcare system paradigms to facilitate design and delivery of culturally competent public health programs and train culturally competent practitioners. Letter grading.

240. Child and Reproductive Health in Communities: Global Environmental Perspective. (4) Lecture, three hours. Limited to graduate students. Interdisciplinary global issues of child and reproductive health in relation to environmental factors in interplay with socio-economic and biological factors. Environmental influences on childhood mortality and morbidity, and potentially modifiable factors such as access to safe water or urbanization, as well as environmental contribution to high-burden outcomes in childhood and reproduction. Focus on lower income settings and discussion of relevant population-based approaches to assessment and intervention. Letter grading.

246. Women’s Roles and Family Health. (4) Lecture, two hours; discussion, one hour. Rapidly changing roles of women throughout world are having important effects on women’s own health and that of their families. Analysis of multidisciplinary research from both developed and developing world women to provide basis for in-depth discussion of programmatic and policy implications. Letter grading.


M248. Primary Health Care. (4) (Same as Health Policy and Management M248.) Lecture, four hours. Strongly recommended requisite: course 200 Health Policy and Management 240. Primary Health Care (PHC) is considered to be foundation of all health systems and should be basic component of national health policy. Review of scope of population’s health problems. Overview of organization, structure, and functions of primary health care with emphasis on primary care and middle-income country setting. Study of historical origins of PHC, roles and functions of PHC in health systems, different organizational and managerial approaches to organizing and delivering health care within PHC framework, and tools used for monitoring PHC programs and services are functioning. Review and critical analysis of evidence-based on PHC effectiveness and impact and present detailed case studies of PHC programs in diverse settings. Letter grading.

M249L. Ethical Theory and Applications in Public Health. (4) (Same as Health Policy M285.) Lecture, four hours. Requisites: Health Policy 200A, 200B. Introduction to ethical theories and critical ethical issues pertaining to healthcare policy and healthcare management. Research, writing, and discussion on variety of topics related to health and human rights to enhance professionalism, leadership, and systems thinking and improve student sensitivity to needs of patients, coworkers, and fiduciary shareholders. How ethics are foundation of leadership. Letter grading.

M250. HIV/AIDS and Culture in Latin America. (4) (Same as Latino American Studies M250.) Seminar, three hours. Exploration of cultural, political, and public health context for people living with and at risk for HIV/AIDS and their families in Latin America. Public health aspects, including epidemiology, comorbidity concerns and community interventions, medical anthropological study of experience of those impacted, and grassroots responses, as well as political/economic context addressing poverty and structural violence. Letter grading.

M251. Nutritional Epidemiology I. (4) (Same as Epidemiology M254.) Lecture, two hours; discussion/lab, one hour. Preparation: introductory biostatistics and epidemiology courses. Review of all aspects of contemporary nutrition sciences that require application of epidemiologic principles and methods, ranging from food-borne outbreak investigation to large epidemiologic studies. Development of assessment of health claims for foods. Experience in actual world of collecting, analyzing, and interpreting data related to nutrition and health or disease outcomes. S/U or letter grading.


M256. Interdisciplinary Response to Infectious Disease Emergencies: Public Health Perspective. (4) (Same as Medicine M256, Nursing M298, and Oral Biology M256.) Lecture, three hours; discussion, one hour. Designed to introduce students to the wide array of common emergency public health problems and coordinated response, with specific attention to bioterrorism. Examination of tools to help students prevent, detect, and intervene in infectious disease emergencies. Interdisciplinary sessions also attended by students in Schools of Dentistry, Medicine, and Nursing during weeks two through five. Letter grading.

257. Program Planning in Community Disaster Preparedness. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 211A, 211B, 295. Health education and emergency management principles combined to design, implement, and evaluate community disaster preparedness programs, including needs assessment, identification of target population, objective writing, program planning, and process, outcome, and impact evaluation. Letter grading.

258. Cooperative Interagency Management in Disasters. (4) Lecture, four hours. Recommended requisite: course 295. Designed for graduate students. Brief overview of how involved in disaster responses work together to handle impact of mass population emergencies. Identification of role of local, state, and federal governments, nonprofit and private sector organizations, and health care facilities in disaster situations. Students meet with representatives of different agencies involved in disaster responses and visit one of area’s state-of-art emergency management facilities for hands-on experience.

M259. Smoking, Drinking, Shooting, and Driving: Understanding Public Health Policy in U.S. (4) (Same as Health Policy and Management M259.) Lecture, two hours; discussion, two hours. Recommended requisite: Community Health Sciences 256. Overview of essential theories regarding development, implementation, and impact of public health policies in the context of work on smoking, drinking, and driving. Students develop skills in public health policy research (laws, regulations, statutes, ordinances) and engage in critically analyzing evidence for different approaches currently used to address some of main causes of death and disability in U.S. including tobacco, alcohol, firearms, food and nutrition, and motor vehicle safety. Readings, cases studies, exploration of public use data, group discussion, and independent individual research. Students engage in discussion and debate regarding contemporary challenges and emerging trends. S/U or letter grading.


M263. Social Demography of Los Angeles. (4) (Same as Sociology M263.) Lecture, three hours. Recommended for graduate students. Use of city of Los Angeles to examine major social and demographic factors that characterize city in U.S. Examination of role of these factors in affecting health outcomes. Letter grading.

M264. Latin America: Traditional Medicine, Shamanism, and Folk Illness. (4) (Same as Anthropology M230Q and Latin American Studies M264.) Lecture, three hours. Recommended preparation: course 132. Bilingual English/Spanish skills. Examination of role of traditional medicine and shamanism in Latin America and exploration of how indigenous and mestizo peoples diagnose and treat folk illness and Western-defined diseases with variety of health-seeking methods. Examination of art, music, and ritual and case examples of religion and healing practices via literature, film, and audiovisual materials. Letter grading.

270A-270B. Foundations of Community Health Sciences. (4-4) Lecture, four hours. Enforced requisite: course 210. Course 270A is enforced requisite to 270B. Limited to departmental doctoral students. In-
depth analysis of theories, methods, and research on which community health sciences are based. Letter grading.

271. Health-Related Behavior Change. (4) Lecture, four hours. Understanding a public health science approach to natural determinants of change, as foundation for planned change in health-related behavior at community, group, and individual levels. Letter grading.

M272. Social Epidemiology. (4) Same as Epidemiology M272.) Lecture, two hours; discussion, one hour. Requisite: Epidemiology 100 or Public Health 200A and 200B. Relationship between sociological, cultural, and psychological factors in etiology, occurrence, and distribution of morbidity and mortality. Emphasis on lifestyles and other socioenvironmental factors associated with general susceptibility to disease and susceptibility to specific diseases.


277. Advanced Community Health Education. (4) Lecture, two hours; discussion, two hours. Requisite: course 210. Before planning educational components of health program, one must assess behaviors and factors in the problem. Concepts, theoretical, and evaluative skills developed and applied in constructing community-based educational program. Letter grading.

M278. Work and Health. (4) Same as Environmental Health Sciences M278.) Lecture, three hours; practicum, one hour. Recommended preparation: graduate-level methods/statistics course, basic epidemiology. Designed for graduate students. Exploration of impact of work and psychological and physical health in context of newly emerging discipline. Focus on psychosocial models, measurement (including hands-on experience), contextual factors (gender, ethnicity, social class), and how work stressors can be ameliorated. S/U or letter grading.

281A. Capstone Seminar: Health Promotion and Education. (4) Seminar, 90 minutes; discussion, 90 minutes. Enforced requisites: course 210. Overview of health promotion and education (e.g., nutrition, family health, AIDS/HIV, minority health); learning from presentations and critical discussions of research papers completed under faculty supervision. Letter grading.

281B. Capstone Seminar: Health Promotion and Education. (2) Seminar, one hour; discussion, one hour. Current problems and findings in health promotion and education (e.g., nutrition, family health, AIDS/HIV, minority health); learning from presentations and critical discussions of master’s project reports completed under faculty supervision. Letter grading.

282. Social Marketing for Health Promotion and Communication. (4) Lecture, three hours; fieldwork, one hour. Requisite: course 210. Planning, creating, implementation, and evaluation of comprehensive health communication campaigns, including use of social media and strategies of audience research, marketing psychology, creative message development, branding, comprehensive media use for dissemination, transmedia. Competencies: conducting focus group interviews, creating and evaluating effective health campaigns, critical assessment of existing campaigns. Letter grading.

283. Evidence-Based Health Promotion Programs for Older Adults. (4) Seminar, three hours; discussion, two hours; fieldwork, one hour. Requisite: course 210. Planning, creating, implementation, and evaluation of comprehensive health communication campaigns, including use of social media and strategies of audience research, marketing psychology, creative message development, branding, comprehensive media use for dissemination, transmedia. Competencies: conducting focus group interviews, creating and evaluating effective health campaigns, critical assessment of existing campaigns. Letter grading.

284. Sociocultural Aspects of Mental Health. (4) Seminar, three hours. Enforced requisites: course 210. Designed for graduate students. Examination of how society shapes mental health of its members and lives of those who have been identified as mentally ill. Group differences (e.g., gender, ethnicity) in disorder and how it is socially constructed. Letter grading.

285. Doctoral Roundtable in Community Health Sciences. (4) Seminar, two hours. Designed for departmental doctoral students who must enroll every term until they are advanced to candidacy. Interaction of seminar with focus on research process and social mechanisms in science. May be repeated for credit. S/U grading.

M287. Politics of Health Policy. (4) (Same as Health Policy M287, and Political Policy M286.) Lecture, three hours; discussion, one hour. Examination of politics of health policy process through analysis of case studies such as environmental protection law, Affordable Care Act and patient-responsive, preventive health services for women, and racial and income inequality and health. Examination of framework for assessing evidence-based policy making and effects of political structure and political partitions, including efforts such as to repeal and dismantle Affordable Care Act. Letter grading.

288. Health Communication in Popular Media. (4) Lecture, three hours; discussion, one hour. Requisites: course 210 or prior social sciences courses. Media utilization, media effects, media content, media advocacy, media literacy, health journalism, video and audio storytelling techniques, new media, entertainment education. Competencies: media content analysis, writing popular nonfiction (blogs, journalism), creating and evaluating effective communications using popular media. Letter grading.

290. Race, Class, Culture, and Aging. (4) Lecture, three hours; discussion, one hour. Experience of aging for African American, Latino, and Asian elderly examined in context of their families, communities, and nation. Exploration of cultural and structural influences on health and lived experiences of those elders. Letter grading.

291. Health Policy and Aging. (4, Lecture, three hours; discussion, one hour. Examination of political, economic, and sociocultural drivers of health policy for aged, identifying failings in those policies within framework of broader health policy problems. Letter grading.

292. Information Technology for Health Promotion and Communication. (4) Lecture; three hours; field practice, one hour. Requisites: course 210 or prior social sciences courses. Health literacy, Internet use and health communication, design of health communication materials using digital media that integrates practice and theory and includes websites, print materials, short videos, curricula, and training materials. Laboratory sessions for materials production. Competencies: creating and evaluating effective communications to diverse audiences using new media information technology applied to website, social media, print media, video, and audio platforms. Letter grading.

293. Social and Behavioral Research in AIDS: Roundtable Discussion. (2 to 4) Discussion; two hours; individual consultation, two hours. Review and discussion of research programs directed toward identification of psychosocial, biobehavioral, environmental, and community factors related to prevention and control of AIDS/HIV. Letter grading.

M294. Social and Behavioral Factors of HIV/AIDS: Global Perspective. (4) (Same as Psychiatry M288.) Lecture; three hours; fieldwork, one hour. Requisite: Epidemiology 100, or prior social sciences courses. Overview of social and behavioral factors that influence both transmission and prevention of HIV/AIDS throughout the world. Letter grading.


296. Advanced Research Topics in Community Health Sciences. (2 to 4) Lecture and discussion; two to four hours. Advanced study and analysis of current topics in community health sciences. Discussion of current research and literature in research specialty of faculty member teaching course. May be repeated for credit. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeships under active guidance and supervision of a faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

400. Field Studies in Public Health. (4) Fieldwork, to be arranged. Field observation in selected community organizations for health promotion or medical care. Students must file placement and program training documentation on form available from Student Affairs Office and must adhere toward MS minimum course requirement; 4 units may be applied toward 60-unit minimum total required for MPH degree. Letter grading.

M411. Issues in Cancer Prevention and Control. (4) (Same as Health Policy M411.) Lecture, four hours. Designed for juniors/seniors and graduate students. Introduction to causes and characteristics of cancer epidemic, cancer control goals for nation, and interventions designed to encourage smoking cessation/prevention, cancer screening, and other dietary, psychosocial, and lifestyle changes. Letter grading.

M420. Children with Special Healthcare Needs: Systems Perspective. (4) (Same as Health Policy M420 and Health Policy M428.) Lecture, two hours; fieldwork, one hour. Examination and evaluation of principles, policies, programs, and practices that have evolved to identify, assess, and meet special needs of infants, children, and adolescents with developmental disabilities or chronic illness and their families. Letter grading.

427. Reproductive Health in Sub-Saharan Africa. (4) Lecture, four hours. Requisites: course 210. Focus on reproductive health challenges facing sub-Saharan Africa and main programs designed to address them. Topics include family planning, STIs, child and adolescent HIV/AIDS, and refugees. Letter grading.

M428. Child and Family Health Program Community Leadership Seminar. (4) (Same as Health Policy M428.) Seminar, two hours. Designed for graduate students and supervision of regular faculty. Examination of community-based organizations (CBOs) and role of leadership in decision-making process involved in major issues facing maternal and child health in Los Angeles County. Focus on specific leadership competencies that are or should be employed by organizations effective in shaping maternal and child health programs and policies (or any population-level policies and programs). Leaders from CBOs and communities will meet with current students, comment on their practicum experiences, and underscore community leadership concepts demonstrated by those CBOs. S/U or letter grading.

M430. Building Advocacy Skills: Reproductive Health Focus. (4) (Same as Health Policy M430.) Seminar, three hours. Recommended requisite: one prior health policy course such as Community Health Sciences 247 or Health Policy 235. Designed for School of Public Health graduate and doctoral students. Skills-building course to develop competency in assessing, developing, and implementing advocacy strategies for reproductive health initiatives. Introduction to legislative and community advocacy initiatives and to policy making process, including policy analysis and development of resources necessary for legislative efforts. Identification of goals and objectives, development of advocacy plan, coalition building, organizational capacity building, media relations, and message development for various audiences. Students learn about range of former and current reproductive health advocacy campaigns. Letter grading.

ology of male and female reproductive health tracts, methods of birth control, medical and surgical abortion, infertility, maternal care, and sexual violence and trauma. S/U or pass/fail grading.


449. Nutrition and Chronic Disease. (4) Lecture, four hours. Requisites: course 130 or one introductory nutrition or biology course. Advanced-level seminar on nutrition and chronic disease. Exploration of role of nutrition in disease prevention, nutritional and metabolic responses to disease, and role of nutritional therapy in management of disease. Letter grading.

451. Post-Disaster Community Health. (4) Lecture, four hours. Examination of public health research and practices can be combined to address post-disaster community health needs. Identification of disaster questions, problems, data collection strategies, and service delivery approaches in post-disaster environment. Letter grading.

452. Management of Food and Nutrition in Major Emergencies. (4) Lecture, three hours. Designed to second-year master’s or doctoral students interested in humanitarian relief. Basic principles required to design rational and cost-effective food and nutrition emergency relief approaches and programs. Letter grading.

CM470. Improving Worker Health: Social Movements, Policy Debates, and Public Health. (4) (Same as Environmental Health Science M471 and Urban Planning M470.) Lecture, two hours; fieldwork, two hours. Examination of intersection between work, health, and environment, analysis of social causes of health disparities, investigation of historical trends and social movements, interpretation of current policy debates, and development of innovative interventions. Concurrently scheduled with course CM170. S/U or letter grading.

477. Health Disparities, Health Equity, and Sexual Minorities. (4) Lecture, two hours; discussion, one hour. Limited to graduate students. Examination of health disparities affecting sexual minority populations, category that includes lesbians, gay men, bisexuals, and transgender (LGBT) persons. Use of Healthy People 2010 Companion Document for LGBT Health to outline key health issues and national recommendations for achieving reductions in each area. Discussion of considerations for providing clinical care and public health practice in this population, unique social and contextual factors influencing LGBT health, and methodological issues for conducting research among LGBT persons. S/U or letter grading.

482. Practicum: Community Health Sciences. (4) Discussion, two hours; fieldwork, up to 20 hours. Requisites: courses 210, 211A, 211B. Understanding of professional practice in health-related organizations. Letter grading.

484. Risk Communications. (4) Lecture, three hours; fieldwork, one hour. Requisites: courses 210, 211A, and 211B, or prior public health and behavioral sciences courses. Risk communication theory, research, and practice, including social and psychological bases of population risk perceptions, media theories, and how risk is portrayed in media. Environmental, product safety, food-borne and infectious diseases, disasters, and bioterrorism communication. Competencies: understanding everyday and emergency risk communication principles, creating valid risk communication messages and materials, working productively with new media. Letter grading.

485. Resource Development for Community Health Programs. (4) Lecture, three hours; fieldwork, one hour. Enforced requisites: courses 211A, 211B, Public Health 200A, or permission of instructor. Design for graduate students. Overview course of fund and resource development for public health and community-based programs. Lectures and workshops include developing grant proposals, researching funding sources, evaluating proposals, developing volunteer and in-kind resources, and implementing capital campaigns. Letter grading.


501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate advisor and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. No more than 8 units may be applied toward master’s degree minimum total course requirement; may not be applied toward minimum graduate course requirement. S/U grading.

506. Directed Individual Study or Research. (2 to 12) Tutorial, to be arranged. Limited to graduate students. Individual guided studies under direct faculty supervision. Only 4 units may be applied toward MPH and MS minimum total course requirement. May be repeated for credit. S/U or letter grading.

507. Preparation for Master’s Comprehensive or Doctoral Qualifying Examinations. (2 to 12) Tutorial, to be arranged. Limited to graduate students. May not be applied toward any degree course requirements. May be repeated for credit. S/U grading.

508. Master’s Thesis Research. (2 to 8) Tutorial, to be arranged. Only 4 units may be applied toward MPH and MS minimum total course requirement; may not be applied toward minimum graduate course requirement. May be repeated for credit. S/U grading.

509. Doctoral Dissertation Research. (2 to 12) Tutorial, to be arranged. May not be applied toward any degree course requirements. May be repeated for credit. S/U grading.

COMPARATIVE LITERATURE

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Comparative Literature
310-825-7650
Department e-mail
Michael Rothberg, PhD, Chair
Nouri Gana, PhD, Director, Undergraduate Studies
Tamara J.M. Levitz, PhD, Director, Graduate Studies

Faculty Roster

Professors
Ali Behdad, PhD (John Charles Hillis Professor of Literature)
Massimo Ciavolella, PhD (Franklin D. Murphy Professor of Italian Renaissance Studies)
Nouri Gana, PhD
Eleanor K. Kaufman, PhD
Kathleen L. Kornar, PhD
Efrain Kristal, PhD
Tamara J.M. Levitz, PhD
David W. MacFadyen, PhD
Sareh Malikdoust, PhD
Kirstie M. McClure, PhD
Aamir R. Mufti, PhD
Anjali Prabhu, PhD (Edward W. Said Professor of Comparative Literature)
understanding of literary, visual, and cultural forms, themes, and movements. Given its focus on interdisciplinary research and pedagogy, comparative literature is the ideal site around which to explore and expand the boundaries of national cultures, modern languages, and literary studies.

**Undergraduate Major**

**Comparative Literature BA**

**Learning Outcomes**

The Comparative Literature major has the following learning outcomes:

- Ability to analyze literary texts
- Ability to situate literary texts in their aesthetic, historical, and cultural contexts
- Knowledge of different methods of analyzing literature
- Understanding of the importance of reading texts in their cultural context
- Ability to read literary texts in two languages
- Ability to write clearly-written, structured analytic essays

**Entry to the Major**

**Transfer Students**

Transfer applicants to the Comparative Literature major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one English composition course, two literature survey courses, at least one of which must be world literature, and the equivalent of at least one year of foreign language.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

**Requirements**

**Preparation for the Major**

Required: (1) Two courses from the Comparative Literature 1, 2, or 4 series (with approval of the director of undergraduate studies, a comparable and appropriate lower-division course in another department may be substituted for one of the courses), (2) completion of the College Writing requirement, and (3) literary proficiency in at least one language other than English, to be demonstrated by admission into one upper-division literature course in the original language.

**The Major**

Required: Ten courses, of which (1) five must be from comparative literature offerings, including Comparative Literature 100 and at least four additional comparative literature courses selected from M101 through 197, (2) two upper-division literature courses using original language texts in the primary language area, and (3) two upper-division literature courses using original language texts in the secondary language area (students may petition the student services adviser to take two upper-division literature courses in translation if their primary literature area is in a language other than English).

**Honors Program**

The departmental honors program is open to Comparative Literature majors with a 3.5 departmental and a 3.25 overall grade-point average. Eligible interested students should contact the student services adviser to enter the program.

Departmental honors candidates must complete all requirements for the major and an honors research paper (in addition to regular course requirements) in two of the four required upper-division comparative literature courses. These two honors research papers must be completed during the quarter in which the student is enrolled in the course. Candidates must also complete a fourth course in the primary literature area and Comparative Literature 198 with a core faculty member in which they write an independent research paper of approximately 25 pages.

**Undergraduate Minor**

**Comparative Literature Minor**

The Comparative Literature minor offers students interested in literature and the humanities the opportunity to gain insight into the critical problems and theories addressed by comparative literature and to apply that knowledge in literature and comparative literature courses.

**Admission**

To enter the minor students must have fulfilled the College Writing requirement, have completed 40 units with an overall grade-point average of 2.0 or better, have taken at least one year or equivalent of a language other than English, and contact the student services adviser, 350B Kaplan Hall, 310-825-7650.

**The Minor**

**Required Courses (28 units minimum):** (1) Four upper-division comparative literature courses (one course from Comparative Literature 1A through 4DW may be substituted), (2) two upper-division courses in one literature (e.g., Arabic, Chinese, English, French, German, Korean, Russian, Spanish) in the original language, and (3) one upper-division course in a second language in the original language (one level-six foreign language course may be substituted).

**Policies**

If students complete two upper-division courses in a language other than English, they may petition to take one upper-division course taught in English translation to fulfill the third requirement. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.
Graduate Major

Comparative Literature

MA, CPhil, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Comparative Literature

Lower-Division Courses

1A. World Literature: Antiquity to Middle Ages. (5) Lecture, three hours; discussion, one hour. Enforced requisite: satisfaction of Entry-Level Writing requirement. Not open for credit to students with credit for course 2A or 4AW. Study of major texts in world literature, with emphasis on Western civilization. Texts include major works and authors such as Homer, Dante, Cervantes’ Don Quixote, Shakespeare’s King Lear, and Sor Juana’s Mexican poetry. P/NP or letter grading.

1B. World Literature: Middle Ages to 17th Century. (5) Lecture, three hours; discussion, one hour. Enforced requisite: satisfaction of Entry-Level Writing requirement. Not open for credit to students with credit for course 2B or 4BW. Study of world literature, with emphasis on Western civilization as it grapples with its past and with other civilizations. Examination of works such as Dante’s Divine Comedy, Cervantes’ Don Quixote, Shakespeare’s King Lear, and Sor Juana’s Mexican poetry. P/NP or letter grading.

1C. World Literature: Age of Enlightenment to 20th Century. (5) Lecture, three hours; discussion, one hour. Enforced requisite: satisfaction of Entry-Level Writing requirement. Not open for credit to students with credit for course 2CW or 4CW. Study of major texts in world literature, with emphasis on Western civilization. Texts may include works by authors such as Swift, Voltaire, Diderot, Rousseau, Goethe, Flaubert, Ibsen, Strindberg, Dostoevsky, Kafka, Joyce, Woolf, and Stevens. P/NP or letter grading.

1D. Great Books from World at Large. (5) Lecture, three hours; discussion, one hour. Enforced requisite: satisfaction of Entry-Level Writing requirement. Not open for credit to students with credit for course 2DW or 4DW. Study of major texts in world literature, with emphasis on Western civilization. Texts include works by authors such as Homer, Dante, Cervantes’ Don Quixote, Shakespeare, One Thousand and One Nights, Christine de Pizan, Popul Vuh, Moirolé, and Racine. Satisfies Writing II requirement. Letter grading.

4AW. Literature and Writing: Antiquity to Middle Ages. (5) Discussion, four hours. Enforced requisite: English Composition 3 or English as a Second Language 36. Not open for credit to students with credit for course 1A or 2AW. Study of selected texts from antiquity to Middle Ages, with emphasis on literary analysis and expository writing. Texts may include works by authors such as Homer, Dante, Cervantes’ Don Quixote, Shakespeare, one Thousand and One Nights, Christine de Pizan, Popul Vuh, Moirolé, and Racine. Satisfies Writing II requirement. Letter grading.

4DW. Literature and Writing: Great Books from World at Large. (5) Seminar, four hours. Enforced requisite: English Composition 3. Not open for credit to students with credit for course 1D or 2DW. Study and discussion of major literary texts usually overlooked in courses that focus only on canon of Western literature, with emphasis on literary analysis and expository writing. Texts may include works by authors such as Achebe, Can, Derrida, Emecheta, Kafka, Duras, Diderot, Flaubert, Kafka, Joyce, Beckett, L. Hughes, and Garcia Marquez. Satisfies Writing II requirement. Letter grading.

10. Virtual Realities: Introduction to Humanities. (5) Lecture, two hours; discussion, two hours. What exactly are humanities? Position of humanities as not science is becoming unclear as human communication, thought, and culture are increasingly tied to technology. Examination of various disciplines within humanities at UCLA to define their place in today’s society and contemplate their possible function in tomorrow’s world, and determine to whom humanities will and will not cater in future. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

10. Introduction to Literary and Critical Theory. (5) Lecture, four hours. Preparation: satisfaction of Entry-Level Writing and College Writing requirements. Requisites: two courses from Comparative Literature 1 or 2 series or English 10 series or Spanish 60 series, etc. Seminar-style introduction to discipline of comparative literature presented through series of texts illustrative of its formation and practice. Letter grading.


102. Classical Tradition. Epic. (4) Seminar, three hours. Designed for upper-division literature majors. Analysis of Iliad, Odyssey, Aeneid, Gerusalemme Liberata, and
103. People on Run: Migrants, Minorities, and Multiculturalism in Europe. (4) Seminar, three hours. Problem of migrants and refugees in ongoing crisis of European Union. Examination of contemporary crisis of Europe's internal multicultural mosaic. Of particular. Overview of history of European integration since World War II, as well as more focused examination of ways in which culture and migration have come to dominate discussions of future of what had primarily been conceived of as one economic union. Offered in summer only. P/NP or letter grading.

104. Art of Film Adaptation. (4) Seminar, three hours. Engagement with current debates and key theoretical texts on film adaptation. Exploration of art of film adaptation in broad sense, including transformation of short stories, plays, novels, historical accounts, biographies, paintings, musical compositions, or philosophical concepts into multilayered medium or cinema. Adaptations addressed include selection of films from range of cultural and linguistic traditions by directors such as Kiarostami, Varda, Kurosawa, Babelmeier, Fellini, Hitchcock, Antonioni, Kieslowski, and Taymor. Specific directors, films, and cinematic traditions vary each year. P/NP or letter grading.

105. Comic Vision. (4) Lecture, three hours. Designed as a literature major's capstone. Major works of animation, both dramatic and nondramatic, selected to demonstrate variety of comic expression. May be concurrently scheduled with course C205. Undergraduate students may read all works in translation. P/NP or letter grading.

106. Archetypal Heroes in Literature. (4) Seminar, three hours. Designed for juniors/seniors. Survey and analysis of function and appearance of archetypal heroes in classical and modern world literature. Analysis of narrative strategies that serve to create archetypal heroes, including recurring patterns in the hero's journey, the quest, and the trickster. Students learn to produce five- to eight-minute film on relevant topic in film laboratory. P/NP or letter grading.

107. Film on Brain. (4) Seminar, three hours; discussion/analysis of brain laboratory, one hour. Designed for juniors/seniors. Seminar and analysis of investigations between film analysis and neuroscience. Exploration of questions such as how do cues on screen prompt emotions in what are viewers' neurological responses to comedy; what are potential affective impacts of color; how do brains respond to screen violence. Investigation of emotional contagion that occurs when viewers connect film characters and certain viewers, including in narrative structures acknowledged to be fictitious. Analysis of filmic strategies and techniques employed by directors to elicit emotions and influence audiences. Students learn to produce five-to-eight-minute film on relevant topic in film laboratory. P/NP or letter grading.

108. Autobiography in Francophone and Anglophone Worlds. (5) Seminar, three hours. Designed for juniors/seniors. Focus on number of narratives that use autobiographical mode to situate self in relation to history of nations and biography of family members. Introduction to theories of subjectivity and to genre of self-writing in France, Africa, and Caribbean. Comparison of serial autobiographies of Assia Djebar, Annie Ernaux, and Jamaica Kincaid to better understand limits of genre, and to establish its presence in autobiography and can be read as biography, autoethnography, and auto/historiography. Examination of differences that emerge between autobiographical pact (a contract that is authored and read by reader and writer) and those of readers and liberties that others take with history. Attention to way visual culture (painting, photography, film) helps authors make their point, access memory, and create a postmodern narrative. P/NP or letter grading.

M110. One Thousand and One Nights/All Layla Wa-Layla. (4) (Same as Arabic M110.) Lecture, three hours. Knowledge of Arabic not required. Since its appearance in Europe in 1704, One Thousand and One Nights has been translated into more than thirty languages. Examination of cycle of tales more commonly known as Arabian Nights, including history of its translation, contemporary oral performances of tales in Arabic-speaking world, literary emergence of vernacular language in relation to classical Arabic, and Western appropriations of tales in music, film, and novels (Ravel, Rimsky-Korsakov, Barth, Poe, and Walt Disney). P/NP or letter grading.

111. Histories and Methodologies of Comparative Literature. (5) Seminar, three hours. Preparation: sat-isfaction of Entry-Level Writing and College writing requirements. Requisites: two courses from Comparative Literature or other literature 10 series or Spanish 60 series. Recommended: course 100. Exploration of history of comparative literature discipline and variety of central methodological past and present debates. Among more important of discussion and to several key theoretical texts from early 20th century to present, addressing these and other related questions: what does it mean to read comparatively? What is significance of comparing across national and linguistic borders? What are criteria for conducting such comparative readings? Is comparative reading more concerned with finding similarities or differences? P/NP or letter grading.


113. Opera in LA Live. (4) Seminar, three hours; field trips. Interpretation of operas currently being performed in Los Angeles from critical perspective of comparative literature. Content varies to match changing repertoire. Critical exploration and relation of every aspect of opera as literary and musical form. Analysis and interpretation of original literary source and libretto, music, singing, staging, drama-turgy, reception, and live performance. Two or more field trips to LA Opera, UCLA Opera, and/or Long Beach Opera to experience opera. P/NP or letter grading.

M119. Al-Andalus: Literature of Islamic Spain. (4) (Same as Arabic M155.) Lecture, three hours. Study of literature of Islamic Spain to learn about interaction of Arabic and Western and Arabic and Jewish cultures and to recognize Islamic culture as vital force in Euro-pean life and letters. P/NP or letter grading.

M120. Women and Literature in Southeastern Europe. (4) (Same as Central and East European Studies M112.) Lecture, three hours. Examination of changing roles of women in Balkan countries (Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Greece, Macedonia, Montenegro, Romania, Serbia, Slovenia, Turkey) in last forty-five years. Comprehension of changing roles of women's roles during countries' transition from agricultural to industrial economy and from communism to post-communism (in former communist countries). Sensitizes students to complexity of issues in region and helps them better understand multiplicity of causes of present situation. Interdisciplinary study, drawing on sociological, women's studies, articles, and short fiction by women writers for analysis. Discussion of topics covered in articles, positions taken by authors, and in which ways aspects of Southeast European realities are reflected in literature form. P/NP or letter grading.

C122. Renaissance Drama. (4) Lecture, three hours. Designed for upper-division literature majors. Study of dramatists and plays in the period of Renaissance, with consideration of historical and literary influences on plays. Readings include works of such dramatists as Tasso, Machiavelli, Lope de Vega, Racine, Shakespeare, and Moliere. May be concurrently scheduled with course C222. Undergraduate students read all works in translation. P/NP or letter grading.

M123. Oral Literature and Performance of Arab World. (4) (Same as Arabic M123.) Lecture, three hours. Knowledge of Arabic not required. Exploration of oral traditions in the Middle East. Examination of cycle of tales more commonly known as Arabian Nights, including history of its translation, contemporary oral performances of tales in Arabic-speaking world, literary emergence of vernacular language in relation to classical Arabic, and Western appropriations of tales in music, film, and novels (Ravel, Rimsky-Korsakov, Barth, Poe, and Walt Disney). P/NP or letter grading.
plastic and verbal arts in comparative study. May be repeated for credit with instructor and/or topic change. May be concurrently scheduled with course C286. Undergraduate students may read all works in translation. P/NP or letter grading.

C161. Fiction and History. (4) Seminar, three hours. Designed for upper-division literature majors. Analysis of use of historical events, situations, and characters in literary fiction and history. Focus on historical periods and approaches in medical humanities, giving pride of place to literary and cultural expressions in dialogues with other disciplines such as anthropology, history, linguistics, philosophy, psychology, or sociology. Consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit with topic change. P/NP or letter grading.

180BL. Variable Topics: Medical Humanities in Comparative Contexts and Community-Based Learning. (4) Seminar, three hours, fieldwork, three hours. Exploration of topics in medical humanities with community service component, giving pride of place to literary and cultural expressions with other disciplines such as art, philosophy, or sociology. Ways in which medical humanities can make contributions to Los Angeles community through service learning. Consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

184. Undergraduate Research Seminar: Comparative Literature. (4) Seminar, three hours. Preparation: enrollment in Entry-Level Writing course. Writing requirements. Designed for undergraduate students interested in learning more about research and/or writing honors thesis. Introduction to research in comparative literature, with focus on critical and theoretical methodologies and approaches to analyzing literary texts. Students complete final paper on topic of their own design. P/NP or letter grading.


199. Cultural Studies. (5) Seminar, three hours. Study of literary representation of Jews to modernity, its challenges, and threats. Readings in texts originally written in English or translated from Hebrew, Yiddish, German, Russian, French, and Italian. Analysis of formal aspects of each work. P/NP or letter grading.

M167. Modern Arabic Literature in English. (4) (Same as Arabic M151.) Lecture, three hours. Designed for upper-division literature majors. Study of modern European and American works that are concerned both in subject matter and expression with growing self-consciousness of human beings and their relationship with focus on works of Kafka, Rilke, Woolf, Sartre, and Stevens. May be concurrently scheduled with course C286. Undergraduate students may read all works in translation. P/NP or letter grading.

M175. Race, Gender, Class. (5) (Same as Asian American Studies M130B and Chicana, Latina, and Native American Literature M175.) Seminar, three hours. Theoretical and literary examination of three main aspects of social and cultural experience (race, gender, class) as separate but interconnected spheres of analysis, formal experimentation, and self-consciousness in narrative. May be concurrently scheduled with course C264. Undergraduate students may read all works in translation. P/NP or letter grading.

M276. Movement in Art, Philosophy, and Daily Life. (5) (Same as Middle Eastern Studies M179SL.) Seminar, three hours. Fieldwork course. Exploration of relation between humans and world. Only relevant output of brain, irrespective of what may or may not go on inside it, is control over movements. In living animals, movement is closely tied to intake of food; in invertebrates, movement is in response to chemical input and decision on course of action. Similarly, ownership and agency are inextricably associated with biological systems that control our movements. Movements play vital part in constructing psychosocial environment that permeates and surrounds us. Exploration of how animals and humans move, and how movement, as well as limitations of movement, contribute to personal and community identity. P/NP or letter grading.

180. Variable Topics: Medical Humanities in Comparative Contexts. (4) Seminar, three hours. Designed for undergraduate students interested in learning more about research and/or writing honors thesis. Introduction to research in comparative literature, with focus on critical and theoretical methodologies and approaches to analyzing literary texts. Students complete final paper on topic of their own design. P/NP or letter grading.

C171. Comparing across Cultures. (5) Seminar, three hours. What is it we do when we try to understand words, habits, gestures, and beliefs not our own? Do we understand something foreign to us by immersing ourselves in it, by standing outside of it, or by understanding something foreign imply taking universal standpoint? Can we make judgments about beliefs other than our own? Questions of cultural interpretation and cultural expressions with other disciplines such as art, philosophy, or sociology. Ways in which medical humanities can make contributions to Los Angeles community through service learning. Consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

180SL. Variable Topics: Medical Humanities in Comparative Contexts and Community-Based Learning. (4) Seminar, three hours, fieldwork, three hours. Exploration of topics in medical humanities with community service component, giving pride of place to literary and cultural expressions with other disciplines such as art, philosophy, or sociology. Ways in which medical humanities can make contributions to Los Angeles community through service learning. Consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

184. Undergraduate Research Seminar: Comparative Literature. (4) Seminar, three hours. Preparation: enrollment in Entry-Level Writing course. Writing requirements. Designed for undergraduate students interested in learning more about research and/or writing honors thesis. Introduction to research in comparative literature, with focus on critical and theoretical methodologies and approaches to analyzing literary texts. Students complete final paper on topic of their own design. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in question of biological systems that control our movements. Movements play vital part in constructing psychosocial environment that permeates and surrounds us. Exploration of how animals and humans move, and how movement, as well as limitations of movement, contribute to personal and community identity. P/NP or letter grading.

180. Variable Topics: Medical Humanities in Comparative Contexts. (4) Seminar, three hours. Designed for undergraduate students interested in learning more about research and/or writing honors thesis. Introduction to research in comparative literature, with focus on critical and theoretical methodologies and approaches to analyzing literary texts. Students complete final paper on topic of their own design. P/NP or letter grading.

184. Undergraduate Research Seminar: Comparative Literature. (4) Seminar, three hours. Preparation: enrollment in Entry-Level Writing course. Writing requirements. Designed for undergraduate students interested in learning more about research and/or writing honors thesis. Introduction to research in comparative literature, with focus on critical and theoretical methodologies and approaches to analyzing literary texts. Students complete final paper on topic of their own design. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in question of biological systems that control our movements. Movements play vital part in constructing psychosocial environment that permeates and surrounds us. Exploration of how animals and humans move, and how movement, as well as limitations of movement, contribute to personal and community identity. P/NP or letter grading.
May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

188HC. Honors Contracts. (1) Tutorial, three hours. Limited to College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, projects, or essays. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

190. Research Colloquia in Comparative Literature. (2) Seminar, three hours. Designed to bring together students undertaking supervised tutorial research in seminar setting with one or more faculty members to discuss their own work or related work in discipline. Led by one supervising faculty member. May be repeated for credit. P/NP or letter grading.

191. Variable Topics in Comparative Literature. (4) Seminar, three hours. Designed for juniors/seniors. Study and discussion of limited periods and specialized issues and approaches to literary theory, especially in relation to other modes of discourse such as history, philosophy, psychology, linguistics, anthropology, Development of cultivating project required. Consent of Schedule of Classes for topics to be offered in specific term. May be repeated for credit with topic change. P/NP or letter grading.

M191P. Careers in Humanities. (4) Same as English M191P. Challenges misgivings regarding humanities majors and their practical applications to life after graduation. Exploration of wide range of careers, with hands-on practice in crafting professional narrative. Guest lectures from UCLA professionals and alumni—all experts in career planning and local industry. Students engage with workplace leaders, and simultaneously build professional dossier for their own—preparing for life after UCLA with a humanities degree. P/NP or letter grading.

197. Individual Studies in Comparative Literature. (2 to 4) Tutorial, three hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

198. Honors Research in Comparative Literature. (2 to 4) Tutorial, three hours. Limited to senior comparative literature honors students. Development and completion of honors thesis or comprehensive project on comparative topic selected by student and written under supervision of core faculty member. Students expected to meet regularly with supervisor throughout term. May be repeated once for a maximum of 8 units. Individual contract required. Letter grading.

199. Directed Research or Senior Project in Comparative Literature. (2 to 4) Tutorial, three hours. Requires: course 100. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit with consent of chair. Individual contract required. P/NP or letter grading.

Grades

Coursework

200A. Theory of Comparative Literature. (6) Seminar, three hours. Study of theory of literature, with emphasis on genealogy of theoretical problems. S/U or letter grading.

200B. Methodology of Comparative Literature. (6) Seminar, three hours. Requisite: course 200A. Study of methodology of comparative literature, with emphasis on genealogy of theoretical problems. S/U or letter grading.

202. Classical Tradition: Epic, Tragedy, or Comedy. (4) Seminar, three hours. Preparation: reading knowledge of Greek, Latin, or Italian. Analysis of Greek and Roman works and their re-creations in Renaissance and modern periods. Emphasis on how poets build on work of their predecessors. Reading may range from Iliad or Odyssey to tragedies by Sophocles and Euripides or satires by Aristophanes. S/U or letter grading.

C205. Comic Vision. (4) Lecture, three hours. Preparation: reading knowledge of one appropriate foreign language. Literary masterpieces, both dramatic and non-dramatic, selected to demonstrate varieties of comic expression. May be concurrently scheduled with course 199. S/U or letter grading.

206. Archetypal Heroes in Literature. (4) Seminar, three hours. Preparation: reading knowledge of one appropriate foreign language. Survey and analysis of function and appearance of such archetypal heroes as Achilles, Ulysses, Prometheus, Cepidus, and Orpheus in literature from antiquity to modern period. S/U or letter grading.

210. Comparative Studies in Autobiography. (5) Seminar, three hours. Limited to graduate students. Introduction to theories of autobiography and subjection topics in greater depth through supplemental readings. Graduate students required to prepare papers based on texts read in original languages and to meet as group one additional hour each week. S/U or letter grading.

220. Topics in Medieval Studies. (4) Seminar, four hours. Preparation: knowledge of one appropriate foreign language. Examination of nature of cross-cultural, cross-linguistic, and cross-confessional exchange in known medieval worlds of Europe, Asia, and the Americas. May be concurrently scheduled with course C122. Graduate students required to prepare papers based on texts read in original languages and to meet as group one additional hour each week. S/U or letter grading.

222. Renaissance Drama. (4) Lecture, three hours. Preparation: reading knowledge of one appropriate foreign language. Broad introduction to subject matter of Renaissance drama, with consideration of historical and literary influences on plays. Readings include works of such dramatists as Tasso, Macha- velli, Lope de Vega, Racine, Jonson, Shakespeare. May be concurrently scheduled with course C122. Graduate students required to prepare papers based on texts read in original languages and to meet as group one additional hour each week. S/U or letter grading.

250A-250B. Seminar in Experimental Critical Theory. (4-4) Seminar, three hours. Advanced course in critical theory, drawing on wide range of approaches and methods, from anthropology, art history, literature, performance, philosophy, and political theory. Variable topics are set annually. Includes canonical thinkers (e.g., J. Butler, J. Derrida, M. Deleuze, G. Dumenil, F. Héritier, J. Latour, C. Lévi-Strassou), A. Foucault, M. Heidegger, and other influential theoretical and political figures. S/U or letter grading.

250A. Enforced requisite: course 200A. 250B. Enforced requisite: course 250A.

M251. Literatures and Cultures of Maghreb. (4) Same as Arabic M251. Seminar, three hours. Limited to graduate students. Examination of historical and literary influences on plays. Readings include works of such dramatists as Tasso, Macha- velli, Lope de Vega, Racine, Jonson, Shakespeare. May be concurrently scheduled with course C122. Graduate students required to prepare papers based on texts read in original languages and to meet as group one additional hour each week. S/U or letter grading.

M254. Modern European Novel. (5) Seminar, four hours. Preparation: reading knowledge of at least one appropriate foreign language. Study of modern European and American works that are connected or in dialogue with literature and culture of the modern period. Texts and individual assignments range from Renaissance historical narratives (Italian humanists, Machiavelli) to 19th- and 20th-century novels by authors such as Stendhal, Verlaine, Mallarmé, and contemporary writers such as Grass, Christa Wolf, and Enquist to focus on development of themes such as shifting authority, gender conflicts, change versus stability, formal experimentation, and self-consciousness in narrative. May be concur-
266. Writing and Photographic Image. (4) Seminar, three hours. Preparation: knowledge of one appropriate foreign language. Designed for graduate students. Investigation of intertextual relations between writing and photography in American and European contexts. Study rests on premise that photograph enters public domain framed by writing and discourse and that, in turn, some forms of writing are framed by photographic modes of representation. S/U or letter grading.

267. Comparative Arab Studies. (5) Seminar, three hours. Limited to graduate students. Investigation of ways in which Arab litterateurs, artists, and intellectuals have perseveringly sought to imagine and construct viable structures of cultural empowerment on pyre of political project of Arab nationalisation and in growing response to globalization and consolidation of Western powers in the Arab world. Particular attention to technical and experimental modes of expression through which Arab artists working in different genres have engaged with some perennial questions related to their mission, vocation, and commitment (iltizam) to fundamental concerns of Arab world, to responsible mimetic urgency, and to general uses/potencies of rhetoric and poetry in para-literary contexts of production. Asymmetries of power, temporalities, and actualities. S/U or letter grading.


272. Postmodern Novel. (4) Seminar, three hours. Preparation: reading knowledge of one appropriate foreign language. Study of postmodern novel as it developed out of modernism. Postmodernism defined in three different ways: philosophically—scientifically, scientifically, and economically. Emphasis on relationship of recent novels to theories of structuralism and poststructuralism. Readings include authors such as Borges, Hawkes, Nabokov, Pynchon, Fuentes, Grass, Böll, and Calvino. Concurrently scheduled with course C170. S/U or letter grading.

277. Caribbean Literature from Negritud to Diaspora. (4) Seminar, three hours. Historical approach to modern Anglicophone and Francophone Caribbean literature, retracing search for cultural identity, beginning with negritude movement’s claim to Africa as expressed in Aimé Césaire’s classic poem Cahier d’un retour au pays natal and ending with consideration of dispersion of identities in work of writers and intellectuals who have developed theories of postcolonic Caribbean culture. S/U or letter grading.

278. India Ink: Literature and Culture of Modern South Asia. (5) Seminar, three hours. Survey of significant issues in modern Indian literature and culture. Great works of modern Indian culture such as Rabindranath Tagore, Satyajit Ray, Faiz Ahmed Faiz, and U.R. Ananthan Murthy, including novels, short stories, and more contemporary works on cultural criticism and historical scholarship. Central and defining issues of 20th-century Indian culture is experience of British colonial rule and massive cultural and material changes that accompanied it. Exploration of manner in which literature and culture have developed in interaction with powerful social forces, such as struggle for national independence from British rule and the role it had in shaping and consolidating development of postcolonial nation-state. S/U or letter grading.

279. Subaltern Studies: Colonial Histories and Cultural Critique. (5) Seminar, three hours. Examination of ways in which literary and cultural criticism and problems in historiography of colonial and postcolonial societies. Use of key texts by members of Subaltern Studies collective of Indian historians to explore some of the central issues arising from this relationship. What kind of interdisciplinary space is produced by an encounter of history and literary and cultural theories? Attention to literary texts to practice such interdisciplinary criticism. Nature of modernity in colonial setting. What is nature of bourgeois life in colonial society? What kind of modernization does it seek? What is the relationship of modern metropolitan bourgeoisie to indigenous ones? S/U or letter grading.

280. Latin American Literature in Comparative Contexts. (4) Seminar, three hours. Preparation: reading knowledge of one foreign language. In-depth study of one topic within Latin American literature in comparative context. May be repeated for credit. S/U or letter grading.

281. Studies in Contemporary Spanish-American Literature. (4) (Same as Spanish M280B) Seminar, three hours. Preparation: reading knowledge of one foreign language. In-depth study of topic of Latin American literature in comparative context. May be repeated for credit. S/U or letter grading.

284. Theories of Translation. (4) Seminar, three hours. Examination of number of landmark theories of translation and its significance for literary studies. Readings include authors such as Matthew Arnold, Walter Benjamin, Gayatri Spivak, and Erich Auerbach. Concurrently scheduled with course C178. S/U or letter grading.

286. Workshop: Social Sciences Translation. (4) Seminar, three hours. Presentation of student work for discussion. Preparation: reading knowledge of one appropriate foreign language. Study of literary translation heuristically, that is, on principles of literary translation as such, that is, on basis of texts participating students translate, and presentation of student work for discussion. Opportunity for students to develop their independence and expertise in translation and to its significance for literary studies. Readings include authors such as Walter Benjamin, and Friedrich Engels. Examination of number of landmark theories of empire and consideration of whether or not they may be said to constitute coherent tradition or line of progressive development. Connection of resistance to imperial rule and role it plays in these theoretical accounts. S/U or letter grading.

291. Problems in Theory of Literature. (4) Seminar, three hours. Preparation: reading knowledge of French or German. Concurrently scheduled with course C290. Study of specific topics in theory of literature for advanced students in criticism and literary theory. May be repeated for credit. S/U or letter grading.

292. Theories of Empire. (4) Seminar, three hours. History of theorizations of modern imperialism and colonialism since relevancy in Werner Heisenberg and Friedrich Engels. Examination of number of landmark theories of empire and consideration of whether or not they may be said to constitute coherent tradition or line of progressive development. Connection of resistance to imperial rule and role it plays in these theoretical accounts. S/U or letter grading.

299. Aesthetics and Literature. (4) Seminar, three hours. Preparation: reading knowledge of one appropriate foreign language. Study of literary theory through exploration of approaches to literature by philosophers grounded on analytic tradition. Careful attention to concepts of truth, meaning, expression, representation, metaphor, fiction, and literature. Letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U or letter grading.

495. Preparation for Teaching Literature and Composition. (4) (Same as English M495) Seminar, three hours. Preparation: reading knowledge of one appropriate foreign language. Study of literary theory through exploration of approaches to literature by philosophers grounded on analytic tradition. Careful attention to concepts of truth, meaning, expression, representation, metaphor, fiction, and literature. Letter grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate advisor and graduate dean, and host campus instructor.
Computational and Systems Biology

Interdepartmental Program
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Aaron S. Meyer, PhD (Bioengineering)
Matteo Pellegrini, PhD (Human Genetics; Molecular, Cell, and Developmental Biology)
Van M. Savage, PhD (Computational Medicine, Ecology and Evolutionary Biology)
Roy Wollman, PhD (Chemistry and Biochemistry, Integrative Biology and Physiology)
Xinshu Grace Xiao, PhD (Integrative Biology and Physiology)
Xia Yang, PhD (Integrative Biology and Physiology)

Overview

The major in Computational and Systems Biology is designed primarily for highly motivated undergraduate students interested in interdisciplinary studies in life sciences, behavioral sciences, and engineering and computer sciences. Preparation for the major consists of a broad foundation in basic sciences—chemistry, biology, physics, and mathematics, plus an introduction to computing. The major itself provides students with foundations in mathematical modeling, information processing, and control and system analysis, with an emphasis on quantitative ideas and methodologies. Mathematical and other analytical skills are essential in the major.

Computational and Systems Biology majors have several options for in-depth studies: a coherent integration of courses selected from one of three tracks in bioinformatics, biological data sciences, or dynamical modeling. The major is appropriate preparation for employment or for graduate studies in any of these areas, with emphasis on interdisciplinary activities. It is also appropriate preparation for professional school studies in dentistry, engineering, management, medicine, and public health.

Undergraduate Major

Computational and Systems Biology BS

Computational and Systems Biology majors select a coherent integration of courses from one of three designated tracks: bioinformatics, biological data sciences, or dynamical modeling. The synergy for all tracks is integrative systems, information, and computational systems modeling sciences in biology. The focus is primarily quantitative, as mastery of advanced quantitative skills is essential for multidisciplinary understanding. Each track emphasizes different systems or modalities, and modeling or other computational approaches. Students choose one of the three tracks when they declare the major. Well-justified customized tracks may also be approved by the faculty.

Bioinformatics Track

The bioinformatics track is designed for students interested in computational discovery and management of biological data, primarily genomic, proteomic, or metabolomic data. Bioinformatics emphasizes computational, statistical, and other mathematical approaches for mining, modeling, and analyzing high-throughput biological data and the inherent structure of biological information. Example research problems include finding statistical patterns that reveal genomic or evolutionary or developmental information, studying how regulatory sequences give rise to programs of gene expression, or re-searching how the genome encodes the capabilities of the human mind.

Biological Data Sciences Track

The biological data sciences track addresses a diverse set of biological questions—ranging from medicine, to genomics, physiology, pharmacology, neuroscience, ecology, and evolution—using recent tools and advances in mathematics and computation—specifically machine learning, statistical data sciences, and informatics. Biological data sciences leverages new and developing courses within computational and systems biology and across UCLA, and greatly aids students who aim to go directly into industry—biotech, pharmaceuticals, and more—as well as computational biology graduate school. The track has a strong focus and deep integration with life sciences.

Dynamical Modeling Track

The dynamical modeling track seeks to provide students a strong foundation in the use of mathematical and computational models for analyzing biological systems. The modeling approaches are based on a varied set of approaches such as partial differential equations, stochastic equations, dynamical systems theory, stability theory and linear algebra, network theory, cellular automata, and numerical methods. Dynamical models are the heart of evolution that underpin all of biology and can be applied to disease spread, tumor growth and treatment, wound healing, cell migration, blood flow, ecology, climate change biology, population genetics, evolutionary theory, game theory, and scaling theory. Models are tailored based on the biological and physical details of the system and can often be simplified or used to build intuition based on the associated timescales and spatial dimensions—from cellular signaling and transcriptional regulation to communication between organs through hormones to consumer-resource interactions among species. The track allows students to develop quantitative approaches to interpret complex biological systems and is a gateway towards careers in biotechnology and academia.

Capstone Major

The Computational and Systems Biology major is a designated capstone major. The capstone experience is a senior-level sequence of two courses integrating the discipline via mathematical modeling, simulation, and active research and report writing. Students are expected to demonstrate critical thinking skills and familiarity with research techniques needed to successfully pursue a project in computational and systems biology, conceive and execute a project on which they engage current methods and theory, communicate original scholarly findings to peers both in oral and written form, and work productively with others as part of a team. The experience culminates with completion of the senior thesis requirement.

Learning Outcomes

The Computational and Systems Biology major has the following learning outcomes:

- Demonstrated familiarity with research techniques needed to successfully pursue a research project
- Demonstrated critical thinking skills in mathematics, computation, and quantitative thinking
- Demonstrated critical thinking skills in life science disciplines and biological applications
- Conception and execution of a research project that engages current methods and theory
- Oral and written communication of original scholarly findings to peers
- Productive participation with others as part of a research team
Entry to the Major

Pre-major
Students entering UCLA directly from high school or first-term transfer students who declare the Computational and Systems Biology pre-major at the time of application are automatically admitted. Current students who were admitted as first-year or transfer students (transfer students must have been admitted under the division of life sciences) may request to declare the pre-major once they have met the following criteria: (1) completed one quarter at UCLA, (2) are in good academic standing, (3) have a minimum cumulative grade-point average (GPA) of 2.0, and (4) have established a pre-major GPA of a minimum of 2.7 by taking at least one pre-major course at UCLA for a letter grade. Requests to declare the pre-major should be sent by e-mail to the program. For more information, see the program website.

All courses taken for the pre-major must be completed with a grade of C or better. Pre-major course Computer Science 32 is required for students following the Biological Data Sciences track, but does not have to be completed prior to applying to the major. Pre-major courses Program in Computing 10B and 10C, or Computer Sciences 32, are required for students following the Bioinformatics track, but do not have to be completed prior to applying to the major. All students are identified as pre-majors until they satisfy the preparation for the major requirements by achieving (1) a minimum 2.7 GPA in all pre-major courses, and (2) a minimum grade of C in all pre-major courses.

Transfer Students
Transfer applicants to the Computational and Systems Biology major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA; one year of general chemistry with laboratory for majors, two years of calculus for majors, one year of calculus-based physics, one year of biology with laboratory for majors, and one programming course using C++, Python, or a similar language.

Transfer applicants must meet the same academic requirements as current UCLA students, based on all courses transferred from another institution that satisfy pre-major requirements, and must have completed one 12-unit term of residence in regular session at UCLA.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major
Required: A minimum of 66 to 82 units (depending on the calculus series, computer programming courses, and additional requisites for specific concentrations), including Chemistry and Biochemistry 14A, 14B, and 14BL, or 20A, 20B, and 20L; Computer Science 31 or Program in Computing 10A; Life Sciences 7A, 7B, 7C; Life Sciences 30A, 30B, 40, and Computational and Systems Biology M32 or Mathematics M32T, or Mathematics 31A or 31AL, 31B, and Statistics 10; Mathematics 33A, 33B; Physics 1A, 1B, and 1C, or 1AH, 1BH, and 1CH, or Physics 5A, 5B, and 5C.

Students following the bioinformatics track must also complete Computer Science 32 or Program in Computing 10B and 10C.

Students following the biological data sciences track must also complete Computer Science 32. Additional lower-division courses may be requisite to desired track courses.

The Major
The major consists of a methodology core of seven courses (27 units) and a track of five upper-division courses (20 units minimum).

Methodology Core
Required: (1) Computational and Systems Biology M150, M184, 185, (2) one probability course from: Electrical and Computer Engineering 131A, Mathematics 170E, or Statistics 100A, (3) one statistics course from: Biostatistics 100A or Statistics 100B, and (4) two core courses from the following options: Computational and Systems Biology M187 and 195, or M187 and 199, or 198A and 198B.

Tracks
Required: A minimum of five courses (20 units minimum) from the tracks listed below. No 199 course may be applied toward any track.

Bioinformatics (at least 20 units): One course selected from Computer Science CM121, CM122, or CM124; two courses selected from Computer Science CM121, CM122, CM124, Ecology and Evolutionary Biology C135, Molecular, Cell, and Developmental Biology CM156, 187AL, Physiological Sciences 125, or Statistics M254; two life science courses selected from the list below.

Note: Computer Science 32 or Program in Computing 10B and 10C, and Computational and Systems Biology M32 (same as Life Sciences M32 or Mathematics M32T) or Mathematics 32A are completed in the pre-major.

Biological Data Sciences (at least 20 units): Three courses selected from Computer Science CM124 (or M226), M146 (or Mathematics 156 or Statistics C161), 161, 168, 180 (or Mathematics 182), Electrical and Computer Engineering C143A, C147, Mathematics 155, 164, Statistics 101A, or 101C; two life science courses selected from the list below. A maximum of two courses may be from mathematics.

Note: Computer Science 32 is completed in the pre-major.

Dynamical Modeling (at least 20 units): Three courses selected from Computational and Systems Biology M186 (or Computer Science M182), Electrical and Computer Engineering 102, 113, Ecology and Evolutionary Biology C119A, C119B, Mathematics 134 (or 135), 136, 142, 146, 166, or 171; two life science courses selected from the list below. A maximum of two courses may be from mathematics.

Life Science Courses for all three tracks: any two courses selected from the subareas below. Courses may be chosen from different subareas.

Biochemistry: Chemistry 153A, 153B.
Epidemiology: Epidemiology 100, Microbiology, Immunology, and Molecular Genetics 101, 102, 168, C185A.

Genetics and Molecular Biology: Life Sciences 107, Molecular, Cell, and Developmental Biology 138, M140, 144, 165A (or 100).

Neurosystems: Neuroscience M101A (or Psychology 115), M101B, 102, 205, 260, Physiological Sciences C144, Physics C186, Psychology 119M.

Physiology: Bioengineering C102, Biomechanics 206, Ecology and Evolutionary Biology 170 (or Physiological Sciences 166), Physiological Sciences 149.

Honors Program
Students with a grade-point average of 3.5 or better in required major courses and a 3.0 cumulative GPA may apply for admission to the honors program. Honors or highest honors may be granted at the discretion of the faculty sponsor and the faculty committee to students demonstrating exceptional ability on the senior research thesis.

Policies

Preparation for the Major
All courses taken for the Preparation for the Major must be completed with a grade of C or better. Students are allowed to repeat up to two Preparation for the Major courses in which they receive a C– or worse. Students who receive a third grade of C– or worse in Preparation for the Major courses are dismissed from the program.

The Major
Each course in the major must be passed with a grade of C or better.

Undergraduate Minors

Mathematical Biology Minor

The Mathematical Biology minor introduces undergraduate students to an active interdisciplinary research field at UCLA. The minor core examines biological systems in a holistic and quantitative manner by emphasizing systems and integrative principles in biology. Students who complete the minor have sufficient training to apply the knowledge they learn in graduate school or employment of their choice. Students complete a core curriculum and an elective course. The minor consists of lower-division courses basic to the minor, five core courses, and one elective course that provide the needed background in mathematical biology, molecular and cell biology, statistics and probability, and mathematical modeling and simulation methods for biological systems.
Admission
To enter the minor, students must be in good academic standing (2.0 grade-point average or better) and have completed Computer Science 31 or Program in Computing 10A with a grade of C or better. Requests to declare the minor must be sent by e-mail to the program. The e-mail should include full name, UID number, request to declare the minor, and a statement indicating whether the student consents to being added to the departmental Common Collaboration and Learning Environment (CCLE) web page.

The Minor
Required Lower-Division Course (4 units): Mathematics 33A.
Required Upper-Division Courses (22 units): Computational and Systems Biology M184, M186, Electrical and Computer Engineering 102, 141 (or Mechanical and Aerospace Engineering 171A), Molecular, Cell, and Developmental Biology M140 or 144, and one elective course selected from Statistics 100A, 100B.

Policies
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Structural Biology Minor
The Structural Biology minor introduces undergraduate students to an active, interdisciplin ary, quantitative biosciences research and teaching field at UCLA. It offers a coherent course plan encompassing basic foundations of the field. Beside broadening student knowledge in structural biology, the minor provides students with enhanced perspective about computational and systems biology methods and applications and better prepares students to make more informed choices about their future directions and careers. The minor consists of lower-division courses basic to the minor, a survey seminar course, four core courses, and one elective course that provide the needed background in molecular and cell biology, computational and systems engineering, and mathematical modeling and simulation methods for biological systems.

Admission
To enter the minor, students must be in good academic standing (2.0 grade-point average or better) and have completed Computer Science 31 or Program in Computing 10A with a grade of C or better. Requests to declare the minor must be sent by e-mail to the program. The e-mail should include full name, UID number, request to declare the minor, and a statement indicating whether the student consents to being added to the departmental Common Collaboration and Learning Environment (CCLE) web page.

The Minor
Required Lower-Division Courses (8 units): Mathematics 33A, 33B.
Required Upper-Division Courses (24 units): Computational and Systems Biology M184, M186, Mathematics 170A or Electrical and Computer Engineering 151A or Statistics 100A, Molecular, Cell, and Developmental Biology M140 or 144, Statistics 100B, and one elective course selected from Electrical and Computer Engineering 102, 113, Statistics 100A, 100B.

Policies
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Systems Biology Minor
The Systems Biology minor introduces undergraduate students to an active, interdisciplinary, quantitative biosciences research and teaching field at UCLA. It offers a coherent course plan encompassing basic foundations of the field. Beside broadening student knowledge in systems biology, the minor provides students with enhanced perspective about computational and systems biology methods and applications and better prepares students to make more informed choices about their future directions and careers. The minor consists of lower-division courses basic to the minor, a survey seminar course, four core courses, and one elective course that provide the needed background in molecular and cell biology, computational and systems engineering, and mathematical modeling and simulation methods for biological systems.

Admission
To enter the minor, students must be in good academic standing (2.0 grade-point average or better) and have completed Computer Science 31 or Program in Computing 10A with a grade of C or better. Requests to declare the minor must be sent by e-mail to the program. The e-mail should include full name, UID number, request to declare the minor, and a statement indicating whether the student consents to being added to the departmental Common Collaboration and Learning Environment (CCLE) web page.

The Minor
Required Lower-Division Course (4 units): Mathematics 33A.
Required Upper-Division Courses (22 units): Computational and Systems Biology M184, M186, Electrical and Computer Engineering 102, 141 (or Mechanical and Aerospace Engineering 171A), Molecular, Cell, and Developmental Biology M140 or 144, and one elective course selected from Mathematics 134, 151A, 151B, 170A, 170B, 171, Molecular, Cell, and Developmental Biology 172, or Physiological Science 125.

Policies
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Computational and Systems Biology
Lower-Division Courses
10. Preparation for Research in Computational Biology. (3) Lecture, two and one half hours. Provides students with basic understanding of several computational tools used in molecular biology research. Focus on practical application of these tools rather than deep theoretical understanding. Creates more inclusive and accessible experience for learners. Students are introduced to computational tools for carrying out research in computational biology, including basic statistics, Python, R, and UNIX. P/NP or letter grading.

18. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

M32. Essential Calculus for Mathematical Biologists. (4) Same as Mathematics M31 and Life Sciences M32.) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 30A, 30B. Not open to students with credit for Mathematics 31A, 31B, 32A, or 32B. Designed for life science students. Methods and results of single and multivariable calculus essential for quantitative training in biology. Limits, differentiation (single and several variables), optimization, integration and methods of integration, Taylor polynomials and applications to approximation, Taylor and other power series, vector valued functions, gradients, and Lagrange multipliers. P/NP or letter grading.

99. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and leads to instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

99HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99ST. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses
M130. Fundamentals of Digital Imaging and Image Processing. (5) Same as Molecular, Cell, and Developmental Biology M130.) Lecture, three hours; laboratory, two hours. Requisites: Life Sciences 7A, 7B, 7C.
Mathematics 3A, 3B, and 3C, or Mathematics 31A, and Life Sciences 30A, 30B, and 40 or Statistics 13, or 346 / Computational Medicine.

M175. Stochastic Processes in Biochemical Systems. (4) Covers mathematical tools such as continuous and discrete Markov processes, first passage, time escape problems, statistical mechanics, and information theory. Lecture, two hours; discussion, one hour.

M176. Quantitative Regulatory Biology and Signal Transduction. (4) Same as Molecular Biology M176 and Physiological Science M176.) Lecture, three hours; laboratory, one hour. Requisites: Life Sciences 7A, 7B, 7C, 30A, 30B. Introduction to key biological regulatory circuit motifs and systems biology concepts that are critical to understanding how cellular responses are controlled. Letter grading.

M184. Introduction to Computational and Systems Biology. (2) Same as Bioengineering M184 and Computer Science M184.) Lecture, two hours; outside study, four hours. Enforced requisites: one course from Civil Engineering M20, Computer Science 31, Mechanical and Aerospace Engineering M20, or Program in Complexity 10A; and Life Sciences 30A and 30B. Introduction to key biological regulatory circuit motifs and systems biology concepts that are critical to understanding how cellular responses are controlled. Letter grading.

M185. Research Opportunities in Computational and Systems Biology. (4) Lecture, two hours; discussion, two hours; laboratory, one hour. Requisites: course M184, Life Sciences 7C, Mathematics 33A, 33B. Involves extensive reading and development of honors thesis or comprehensive project under guidance of faculty mentor. In Progress grading (credit to be given on completion of course 198B). Letter grading.

M190. Honors Research in Computational and Systems Biology. (4–4) Tutorial, 12 hours. Maximum of 8 units of courses 198A and 198B may be applied toward major. Individual contract required. P/NP grading.

198A-198B. Honors Research in Computational and Systems Biology. (4–4) Tutorial, 12 hours. Maximum of 8 units of courses 198A and 198B may be applied toward major. Individual contract required. 198A. Requisites: course M150 or M184 or Computer Science M182 and research experience (course 199, Bioengineering, Computer Science 199, or equivalent). Closely directed, interactive, and real research experience in active quantitative systems biology research laboratory. Direction on how to focus on topics of current interest in scientific community, appropriate to student interests and capabilities. Critiques of oral presentations and written progress reports explain how to proceed with research for results. Major emphasis on effective research reporting, both oral and written. Letter grading.

Elective Courses

M175. Stochastic Processes in Biochemical Systems. (4) Covers mathematical tools such as continuous and discrete Markov processes, first passage, time escape problems, statistical mechanics, and information theory. Lecture, two hours; discussion, one hour.

M176. Quantitative Regulatory Biology and Signal Transduction. (4) Same as Molecular Biology M176 and Physiological Science M176.) Lecture, three hours; laboratory, one hour. Requisites: Life Sciences 7A, 7B, 7C, 30A, 30B. Introduction to key biological regulatory circuit motifs and systems biology concepts that are critical to understanding how cellular responses are controlled. Letter grading.

M184. Introduction to Computational and Systems Biology. (2) Same as Bioengineering M184 and Computer Science M184.) Lecture, two hours; outside study, four hours. Enforced requisites: one course from Civil Engineering M20, Computer Science 31, Mechanical and Aerospace Engineering M20, or Program in Complexity 10A; and Life Sciences 30A and 30B. Introduction to key biological regulatory circuit motifs and systems biology concepts that are critical to understanding how cellular responses are controlled. Letter grading.

M185. Research Opportunities in Computational and Systems Biology. (4) Lecture, two hours; discussion, two hours; laboratory, one hour. Requisites: course M184, Life Sciences 7C, Mathematics 33A, 33B. Involves extensive reading and development of honors thesis or comprehensive project under guidance of faculty mentor. In Progress grading (credit to be given on completion of course 198B). Letter grading.

M190. Honors Research in Computational and Systems Biology. (4–4) Tutorial, 12 hours. Maximum of 8 units of courses 198A and 198B may be applied toward major. Individual contract required. 198A. Requisites: course M150 or M184 or Computer Science M182 and research experience (course 199, Bioengineering, Computer Science 199, or equivalent). Closely directed, interactive, and real research experience in active quantitative systems biology research laboratory. Direction on how to focus on topics of current interest in scientific community, appropriate to student interests and capabilities. Critiques of oral presentations and written progress reports explain how to proceed with research for results. Major emphasis on effective research reporting, both oral and written. Letter grading.

198A-198B. Honors Research in Computational and Systems Biology. (4–4) Tutorial, 12 hours. Maximum of 8 units of courses 198A and 198B may be applied toward major. Individual contract required. 198A. Requisite: course M150 or M184 or Computer Science M182. Limited to juniors/seniors. Supervised individual research involving extensive reading and development of honors thesis or comprehensive project under guidance of faculty mentor. In Progress grading (credit to be given on completion of course 198B). 198B. Requisite: course 198A. Limited to seniors. Supervised individual research involving extensive reading and development of honors thesis or comprehensive project under guidance of faculty mentor. Letter grading.

199. Directed Research in Computational and Systems Biology. (4) Limited to seniors. Supervised individual research involving extensive reading and development of honors thesis or comprehensive project under guidance of faculty mentor. Letter grading.

199A-199B. Honors Directed Research in Computational and Systems Biology. (4–4) Tutorial, 12 hours. Limited to seniors. Supervised individual research involving extensive reading and development of honors thesis or comprehensive project under guidance of faculty mentor. Letter grading.

198A-198B. Honors Research in Computational and Systems Biology. (4–4) Tutorial, 12 hours. Maximum of 8 units of courses 198A and 198B may be applied toward major. Individual contract required. 198A. Requisite: course M150 or M184 or Computer Science M182. Limited to juniors/seniors. Supervised individual research involving extensive reading and development of honors thesis or comprehensive project under guidance of faculty mentor. In Progress grading (credit to be given on completion of course 198B). 198B. Requisite: course 198A. Limited to seniors. Supervised individual research involving extensive reading and development of honors thesis or comprehensive project under guidance of faculty mentor. In Progress grading (credit to be given on completion of course 198B). Letter grading.

COMPUTATIONAL MEDICINE

David Geffen School of Medicine
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Computational Medicine
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Faculty Roster

Professors
Douglas S. Bell, MD, PhD, in Residence
Thomas Chou, PhD
Jason Ernst, PhD
Eleazar Eskin, PhD
Eran Halperan, PhD
Kenneth L. Lange, PhD (Maxine and Eugene Rosenfeld Endowed Professor of Computational Genetics)
Gang Li, PhD
James O. Lloyd-Smith, PhD
Bogdan Pasaniuc, PhD
Zhilin Qu, PhD, in Residence
Marcus L. Roper, PhD
Van M. Savage, PhD
Eric M. Sobel, PhD, in Residence
Marc A. Suchard, MD, PhD
Wei Wang, PhD (Leonard Kleinrock Term Professor of Computer Science)

Assistant Professors
Brunilda Balliu, PhD
Jeffrey N. Chiang, PhD
Harold J. Pimentel, PhD
Daniel J. Tward, PhD
Bolei Zhou, PhD

Adjunct Professors
David Elashoff, PhD
Jeffrey A. Gornbein, DrPH

Adjunct Associate Professors
Maria-Rita R. D’Orsogna, PhD
Mary E. Sehli, MD, PhD

Adjunct Assistant Professor
Elior Rahmani, PhD

Adjunct Professor
Bolei Zhou, PhD

Adjunct Associate Professor
David Elashoff, PhD

Adjunct Assistant Professor
Elior Rahmani, PhD

Adjunct Assistant Professor
Bogdan Pasaniuc, PhD

Adjunct Assistant Professor
David Elashoff, PhD
Overview
As biology advances rapidly in quantitative research methods, both the need and potential for closely associated theoretical research increases. On numerous medical science frontiers—such as genetics, molecular biology, oncology, pharmacology, neuroscience, and physiology—the Department of Computational Medicine contributes both in basic research and the development of specialized software to support investigation and health care. UCLA has one of the few departments in this rapidly evolving field.

The department builds from abstract modeling toward research vital to the advancement of current biomedical frontiers. The doctoral program reflects this in requirements for advanced training in a biomedical research specialty and in the mathematical and computing skills required to contend realistically with the complex phenomena encountered in biology and medicine. The art of quantitative research is developed individually from the first year.

The department welcomes both undergraduate and graduate students in other majors to its courses in mathematical modeling, research computing, and biomedical statistics. Premedical majors with mathematical and computational interests can receive early guidance toward an MD/PhD joint degree. The department also offers quantitative research training in the medical curriculum and postgraduate medical programs.

Graduate Majors

Biomathematics MS, PhD
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Biomathematics

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1 Seminar, one hour. Discussion of and critical thinking about topics of current interest, import or priority taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.)

99. Student Research Program. (1 or 2 Tutorial (supervised research or research scholarly project), two hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.)

Upper-Division Courses

170A. Introductory Biomathematics for Medical Investigators. (4 Lecture, three hours; discussion, one hour. Intensive elementary statistics course emphasizing design and interpretation to observational studies and experiments/clinical trials. Statistical topics include study design, descriptive statistics, elementary probability and distributions, confidence intervals and hypothesis testing, sample size and power, linear regression and correlation, analysis of variance, nonparametric statistics. Applications to biomedical literature and design of clinical trials. Letter grading.)
189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Involves study with lecture course instructor to explore topics in greater depth through supplementary readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.
190HA-190HB. Honors Research in Biomathematics. (4-6) Tutorial, to be arranged. Limited to juniors/seniors. Individual research in some aspect of biomathematics designed to acquaint students in depth with material covered in upper-division courses in biology. Must be taken for at least two terms and for total of at least 8 units. Thesis required. P/NP or letter grading.
197. Individual Studies in Biomathematics. (2 to 4) Tutorial, four hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.
199. Directed Research or Senior Project in Biomathematics. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200. Research Frontiers in Biomathematics. (2 Lecture, two hours. Series of presentations by faculty members on research frontiers in biomathematics. S/U grading.)
200B. Frontiers and Methods in Mathematical Systems. (4 Lecture/seminar, four hours. Introduction to cutting-edge research and highly applied, cross-disciplinary problems, important critical thinking through critique of research, trains students in scientific writing and presentation skills, Short writing assignments, figure preparation, and slide development. Letter grading.)
201. Deterministic Models in Biomedicine. (4 Lecture, three hours; laboratory, three hours. Preparation: knowledge of linear algebra and differential equations. Examination of conditions under which deterministic approaches can be employed and conditions where they may be expected to fail. Topics include compartmental analysis, enzyme kinetics, physiological control systems, and cellular/animal population models. S/U or letter grading.
M203. Stochastic Models in Biology. (4 Same as Human Genetics M203.) Lecture, four hours. Requirements: Mathematics 170A or equivalent experience in probability. Mathematical description of biological relationships, with particular attention to areas where conditions for deterministic models are inadequate. Examples of stochastic models from genetics, physiology, ecology, and variety of other biological and medical disciplines. S/U or letter grading.
204. Biomedical Data Analysis. (4 Lecture, four hours. Preparation: at least one course in probability or statistics that included basic probability, elementary descriptive statistics, and elementary matrix algebra. Familiarity with elementary matrix algebra. Students must have previous experience with statistical software. Preparation: knowledge of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.)
205. Top Computational Algorithms. (4 Lecture, four hours. Preparation: at least one course in probability or statistics that included basic probability, elementary descriptive statistics, and elementary matrix algebra. Familiarity with elementary matrix algebra. Students must have previous experience with statistical software. Preparation: knowledge of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.)
206. Introduction to Mathematical Oncology. (4 Lecture, four hours; computer laboratory, two hours. Preparation: ordinary partial differential equations, one computer programming course. Deterministic and stochastic modeling of cell metabolism, colony growth, and responses to radiotherapy and immunotherapeutic agents applied to carcinogenesis, therapy, emergence of resistance to therapy. Simulation optimization methods introduced. Current literature review. S/U or letter grading.)
M207A. Theoretical Genetic Modeling. (4 Same as Biostatistics M272 and Human Genetics M207A.) Lecture, three hours; discussion, one hour. Requirements: Mathematics 115A, 131A, Statistics 100B. Mathematical models in statistical genetics. Topics include population genetics, genetic epidemiology, gene mapping, design of genetic experiments, DNA sequence analysis, and molecular phylogeny. S/U or letter grading.
M207B. Applied Genetic Modeling. (4 Same as Biostatistics M237 and Human Genetics M207B.) Lecture, three hours; laboratory, one hour. Requirements: Biostatistics 200B, 208B (may be taken concurrently) or equivalent coursework or consent of instructor. Covers basic genetic concepts (prior knowledge of human genetics not required). Topics include statistical methodology underlying genetic analysis of both quantitative and qualitative complex traits. Laboratory for hands-on computer analysis of genetic data; laboratory reports required. Course complements M207A; students may take either and are encouraged to take both. S/U or letter grading.
208. Geometric Methods in Medical Imaging. (4 Lecture, four hours. Recommended preparation: under-graduate calculus, linear algebra, probability. Overview of mathematical and computational techniques to study geometric objects and medical images. Includes curves, surfaces, z-sizes, shapes, and diffusion tensors that describe cells, tissues, and organs. S/U or letter grading.

Clinical Research MS
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Data Science in Biomedicine MS
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Biomathematics MS, PhD
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Courses

200. Research Frontiers in Biomathematics. (2 Lecture, two hours. Series of presentations by faculty members on research frontiers in biomathematics. S/U grading.)
208B. Frontiers and Methods in Mathematical Systems. (4 Lecture/seminar, four hours. Introduction to cutting-edge research and highly applied, cross-disciplinary problems, important critical thinking through critique of research, trains students in scientific writing and presentation skills, Short writing assignments, figure preparation, and slide development. Letter grading.)
209. Deterministic Models in Biomedicine. (4 Lecture, three hours; laboratory, three hours. Preparation: knowledge of linear algebra and differential equations. Examination of conditions under which deterministic approaches can be employed and conditions where they may be expected to fail. Topics include compartmental analysis, enzyme kinetics, physiological control systems, and cellular/animal population models. S/U or letter grading.
M203. Stochastic Models in Biology. (4 Same as Human Genetics M203.) Lecture, four hours. Requirements: Mathematics 170A or equivalent experience in probability. Mathematical description of biological relationships, with particular attention to areas where conditions for deterministic models are inadequate. Examples of stochastic models from genetics, physiology, ecology, and variety of other biological and medical disciplines. S/U or letter grading.
204. Biomedical Data Analysis. (4 Lecture, four hours. Preparation: at least one course in probability or statistics that included basic probability, elementary descriptive statistics, and elementary matrix algebra. Familiarity with elementary matrix algebra. Students must have previous experience with statistical software. Preparation: knowledge of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.)
205. Top Computational Algorithms. (4 Lecture, four hours. Preparation: at least one course in probability or statistics that included basic probability, elementary descriptive statistics, and elementary matrix algebra. Familiarity with elementary matrix algebra. Students must have previous experience with statistical software. Preparation: knowledge of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.)
206. Introduction to Mathematical Oncology. (4 Lecture, four hours; computer laboratory, two hours. Preparation: ordinary partial differential equations, one computer programming course. Deterministic and stochastic modeling of cell metabolism, colony growth, and responses to radiotherapy and immunotherapeutic agents applied to carcinogenesis, therapy, emergence of resistance to therapy. Simulation optimization methods introduced. Current literature review. S/U or letter grading.)
M207A. Theoretical Genetic Modeling. (4 Same as Biostatistics M272 and Human Genetics M207A.) Lecture, three hours; discussion, one hour. Requirements: Mathematics 115A, 131A, Statistics 100B. Mathematical models in statistical genetics. Topics include population genetics, genetic epidemiology, gene mapping, design of genetic experiments, DNA sequence analysis, and molecular phylogeny. S/U or letter grading.
M207B. Applied Genetic Modeling. (4 Same as Biostatistics M237 and Human Genetics M207B.) Lecture, three hours; laboratory, one hour. Requirements: Biostatistics 200B, 208B (may be taken concurrently) or equivalent coursework or consent of instructor. Covers basic genetic concepts (prior knowledge of human genetics not required). Topics include statistical methodology underlying genetic analysis of both quantitative and qualitative complex traits. Laboratory for hands-on computer analysis of genetic data; laboratory reports required. Course complements M207A; students may take either and are encouraged to take both. S/U or letter grading.
M212. Evolutionary Ecology. (Same as Ecology and Evolutionary Biology M222.) Lecture, two and one half hours. Preparation: Ecology and Evolutionary Biology M200A or 200B, or equivalent. Concepts and topics include fundamental concepts of evolutionary ecology, including life history theory, quantitative genetic analyses and coenontic evolution, and advances made in this field in last decade. May be repeated for credit.

M226. Machine Learning in Bioinformatics. (Same as Bioinformatics M226, Computer Science M226, and Human Genetics M226.) Lecture, four hours; laboratory, one hour. Enforced requisite: Computer Science 32 or Program in Computing 10C with grade of C- or better. Recommended: one course from Biostatistics 100A, 109A, Civil Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, or Statistics 100A. Familiarity with probability, statistics, linear algebra, and algorithms expected. Designed for engineering students as well as students from biological sciences and medical school. Biology has become data-intensive science. Bottle-neck in being able to make sense of biological processes has shifted from data generation to statistical modeling of the available datasets. This course will introduce students to the statistical modeling tools and techniques that are available as well as how to apply them. Statistical machine learning provides important toolkit in this endeavor. Biological datasets offer new challenges to field of machine learning. Exploration of statistical and computational aspects of machine learning techniques and their application to key biological questions. Letter grading.


M234. Applied Bayesian Inference. (Same as Biostatistics M234.) Lecture, three hours; laboratory, one hour. Requisites: Biostatistics 200B or another substantial regression course, Bayesian approach to statistical inference, with emphasis on biomedical applications and computational aspects of the Bayesian methodology. Topics include large sample Bayes inference from likelihoods, noninformative and conjugate priors, empirical Bayes, Bayesian approaches to linear and nonlinear regression, model selection, Bayesian hypothesis testing, and numerical methods. S/U or letter grading.


M257. Computational Methods for Biostatistical Research. (Same as Biomathematics M257.) Lecture, three hours; discussion, one hour. Requisites: Biostatistics 250A or Statistics 100C, Mathematics 115A. Preparation for quantitative research in statistics and data sciences. Numerical analysis and hands-on computing techniques. Numerical analysis topics include computer arithmetic, solving linear equations, Cholesky factorization, QR factorization, regression computations, eigenvalue problems, iterative solvers, random number generation, and design and analysis of statistical simulation experiments. Computing techniques include basics of R programming, reproducible research using R and RStudio, collaborating in research, parallel computing, and cloud computing. No prior knowledge of R assumed. S/U or letter grading.

M260A-M260B. Methodology in Clinical Research I, II. (4-4) (Same as Medicine M260A-M260B.) Lecture, four hours; requisites: courses 170A, 265A. Requisites: courses 170A, 265A. Course 260A is requisite to 260B. Some traditional multivariate methods, such as principle components, factor analysis, cluster analysis, and more contemporary methods, including recursive partitioning and missing data analysis. S/U or letter grading.

M270. Optimal Parameter Estimation and Experiment Design for Biomedical Systems. (4) (Same as Bioengineering M270B, Computer Science M270B, and Medicine M270D.) Lecture, four hours; outside study, eight hours. Requisites: course 220 or Bioengineering CM226 or M226A. Estimation methodology and parameter model estimation. Methods for fitting dynamic system models to biomedical data. Model discrimination methods. Theory and algorithms for designing optimal experiments for developing and quantifying clinical studies, with special emphasis on using the experimental schedule design for kinetic models. Exploration of PC software for model building and optimal experiment design via applications in physiology and pharmacology. Letter grading.

M271. Statistical Methods in Computational Biology. (4) (Same as Bioinformatics M271 and Statistics M271.) Lecture, three hours; discussion, one hour. Preparation: elementary probability concepts. Requisites: Biostatistics M211 or Statistics 266A or 200A. Introduction to statistical methods developed and widely applied in several branches of computational biology and bioinformatics. Topics include: segment detection, motif discovery, comparative genomics, and biological networks, with emphasis on understanding of basic statistical concepts and use of statistical inference to solve biological problems. Letter grading.


208. Recent Research in Machine Learning in Medicine. (4) Lecture, four hours; discussion, two hours. Requisite: course 200 or equivalent. Overview of recent research in machine learning applied to medicine. Covers recent papers utilizing data science approaches to analyze large amounts of medical data. Topics include analysis of medical imaging data, electronic health records, and waveforms. Students receive instruction on how to read recent research papers, and present these papers in class. Letter grading.

209. Recent Research in Data Science in Genomic Medicine. (4) Lecture, four hours; discussion, two hours. Requisite: course 200 or equivalent. Overview of recent research in data science applied to genomic medicine. Covers recent papers that use data science approaches to analyze large amounts of genomic data along with medical data with the goal of improving patient care. Topics include and focus on genotyping, diagnose rare diseases, estimation and utilization of polygenic risk scores in electronic medical records, and integrating novel types of genomic data into clinical care. Students receive instruction on how to read recent research papers, and present these papers in class. Letter grading.

COMPUTER SCIENCE

Data Science in Biomedicine

Graduate Courses

200. Foundations of Data Science. (4) Lecture, four hours; discussion, two hours. Preparation: familiarity with programming and algorithms, probability, statistics, linear algebra. Study offers background in mathematical and engineering foundations that are building blocks of data science. Topics include linear algebra, probability, and statistics. Overview of science software engineering and reproducibility fundamentals including working on a compute cluster, pipeline development, virtual notebooks, version control. Letter grading.

205. Machine Learning Applications in Biomedicine. (4) Lecture, four hours; discussion, two hours. Requisite: course 200 or equivalent. Introduction to machine learning analysis of biomedical data, with focus on formulating interdisciplinary problems as computational problems and then solving those problems using machine learning techniques and computational interdisciplinary research in genetics. Fundamentals of machine learning and applications to genetics and health records. Letter grading.

206. Advanced Machine Learning Applications in Biomedicine. (4) Lecture, four hours; discussion, two hours. Requisite: course 200 or equivalent. Statistical models for analysis of biomedical data that captures the structure of the data and accounts for the constraints. Topics include Bayesian models, probabilistic graphical models, deep learning, time series, dynamical systems, stochastic processes, scalable inference (gradient descent, stochastic gradient descent, expectation-maximization, Markov chain Monte Carlo, variational inference), privacy-preserving inference (differential privacy, inference over encrypted data), interpretable machine learning, and fairness and bias. Letter grading.

207. Data Science for Medical Imaging. (4) Lecture, four hours; discussion, two hours. Requisite: course 200 or equivalent. Overview of medical image modalities and 3D visualization, classical image processing (histogram analysis and filtering), modern deep learning techniques (convolutional networks), image alignment, and statistical analysis of populations. Letter grading.

208. Recent Research in Machine Learning in Medicine. (4) Lecture, four hours; discussion, two hours. Requisite: course 200 or equivalent. Overview of recent research in machine learning applied to medicine. Covers recent papers utilizing data science approaches to analyze large amounts of medical data. Topics include analysis of medical imaging data, electronic health records, and waveforms. Students receive instruction on how to read recent research papers, and present these papers in class. Letter grading.

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Computer Science / 349

Miodrag Potkonjak, PhD
Glenn D. Reinman, PhD
Amit Sahai, PhD (Symantec Term Professor of Computer Science)
Majid Sarrafzadeh, PhD (Levi James Knight, Jr. Term Professor of Innovation)
Stefano Soatto, PhD
Mani B. Srivastava, PhD
Demetri Terzopoulos, PhD
George Varghese, PhD (Jonathan B. Postel Professor of Networking)
Wei Wang, PhD (Leonard Kleinrock Term Professor of Computer Science)
Harry G. Xu, PhD
Lixia Zhang, PhD (Jonathan B. Postel Professor of Computer Systems)
Song-Chun Zhu, PhD

Professors Emeriti
Algirdas A. Avizienis, PhD
Rajive L. Bagrodia, PhD
Alfonso F. Cardenas, PhD
Jack W. Carlyle, PhD
Wesley W. Chu, PhD
Michael G. Dyer, PhD
Milos D. Ercegovac, PhD
Eliezer M. Gafni, PhD
Sheila A. Greibach, PhD
Leonard Kleinrock, PhD
Allen Klüenger, PhD
Lawrence P. McNamee, PhD
Richard R. Muntz, PhD
Judea Pearl, PhD
Carlo A. Zaniolo, PhD (Norman E. Friedmann Professor Emeritus of Knowledge Sciences)

Associate Professors
Kai-Wei Chang, PhD
Jason Ernst, PhD
Alyxson K. Fletcher, PhD
Quanquan Gu, PhD
Choi-Jul Hsieh, PhD
Raghur Meka, PhD
Anthony J. Nowatzki, PhD
Sriram Sankararaman, PhD
Alexander Sherstov, PhD
Yizhou Sun, PhD
Yuval Tamir, PhD
Guy Van den Broeck, PhD

Assistant Professors
Omid Abari, PhD
Additya Grover, PhD
Achuta Kadambi, PhD
Baharan Mirzasoleiman, PhD
Violet (Nanyun) Peng, PhD
Fabien Scalzo, PhD, in Residence
Bolei Zhou, PhD

Senior Lecturers SOE
Paul R. Eggert, PhD
David A. Smallberg, MS

Adjunct Professors
David E. Heckerman, PhD
Van Jacobsen, MS
Alan C. Kay, PhD

Adjunct Associate Professors
Carey S. Nachenberg, MS
Giovanni Pau, PhD
Ramin Ramezani, PhD
Adjunct Assistant Professor
Ravi Netravali, PhD

Overview

Computer science is concerned with the design, modeling, analysis, and applications of computer systems. Its study at UCLA provides education at the undergraduate and graduate levels necessary to understand, design, implement, and use the software and hardware of computers and digital systems. The programs offer comprehensive and integrated studies of subjects in computer system architecture, computer networks, distributed computer systems, programming languages and software systems, information and data management, artificial intelligence, computer science theory, computational systems biology and bioinformatics, and computer vision and graphics.

The undergraduate and graduate studies and research projects in the Department of Computer Science are supported by significant computing resources. In addition to the departmental computing facility, there are over a dozen research laboratories specializing in areas such as distributed systems, multimedia computer communications, distributed sensor networks, VLSI systems, VLSI CAD, embedded and reconfigurable systems, computer graphics, bioinformatics, and artificial intelligence. Also, the Cognitive Systems Laboratory is engaged in studying computer systems that emulate or support human reasoning. The Bioinformatics Laboratory is devoted to multidisciplinary research involving the application of engineering and computer science methods to problems in biology and medicine.

Undergraduate Majors

Computer Science and Engineering BS

The Computer Science and Engineering curriculum at UCLA provides students with the education and training necessary to design, implement, test, and utilize the hardware and software of digital computers and digital systems. The curriculum has components spanning both the Computer Science and Electrical and Computer Engineering departments. The curriculum covers all aspects of computer systems from electronic design through logic design, VLSI, circuit design, computer architecture, software systems, computer utilization, machine language design, implementation and programming, operating system concepts, systems programming, networking fundamentals, and higher-level language skills; and their application. Students are prepared for employment in a wide spectrum of high-technology industries.

The computer science and engineering program is accredited by the Computing Accreditation Commission and the Engineering Accreditation Commission of ABET.

Capstone Major

The Computer Science and Engineering major is a designated capstone major. Computer Science and Engineering students complete a major product design course. Graduates are expected to apply the basic mathematical and scientific concepts that underlie modern computer science and engineering; design a software or digital hardware system, component, or process to meet desired needs within realistic constraints; function productively with others as part of a team; identify, formulate, and solve computer software- and hardware-related engineering problems; and demonstrate effective communication skills.

Learning Outcomes

The Computer Science and Engineering major has the following learning outcomes:

- Application of basic mathematical and scientific concepts that underlie the modern field
- Design of a software or digital hardware system, component, or process to meet desired needs within realistic constraints
- Function productively with others on a team, including those with different specialties within the field
- Identification, formulation, and solution of computer software- and hardware-related engineering problems
- Effective communication

Requirements

Preparation for the Major

Required: Computer Science 1, 31, 32, 33, 35L, M51A; Electrical and Computer Engineering 3, Mathematics 31A, 31B, 32A, 32B, 33A, 33B, 61; Physics 1A, 1B, 1C, and 4AL or 4BL.

The Major

Required: Computer Science 111, 118, 131, M151B, M152A, 180, 181, Electrical and Computer Engineering 100, 102, 115C; one course from Civil and Environmental Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, 170E, or Statistics 100A; one capstone design course (Computer Science 152B); a minimum of 4 units and one elective course selected from Electrical and Computer Engineering 101A through M185; a minimum of 12 units and three elective courses selected from Computer Science 111 through CM187, and up to 8 units of Computer Science 188; and 12 units of technical breadth courses selected from an approved list available in the Office of Academic and Student Affairs.

Students who want to deepen their knowledge of electrical engineering are encouraged to select that discipline as their technical breadth area.

For information on UC, school, and general education requirements, see the Samueli school section in College and Schools.

Policies

The Major

Credit is not allowed for both Computer Science 170A and Electrical and Computer Engineering 133A unless at least one of them is applied as part of the technical breadth area. Electrical and Computer Engineering 110, 131A, and CM182 may not satisfy elective credit. A petition may be submitted to consider four units of Computer Science 194 or 199 for an elective. Credit is not guaranteed and subject to vice chair review.

A multiple-listed (M) course offered in another department may be used instead of the same computer science course (e.g., Electrical and Computer Engineering M116C may be taken instead of Computer Science M151B). Credit is applied automatically.

Computer Science BS

The Computer Science curriculum is designed to accommodate students who want professional preparation in computer science but do not necessarily have a strong interest in computer systems hardware. The curriculum consists of components in computer science, a minor or technical support area, and a core of courses from the social sciences, life sciences, and humanities. Within the curriculum, students study subject matter in software engineering, principles of programming languages, data structures, computer architecture, theory of computation and formal languages, operating systems, distributed systems, computer modeling, computer networks, compiler construction, and artificial intelligence. Majors are prepared for employment in a wide range of industrial and business environments.

The computer science program is accredited by the Computing Accreditation Commission of ABET.

Capstone Major

The Computer Science major is a designated capstone major. Students complete either a software engineering or a major product design course. Graduates are expected to apply the basic mathematical and scientific concepts that underlie modern computer science and engineering; design a software or digital hardware system, component, or process to meet desired needs within realistic constraints; function productively with others as part of a team; identify, formulate, and solve computer software- and hardware-related engineering problems; and demonstrate effective communication skills.

Learning Outcomes

The Computer Science major has the following learning outcomes:

- Application of basic mathematical and scientific concepts that underlie the modern field
- Design of a software or digital hardware system, component, or process to meet desired needs within realistic constraints
- Function productively with others on a team, including those with different specialties within the field
- Identification, formulation, and solution of computer software- and hardware-related engineering problems
- Effective communication
Requirements

Preparation for the Major
Required: Computer Science 1, 31, 32, 33, 35L, M51A; Mathematics 31A, 31B, 32A, 32B, 33A, 33B, 61; Physics 1A, 1B, 1C, and 4AL or 4BL.

The Major
Required: Computer Science 111, 118, 131, M151B, M152A, 180, 181; one course from Civil and Environmental Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, 170E, or Statistics 100A; one capstone software engineering or design course from Computer Science 130 or 152B; a minimum of 20 units and five elective courses selected from Computer Science 111 through CM187, and up to 8 units of Computer Science 188; a minimum of 12 units and three science and technology courses (not used to satisfy other requirements) that may include 12 units of upper-division computer science courses or 12 units of courses selected from an approved list available in the Office of Academic and Student Affairs; and 12 units of technical breadth courses selected from an approved list available in the Office of Academic and Student Affairs.

For information on UC, school, and general education requirements, see the Samueli school section in College and Schools.

Policies

The Major
Students must take at least one course from Computer Science 130 or 132. Computer Science 130 or 152B may be applied as an elective only if it is not taken as the capstone course.

Credit is not allowed for both Computer Science 170A and Electrical and Computer Engineering 133A unless at least one of them is applied as part of the science and technology requirement or as part of the technical breadth area. A petition may be submitted to consider four units of Computer Science 194 or 199 for an elective. Credit is not guaranteed and subject to vice chair review.

A multiple-listed (M) course offered in another department may be used instead of the same computer science course (e.g., Electrical and Computer Engineering M116C may be taken instead of Computer Science M151B). Credit is applied automatically.

Computer Engineering BS
The undergraduate curriculum provides all computer engineering students with preparation in the mathematical and scientific disciplines that lead to a set of courses that span the fundamentals of the discipline in the major areas of data science and embedded networked systems. These collectively provide an understanding of many inventions of importance to our society, such as the Internet of Things, human-cyber-physical systems, mobile/wearable/implantable systems, robotic systems, and more generally smart systems at all scales in diverse spheres. The design of hardware, software, and algorithmic elements of such systems represents an already dominant and rapidly growing part of the computer engineering profession. Students are encouraged to make use of their computer science and electrical and computer engineering electives and a two-quarter capstone design course to pursue deeper knowledge within one of these areas according to their interests, whether for graduate study or preparation for employment.

Capstone Major
The Computer Engineering major is a designated capstone major that is jointly administered by the Computer Science, and Electrical and Computer Engineering, departments. Undergraduate students complete a design course in which they integrate their knowledge of the discipline and engage in creative design within realistic and professional constraints. Students apply their knowledge and expertise gained in previous mathematics, science, and engineering coursework. Students identify, formulate, and solve engineering problems and present their projects to the class.

Learning Outcomes
The Computer Engineering major has the following learning outcomes:
- Application of mathematical, scientific, and engineering knowledge
- Design of a software or hardware system, component, or process to meet desired needs within realistic economic, environmental, social, ethical, health, safety, security, reliability, manufacturability, and sustainability constraints
- Function productively on a team with others
- Identification, formulation, and solution of computer engineering problems
- Effective communication

Requirements

Preparation for the Major
Required: Computer Science 1 (or Electrical and Computer Engineering 1), 31, 32, 33, 35L, M51A (or Electrical and Computer Engineering M16); Electrical and Computer Engineering 3; Engineering 96l; Mathematics 31A, 31B, 32A, 32B, 33A, 33B, 61; Physics 1A, 1B, 1C, and 4AL or 4BL.

The Major
Required: Computer Science 111, 118 (or Electrical and Computer Engineering 132B), M151B (or Electrical and Computer Engineering M16C), M152A (or Electrical and Computer Engineering M116L), 180; Electrical and Computer Engineering 100, 102, 113, 115C; one course from Civil and Environmental Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, 170E, Statistics 100A; 8 units of computer science and 8 units of electrical and computer engineering upper-division electives; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; 8 units capstone design from either Electrical and Computer Engineering 180DA/180DW or 183DA/183DB.

For information on UC, school, and general education requirements, see the Samueli school section in College and Schools.

Undergraduate Minors

Bioinformatics Minor
The Bioinformatics minor introduces undergraduate students to the emerging interdisciplinary field of bioinformatics, an active area of research at UCLA combining elements of the computational sciences with the biological sciences. The minor organizes the many course offerings in different UCLA departments into a coherent course plan providing students with significant training in bioinformatics in addition to the training they obtain from their major. Students who complete the minor will be strong candidates for admission to PhD programs in bioinformatics as well as have the relevant training to obtain jobs in the biotechnology industry.

Students complete a core curriculum and an elective course and are strongly encouraged to participate in undergraduate research as early as possible in one of the many groups offering research opportunities in bioinformatics.

Admission
To enter the minor, students must be (1) in good academic standing (2.0 grade-point average or better), (2) have completed at least two of the lower-division requirements with minimum grades of C, and (3) file a petition through Message Center. Steps to apply are outlined on the Office of Academic and Student Affairs website. Information about the minor and the application are available on the minor website.

The Minor

Required Lower-Division Courses (17 units minimum): Computer Science 32 or Program in Computing 10C, Life Sciences 7A, Mathematics 33A, 61.

Required Upper-Division Courses (18 units minimum): Computer Science 180 (or Mathematics 182), M184; two courses selected from Computer Science CM121, CM122, and CM124, and one course selected from Chemistry and Biochemistry C100, 153B, Civil and Environmental Engineering 110, Computer Science CM121, CM122, CM124, 170A, CM186, CM187, Ecology and Evolutionary Biology C135, Electrical and Computer Engineering 102, 131A, 141, Human Genetics C144, Mathematics 170A, 170E, Microbiology, Immunology, and Molecular Genetics 132, Molecular, Cell, and Developmental Biology 144, 187AL, Physiological Science 125, Statistics 100A, 100B.

Students are strongly encouraged to take Computer Science M184 as early as possible to obtain an overview of computational biology.
Policies
Eight units of either Bioinformatics 199 or Computer Science 194 or 199 may be applied as an elective by petition.

If students apply any of Civil and Environmental Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, 170E, or Statistics 100A toward major requirements or another minor, then no other course from that set may be applied toward the minor requirements.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

All minor courses must be taken for a letter grade (unless not offered on that grading basis), and students must have a minimum grade of C– in each and an overall C (2.0) grade-point average in all courses taken for the minor. Successful completion of the minor is indicated on the transcript and diploma.

Data Science Engineering Minor
The minor is intended to expose students to the entire data science life cycle from both foundational and application perspectives. The foundational courses provide the engineering skills to collect, cleanse, and store data; analyze and draw inference from data; and take action and make decisions. A wide-ranging list of interdisciplinary courses focuses on various data-science applications using these skills.

Admission
To apply for the minor, students must have an overall grade-point average of 3.0 or better, and file a petition through Message Center. Steps to apply are outlined on the Office of Academic and Student Affairs website. Information about the minor and the application are available on the minor website.

The Minor
Required Lower-Division Courses (8 units): Computer Science 32, Mathematics 33A.

Required Upper-Division Courses (12 units minimum): One course from Civil and Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, 170E, or Statistics 100A; Computer Science M148 or Electrical and Computer Engineering M148; Computer Science 145 or M146 or Electrical and Computer Engineering M146.

Elective Upper-Division Courses (8 units minimum): Two courses from Computer Science M119, CM121, CM122, CM124, 143, 145 or M146 (if not taken as a required course), 161, 180, M182, Electrical and Computer Engineering 102, 113, 114, M119, 133A, M146 (if not taken as a required course), C147, 183DA and 183DB (both must be taken), Mechanical and Aerospace Engineering C137, 185, Statistics 100B, 115, 170, or C180.

Policies
Variable topics courses may be taken as topics apply. Transfer credit for any of the above is subject to approval; consult with the undergraduate counselors before enrolling in any courses for the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and student must have a minimum grade of C in each and an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Major
Computer Science MS, PhD
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Concurrent Degree Program
Concurrent degree programs allow students to reduce the number of courses required for two degrees, since some courses may apply to both degrees.
- Computer Science MS/Master of Business Administration

Bioinformatics
Lower-Division Courses
19. Fiat Lux Freshman Seminars, (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program, (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Course
199. Directed Research in Bioinformatics. (2 to 4) Tutorial, six to 12 hours. Limited to juniors/seniors. Supervised individual research under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. Letter grading.

Computer Science
Lower-Division Courses
1. Freshman Computer Science Seminar, (1) Seminar, one hour. Introduction to department resources and principal topics and key ideas in computer science and computer engineering. Students create critical summaries of seminar talks. P/NP grading.

19. Fiat Lux Freshman Seminars, (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

30. Principles and Practices of Computing, (4) Lecture, four hours; discussion, two hours; outside study, six hours. Designed for students in computer science and related majors who do not have prior programming experience. Precursor course to introductory computer science sequence (courses 31, 32, 33). Teaches students how to use computers as tool for problem solving, creativity, and exploration through design and implementation of computer programs.


33. Introduction to Computer Organization, (5) Lecture, four hours; discussion, two hours; outside study, nine hours. Enforced requisite: course 32. Introductory course on computer architecture, assembly language, and operating systems fundamentals. Number systems, machine language, and assembly language. Procedure calls, stacks, interrupts, and traps. Assemblers, linkers, and loaders. Operating systems concepts: processes and process management, input/output (I/O) programming, memory management, file systems. Letter grading.

35L. Software Construction, (4) Lecture, four hours; discussion, two hours; outside study, six hours. Required: course 31. Fundamentals of tools and environments for software construction projects, particularly open-source platforms used in upper-division computer science courses. Software practice through collaborative student project. Letter grading.


97. Variable Topics in Computer Science, (1 to 4) Lecture, one to four hours; discussion, zero to two hours. Designed for freshmen/sophomores. Variable topics in computer science not covered in regular computer science courses. May be repeated once for credit with topic or instructor change. Letter grading.

Academic and Student Affairs
Steps to apply are outlined on the Office of Administration, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

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Upper-Division Course
199. Directed Research in Bioinformatics. (2 to 4) Tutorial, six to 12 hours. Limited to juniors/seniors. Supervised individual research under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. Letter grading.

Computer Science
Lower-Division Courses
1. Freshman Computer Science Seminar, (1) Seminar, one hour. Introduction to department resources and principal topics and key ideas in computer science and computer engineering. Students create critical summaries of seminar talks. P/NP grading.

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99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses


112. Modeling Uncertainty in Information Systems. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisites: course 111. Operating System course from Civil Engineering 110, Electrical Engineering 131A, Mathematics 170A, or Statistics 100A. Designed for juniors/seniors. Probability and stochastic process models as applied in computer science. Basic course tools include random variables, conditional probability, expectation and higher moments, Bayes theorem, Markov chains. Applications include probabilistic algorithms, evolvability, reasoning, analysis of algorithms and data structures, reliability, communication protocol and queuing models. Letter grading.

117. Computer Networks: Physical Layer. (4) Lecture, two hours; laboratory, two hours; outside study, six hours. Not open to students with credit for course M171L. Introduction to fundamental computer communication concepts underlying and supporting modern networks, with focus on wireless communications and media access layers of network protocol stack. Systems include wireless LANs (IEEE802.11) and ad hoc wireless and personal area networks (e.g., Bluetooth, ZigBee). Experimental project based on mobile radio-equipped devices (smart phones, tablets, etc.) as sensor platforms for personal applications such as wireless health, positioning, automation, safety, and awareness, as well as experimental laboratory sessions included. Letter grading.


114. Distributed Systems. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 118. Covers fundamental concepts regarding design and implementation of distributed systems. Topics include program state (e.g., clock synchronization, logical clocks, vector clocks), failure recovery (e.g., snapshotting, primary-backup), consistency models (e.g., linearizability), eventual, causal, and other causality models (e.g., Raft), distributed transactions, and locks. Students gain hands-on, practical experience through multiple programming assignments that analyze through steps of creating fault-tolerant, shared key/value store. Exploration of how these concepts have manifested in several real-world, large-scale distributed systems used by Internet companies like Google, Facebook, and Amazon. Letter grading.

136. Introduction to Computer Security. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 118. Introduction to basic concepts of information security necessary for students to understand risks and mitigations associated with protection of systems and data. Topics include security models and architectures, security threats and risk analysis, access control and authentication/authorization, cryptography, network security, secure application design, and ethics and law. Letter grading.

137A. Prototyping Programming Languages. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 131. How different programming language paradigms provide dramatically different ways of thinking about computation. Major paradigms—functional, object-oriented, and logic programming. Security and user model, Web services and distributed computing. Enforced requisite: one course from Civil Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, or Statistics 100A. Designed for juniors/seniors. Probability and stochastic process models as applied in computer science. Basic course tools include random variables, conditional probability, expectation and higher moments, Bayes theorem, Markov chains. Applications include probabilistic algorithms, evolvability, reasoning, analysis of algorithms and data structures, reliability, communication protocol and queuing models. Letter grading.

137B. Programming Language Design. (4) Seminar, four hours; outside study, eight hours. Enforced requisite: course C137A. Study of various programming language designs, from computing history and research literature, that attempt to solve problems of software systems that are bloated, buggy, and difficult to maintain and extend despite trend in computing toward ever higher levels of abstraction for programmers: Hands-on experience designing and implementing new language abstractions, both as stand-alone languages and as libraries in existing languages. Concurrently scheduled with course C237A. Letter grading.


144. Web Applications. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 143. Important concepts and theory for building effective, efficient, and robust web applications. Topics include basic Web architecture and protocol, XML and XML query language, mapping between XML and relational models, database design for the Web, security and user model, Web services and distributed transactions. Letter grading.

145. Introduction to Data Mining. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 143. Introductory survey of data mining (process of automatic discovery of patterns, changes, associations, and anomalies in massive databases), knowledge engineering, and wide spectrum of data mining application areas such as
bioinformatics, e-commerce, environmental studies, financial markets, multimedia data processing, network monitoring, and social service learning. Letter grading.

M146. Introduction to Machine Learning. (Same as Electrical and Computer Engineering M146.) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: course 32 or Program in Computing 10A, Electrical and Computer Engineering 110 or Electrical and Computer Engineering 131A or Mathematics 170A or 170E or Statistics 100A; Mathematics 33A. Introduction to breadth of data science. Foundations for modeling and analysis of complex data sets using computational methods. Modeling and design of efficient algorithms. Graphs, longest common subsequence, decision trees, and clustering. Letter grading.

M147. Introduction to Data Science. (Same as Electrical and Computer Engineering M148.) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: course 31 or Program in Computing 10A, and 10B, and one course from Civil and Environmental Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, Mathematics 170E, or Statistics 100A. How to analyze data arising in real world so as to understand corresponding phenomena. Covers topics in machine learning, data analytics, and statistical modeling classically employed for prediction. Comprehensive, hands-on overview of data science domain by blending theoretical and practical aspects of data science. Letter grading.

M151B. Computer Systems Architecture. (Same as Electrical and Computer Engineering M116C.) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisites: courses 33, and M51A or Electrical and Computer Engineering M16. Recommended: course M152A or Electrical and Computer Engineering M116L. Computer system organization and design, implementation of CPU data path and control, instruction set design, memory hierarchy ( caches, main memory, virtual memory) organization and management, input/output subsystems (bus structures, interrupts, DMA), performance evaluation, pipelined processors. Letter grading.

M152A. Introductory Digital Design Laboratory. (Same as Electrical and Computer Engineering M116LC.) Laboratory, four hours; discussion, two hours; outside study, two hours. Enforced requisites: course M51A or Electrical and Computer Engineering M16. Hands-on design, implementing and designing of digital logic circuits, use of computer-aided design tools for schematic capture and simulation, implementation of complex circuits using programmed array logic, design projects. Letter grading.

C174C. Computer Animation. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 174A. Designed for juniors/seniors. Introduction to computer animation, including basics of character modeling, forward and inverse kinematics, forward and inverse dynamics, motion capture animation techniques, physics-based animation, and spatial control. Concurrently scheduled with course C274C. Letter grading.

180. Introduction to Algorithms and Complexity. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 32, Mathematics 61. Designed for junior/senior Computer Science majors. Introduction to design and analysis of algorithms. Asymptotic analysis of algorithms, greedy method, dynamic programming; selection of prototypical algorithms; choice of data structures and representations; complexity measures: time, space, upper, lower bounds, asymptotic complexity; NP-completeness. Letter grading.


M182. Dynamic Biosystem Modeling and Simulation Methodology. (4) (Same as Bioengineering M182.) Lecture, four hours; discussion, one hour; laboratory, two hours; outside study, five hours. Requisites: Life Sciences 33A and 33B, or Mathematics 3A and 3B, or 31A and 31B. Recommended requisite or corequisite: Mathematics 3C, 32A, or 32T. For undergraduate students in life, computational, engineering, and mathematical sciences. Active learning approach. Introduction to explicit modeling and simulation of dynamic biological systems. Basic methodology for transforming biology, biochemistry, and physiology into system diagrams and models. Four units of credit for students taking the course as a requirement for the major or minor in bioengineering. Course projects emphasize the design, implementation and evaluation of simulation programs and models. Letter grading.

183. Introduction to Cryptography. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 32. Basic principles behind modern two- and three-dimensional computer graphics systems, including complete set of steps that modern graphics pipelines use to create realistic images in real time. How to position and manipulate objects in scene using geometry and camera transformations. How to create new frame using perspective and orthographic transformations. Basics of modeling primitives such as polygonal models and implicit, and parametric surface models, and color spaces, illumination models, shading, and texture mapping. Letter grading.

174B. Introduction to Computer Graphics: Three-Dimensional Graphics and Modeling. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 174A. State of art in three-dimensional photography and image-based rendering. How to capture, represent, and synthesize the shape and appearance of real objects and scenes. Process provides simple way to acquire three-dimensional models of unparalleled detail and realism. Appli- cation of techniques from computer en- gineering and postprocessing of movies, generation of realistic synthetic objects and characters) to medicine (modeling of biological structures from imaging data), and real-time augmentation of video, and security (vi- sual surveillance). Fundamental analytical tools for modeling and inferring geometric (shape) and photo- metric (reflectance, illumination) properties of objects and scenes, and for rendering and manipulating novel views. Letter grading.
permutations, semantic security, public-key and private-key encryption, key-agreement, homomorphic encryption, private information retrieval and voting protocols, message authentication, digital signatures, interactive proofs, zero-knowledge proofs, collision-resistant hash functions, commitment protocols, and two-party secure computation with static security. Letter grading.

M184A. Introduction to Computational and Systems Biology. (2) (Same as Bioengineering M184B and Computational and Systems Biology M184A) Lecture, two hours; outside study, four hours. Enrolled requires: one course from Mathematics M20, Mechanical and Aerospace Engineering M20, or Program in Computing 10A; and Life Sciences 30B or Mathematics 3B or 31B. Survey course designed to introduce students to computational and systems modeling and computation in biology and medicine, providing motivation, flavor, culture, and cutting-edge contributions in computational biociences and aims. Capabilities of oral presentations and model students with computational and systems biology interests. Presentations by individual UCLA researchers discussing their active computational and systems biology research. Letter grading.

CM186. Computational Systems Biology: Modeling and Simulation of Biological Systems. (5) (Same as Bioengineering CM186, Computational and Systems Biology M186, and Ecology and Evolutionary Biology M178B) Lecture, two hours; discussion, one hour; recitation, one hour. Requisites: Life Sciences 30A, 30B, Mathematics 32A or M32T, 33A, or 33B; or Mathematics 31A, 31B, 32A or M32T, 33A, or 33B. Dynamic and computer simulation methods for studying biological/biomedical processes and systems at multiple levels of organization. Intermediate linear and nonlinear control system, multi-component, epidemiological, pharmacokinetic, and other biomodeling methods applied to life sciences problems at molecular, cellular, organ, and population levels. Theory and data-driven modeling, with focus on translating biomodeling goals and methods into dynamical mathematical models, and implementing them for simulation, quantification, and analysis. Numerical simulation, optimization, and parameter identification and search algorithms, with model discrimination and analysis and software exercises in PC laboratory assignments. Concurrently scheduled with course CM286. Letter grading.

CM187. Research in Communication in Computational and Systems Biology. (4) (Same as Bioengineering CM187 and Computational and Systems Biology M187) Lecture, four hours; outside study, eight hours. Letter grading.


211. Network Protocol and Systems Software Design for Wireless and Mobile Internet. (4) Lecture, four hours; outside study, eight hours. Requisites: course 110B. Designed to provide an in-depth study of network protocol and systems software design in area of wireless and mobile Internet. Topics include (1) networking fundamentals: design philosophy of TCP/IP, end-to-end arguments, and protocol design principles, (2) network interfaces: TCP, IP, MAC standards, standard, packet scheduling, mobile IP, ad hoc routing, and wireless TCP, (3) mobile computing systems software: middleware, file system, services, and application protocols, and (4) topical studies: energy-efficient design, security, location management, and quality of service. Letter grading.


M231B. Play and Computer Games. (3) Lecture, one hour; outside study. Letter grading.

M231E. Embedded Systems. (4) (Same as Electrical and Computer Engineering M202A) Lecture, four hours; discussion, one hour; outside study, six hours. Enrolled requires: course 118B. Designed for undergraduate students. Introduction to embedded systems: structural and behavioral aspects, system design, microcontroller technology, and system design and analysis. Letter grading.

213. Big Data. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enrolled requires: course 111. Modern computing has entered an era of big data. Introduction to concepts of state-of-the-art in modern big data systems. Study of distributed storage and database systems, which provide foundation for other systems. Discussion of systems built for specific classes of workloads: processing of streaming data, relational data, batched data, graph data, as well as machine learning. Letter grading.

215. Internet of Things: Connectivity and Sensing. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: course 111. Covers modern concepts of state-of-the-art Internet of Things (IoT) technologies and their applications. Covers diverse set of IoT and wireless networking technologies such as OFDM, Wi-Fi, Bluetooth, global positioning system (GPS) for various of emerging communication and sensing applications such as 5G, dig-
ital medicine, digital farming, smart cities, and smart homes. Students learn how to design and build IoT system. Letter grading.

216. Network Algorithmics. (4) Lecture, four hours; outside study, eight hours. Recommended preparation: one on networks. Requisite: course 211. Introduction to algorithms for routers and servers. Models of network devices and hardware design. Principles of efficient implementation. Lookup algorithms (exact match, prefix lookups, advanced cardiac life support), fair queuing implementations, crossbar and scalable switches, with examples from well-known networking and Internet protocols. Topics include traffic measurement and network security. Letter grading.

217A. Internet Architecture and Protocols. (4) Lecture, four hours; outside study, eight hours. Enforced requisite: course 118. Focus on mastering existing core set of Internet protocols, including IP, TCP transport protocols, routing protocols, DNS, NTP, and security protocols such as DNSSEC, to understand principles behind design of these protocols, appreciate their design tradeoffs, and learn lessons from their operations. Letter grading.

217B. Advanced Topics in Internet Research. (4) Lecture, four hours; outside study, eight hours. Enforced requisite: course 217A. Designed for graduate students. Review of Internet development history and fundamental principles underlying TCP/IP protocol design. Discussion of current Internet research topics, including common results in routing protocols, transport protocols, network measurements, network security protocols, and clean-slate approach to network architecture design. Fundamental issues in network protocol design and implementations. Letter grading.


219. Current Topics in Computer System Modeling Analysis. (4) Lecture, eight hours; outside study, four hours. Review of current literature in area of computer system modeling analysis in which instructor has developed special proficiency as consequence of research interests. Students report on selected topics. May be repeated for credit with consent of instructor. Letter grading.

CM221. Introduction to Bioinformatics. (4) (Same as Bioinformatics M221, Chemistry CM260A, and Human Genetics M260A.) Lecture, four hours; discussion, two hours. Requisite: course 2 or Program in Computing 10C with grade of C– or better. Recommended: one course from Biological Sciences and Medicine, Bioinformatics, or Computer Engineering. Bioinformatics has become data-intensive science. Bottleneck in this endeavor. Biological datasets offer new challenges and methodologies. Introduction to analysis techniques and methods in bioinformatics and computational biology. Focus on key biological data types and statistical analyses used to explore and extract biological information. Letter grading.

CM222. Algorithms in Computational Genomics. (4) (Formerly numbered CM222.) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 112, 116. Course C222 is not required to C222. Prior knowledge of biology not required. Designed for engineering students as well as students from biological sciences and medical school. Introduction to bioinformatics and methodologies, with emphasis on concepts and inventing new computational and statistical techniques to analyze biological data. Focus on sequence analysis and alignment algorithms. Concurrently scheduled with course CM121. S/U or letter grading.

CM223. Computational Methods in Genomics. (4) (Same as Biological Chemistry M229S and Human Genetics CM223.) Seminar, four hours; outside study, eight hours. Designed for graduate engineering students as well as students from biological sciences and medical school. Introduction to computational genomics and proteomics and preparation for computational interdisciplinary research in genetics and genomics. Topics include genomics analysis, regulatory genomics, association analysis, and expression of genes. Letter grading.

CM224. Machine Learning Applications in Genetics. (4) (Same as Bioinformatics M224 and Human Genetics M224.) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: course 32 or Program in Computing 10C with grade of C– or better. Recommended: one course from Biology 10A, 101A, Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, 170E, or Statistics 100A. Familiarity with probability, statistics, linear algebra, and algorithms expected. Designed for engineering students as well as students from biological sciences and medical school. Biological science has become data-intensive science. Computational techniques and methods in bioinformatics and computational biology. Focus on key biological data types and statistical analyses used to explore and extract biological information. Letter grading.

CM225. Machine Learning in Bioinformatics. (4) (Same as Bioinformatics M226, Biomathematics M229B, and Human Genetics M229S.) Lecture, four hours; outside study, eight hours. Enforced requisite: course 32 or Program in Computing 10C with grade of C– or better. Recommended: one course from Biostatistics 101A, 110A, Civil Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, or Statistics 100A. Familiarity with probability, statistics, linear algebra, and algorithms expected. Designed for engineering students as well as students from biological sciences and medical school. Biological science has become data-intensive science. Computational techniques and methods in bioinformatics and computational biology. Focus on key biological data types and statistical analyses used to explore and extract biological information. Letter grading.


CM227. Current Topics in Computer System Modeling Analysis. (4) Lecture, eight hours; outside study, four hours. Review of current literature in area of computer system modeling analysis in which instructor has developed special proficiency as consequence of research interests. Students report on selected topics. May be repeated for credit with consent of instructor. Letter grading.

CM228. Types and Programming Languages. (4) Letter grading.

CM229. Machine Learning Applications in Genetics. (4) (Same as Bioinformatics M224 and Human Genetics M224.) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: course 32 or Program in Computing 10C with grade of C– or better. Recommended: one course from Biological Sciences and Medicine, Bioinformatics, or Computer Engineering. Bioinformatics has become data-intensive science. Bottleneck in this endeavor. Biological datasets offer new challenges and methodologies. Introduction to analysis techniques and methods in bioinformatics and computational biology. Focus on key biological data types and statistical analyses used to explore and extract biological information. Letter grading.

CM230. Machine Learning in Bioinformatics. (4) (Same as Bioinformatics M226, Biomathematics M229B, and Human Genetics M229S.) Lecture, four hours; outside study, eight hours. Enforced requisite: course 32 or Program in Computing 10C with grade of C– or better. Recommended: one course from Biostatistics 101A, 110A, Civil Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, or Statistics 100A. Familiarity with probability, statistics, linear algebra, and algorithms expected. Designed for engineering students as well as students from biological sciences and medical school. Biological science has become data-intensive science. Computational techniques and methods in bioinformatics and computational biology. Focus on key biological data types and statistical analyses used to explore and extract biological information. Letter grading.

CM231. Types and Programming Languages. (4) Letter grading.


CM233A. Parallel Programming. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 111. Introduction to static analysis of object-oriented programs and languages. Topics include static type systems, type safety, well-formedness, type checking, type inference, and type soundness. Soundness proofs for type systems. formal specification and implementation of variety of type systems, as well as readings from recent research literature on modern applications of type systems. Letter grading.

CM233B. Verification of Concurrent Programs. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 111, 131. Mutual exclusion and resource allocation in distributed systems; primitives for parallel computation; specification of parallelism, interprocess communication and synchronization, atomic actions, binary and multiway rendezvous, synchronous and asynchronous languages: CSP, Ada, Linda, Maie, UC, and others; introduction to parallel program verification. Letter grading.

CM233C. Verification of Concurrent Programs. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 111, 131. Mutual exclusion and resource allocation in distributed systems; primitives for parallel computation; specification of parallelism, interprocess communication and synchronization, atomic actions, binary and multiway rendezvous, synchronous and asynchronous languages: CSP, Ada, Linda, Maie, UC, and others; introduction to parallel program verification. Letter grading.

CM234. Computer-Aided Verification. (4) Lecture, four hours; outside study, eight hours. Requisites: course 181. Introduction to theory and practice of formal methods for design and analysis of concurrent and embedded systems, with focus on algorithmic techniques for checking logical properties of hardware and software systems. Topics include semantic and operational semantics, specification and conformance, confluence and strong fairness, bisimulation equivalence, invariant verification, temporal logic model checking, theory of omega automata, state-space reduction techniques, compositional and hierarchical reasoning. Letter grading.

CM235. Advanced Operating Systems. (4) Lecture, four hours. Preparation: C or C++ programming experience. Requisites: course 111. In-depth investigation of current systems issues through guided construction of research operating system for PC machines and consideration of recent literature. Memory management and protection, interrupts and traps, processes, interprocess communication, multiprogramming, multithreading, and on-line file systems. Virtualization, networking, profiling, research operating systems. Series of laboratory projects, including extra challenge work. Letter grading.
236. Computer Security. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 111, 118. Basic and research material on computer security. Topics include basic security goals and best practices, computer security tools, use and cryptography protocols for security, security tools (firewalls, virtual private networks, honeypots), virus and worm protection, security assurance and testing, design of secure programs, software, and networks, (4) security principles and techniques, and new and emerging threats and security tools. Letter grading.

C237A. Prototyping Programming Languages. (4) Lecture, four hours; outside study, two hours. Enforced requisite: course 131. How different programming language paradigms provide dramatically different ways of thinking about computation and the design of software systems. New abstract languages and computer languages in each. Analysis of prototypes to shed light on design and structural properties of each language and paradigm and to allow easy comparison against one another. Hands-on experience implementing new abstractions, both as stand-alone languages and as libraries in existing languages. Concurrently scheduled with course C137A. Letter grading.

C237B. Programming Language Design. (4) Seminar, four hours; discussion, two hours. Enforced requisite: course C237A. Study of various program- ming language designs, from computing history and research literature, that attempt to address problems of software engineering: bugs, concurrency, and artifact maintain and extend despite trend in computation toward ever higher levels of abstraction for programs. Hands-on experience designing, prototyping, and evaluating languages, new abstractions, and/or programming environments. Concurrently scheduled with course C137B. Letter grading.

M240. Quantum Programming. (4) (Formerly numbered 238B.) (Same as Quantum Science and Technology M205S.) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: Mathematics 115A. History of quantum computation and computation of qubit; four postulates that provide interface to quantum mechanics; concepts of quantum circuit and universal gate set; quantum teleportation; superdense coding; no-cloning theorem; suit of fundamental new quantum algorithms including Shor’s algorithm, Grover’s algorithm, and quantum approximate optimization algorithm; several quantum programming languages for quantum simulators; quantum simulators; quantum compilers; quantum error correction; quantum advantage. Students implement several quantum algorithms in multiple languages and run them on both simulators and quantum computer. Letter grading.

239. Current Topics in Computer Science: Programming Languages and Systems. (4) Lecture, four hours; outside study, eight hours. Review of current literature in area of computer science programming languages and systems in which instructor has developed special proficiency as consequence of research interests. May be repeated for credit with topic change. Letter grading.

240A. Databases and Knowledge Bases. (4) Lecture, four hours; outside study, eight hours. Requisite: course 143. Theoretical and technological foundation of Intelligent Database Systems, that merge database technology, knowledge-based systems, and advanced programming environments. Rule-based knowledge representation, spatio-temporal reasoning, and logic-based declarative querying/programming are salient features of this extended research area. Other topics include object-relational systems and data mining techniques. Letter grading.


244A. Distributed Database Systems. (4) Lecture, four hours; outside study, eight hours. File allocation, intelligent directory design, transaction management, deadlock, strong and weak concurreny control, commit protocols, semantic query answering, multi- graduate students. Scale of Web data requires novel partitioning, examples, trade-offs, and design experi- ences. Letter grading.

245. Big Data Analytics. (4) Lecture, four hours; dis- cussion, two hours; outside study, six hours. Requi- site: course 143 or equivalent. With emerging abundance of data, how will we make sense of that infor- mation from it. Data analytics is process of automatic discovery of patterns, changes, associations, and anomalies in massive databases, and is highly inter- disciplinary field representing confluence of several disciplines, including database systems, data ware- housing, data mining, machine learning, statistics, al- gorithms, data visualization, and cloud computing. Letter grading.

246. Web Information Management. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 112, 143, 180, 181. Designed for graduate students. Scale of Web data requires novel algorithms and principles for their management and retrieval. Study of Web characteristics and new manage- ment techniques needed to build computer sys- tems scaleable to cope. Topics include: Web searching techniques, large-scale data mining algorithms, efficient page refresh techniques, Web- search ranking algorithms, and query processing techniques on independent data sources. Letter grading.

247. Advanced Data Mining. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requir- e: course 145 or M146 or equivalent. Introduction of concepts, algorithms, and techniques of data mining on different types of datasets, covering basic data mining algorithms, advanced topics on text mining, recommender systems, and graph/network mining. Team-based project involving hands-on prac- tice of mining useful knowledge from large data sets is required. Letter grading.

249. Current Topics in Data Structures. (4) Lecture, four hours; outside study, eight hours. Review of cur- rent literature in area of data structures in which in- structor has developed special proficiency as conse- quence of research interests. Students report on se- lected topic and must be approved for credit with consent of instructor. Letter grading.

251A. Advanced Computer Architecture. (4) Lec- ture, four hours; outside study, eight hours. Requisites: course M151B. Recommended: course 111. Design and implementation of computer systems. Advanced computer hardware components, computer organization and architecture. Digital design process, instruction-level parallelism, simulation, evaluation, and analysis, state-of- art design examples, introduction to parallel architec- tures. Letter grading.

251B. Parallel Computer Architectures. (4) Lecture, four hours; outside study, eight hours. Requisite: course M151B. Recommended: course 251A. SIMD and MIMD systems, symmetric multiprocessors, dis- tributed shared memory systems, message-passing systems, multicomputer chips, clusters, interconnection networks, host-network interfaces, switching element design, communication primitives, cache coherence, memory consistency models, synchronization prin- tives, state-of-art design examples. Letter grading.


256A. Advanced Scalable Architectures. (4) Lecture, four hours; outside study, eight hours. Requisite: course M151B. Recommended: course 251A. State-of-the-art scalable multiprocessor design using communication and memory exploiting parallelism at multiple levels. Current re- search areas. Examples of chips and systems. Letter grading.

258A. Design of VLSI Circuits and Systems. (4) (Same as Electrical and Computer Engineering M216A.) Lecture, four hours; discussion, two hours; laboratory, four hours; outside study, two hours. Requisites: courses M151A or Electrical and Computer Engi- neering M16, and Electrical and Computer Engi- neering 115C. Letter grading. Letter grading.

258C. LSI in Computer System Design. (4) (Same as Electrical and Computer Engineering M216C.) Lecture, four hours; outside study, four hours. Requisite: course M258A. LSI/VLSI design and application in computer systems. In-depth studies of VLSI architectures and VLSI design tools. Letter grading.

258F. Physical Design Automation of VLSI Systems. (4) Lecture, four hours; outside study, eight hours. De- tailed study of various physical design automation problems of VLSI circuits, including logic partitioning, floorplanning, placement, routing, timing, channel and switchbox routing, planar routing and via minimization, compaction and performance-driven layout. Discus- sion of applications of number of important optimization techniques, such as network flows, Steiner trees, simulated annealing, and generic algorithms. Letter grading.

258G. Logic Synthesis of Digital Systems. (4) Lecture, four hours; outside study, eight hours. Requisites: courses M151A, 180. Detailed review of various problems in logic synthesis of VLSI digital sys- tems, including two-level Boolean network optimization, Boolean minimization, Boolean simplification, technology mapping for standard cell designs and field-programmable gate-array (FPGA) designs; retime for sequential circuits; and applications of binary decision diagrams (BDDs). Letter grading.

258H. Analysis and Design of High-Speed VLSI Interconnects. (4) Lecture, four hours; outside study, eight hours. Requisites: courses M258A, 258F. De- tailed study of various problems in analysis and design of high-speed VLSI interconnects and design of on-chip interconnects. Boolean interconnects at both the interconnect circuit (IC) and packing levels, including interconnect capacitance and resistance, lossless and lossy trans- mission lines, crosstalk and power distribution noise, design and analysis of on-chip interconnect models, intercon- nect topology and geometry optimization, and clocking for high-speed systems. Letter grading.

259A. Introduction to VLSI System Design. (4) Lecture, four hours; outside study, eight hours. Requisite: course M258A. VLSI systems, VLSI design and application in computer systems. Letter grading.

259B. Analysis and Design of High-Speed VLSI Interconnects. (4) Lecture, four hours; outside study, eight hours. Requisite: course M259A. High-speed VLSI interconnects and design of on-chip interconnects. Boolean interconnects at both the interconnect circuit (IC) and packing levels, including interconnect capacitance and resistance, lossless and lossy trans- mission lines, crosstalk and power distribution noise, design and analysis of on-chip interconnect models, intercon- nect topology and geometry optimization, and clocking for high-speed systems. Letter grading.
search algorithms in artificial intelligence, including problem spaces, brute-force search, heuristic search, linear-space algorithms, real-time search, heuristic evaluation functions, and con- straint-satisfaction problems. Letter grading.

262A. Learning and Reasoning with Bayesian Net- works. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 112 or Electrical Engineering 131A. Review of several formalisms for representing and managing uncertainty in reasoning systems; presentation of comprehensive description of Bayesian inference using belief net- works representation. Letter grading.


262Z. Current Topics in Cognitive Systems. (4) Lec- ture, four hours; outside study, eight hours. Requisite: course 262A. Additional requisites for each offering announced in advance by department. Theory and im- plementation of systems that emulate or support human reasoning. Current literature and individual studies in artificial intelligence, knowledge-based sys- tems, dynamic constraint systems, computational psy- chology, and heuristic programming theory. May be repeated for credit with topic change. Letter grading.

263. Natural Language Processing. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Natural language processing (NLP) enables com- puters to understand and process human languages. NLP techniques have been widely used in many appli- cations, including question answering, machine trans- lation, text mining, question answering, machine trans- lation, word-sense disambiguation, narrative and edito- rial comprehension. Examination of both symbolic and statistical approaches to language processing and ac- quisition. Letter grading.

263A. Language and Thought. (4) Lecture, four hours; outside study, eight hours. Requisite: course 130 or 131 or 161. Introduction to natural language pro- ccssing (NLP), with emphasis on semantics. Presenta- tion of process models for variety of tasks, including question answering, paraphrasing, machine transla- tion, world disambiguation, narrative and editing. An overview of both symbolic and statistical approaches to language processing and acquisi- tion. Letter grading.

263C. Animals-Based Modeling. (4) Lecture, four hours; outside study, eight hours. Requisite: course 130 or 131 or 161. Animals are mobile/sensing animal-like software agents embedded in simulated dynamic en- vironments. Emphasis on models of goal-oriented behav- ior via neurocontrollers, adaptation via reinforce- ment learning, evolutionary programming. Animat- based, task-oriented design in which cognitive proces- ses are encoded, learned, and evaluated in simulated en- vironments. Letter grading.

264A. Automated Reasoning: Theory and Applica- tions. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 161. Intro- duction to artificial intelligence and computational logic. Topics include: automated reasoning; propositional and first-order logic; problem solving; planning; formal verification; and reliability analysis. Letter grading.


M266B. Statistical Computing and Inference in Vi- sion and Cognition. (Same as Statistics M232B) Lecture, three hours. Preparation: basic statistics, linear algebra (matrix analysis), computer vision. Intro- duction to broad range of algorithms for statistical in- ference, vision, and cognition. Overview of several statis- tical models for modeling visual patterns: descriptive, causal Markov, generative (hidden Markov), and discriminative. Comparison of principles and al- gorithms for these models; presentation of unifying picture. Introduction of minimum entropy and EM-type and stochastic algorithms for learning. S/U or letter grading.
275. Artificial Life for Computer Graphics and Vision. (4) Lecture, four hours; outside study, eight hours. Enforced requisite: course 174A. Recommended background: course 161, lowest of important prerequisites that concepts from artificial life, emerging discipline that spans computational and biological sciences, can play in construction of advanced computer graphics and vision models for reality animation, interactive games, other visual sensor-based understanding of medical image analysis, etc. Focus on comprehensive models that can realistically emulate variety of living things (growing, aging, learning) from lower animals to humans. Exposure to effective computational modeling of natural phenomena of life and their incorporation into sophisticated, self-animating graphical entities. Specifically, selection of modeling plants using L-systems, biomechanical simulation and control, behavioral animation, reinforcement and neural-network learning of locomotion, cognitive modeling, artificial animals and humans, human facial animation, and artificial evolution. Letter grading.

M276A. Pattern Recognition and Machine Learning. (4) Same as Statistics M231A. Lecture, three hours; discussion, one hour. Designed for graduate students. Fundamental concepts, theorems, and algorithms for pattern recognition and machine learning that are used in computer vision, image processing, speech recognition, data mining, statistics, and computational biology. Bayesian decision theory and parametric and nonparametric learning, clustering, complexity (VC-dimension, MLD, AIC), PCA/ICA/CTA, MDL, SW, boosting. S/U or letter grading.

M280A-280C. Complex Systems. (4 each) Lecture, four hours; outside study, eight hours. Requisite: course 180. Additional requisites for each offering announced in advance by department. Selections from families of formal languages, grammars, machines, operators: pushdown automata, context-free languages and their generalizations, parsing, multidimensional computational systems, machine-based complexity. Subtopics of current and planned sections: Context-Free Languages (284A), Parsing Algorithms (284F). May be repeated for credit with consent of instructor and topic change. Letter grading.

M306. Computational Systems Biology: Modeling and Simulation of Biological Systems. (5) Same as Bioengineering CM286, Biophysics CM290A. Lecture, four hours; laboratory, two hours; discussion, one hour. Requisites: Life Sciences 10A, 10B or 20 or 30A, 31A, 31B, 32A or M32T, 32A, 33B; or Mathematics 31A, 31B, 32A or M32T, 33A, and 33B. Dynamic system simulation and computer simulation methods for studying biological phenomena, development and applications of numerical methods at multilevels of organization. Intermediate linear and nonlinear control system, multicompartamental, epidemiological, pharmacokinetic, and other biomodeling methods applied to life sciences problems at molecular, cellular, organ, and population levels. Both theory and data-driven modeling, with focus on translating biomedeling goals and data into dynamical mathematical models, and interpreting the simulation quantification, and analysis. Numerical simulation, optimization, and parameter identifiability and search algorithms, with model discrimination and analysis and robustness to uncertainty assessments. Concurrently scheduled with course CM186. Letter grading.

M322B. Cryptographic Protocols. (4) Same as Mathematics M209A. Lecture, four hours; outside study, eight hours. Requisite: course M222A. Consideration of cryptographic protocol design and analysis. Topics include noninteractive zero-knowledge proofs; zero-knowledge arguments; current and non-black-box zero-knowledge; IP=PSPACE proof, stronger notions of security for public-coin models; breaking chosen-ciphertext security; secure multiparty computation; dealing with dynamic adversary; nonmalleability and composability of secure protocols; software protection; threshold cryptography; identity-based cryptography; private information retrieval; and attacks on cryptographic protocols. Voting protocols; identification protocols; digital cash schemes; lower bounds on use of cryptographic functions in certain applications. May be repeated for credit with topic change. Letter grading.


284A-284C-284P. Topics in Automata and Language Theory. (4, 4, 4) Lecture, four hours; outside study, eight hours. Requisite: course 181. Additional requisites for each offering announced in advance by department. Selections from formal languages, automata, computation complexity and general theory of algorithms; algorithms for particular application areas. Subtopics of current sections: Principles of Design and Analysis of Algorithms (284O); Design and Analysis of Networks (284G). May be repeated for credit with consent of instructor and topic change. Letter grading.

M280P. Approximation Algorithms. (4) Lecture, four hours; outside study, eight hours. Requisite: course 180. Background in discrete mathematics helpful. Theoretically sound techniques for dealing with NP-hard problems. Inability to solve these problems efficiently led to development of algorithms whose approximation—finding solution that is near to best possible in efficient running time. Coverage of approximation techniques for number of different problems, with algorithms that include primal-dual method, linear program rounding, greedy algorithms, and local search. Letter grading.

281A. Computability and Complexity. (4) Lecture, four hours; outside study, eight hours. Requisite: course 180. Advanced aspects of algorithms, computational complexity and general theory of algorithms; algorithms for particular application areas. Subtopics of current sections: Principles of Design and Analysis of Algorithms (284O); Design and Analysis of Networks (284G). May be repeated for credit with consent of instructor and topic change. Letter grading.

M296A. Advanced Modeling Methodology for Dynamic Biomedical Systems. (4) Same as Bioengineering M296A and Medicine M270C.) Lecture, four hours; outside study, eight hours. Basic concepts and design techniques for randomized algorithms, such as probability theory, Markov chains, random graphs, probabilistic method, applications to randomized algorithms in data structures, graph theory, computational geometry, number theory, parallel and distributed systems. Letter grading.

M296B. Optimal Parameter Estimation and Experimental Design. (4) Same as Bioengineering M296B, Biomathematics M270, and Medicine M270D.) Lecture, four hours; outside study, eight hours. Requisite: course CM286 or M296A or Biomathematics 220. Estimation methodology and model parameter estimation algorithms for fitting data presentations and written progress reports explain how to proceed with search for research results. Major emphasis on effective research reporting, both oral and written. Concurrently scheduled with course CM186. Letter grading.

M295S. Seminar: Theoretical Computer Science. (2) Seminar, two hours; outside study, six hours. Requisites: courses 280A, 281A. Intended for students un- dergraduate students interested in research in current computer science topics and recent research in such areas as algorithms and complexity theory. Letter grading. May be repeated for credit with topic change.

M294A. Current Topics in Computer Theory. (4) Lecture, four hours; outside study, eight hours. Review of current literature in area of computer theory in which instructor has developed special proficiency as consequence of research interests. Students report on selected topics. Letter grading.

M294CO. Current Topics in Computer Theory: Complexity Theory. (4) Lecture, four hours; outside study, eight hours. Diagonalization, polynomial-time hierarchy, PCP theorem, randomness and derandomization, circuit complexity, attempts and limitations. Letter grading. May be repeated for credit with topic change.

M295L. Current Topics in Computer Theory. (4) Lecture, four hours; outside study, eight hours. Review of current literature in area of computer theory in which instructor has developed special proficiency as consequence of research interests. Students report on selected topics. Letter grading.

M295L. Current Topics in Computer Theory: Online Algorithms. (4) Lecture, four hours; outside study, eight hours. Requisite: course 180. Introduction to decision making under uncertainty and competitive analysis. Review of current research in online algorithms for problems arising in many areas, such as data and memory management, searching and navigating in unknown terrains, and server systems. Letter grading.

M295P. Current Topics in Computer Theory. (4) Lecture, four hours; outside study, eight hours. Review of current literature in area of computer theory in which instructor has developed special proficiency as consequence of research interests. Students report on selected topics. Letter grading.

M295P. Current Topics in Computer Theory: Randomized Algorithms. (4) Lecture, four hours; outside study, eight hours. Basic concepts and design techniques for randomized algorithms, such as probability theory, Markov chains, random graphs, probabilistic method, applications to randomized algorithms in data structures, graph theory, computational geometry, number theory, parallel and distributed systems. Letter grading.

M295G. Current Topics in Computer Theory. (4) Lecture, four hours; outside study, eight hours. Review of current literature in area of computer theory in which instructor has developed special proficiency as consequence of research interests. Students report on selected topics. Letter grading.

M296A. Advanced Modeling Methodology for Dynamic Biomedical Systems. (4) Same as Bioengineering M296A and Medicine M270C.) Lecture, four hours; outside study, eight hours. Basic concepts and design techniques for randomized algorithms, such as probability theory, Markov chains, random graphs, probabilistic method, applications to randomized algorithms in data structures, graph theory, computational geometry, number theory, parallel and distributed systems. Letter grading.

M296B. Optimal Parameter Estimation and Experimental Design. (4) Same as Bioengineering M296B, Biomathematics M270, and Medicine M270D.) Lecture, four hours; outside study, eight hours. Requisite: course CM286 or M296A or Biomathematics 220. Estimation methodology and model parameter estimation algorithms for fitting dy-
C. Preparation for PhD Oral Qualifying Examination. (2 to 16) Tutorial, to be arranged. Limited to graduate computer science students. Preparation for oral qualifying examination including preliminary research on dissertation. S/U grading.

598. Research for and Preparation of MS Thesis. (2 to 12) Tutorial, to be arranged. Limited to graduate computer science students. Supervised independent research for MS candidates, including thesis prospectus. S/U grading.

599. Research for and Preparation of PhD Dissertation. (2 to 16) Tutorial, to be arranged. Limited to graduate computer science students. Petition forms to request enrollment may be obtained from assistant dean, Graduate Studies. S/U grading.

CONSERVATION OF CULTURAL HERITAGE

Interdepartmental Program
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M. Rahim Shayegan, PhD (Near Eastern Languages and Cultures)
Lothar von Falkenhause, PhD (Art History)
Glenn Wharton, PhD (Art History)

Overview
The UCLA/Getty Conservation interdepartmental program provides an excellent platform for education and research in the conservation of cultural heritage. It supports discovery and innovation through research that transcends the boundaries of traditional disciplines. It uniquely trains cultural property professionals in the best practices and methods of cultural heritage conservation through various pedagogical approaches including, but not limited to, core teaching and learning, independent research, and laboratory experience in museums and in the field. Finally, it positively impacts the community by engaging with a more informed public that would seek to protect cultural heritage from imminent threats.

Graduate Study
The program offers two degree options: a practice-focused three-year Master of Arts (MA) degree in Conservation of Cultural Heritage and a research-focused Doctor of Philosophy (PhD) degree in Conservation of Material Culture. Though the two degrees share a scholarly approach to the discipline and strong commitment to the advancement of the conservation profession, they provide distinctive competencies, preparing students for different careers in the cultural heritage section and beyond.

The aim of the program is to train the next generation of multidisciplinary researchers, heritage practitioners, and cross-cultural leaders in the theoretical and experimental developments and advocacy of cultural heritage. These skills are also transferable to other domains and provide a rich educational experience that can be very different from the criteria for conservation of fine art or historical materials. The special focus of the program and its interdisciplinary curriculum serves the archaeological, scientific, native, and cultural minority communities alike and offers a nexus at the boundaries of conservation, archaeology, ethnography, the natural sciences, and programming.

The partnership between UCLA and the Getty in establishing the program ensures that both a major research university and an institution with a principal mandate for conservation of world cultural heritage are working to create rich and vibrant conservation training opportunities. The program helps students develop working relationships with a wide array of colleagues in the Getty Conservation Institute, the J. Paul Getty Museum, other local museums and cultural organizations, and different departments and programs at UCLA.

Graduate Majors

Conservation of Cultural Heritage MA

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.
Conservation of Cultural Heritage

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members and students of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in a minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

C210. Field Methods in Archaeological Conservation: Readiness, Response, and Recovery. (4) Formerly numbered Conservation of Archaeological and Ethnographic Materials C220.) Laboratory, four hours. Overview of risks (direct and indirect) and materials vulnerability of in situ cultural heritage and movable archaeological materials in emergency situations (rescue excavations, disasters, conflicts), with emphasis on readiness, first aid response, and recovery. Readiness focuses on preparedness and preventive measures, including reburials, shelters, rescue excavations, and documentation as well as developing inventories and awareness mechanisms, basic first aid response covers development of on-site emergency risk assessments to evaluate damage and putting triage theory into practice, salvage rescue operations, emergency temporary in situ stabilization and protection (using locally available materials), and training. Recovery is based on documentation, lifting methods, handling, transportation, and storage. Emphasis on finding practical solutions to prevent and mitigate damage and to recover and safeguard archaeological artifacts. Concurrently scheduled with course C220. Letter grading.

C212. Field Methods in Archaeological Conservation: Readiness, Response, and Recovery. (4) Formerly numbered Conservation of Archaeological and Ethnographic Materials 212L.) Lecture, four hours. Introduction to important scientific parameters in conservation of materials that are of great importance for both fundamental science and practical application—understanding intrinsic properties of materials, mechanisms of deterioration, and conservation treatments. General chemistry, physics, and physical chemistry (atomic structure, reactivity in various states of matter), diffusion, interfaces, surface tension, wetting, adsorption, adhesion, dissolution and crystallization, mechanical properties (properties/characterization), phase transformations (glass, metals, polymers). Letter grading.

M215. Cultural Materials Science I: Analytical Imaging and Documentation in Conservation of Materials. (4) Formerly numbered Conservation of Archaeological and Ethnographic Materials 211.) Lecture, three hours. Introduction to preservation of cultural heritage addressing threats and challenges such as climate change and global warming, conflicts, and neglect. Consideration of significance and value of heritage sites and role of stakeholders. Investigation of methods of evaluation of physical condition and development of risk assessments to address physical risks in milieu of site preservation management, including visitors’ organization, urban development, socio-economic growth, and tourist development. Letter grading.


M234. Conservation Laboratory: Metals I. (4) Formerly numbered Conservation of Archaeological and Ethnographic Materials 234.) Laboratory, four hours. Enforced requisite: course 263. Recommended:

238. Conservation Laboratory: Organic Materials II. (Formerly numbered Conservation of Archaeological and Ethnographic Materials 238.) Laboratory, four hours. Enforced requisites: course 262. Designed for graduate conservation students. Typical treatments used historically and currently for deterioration problems found in organic materials from archaeological and ethnographic contexts. Materials include plant and animal fibers, feathers, and quills. Letter grading.

239. Conservation Laboratory: Metals II. (Formerly numbered Conservation of Archaeological and Ethnographic Materials 239.) Laboratory, four hours; outside conservation studies required. Enforced requisites: courses 262, 283. Recommended: courses M210, M215. Treatment of conservation problems of metallic artifacts made of iron, steel, cast iron, gold, zinc, and aluminum that have some importance in ethnographic objects. Practical work on metallic artifacts. Letter grading.

M240. Environmental Protection of Collections for Museums, Libraries, and Archives. (Formerly numbered Conservation of Archaeological and Ethnographic Materials 240.) (Same as Information Studies M238.) Lecture, two hours; laboratory, two hours. Requisites: Information Studies 432. Required of graduate conservation students. Review of environmental and biological agents of deterioration, including light, temperature, relative humidity, pollution, insects, and fungi. Emphasis on monitoring to identify agents and understanding of materials sensitivity, along with protective measures for collections. Letter grading.


C242. Managing Collections for Museums, Libraries, and Archives. (Formerly numbered Conservation of Archaeological and Ethnographic Materials C242.) Lecture, two hours; activity, two hours. Designed for graduate conservation students. How conservators work together with curators, collections managers, museum directors, and registrars to permit collections to be both accessed and preserved. Concurrently scheduled with course C142. Letter grading.

M244. Collection Management for Archives, Libraries, and Museums. (Formerly numbered Conservation of Archaeological and Ethnographic Materials M244.) (Same as Information Studies M244.) Lecture, two hours; fieldwork, two hours. How conservators work together with curators, collections managers, museum directors, and registrars to permit collections to be both accessed and preserved. Letter grading.


262. Structure, Properties, and Deterioration of Materials: Stone and Adobe. (Formerly numbered Conservation of Archaeological and Ethnographic Materials 262.) Lecture, one hour; laboratory, one hour. General introduction to different types of organic materials used to produce ethnographic and archaeological cultural heritage. Relationship between material composition, processing, and properties of natural and manufactured materials using basic concepts from biology and chemistry. Structural stability and deterioration phenomena of these materials as found in cultural collections. Letter grading.


264. Structure, Properties, and Deterioration of Materials: Rock Art, Wall Paintings, Mosaics. (Formerly numbered Conservation of Archaeological and Ethnographic Materials 264.) Lecture, three hours. Recommended preparation: basic knowledge of general chemistry and materials science. Introduction to materials and techniques of rock art, wall paintings (including painted surfaces on cement and composite decorative architectural surfaces), and mosaics. Archaeological and ethnographic context, techniques, and materials. Pigments, colorants, and binding media explained using basic concepts from physics and chemistry. Intrinsic attributes and resistance to weathering. Causes, sources, and mechanisms of deterioration (physical, chemical, and biochemical). Letter grading.

265. Structure, Properties, and Deterioration of Materials: Organics II. (Formerly numbered Conservation of Archaeological and Ethnographic Materials 265.) Lecture, one hour; laboratory, one hour. General introduction to different types of organic materials used to produce ethnographic and archaeological cultural heritage: wood, bark, paper, bast fibers, grasses. Relationship between materials, processing, and properties of natural materials using basic concepts from biology and chemistry. Structural stability and deterioration phenomena of these materials as found in cultural collections. Letter grading.

288. Special Topics in Conservation. (2 or 4) (Formerly numbered Conservation of Archaeological and Ethnographic Materials 288.) Lecture, three hours; laboratory, one hour. Special topics on theoretical and practical subjects in conservation, including painted surfaces on cement and composite decorative architectural surfaces, and mosaics. Archaeological and ethnographic context, techniques, and materials. Pigments, colorants, and binding media explained using basic concepts from physics and chemistry. Intrinsic attributes and resistance to weathering. Causes, sources, and mechanisms of deterioration (physical, chemical, and biochemical). Letter grading.

290. Conservation Program Internship. (6 or 12) (Formerly numbered Conservation of Archaeological and Ethnographic Materials 290.) Fieldwork, 20 or 40 hours. Open only to Conservation MA program graduate students who have completed first year of conservation program coursework. Supervised conservation fieldwork is required, and the student is expected to work in field teams composed of students and professional conservationists. Internship experience may be arranged for credit with instructor. May not be applied toward PhD course requirement. May be repeated for credit. S/U grading.

596. Directed Individual Studies. (2 to 6) (Formerly numbered Conservation of Archaeological and Ethnographic Materials 596.) Tutorial, two or four hours. May not be applied toward PhD course requirement. May be repeated for credit. S/U grading.

597. Preparation for PhD Qualifying Examination. (2 to 12) (Formerly numbered Conservation of Archaeological and Ethnographic Materials 597.) Tutorial, to be arranged. May not be applied toward PhD course requirement. May be repeated for credit. S/U grading.

598. MA Thesis Preparation. (2 to 12) (Formerly numbered Conservation of Archaeological and Ethnographic Materials 598.) Tutorial, two hours; laboratory, one hour. Development of a thesis proposal including background research and literature review. May be arranged for credit with instructor. May not be applied toward PhD course requirement. May be repeated for credit. S/U grading.

599. PhD Dissertation and Preparation. (2 to 12) (Formerly numbered Conservation of Archaeological and Ethnographic Materials 599.) Tutorial, to be arranged. May not be applied toward PhD course requirement. May be repeated for credit. S/U grading.
Overview
The UCLA School of Dentistry offers courses for general campus students. Dentistry 199 and 199H are individual special studies courses for UCLA undergraduates with definitive research interests and abilities applicable to dentistry. The subject areas include oral biology, clinical research, and dental health policy. Interested students should contact the associate dean of research at 310-825-6405 to obtain the names and areas of interest of participating School of Dentistry faculty members.

Dentistry faculty information is available from the department.

Dentistry

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

199. Individual Special Studies. (2 to 8) Tutorial, to be arranged. Studies in dentistry and related subject areas appropriate for training of particular students, with required reading assignments or laboratory work leading to final oral or written examination. May be repeated for maximum of 16 units. P/NP or letter grading.

199H. Individual Special Studies (Honors). (2 to 8) Tutorial, to be arranged. Studies in dentistry and related subject areas appropriate for training of particular students, with required paper submitted at end of course in addition to final examination (paper to be of publication quality as judged by course mentor). May be taken for maximum of 8 units. P/NP or letter grading.

Graduate Course

441C. Introduction to Healthcare. (2) Lecture, two hours. Description and analysis of American dental care system from historical, ethical, and legal perspectives. Assessment of how dentistry fits within general provision of healthcare services in America, with comparisons to dental care provisions in other countries. S/U grading.

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DENTISTRY / 363

DESIGN/MEDIA ARTS

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Lauren L. McCarthy, MFA, Chair

Faculty Roster

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Lauren L. McCarthy, MFA
Rebeca Méndez, MFA
Christian A. Moeller, Dipl–ING
Casey E.B. Reas, MS
Eddo I. Stern, MFA
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Associate Professor
Ramesh Srinivasan, PhD

Assistant Professors
Jenna B. Caravello, MFA
Chandler B. McWilliams, MFA, MA
Daniel S. Snelson, PhD

Overview

The Department of Design/Media Arts offers the Bachelor of Arts (BA) and Master of Fine Arts (MFA) degrees. The BA degree focuses on visual communication design, with emphasis on digital media. The MFA degree focuses on media arts. These uniquely challenging programs invite students to balance aesthetic sensibility with logical reasoning, formal theories with practical application, and contemporary thought with historical perspective.

The Department of Design/Media Arts reserves the right to hold for exhibition purposes examples of any work done in classes and to retain for the permanent collection of its galleries such examples as may be selected.

Undergraduate Major

Design/Media Arts BA

The undergraduate program begins with the study of basic design elements and processes: form, color, letterforms and typography, motion, and interactivity. Historical perspectives and social issues are also introduced. At the upper-division level, studio courses explore current uses of interactive media and new directions in visual communication design, including the study of time and motion, as well as virtual form and space in computer-generated environments. Through a balance of courses in theory, criticism, and practice, students develop an understanding of design principles. Most courses are taught as studios of no more than 22 students, which encourages individual growth and fosters a sense of community within the department.

Capstone Major

The Design/Media Arts major is a designated capstone major. Students are required to complete an advanced project of their own that entails full engagement with the design process. Through their capstone work, students demonstrate their capacities for research, ideation/concept development, creative and design direction, communication strategy, design, production/fabrication, and critical analysis. Capstone courses focus on career choice, and final projects are showcased at the spring senior show.

Learning Outcomes

The Design/Media Arts major has the following learning outcomes:

• Deep understanding of the field through immersion
• Exploration and development of ideas through listening to and observation of patterns
• Definition of an event and its surroundings and mise-en-scène, and the ethos of the student’s idea
• Development of the specifics of a design
• Conceptualization of how an idea reaches its potential
• Designed specifics of each element of the visual vocabulary—from graphic elements to photography, videography, and illustrations—including definition of spatial, material, and auditory elements

Facilities

Facilities and equipment in the department enable students to create work in two, three, and four dimensions. They expand opportunities for students to develop interactive media applications in a networked environment and advanced computer graphics. The department equipment includes computer laboratories with high-end PC and Macintosh computers and relevant software for the creation of works for print, web, video, and other media, a fabrication laboratory with equipment ranging from table saws to three-dimensional printers to a CNC machine to create physical objects combined with electronics, and a print laboratory with high-quality printers.
Requirements

Preparation for the Major
Required: Design/Media Arts 8, 10, 21, 22, 24, 25, 28.

The Major
Required: Twelve upper-division courses: Design/Media Arts 101, 104; six courses selected from 152, 153, 154, 155, 156, 157, 158, 161, 163; three courses selected from 160, 171, 172, 173; and one capstone course: 159.

It is recommended that students have each term’s program approved by the departmental adviser.

Consult the Schedule of Classes for courses limited to majors only.

Graduate Major

Design/Media Arts MFA

The three-year Master of Fine Arts (MFA) program fosters mature, professional-quality work utilizing the most current technologies in the field of media arts. The program focuses on developing an individual thesis project that incorporates integration of research and theoretical exploration of a topic, culminating in a final exhibition of work.

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Design/Media Arts

Lower-Division Courses

1. Graphic Design. (2) Studio, 30 hours. Limited to high school students. Basic and advanced photography skills using digital cameras. Alteration/manipulation of photos using techniques from latest version of Adobe Photoshop. Uploading of images on Web or in print. Production of digital and print portfolio of student work. Field trips to surrounding West Los Angeles locales to shoot photos. May be repeated for credit without limitation. Offered only as part of Summer Institute. P/NP grading.

2. Web Design. (2) Studio, 30 hours. Limited to high school students. How Web design works: basic hand coding and creation of personalized homepages with Macromedia Director and Flash software. Photograph scanning and manipulation of images in Adobe Photoshop to incorporate student Web designs. Critique of various Web pages to analyze successful use of Web design and understand enormous potential of Internet. May be repeated for credit without limitation. Offered only as part of Summer Institute. P/NP grading.

3. Game Design. (4) Studio, 30 hours. Limited to high school students. Development of fundamental skills to create games and game art that express personal and subjective approach to game making. Artistic vision combined with technological expertise to teach students fundamentals of designing games, building game worlds, creating game characters, and making playable games for mobile platforms. Use of current software and technology, including Maya and Unity3D. Creation of game projects that students exhibit and can use for college applications. Offered only as part of UCLA Game Lab Summer Institute. P/NP grading.

4. Audio Video Design. (2) Studio, 30 hours. Limited to high school students. Creation of storyboard for short documentary, commercial, or music video. Students shoot and edit their own work by learning fundamentals of preproduction and postproduction using latest digital software, Adobe Premiere and After Effects, to create their work. Burning of DVD of finished production. Visits from professional video producer to help guide students in creating their own videos. May be repeated for credit without limitation. Offered only as part of Summer Institute. P/NP grading.

5. Introduction to Design | Media Arts. (4) Studio, 40 hours. Limited to high school students. Two-week summer course designed to meet needs of high school students interested in exploring their creative potential within fields of design media arts, with focus on concepts of narrative and storytelling. Introduction to and exploration of variety of media such as graphic, web, game, and video design with goal of combining and integrating these media to express and realize their narrative projects. Students work with most current software and technology in each discipline area, developing diverse skill sets while cultivating conceptual capabilities around storytelling project, and with experienced instructors and professionals in field to develop projects utilizing this comprehensive and integrative approach. Culminates in proposals that may be used for college applications. Possible field trips. May be repeated for credit without limitation. Offered only as part of Summer Institute. P/NP grading.

6. Art Science and Technology. (4) Studio/laboratory, 40 hours. Limited to high school students. Two-week summer course, including lectures, required screenings, laboratory visits, field trips, and outside study. Exploration of creative projects on scientific research and innovation to gain broad understanding of impact of science on contemporary art and popular culture, with focus on new sciences of biotechnology and genomics. Development of proposals and ideas that could serve as prototypes for either art projects or scientific research study. P/NP grading.

7. Media Histories. (5) Lecture, three hours; outside study, six hours. For drawing, exploration of relationship between concept and image creation while focusing on concepts of narrative and storytelling. Introduction to and exploration of variety of media such as graphic, web, game, and video design with goal of combining and integrating these media to express and realize their narrative projects. Students work with most current software and technology in each discipline area, developing diverse skill sets while cultivating conceptual capabilities around storytelling project, and with experienced instructors and professionals in field to develop projects utilizing this comprehensive and integrative approach. Culminates in proposals that may be used for college applications. Possible field trips. May be repeated for credit without limitation. Offered only as part of Summer Institute. P/NP grading.

8. Media Art and Science. (5) Lecture, three hours; discussion, one hour; outside study, 11 hours. Exploration and survey of cultural impact of scientific and cultural innovations, technology-driven art inspired by science, and art/science collaborative projects. Introduction to vast array of cutting-edge research taking place on campus; scientific guest lecturers. Emphasis on art projects that use technology and respond to new scientific concepts. P/NP or letter grading.

9. Art, Science, and Technology. (5) Lecture, three hours; discussion, one hour; outside study, 11 hours. Open to nonmajors. Understanding design process, with emphasis on development of visual language; study of historic, scientific, technological, economic, and cultural factors influencing design in physical environments. P/NP or letter grading.

10. Design Culture. (5) Lecture, three hours; outside study, 12 hours. Open to nonmajors. Understanding design process, with emphasis on development of visual language; study of historic, scientific, technological, economic, and cultural factors influencing design in physical environments. P/NP or letter grading.

11. Flat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many pathways and approaches of UCLA. P/NP or letter grading.

12. Drawing and Color. (4) Studio, six hours; outside study, six hours. For drawing, exploration of relationship between concept and image creation while focusing on conceptual and aesthetic movements covering past two centuries: photography and industrialization/Romanticism (1850 to 1900), cinema and modernism (1900 to 1950), television art/modernism (1950 to 2000), and digital media and unmodernism (2000 to 2050). How such movements can inform generative work and how understanding these media becomes essential in emerging era of digital humanities. P/NP or letter grading.

13. Digital Futures. (5) Lecture, three hours; outside study, 12 hours. Limited board and required of Design/Media Arts majors. Survey of media arts, their history, aesthetics, and cultural roles from late-19th century to present. Investigation of media arts within broad historical and cultural framework. Discussion of parallels and links with other cultural forms, including history of technology and various art and design practices. P/NP or letter grading.

14. Critical Writing. (5) Lecture, three hours; outside study, 12 hours. For drawing, exploration of relationship between concept and image creation while focusing on conceptual and aesthetic movements covering past two centuries: photography and industrialization/Romanticism (1850 to 1900), cinema and modernism (1900 to 1950), television art/modernism (1950 to 2000), and digital media and unmodernism (2000 to 2050). How such movements can inform generative work and how understanding these media becomes essential in emerging era of digital humanities. P/NP or letter grading.

15. Tangible Media. (5) Studio, six hours; outside study, nine hours. Required of Design/Media Arts majors. Survey of media arts, their history, aesthetics, and cultural roles from late-19th century to present. Investigation of media arts within broad historical and cultural framework. Discussion of parallels and links with other cultural forms, including history of technology and various art and design practices. P/NP or letter grading.

Upper-Division Courses

101. Media Arts: Introduction. (5) Lecture, three hours; outside study, 12 hours. Limited board and required of Design/Media Arts majors. Survey of media arts, their history, aesthetics, and cultural roles from late-19th century to present. Investigation of media arts within broad historical and cultural framework. Discussion of parallels and links with other cultural forms, including history of technology and various art and design practices. P/NP or letter grading.

102. Motion. (4) Studio, six hours; outside study, six hours. Focus on understanding digital technology and the role of design in the field of media arts. Introduction to and exploration of three-dimensional forms with traditional and experimental materials as foundation for creativity; origination and solution of problems. P/NP or letter grading.

103. Typography. (4) Studio, six hours; outside study, six hours. Focus on understanding digital technology and the role of design in the field of media arts. Introduction to and exploration of typography tools, camera, and digital technologies for application to visual thinking and fundamentals of design. P/NP or letter grading.

104. Design Culture. (5) Lecture, three hours; outside study, six hours. Introduction and visualization of design tools, camera, and digital technologies for application to visual thinking and fundamentals of design. P/NP or letter grading.

105. Art, Science, and Technology. (5) Lecture, three hours; outside study, six hours. Focus on understanding digital technology and the role of design in the field of media arts. Introduction to and exploration of typography tools, camera, and digital technologies for application to visual thinking and fundamentals of design. P/NP or letter grading.

106. Critical Writing. (5) Lecture, three hours; outside study, 12 hours. For drawing, exploration of relationship between concept and image creation while focusing on conceptual and aesthetic movements covering past two centuries: photography and industrialization/Romanticism (1850 to 1900), cinema and modernism (1900 to 1950), television art/modernism (1950 to 2000), and digital media and unmodernism (2000 to 2050). How such movements can inform generative work and how understanding these media becomes essential in emerging era of digital humanities. P/NP or letter grading.
153. Video. (5) Studio, six hours; outside study, nine hours. Preparation: completion of preparation for major courses. Requisites: course 101 or 104. Use of video technology (video systems, cameras, editing, and storage) to integrate image, sound, time, and motion. Emphasis on expression, continuity, and sequential patterns for video communication. P/NP or letter grading.

154. Word + Image. (5) Studio, six hours; outside study, nine hours. Preparation: completion of prepara-tion for major courses. Requisites: courses 21, 22, 25, and 101 or 104. Focus on relationship of type to content, integration of typography and design, and purpose of purpose of type. Understanding of and sensitivity to typograph-y in context of complex communication problems and digital media. Research, concept and content development, and articulation for methodology for visualization. P/NP or letter grading.

155. Interactive Animation. (5) Studio, six hours; outside study, nine hours. Requisites: courses 101 or 104, and 156. Exploration of traditional and experimental animation techniques that are central to 2D and 3D in-teractive digital projects and video games. Course-work develops skills and concepts that are integral to animation workflows and game engine animation systems. Includes traditional animation principles, 2D/3D animation, rigging 2D and 3D game objects, and character controller implementation. Students experiment with common and alternative input methods for real-time control. Requisites: image, sound, and interactive playground sessions supplement lessons. P/NP or letter grading.

156. Three-Dimensional Modeling and Motion. (5) Studio, six hours; outside study, nine hours. Preparation: completion of prepara-tion for major courses. Requisites: courses 24, 28, and 101 or 104. Introduction to game design, with focus on developing conceptual and practical skills that form basis for both digital and nondigital game development. Development of four playful game projects that explore various aspects of game design: rule de-sign, game balance, multiplayer strategy, complexity, randomness, interactive, physical interaction and aesthetic and pragmatic aspects of physical game design. P/NP or letter grading.

157. Game Design. (5) Studio, six hours; outside study, nine hours. Preparation: completion of prepara-tion for major courses. Requisites: courses 24, 28, and 101 or 104. Introduction to game design, with focus on developing conceptual and practical skills that form basis for both digital and nondigital game development. Development of four playful game projects that explore various aspects of game design: rule design, game balance, multiplayer strategy, complexity, randomness, interactive, physical interaction and aesthetic and pragmatic aspects of physical game design. P/NP or letter grading.

158. Studio, six hours; outside study, nine hours. Requisites: courses 24, 28, 101, 104, 153, and 156, and 160, 171, 172, or 173. Preparation: completion of preparation for major courses. Requisites: courses 24, 28, and 101 or 104. Exploration of various aspects of game design: rule design, game balance, multiplayer strategy, complexity, randomness, interactive, physical interaction and aesthetic and pragmatic aspects of physical game design. P/NP or letter grading.

159. Capstone Senior Project in Design Media Arts. (5) (Fall, Winter, Spring) Studio, six hours; outside study, nine hours. Requisites: courses 8, 10, 21, 22, 24, 25, 28, 101, and 104, and 160, 171, 172, or 173. Preparation: completion of preparation for major courses. Requisites: courses 24, 28, and 101 or 104. Exploration of various aspects of game design: rule design, game balance, multiplayer strategy, complexity, randomness, interactive, physical interaction and aesthetic and pragmatic aspects of physical game design. P/NP or letter grading.

160. Special Topics in Design Media Arts. (5) Studio, six hours; outside study, nine hours. Completion of preparation for major and upper-division core courses required. Requisite: course 101 or 104. Selected topics in interactive media and games explored through variety of approaches that may include proj-ects, readings, discussion, research papers, and oral presentations. Topics announced in advance. May be repeated for credit. Letter grading.

161. Network Media. (5) Studio, six hours; outside study, nine hours. Preparation: completion of prepara-tion for major courses. Requisites: courses 28, 154, and 165. Exploration of creative, technical, and critical tools to realize Internet-based projects. Focus on students gaining deeper understanding of Internet as creative platform—where did it come from, how does it work, what do you make things for it, and what do you want to say? Technical workshops on HTML, CSS, JavaS cript, and design support development of series of studio projects using variety of network tools. Exam-ination through discussion of cultural, social, political, and aesthetic values of Internet, and consideration of roles of race, gender, sexuality, disability, class, and influence within increasingly networked world, and strategies of response as artists and de-signers. Examination and challenging of structure of power relationships, inequities, and biases embedded within network tools, technologies, and media. Letter grading.

162. Narrative. (5) Lecture, six hours; outside study, nine hours. Preparation: completion of preparation for major courses. Requisite: course 101 or 104. Provides wider understanding of arts that parallels world of 20th-century visual media of theory that allow viewer to connect story of one art form to an- other in richer context. Letter grading.

163. Topics in Interactivity and Games. (5) Studio, six hours; outside study, nine hours. Completion of preparation for major and upper-division core courses required. Requisites: courses 101 or 104, 157. Se-lected topics in interactive media and games explored through variety of approaches that may include proj-ects, readings, discussion, research papers, and oral presentations. Topics announced in advance. May be repeated for maximum of 15 units. Letter grading.

164. Topics in Video and Animation. (5) Studio, six hours; outside study, nine hours. Completion of prepara-tion for major and upper-division core courses required. Requisites: courses 101 or 104, and 153 or 156. Selected topics in video and animation explored through variety of approaches that may include proj-ects, readings, discussion, research papers, and oral presentations. Topics announced in advance. May be repeated for maximum of 15 units. Letter grading.

165. Topics in Visual Communication and Image. (5) Studio, six hours; outside study, nine hours. Completion of preparation for major and upper-division core courses required. Requisites: courses 24, 28, 101 or 104, 153 and 156. Exploration of various aspects of game design: rule design, game balance, multiplayer strategy, complexity, randomness, interactive, physical interaction and aesthetic and pragmatic aspects of physical game design. P/NP or letter grading.

166. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities. For undergraduates or graduate students. May be applied toward honors credit for eligible stu-dents. Honors content noted on transcript. P/NP or letter grading.

167. Community or Corporate Internships in Design Media Arts. (2–4) Seminar, two hours. Enforced requisite: course 101 or 104. Selection of preparation for major and upper-division core courses required. Requisites: courses 101 or 104, 157. Selected topics in video and animation explored through variety of approaches that may include proj-ects, readings, discussion, research papers, and oral presentations. Topics announced in advance. May be repeated for maximum of 15 units. Letter grading.

168. Directed Research in Design | Media Arts. (2 to 9) Tutorial, four hours. Preparation: completion of prepara-tion for major and upper-division core courses required. Letter grading.

169. Honors Research in Design | Media Arts. (4) Tu-torial, two hours. Preparation: 3.0 grade-point average overall. Limited to juniors/seniors. Development and completion of honors or comprehensive re-search project under direct supervision of faculty member. May be repeated once for credit. Individual contract required. Letter grading.

170. Directed Research in Media Arts. (2 to 9) Tutorial, four hours. Preparation: completion of prepara-tion for major and upper-division core courses required. Letter grading.

Graduate Courses

200. Design/Media Arts Faculty Seminar. (2) Seminar, two hours. Limited to graduate design/media arts students. Designed to familiarize new graduate stu-dents with department programs and their creative work and research to help students select their faculty advisers. May be repeated once for credit. S/U grading.

252A. Programming Media 1. (5) Studio, six hours; outside study, nine hours. Preparation: completion of prepara-tion for major and upper-division core courses required. Requisite: course 101 or 104. Introduction to computer programming within context of art and design. Exploration of conceptual space enabled by electronic media through exercises, presentations, discussions, and critiques. Weekly exercises combine concept and technique to reveal potential of computer as medium and tool. Experience with programming basics includes procedural and object-oriented programming, two- and three-dimensional graphics, file I/O, color models, and image processing. Letter grading.

252B. Programming Media 2. (5) Studio, six hours; outside study, nine hours. Preparation: completion of prepara-tion for major and upper-division core courses required. Requisite: course 101 or 104. Introduction to computer programming within context of art and design. Exploration of conceptual space enabled by electronic media through exercises, presentations, discussions, and critiques. Weekly exercises combine concept and technique to reveal potential of computer as medium and tool. Experience with programming basics includes procedural and object-oriented programming, two- and three-dimensional graphics, file I/O, color models, and image processing. Letter grading.

252C. Virtually. (5) Studio, six hours; outside study, nine hours. Preparation: completion of prepara-tion for major and upper-division core courses required. Requisite: course 101 or 104. Introduction to computer programming within context of art and design. Exploration of conceptual space enabled by electronic media through exercises, presentations, discussions, and critiques. Weekly exercises combine concept and technique to reveal potential of computer as medium and tool. Experience with programming basics includes procedural and object-oriented programming, two- and three-dimensional graphics, file I/O, color models, and image processing. Letter grading.

252D. Virtual Reality and Augmented Reality. (5) Studio, six hours; outside study, nine hours. Preparation: completion of prepara-tion for major and upper-division core courses required. Requisite: course 101 or 104. Introduction to computer programming within context of art and design. Exploration of conceptual space enabled by electronic media through exercises, presentations, discussions, and critiques. Weekly exercises combine concept and technique to reveal potential of computer as medium and tool. Experience with programming basics includes procedural and object-oriented programming, two- and three-dimensional graphics, file I/O, color models, and image processing. Letter grading.

269. Graduate Seminar. (4) Seminar, four hours. De-signed for graduate design/media arts students. Survey of critical theories in media art and design. Critical examination of the roles of art, artists, faculty members, and expert guests. Must be taken twice for MFA degree. May be repeated for credit with consent of adviser. Letter grading.

272. Introduction to Art | Science. (5) Seminar, three hours. For past 50 years artists have increasingly moved from being inspired by scientific innovation and discovery to actually collaborating with scientists and even residing and working in science laboratories. History of science in relation to artists’ interpretation of scientific work to current works that are created in re- sponse to recent developments in biotechnology and nanotechnology. Letter grading.

273. Readings in Media Arts. (3) Seminar, nine hours. Reading and critical evaluation of media arts theory and practice, with scheduled meetings to be arranged-
tween faculty member and student as needed. Topics announced in advance. May be taken for maximum of 18 units. Letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

403. Graduate Critique. (2) Seminar, three hours; outside study, three hours. Limited to first- and second-year departmental graduate students. Students meet with instructor in small classroom setting to exchange ideas through presentation of current projects and research, discussion, research papers, and reports. Instructors may invite visiting critics to contribute. May be repeated for credit. S/U grading.

404. Graduate Tutorial. (3) Tutorial, three hours; outside study, six hours. Limited to first- and second-year departmental graduate students. Development of body of work while working toward MFA degree, with one-to-one interaction between students and faculty members. May be repeated for credit. Letter grading.

495. Teaching Assistant Training Practicum. (2) Seminar, three hours; outside study, three hours. Forum for first-year teaching assistants for discussion and exploration of teaching pedagogy and classroom mechanics. Problems and practices of teaching design at college level, as well as role of teaching assistants within the department. Designed to help new teaching assistants develop teaching skills and to orient them to department and University policies and resources. May not be applied toward degree requirements. S/U grading.

596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. May be repeated for credit with consent of adviser. S/U or letter grading.

597. Preparation for MFA Comprehensive Examination. (4 to 8) Tutorial, to be arranged. Designed for second-year MFA students to prepare for comprehensive examination. May be repeated for credit with consent of adviser. S/U grading.

598. MA Research and Thesis Preparation. (4 to 12) Tutorial, to be arranged. Designed for second-year MA students. May not be applied toward minimum graduate course or unit requirements for MA degree. May be repeated for credit. S/U grading.

Digital Humanities

Overview

The Digital Humanities minor is an interdisciplinary minor that studies the foundations and futures of the digital world. Digital humanities interprets the cultural and social impact of the new information age as well as creates and applies new technologies to answer cultural, social, and historical questions, both those traditionally conceived and those enabled by new technologies. The interdisciplinary curriculum draws on faculty members from more than 15 departments, five schools, and three research centers at UCLA. It places project-based learning at the heart of the curriculum, with students working in collaborative teams to realize digital research projects with real-world applications. Students use tools and methodologies such as three-dimensional visualization, data mining, network analysis, and digital mapping to conceptualize and advance research projects. Students have the opportunity to make significant contributions to scholarship in fields ranging from archaeology and architecture to history and literature. By preparing students to be active participants in the design and production of new knowledge, the minor emphasizes the critical thinking skills, creativity, and collaborative methodologies necessary for success in the digital information age.

Undergraduate Minor

Digital Humanities Minor

The Digital Humanities minor is intended to provide students with literacy in creating, interpreting, and applying the technologies of the digital world. It examines the cultural and social impact of new technologies and enables students to harness these technologies to develop their own research projects in a wide range of fields.

Admission

To apply for the minor, students must (1) have an overall grade-point average of 2.7 or better and (2) submit an application essay supporting their interest in pursuing the minor and enumerating any digital projects that they have already undertaken. On acceptance to the minor, students are expected to identify an academic area of digital humanities in which they intend to concentrate. Information about the minor is available on the minor website. To submit an application for the minor, see the website.

The Minor

Required Lower-Division Course (4 to 6 units):

Required Upper-Division Courses (25 to 28 units):
Digital Humanities 101; one upper-division elective course selected from Digital Humanities 110 through 160; one capstone course selected from Digital Humanities 187, 198, or 199; and three elective courses selected from Ancient Near East M101C (or Art History M110C), 125A, M125B (or Architecture and Urban Design M125B), M125C (or Architecture and Urban Design M125C), 162, C165, CM169 (or Anthropology CM110Q), Anthropology M116R (or Chinese M183), Architecture and Urban Design 132, Armenian C153, Art History C145A, C145B, Classics 164, 166B, Design/Media Arts 104, Digital Humanities 151, 195 or 196, English 118A, History 188, Korean 183, 187, Russian 121, 129, Scandinavian C133A, C171, Society and Genetics 131, 175, Spanish 130, 150, 170, Urban Planning 129, 141.

Policies

Variable topics courses may be taken as topics apply. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade. Successful completion of the minor is indicated on the transcript and diploma.

Digital Humanities

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

30. Los Angeles Tech City: Digital Technologies and Spatial Justice. (5) Lecture, two and one half hours; studio, two hours. Investigation of spatial justice and injustice in multi-ethnic city of Los Angeles through Lens of three thematic technologies that built and transformed Los Angeles into global metropolis: cars and highways, neighborhoods and families, Internet and World Wide Web, and film and broadcast media. Use of innovative forms of investigation and communication, from digital mapping to video-sensing, to integrate interpretative and historical approaches of humanities with material and projective practices of design. Letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Stu-
101. Introduction to Digital Humanities. (4) Lecture, 75 minutes per week, 75 minutes. Foundation course for students in Digital Humanities minor, providing theoretical and conceptual framework for understanding genesis of digital world. Use of contemporary cultural and historical methodologies to focus on new media and information technologies in 19th, 20th, and 21st centuries, such as photography, film, radio, television, Internet, and World Wide Web and their impact on human societies, groups, and cultures experienced their worlds. Letter grading.

110. User Experience and Design. (4) Seminar, three hours. Requisite: course 101. Introduction to fields of user experience (UX) research and design. Covers UX research and design principles, user interface and usability testing. Students learn by hands-on practice in human-centered design and implementation of usability testing, how to design interface and interaction for users, and how to evaluate and communicate user experience design with usability tools. Letter grading.

120. Social Media Data Analytics. (4) Lecture, three hours; laboratory, one hour. Requisite: course 101 or consent of instructor. Social media data analytics, with a focus on questions of power, privilege, identity, whose voice is counted in what spaces, and also how public opinion and social media and digital humanities may be used to challenge power structures. Study of how social media has been used both to undermine and to support social justice movements in ways in which social media is currently used by corporate entities, and ethical data usage. Students learn social media data research methods including quantitative and qualitative data analysis, as well as data visualization to examine social media data. Letter grading.

M121. Race, Gender, and Data. (4) Same as Community Engagement and Social Change M121. Seminar, three hours. Requisite: course 101. Data plays a crucial role in political representation, governmental resource allocation, and policy decisions. Investigation of how data does or does not ascribe a quantitative value to a human being by employing a community-engaged approach, where students learn and study how emerging digital tools and models link data with social justice organizing. Students learn to read datasets produced by governmental entities such as the U.S. Census Bureau, Bureau of Labor Statistics, and Department of Health and Human Services. Assignments include working on a community-engaged data project that evaluates and addresses key concerns facing communities-of-color. Introduction to current data studies and applied ethics. Studio sessions include lessons on finding and analyzing datasets relevant to racial and gender justice themes; and to generating data visualizations, digital stories, and maps using the latest software tools. No prior knowledge of statistics or quantitative analysis is required. P/NP or letter grading.

125. Data Analysis for Social and Cultural Research. (4) Seminar, three hours. Requisite: course 101 or consent of instructor. Data analysis and statistical methods tailored for students in humanities and social sciences, with focus on topics and issues related to social justice. Study of descriptive and inferential statistics as applied in humanistic research. Consideration of how to generate evidence-based, statistically sound arguments, applying methods learned throughout the course to a collaborative project. Students learn statistical methods, R Studio environment and language, and how to communicate their arguments in cogent narratives supported by evidence. Letter grading.

131. Digital Mapping and Critical Geographic Information Systems. (4) Seminar, three hours. Requisite: course 101 or consent of instructor. Introduction to digital mapping and critical geographic information systems. Study of basic data types including geographic, structured, and unstructured. Students engage with fundamental mapping practices such as geolocating structured data, working with open data through web mapping technologies, georeferencing historical maps, analyzing visualization, narratives, and visualizations. Through project-based learning, students discover how to manage and apply data to wide range of digital mapping technologies. Consideration of how to incorporate these concepts into humanities and social sciences research. Letter grading.


140. Coding for Humanities. (4) Seminar, three hours. Requisites: course 101. Introduction to coding, with a focus on Python. Study of basic structural elements such as lists, if statements, dictionaries, loops, functions and for loops. Students will code to develop their own projects. P/NP or letter grading.

150. Advanced Topics in Digital Humanities. (4) Seminar, three hours. Requisite: course 101. Seminar introduces students to advanced research methods or thematic issues in digital humanities such as database and visualization technologies, social media applications, analyzing complex data, and understanding new technologies. Students will develop an understanding of how research can be conducted in this area. Letter grading.

151. Advanced Topics in Urban Humanities. (4) Seminar, three hours. Requisites: course 101. Introduction to advanced research methods or thematic issues in urban humanities. Exploring how visual and digital methods can be used to answer questions related to urban humanities. Letter grading.


196. Research Apprenticeship in Digital Humanities. (4) Tutorial, two hours; fieldwork, eight hours. Limited to juniors/seniors. Internship in supervised setting in community agency or business. Place- ments to be arranged by instructor. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for credit. Individual contract required. P/NP or letter grading.


199. Directed Research in Digital Humanities. (2 to 4) Tutorial, one hour. Requisite: course 101. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. Letter grading.

Graduate Courses

201. Introduction to Digital Humanities. (5) Seminar, three hours; laboratory, one hour. Introduction to field of digital humanities. Historical overview of field from its beginning in post-World War II era to present, highlighting major intellectual problems, disciplinary paradigms, and institutional challenges that are posed by digital humanities. Examination of major epistemological, methodological, technological, and institutional challenges posed by digital humanities through number of specific projects that address fundamental problems in creating, interpreting, preserving, and transmitting human cultural record. How digital technologies and tools, ranging from map visualizations and modeling environments to database structures and interface design, are arguments that make certain assumptions about, and even transform, objects of study. Letter grading.

221. Data and Society. (4) Same as Social Science M242. Seminar, three hours. Introduction to data and computing technologies increasingly play pivotal role in social life. Students pose critical questions about implications of impact of emerging moral paradigms and institutional challenges that are posed by digital humanities. Exposure to the major epistemological, methodological, and technological challenges that are posed by digital humanities. Examination of major epistemological, methodological, and institutional challenges posed by digital humanities through number of specific projects that address fundamental problems in creating, interpreting, preserving, and transmitting human cultural record. How digital technologies and tools, ranging from map visualizations and modeling environments to database structures and interface design, are arguments that make certain assumptions about, and even transform, objects of study. Letter grading.

225. Special Topics in Digital Humanities. (4) Seminar, three hours. Enforced requisite: course 201. Introduction to advanced research methods or thematic issue in digital humanities, such as digital textual analysis, digital mapping database and visualization technologies, or social media technologies. Acquisition of familiarity with particular set of technologies by learning practical research methods and theoretical issues to carry out advanced research in this area. Examination of critiques of theoretical underpinnings of social sciences and humanities. May be repeated for credit with topic change. Letter grading.

299. Special Projects in Digital Humanities. (2 to 4) Tutorial, one hour. Enforced requisite: course 201. Limited to and required of graduate students in Digital Humanities. Supervised research and investigation under guidance of faculty mentor. Culminating project required. May be repeated for maximum of 12 units. Letter grading.

596. Directed Individual Study or Research. (2 to 12) Tutorial, to be arranged by student with faculty member who directs study or research. S/U or letter grading.
Disability Studies is a multifaceted field that examines the nature, meaning, and consequences of disability. The Bachelor of Arts (BA) degree in Disability Studies is an interdisciplinary, community-based, capstone major. It appeals to undergraduates seeking a conceptual and practical understanding of disability as a foundation for graduate or professional studies and/or careers across a broad spectrum of professions. The major curriculum recognizes disability as a central part of our lived experience; a critical dimension of social, cultural, and political identity; and a frequent target of discrimination and exclusion. Through foundational courses, interdisciplinary electives, community-engaged course work, and a senior capstone research project, students in the major learn to think critically about disability as a core aspect of the human experience, preparing them to enact transformational change across disability communities and beyond.

Capstone Major
The Disability Studies major is a designated capstone major. Students have the option of completing a capstone seminar (Disability Studies 191) or independent research project (Disability Studies 198A and 198B, or 199A and 199B) that enables them to use knowledge and skills acquired through previous coursework to engage, under the guidance of a faculty member, in a research or creative project that results in a final paper or other product.

Learning Outcomes
The Disability Studies major has the following learning outcomes:

- Demonstrated understanding of disability studies concepts, theories, history, and political movements
- Integration of multiple perspectives on disability through interdisciplinary inquiry
- Development of professional skills through academic and applied experiences
- Use of theory to inform practice through participation in community-engaged learning activities
- Conduction and communication of research to various audiences

Entry to the Major
Admission
Students must first complete all preparation for the major courses. Students must have a UC grade-point average (GPA) of 2.0 or better in those courses and an overall GPA of 2.0. Students are accepted into the major on a rolling basis but no later than the end of spring quarter of their junior year.

Pre-major
Incoming first-year students may be admitted as Disability Studies pre-majors on acceptance to UCLA. Pre-major students must apply for major standing by the end of spring quarter of their junior year. All other students must first complete Disability Studies 1, and then contact the undergraduate counselor in A316 Murphy Hall to request pre-major standing.

Transfer Students
Transfer applicants to the Disability Studies major with 90 or more units must complete the following preparatory courses prior to admission to UCLA: one social theory course; one race, identity, and society course; one humanities and ethics course; and one data analysis course. Disability Studies 1 must be taken at UCLA once a transfer student is admitted to the University.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements
Preparation for the Major
Required: (1) Disability Studies 1; (2) one social theory course selected from Anthropology 3, Public Affairs 10, 80, or Sociology 1; (3) one race, identity, and society course selected from African American Studies 1, 6, American Indian Studies M10, Asian American Studies 10, 20, 30, 40, 50, Chicana/o and Central American Studies 10A, 10B, 20, Clusters 20B, M72B, 80BX, Communication M72B, Design/Media Arts 10, Education 11, Gender Studies 10, Labor Studies 10, Society and Genetics M72B, Sociology M72B, or World Arts and Cultures M23; (4) one humanities and ethics course selected from Clusters M71B, 73B, Comparative Literature 1E, Design/Media Arts 10, Molecular, Cell, and Developmental Biology 60, Philosophy 22, 22W, Society and Genetics 5, or M71B; and (5) one data analysis course selected from Education 35, Life Sciences 40, Political Science 6, Public Affairs 60, Statistics 10, or 13.

The Major
Required Core Course (5 units): Disability Studies 101W.


Interdisciplinary Perspectives on Disability (16 units): Select one course from each of the four categories:

- Category 1: Health Humanities and Bioethics—Anthropology 137P, 149 (when offering an interdisciplinary perspective of disability), Asian American Studies M117, M129, M161, Community Health Sciences 100, M140, Comparative Literature 180, Disability Studies 138XP, M139, M148, M166, and M172XP (must be taken together to satisfy requirement), M183, Education 132, Health Policy and Management M110, History 179A, 179B, 179C, Honors Collegium M183, Nursing M172 and M172XP (must be taken together to satisfy requirement), Philosophy 173, Public Affairs M131, 134, Psychology M107, 127A, 127B, 127C, M139, Society and Genetics M166, M183, or Sociology M148

- Category 2: Access and Social Change—Community Engagement and Social Change 172XP, Disability Studies 145, M148, M149, M166, M172 and M172XP (must be taken together to satisfy requirement), Design/Media Arts 171, Education 104A, Gender Studies 152, Nursing M172 and M172XP (must be taken together to satisfy requirement), Psychology 132A, Society and Genetics M166, Sociology M120, or M148

- Category 3: Representation, Embodiment, and Disability Cultures—American Sign Language
Disability Studies / 369

Disability Studies

Lower-Division Courses

1. Construction of (Dis)ability and Ableism in U.S. (5) Lecture, two hours; discussion, two hours. Examination of ways in which certain bodies and minds have been categorized, disabled, conceivably of, oppressed, and liberated in U.S. over time. Using intersectoral lens, exploration of origins of American eugenics movement, social construction of normality and (dis)ability, and ableism in its many forms (e.g., individual, legal, medical, cultural, financial). Students learn how to apply critical disability studies framework to evaluate relationships between race, ethnicity, language, gender, sexual orientation, income, and disability in relation to disablism and ableism. Covers key topics and theoretical frameworks in disability studies to give students foundational and conceptual knowledge on how to analyze social, political, and cultural issues from critical disability studies perspectives. P/NP or letter grading.

101W. Perspectives on Disability Studies. (5) Lecture, one hour; discussion, two hours. Not open for credit to students with credit for course 101W. Creation of critical framework for understanding concept of disability from sampling of disciplinary perspectives. Organized around productive and critical tension in disability studies—between disability as lived subjective experience that is both individual and communal, and disability as objective, medical, legal, and sometimes stigmatized category. Students encouraged to make connections between units to create their own perspectives on disability in field that defines itself by how it changes. Letter grading.

101W. Perspectives on Disability Studies. (5) Lecture, one hour; discussion, two hours. Enforced requisites: English Composition 3 or 3H. Survey of modes of disability in literature, with specific emphasis on thematic concerns. Topics may include introduction to disability studies; race, gender, and disability; disability narratives; etc. May be repeated for credit with topic or instructor change. P/NP or letter grading.

102. Disability and Violence. (4) Seminar, three hours. Relationship between disability and violence from three angles: (1) review of disproportionate incidence of violence on disabled people; (2) an assessment of whether specifically as form of hate crime or based on dependency and/or vulnerability that accompany some types of disability; (2) study of role of disability and particularly medical illness in representations of crime and violence; and (3) disabled or emergent disability (injuries, illnesses, and impairments created by social inequity) as consequence of intersecting forms of racial, sexual, class, and gender subordination, or as result of state or interpersonal violence. Consideration of possible coalition-based strategies for challenging systemic subordination and prospects for improving disability-consciousness across all issues. Limited to students in College Honors Program. P/NP or letter grading.

M110. Studies in Disability Literatures. (5) (Same as English M110.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: English Composition 3 or 3H. Survey of modes of disability in literature, with specific emphasis on thematic concerns. Topics may include introduction to disability studies; race, gender, and disability; disability narratives; etc. May be repeated for credit with topic or instructor change. P/NP or letter grading.

111. Disability as Spectacle: Performing Normative Bodies. (4) Lecture, two hours; studio, two hours. Examination through eyes of disability activists and artists interrogating how aspects of body get deemed nonnormative. Investigation of what it means to push against pressure to fit in, as well as how to contest invisibility of some disabilities that happen when normal bodies get defined visually. Use of this lens on disability to research and explore role that bodies play in political battles over who gets socially valued and who does not. P/NP or letter grading.

M112. Disability and Musical-Dramatic Arts: Representation, Embodiment, Themes, and Practices. (5) (Same as Musicology M112.) Lecture, four hours; discussion, one hour. Exploration of ways disability and impairment factor into musical and musical-dramatic creation and performance, considered historically and in terms of representation, embodiment, themes, and developing practices. P/NP or letter grading.

M113. Variable Topics on Music and Disability. (4) (Same as Musicology M113.) Seminar, four hours. Analysis and critique of depiction of disability and music. Topics may include introduction to disability studies; exploring work and creative strategies of disabled musicians; music technologies and instrument design; representation of disability in music; and more. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M114. Variable Topics in Performance and Disability Studies. (4) (Same as American Sign Language M114.) Seminar, four hours. Analysis and critique of depiction of disability in theater. Topics may include introduction to disability studies; race, gender, and disability; representation of disability in theater; and more. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M115. Enforcing Normalcy: Deaf and Disability Studies. (4) (Same as American Sign Language M115.) Lecture, three hours. Exploration of historical, medical, social, political, philosophical, and cultural influences that have constructed categories of normalcy, disability, and deafness. Building on writing of Michel Foucault and critical work in field of disability studies, inquiry into institutions that have enforced standards of normacy throughout 19th and 20th centuries to present. Primary attention to rise of medical
authority in West, history of eugenics, and contemporary bioethics issues confronting disability and deaf communities. P/NP or letter grading.

120. Special Topics on Race and Disability. (4) Lecture, four hours. Exploration of race and disability, with emphasis on lived realities of people of color with disabilities. Use of scholarly texts from disability studies, sociology, gender studies, or critical race studies to investigate how race and disability systems and systems that shape race, ableism, and dominant/non-dominant power dynamics. P/NP or letter grading.

M121. Topics in Gender and Disabilities. (4) (Same as Gender Studies M121.) Lecture, three and one half hours. Limited to juniors/seniors. Ways in which issues of disability are affected by gender, with particular attention to various roles, positions, and concerns of women with disabilities. Approach is intersectional, exploring how social categories of class, race, ethnicity, religion, age, sexuality, nationality, and citizenship affect and are affected by gender and disability. Topics may include law (civil rights, nondiscrimination), education, public policy, health. May be repeated for credit with topic and instructor change. P/NP or letter grading.

M122. Bodies in Antiquity. (4) (Same as Classics M149.) Lecture, three hours. Investigation of individuals and groups that were marginalized and ostracized by premodern Greek and Roman societies and their relationships with larger social body, with particular focus on marginalized or minority groups (women, noncitizens, freedmen, ex-slaves and aliens, and slaves), children, elderly, and disabled. Examination of ways these groups contributed to or detract from our understanding of ancient society and culture. May be repeated for credit with topical change. P/NP or letter grading.

M125. Exploring Intersections of Ability and Sexualities. (4) (Same as Lesbian, Gay, Bisexual, Transgender, and Queer Studies M125.) Lecture, three hours. Exploration of key social construction of ability in K-12 schooling and social and historical contexts of special education policy, as well as its implementation. Focus on equity-related legal and policy issues in education and those associated with disability, sex, race, and gender. Examination of landmark court decisions such as Brown versus Board of Education (1954) and Board of Education versus Rowley (1982), as well as key legislation such as Americans with Disabilities Act (ADA) and Individuals with Disabilities Education Act (IDEA). P/NP or letter grading.

M130. Disability Policy and Services in Contemporary America. (4) (Same as Gerontology M165 and Social Welfare M165.) Lecture, three hours. Limited to juniors/seniors. Growing numbers of people of all ages with disabilities and productive lives in American communities. Many others are struggling to lead such lives. Who are people with disabilities in contemporary America? How has U.S. responded over time to the growing number of people with disabilities, young and old? What demands have been made over time by disability advocates? How has government addressed demands of advocates for persons with disabilities? What do we know about extent to which public policies and programs are responsive to people in need? How do demographics, economics, and politics continue to influence evolving public policy responses? P/NP or letter grading.

134. Alternative Approaches to Language Acquisition. (4) Seminar, four hours. Examination of everyday experience of language delay, disorder, difference, and disability from disability studies perspective. Presentation of key concepts and terminology of disability, culture, and language use. Discussions and assignments critically evaluate findings on language acquisition by asking questions about disability studies about inclusion, infusion, and socially constructed experience, and power. P/NP or letter grading.

138XP. Applied Autism Intervention: Multidisciplinary Perspective. (4) (Formerly numbered 138SL.) Seminar, four hours. Service-learning course for undergraduate students in Early Childhood Partial Hospitalization Program (ECPHP). Introduction to history, theory, and practice of autism interventions and core skills that determine how society and medical profession understand autism as diagnostic category. Study of processes involved in identifying autism as represented in fields of psychology, neuroscience, arts and humanities, popular media, anthropology, activism, and critical autism studies. Review of research of autism and disability and analysis of dominant as well as counter discourse on autism. Overview of broader educational issues for children living with disabilities as well as parent perceptions. P/NP or letter grading.

M139. Perspectives on Autism and Neurodiversity. (4) (Same as Psychology M139.) Seminar, three and one half hours. Genealogy of autism as diagnostic category and its roots as new, rare, and obscure condition in early 1940s to its current contested status as minority identity and/or global epidemic. Examination of material sources that combine with contemporary events and conditions in autism, including psychology, neuroscience, arts and humanities, popular media, anthropology, activism, and critical autism studies. Students encounter and analyze articles and books that present their own experiences of autism and discussions about how people on spectrum define, explain, and represent themselves. Emphasis on autism and neurodiversity in the context of autism intervention strategies and disability rights today. Letter grading.

145. Mental Disability Law. (4) Lecture, three hours. Examination of issues related to the legal and social consequences and challenges of mental disability, including the role of the law in promoting the social and economic wellbeing of people with mental disabilities. Study of a variety of legal issues that result from the interaction of the legal system with the mental disability community, particularly the rights of people with disabilities. P/NP or letter grading.

M148. Sociology of Mental Illness. (4) (Same as Sociology M148.) Lecture, three hours; discussion, one hour. Analysis of major sociological and social psychological models of madness. Study of social processes involved in production, recognition, labeling, and treatment of mental illness. P/NP or letter grading.

M149. Disability Rights Law. (4) (Same as Sociology M120.) Lecture, four hours. Examination of disability-related incidents impacting people of all ages across the spectrum of settings in both public and private sectors—from preschool to higher education, from military to workplace, and from inner-city to rural environments. Topics range from discrimination, equality, and civil rights to disability-connected issues fueled by new technologies and changing times. P/NP or letter grading.


M157. Rechoreographing Disability. (4) (Same as Dance M157.) Seminar, four hours. Through study of range of performance by, featuring, or about people who identify as disabled, reading and discussion of range of writing about experiences of disability and process of making work about disability by key artists and thinkers. Introduction to concept of choreography as political/cultural idea broadly defined as scored movement and organization and behavior of bodies, and how choreography and performance imply alternative forms of expression of ideas, collective product, or process. Viewing and discussion of work, and embodying ideas through movement and dance-making. P/NP or letter grading.

M160. Sex, Normativity, and Disability. (4) (Same as Gender Studies M161.) Lecture, four hours. Since creation of International Olympic Committee in 1894, athletes with disabilities have had, and been denied, formal and informal opportunities and rights that athletes without disabilities enjoy. Overview of some major topics of discussion concerning intersections of athleticism and disability, addressing variety of perspectives and theories about disability and sport, such as those on sports integration, competition versus charity, and masculinity. Sources include readings, film, television, and biographical writings that address sports, bodies, and disability and norm, and Special Olympics specifically. P/NP or letter grading.

163A-163B. Autism Media Laboratory. (5-5) Lecture, two hours; discussion, one hour. Course 163A is required to course 163B. People with autism who are nonverbal face unique challenges in their communities. Exploration of documentary filmmaking as catalyst to educate greater community on importance of inclusion of people with disabilities. Students will work individually or in teams to interview advocates who are nonspeaking or minimally speaking, to create documentary short films. Students explore issues related to autism and disability while gaining exposure to observation, interview-based, and participatory documentary shooting and editing techniques. Letter grading.

M164A. Documentary Production for Social Change: Mobility in Los Angeles. (5) (Same as Urban Planning M164A.) Seminar, three hours; fieldwork, two hours. Exploration of documentary filmmaking as catalyst for social change, using daily commute in Los Angeles as case study. Introduces students to disability, sexuality, gender, disability, and class on experiences of commuting, access to public transportation, and car-based versus alternative (bike and pedestrian) modes of commuting. Exposure to observational, interview-based, and participatory documentary shooting and editing techniques, as well as social marketing strategies that are vital to documentary production and distribution. Letter grading.

164B. Documenting Disability on Film. (4) Lecture, four hours. Nonfiction digital media is used as contemporary form of investigation or research or as attachment to research projects, built into websites, used in trainings for social and political advocacy and exhibited at film festivals. Social-issue documentaries appear more frequently on cable, public television, and Internet. Examination of how powerful documentaries strongly on well-told stories by passionate filmmakers. P/NP or letter grading.

M166. Health-Care Ethics. (4) (Same as Society and Genetics M166.) Lecture, three hours; discussion, one hour. Consideration of critical ethical concepts as they apply to health-care practice, medical decision-making, and medical technology development and use. Consideration of concepts drawn from philosophy, literature and culture, and political history in context of current health-care policy. Topics include health care, health-care rationing, and end of life; personal autonomy relates to political concept of liberty or autonomy; how health-care concept of patient autonomy relates to political concept of liberty or freedom; how to evaluate good life, or what philosophers call flourishing, in medical treatment decisions for individuals or development of therapies. P/NP or letter grading.

M171. Philanthropy: Confronting Challenges of Serving Disabled. (5) (Same as Honors Colloquium M172.) Lecture, three hours. Enforced requisite: Course 101 or 101W. Study of history, philosophy, and
practice of philanthropy using lenses of disability studies theory in conversation with important themes of charity, paternalism, and systems of dependency. Analysis of multiple perspectives of philanthropy to gain practical experience setting priorities and making philanthropic investments in Los Angeles-based non-profit organizations serving people with disabilities. Letter grading.

M172. Care Work: Disability Justice and Health Care. (2) (Same as Nursing M172.) Lecture, one hour; discussion, one hour. Exploration of nature, history, models, and propositions of care, care work, disability, disability justice movement, and health care. Consideration of intersections, interdependence, and complexities of formal and informal care webs and care economies between caregivers and receivers, which includes kin, advocates, disability communities, and health professionals. Use of multimedia, scholarly texts, and theoretical frameworks from disability justice, disability studies, film, gender studies, health, labor studies, law, nursing, and public policy to investigate the concepts of care and care work. Letter grading.

M172XP. Care Work: Disability Justice and Health Care. (3) (Same as Nursing M172XP.) Seminar, one hour. Corequisite course M172. Exploration of nature, history, models, and propositions of care, care work, disability, disability justice movement, and health care. Consideration of intersections, interdependence, and complexities of formal and informal care webs and care economies between caregivers and receivers, which includes kin, advocates, disability communities, and health professionals. Use of multimedia, scholarly texts, and theoretical frameworks from disability justice, disability studies, film, gender studies, health, labor studies, law, nursing, and public policy to investigate the concepts of care and care work. Emphasis on community engagement with observational and collaborative interaction and learning in governmental, non-profit, community-based organizations, or health-care networks of disability care. Letter grading.

M183. Advanced Topics in Disability and Mental Illness. (5) (Same as Honors Collegium M183 and Society and Genetics M183.) Seminar, three hours. Exploration of relationship between identity and mental illness through different approaches to nature and treatment of mental disorder, from biomedical accounts of brain-based pathology (and identity) to Mad Pride movement emphasis on mental diversity. Enduring philosophical questions regarding personal identity, consciousness, selfhood and mind-body relationship are investigated through consideration of conditions such as dissociative identity disorder, trauma, psychosis, autism, HIV/AIDS, or formal and informal care webs and care economies between caregivers and receivers, which includes kin, advocates, disability communities, and health professionals. Use of multimedia, scholarly texts, and theoretical frameworks from disability justice, disability studies, film, gender studies, health, labor studies, law, nursing, and public policy to investigate the concepts of care and care work. Letter grading.

187. Special Topics in Disability Studies. (4) Lecture, one hour; discussion, two hours (when scheduled). Variable topics in one area within disability studies. May be repeated for credit with topic and/or instructor change. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191. Variable Topics Senior Research Seminars: Disability Studies. (5) Seminar, three hours. Enforced requisite: course 101 or 101W. Designed for advanced junior/senior Disability Studies minors. In-depth study of major themes in disability studies research. Themes vary by instructor and term. Students pursue independent research related to course theme, with guidance from instructor, then share and critique other student works in progress. May be repeated for credit with topic change. Letter grading.

M191F. Topics in Gender and Disability. (5) (Same as Gender Studies M191F.) Seminar, three hours. In-depth study of major themes in disability studies and gender studies. Themes vary by instructor and term. Students pursue independent research related to course theme, with guidance from instructor, then share and critique other student works in progress. May be repeated for credit with topic change. Letter grading.

194. Capstone Research Seminar. (2) Seminar, two hours. Enforced requisite: course 195CE. Required of students pursuing Disability Studies minor. Integration of off-campus work with academic theories and concepts within field of disability studies. Students report on their internship experiences and analyze relationship between their internship and issues of policy, ethics, systemic responses to community needs, or personal and intellectual transformations. Students identify one faculty mentor and develop proposal for required capstone research project. Letter grading.

195CE. Community and Corporate Internships in Disability Studies. (4) Tutorial, to be arranged; fieldwork, eight to 10 hours. Limited to juniors/seniors. Enrollment in corporate, governmental, or nonprofit setting coordinated through Center for Community Engagement. Students complete weekly written assignments, attend biweekly meetings with graduate student instructor, and write final research paper. Faculty mentor and graduate student instructor construct series of reading assignments that examine issues related to internship site. May be repeated for credit with consent of Center for Community Engagement. No more than 8 units may be applied toward major; units applied must be taken for letter grade. May not be applied toward concentration or distribution requirements. Individual contract with supervising faculty member required. Letter grading.

196. Research Apprenticeship in Disability Studies. (Variable topics in one area within disability studies. May be repeated for credit. Individual contract required. Letter grading.

196A-196B. Honors Research in Disability Studies. (2–4) Tutorial, one hour. Enforced requisite: course 101 or 101W. Course 196A is enforced requisite to 196B. Limited to juniors/seniors. Required capstone course to Disability Studies minor for students pursuing College Honors. Development and completion of honors thesis or comprehensive research project under direct supervision of faculty mentor. May be repeated for credit. Individual contract required. In Progress (196A) and letter (196B) grading.

198C. Senior Project in Disability Studies. (2 to 8) Tutorial, one hour. Limited to juniors/seniors. Development and completion of honors thesis or comprehensive research project under direct supervision of faculty mentor. May be repeated for credit. Individual contract required. Letter grading.

199A-199B. Directed Research in Disability Studies. (2–4) Tutorial, one hour. Enforced requisite: course 101 or 101W. Course 199A is enforced requisite to 199B. Limited to juniors/seniors. Required capstone course to Disability Studies minor for students pursuing College Honors. Development and completion of honors thesis or comprehensive research project under direct supervision of faculty mentor. May be repeated for credit. Individual contract required. In Progress (199A) and letter (199B) grading.

Graduate Course

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

EARTH, PLANETARY, AND SPACE SCIENCES

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Overview
The disciplines of geology, geochemistry, geophysics, paleobiology, and space physics are concerned with the structure and evolution of the solar system, Earth, and life: essentially, the physical environment and its interaction with biota. These studies entail the application of fundamental physics and chemistry to a broad subject area stretching from astronomy at one extreme to biology at the other. Areas that are emphasized in the Department of Earth, Planetary, and Space Sciences include isotope and trace element analyses, petrology and mineralogy, sedimentology, paleobiology and organic geochemistry, structural geology and tectonophysics, seismology, the Earth’s interior, planetary physics, and space plasmas.

Career Prospects
The variety of techniques applied lead to several concentrations within the three main disciplines. Students completing their studies with a BS or MS degree usually are employed by industry. Many are employed in environment-related activities; others are involved in mineral or oil exploration or in construction. Students attaining the PhD degree are usually employed by universities or governmental and industrial research groups.

The Bachelor of Arts program in Earth and Environmental Science is intended to provide a broad background in Earth sciences that is especially appropriate for students intending to become K through 12 teachers in Earth, physical, or life sciences. It may also be of interest to students who plan careers in business, dentistry, environmental sciences, government, journalism, law, medicine, or public health. Those who intend to become professional geologists, geochemists, or geophysicists and/or to continue into graduate studies in Earth or space sciences are urged to pursue one of the BS degrees.

Undergraduate Majors
Earth and Environmental Science BA

Capstone Major
The Earth and Environmental Science major is a designated capstone major. Students are required to use skill and knowledge sets from previous coursework to complete a field-based research project from conception to written report. Projects must be placed into context within the current state of understanding, and results are presented at a research symposium or published as a brief report.

Learning Outcomes
The Earth and Environmental Science major has the following learning outcomes:

- Use of skills and knowledge set from coursework
- Definition of research methodology and data
- Placement of project into context of current state of understanding
- Completion of research project from conception to written report
- Oral presentation at a research symposium, or brief published report, of field experience results

Entry to the Major
Transfer Students
Transfer applicants to the Earth and Environmental Science major with 90 or more quarter units (60 semester units) must have completed one introductory Earth sciences course with laboratory, one general chemistry course with laboratory for majors, and one calculus course. One introductory biology course (evolution) with laboratory, a second general chemistry course, and one calculus-based physics course with laboratory are recommended.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements
Preparation for the Major
Required: Earth, Planetary, and Space Sciences 1 (or any course from Earth, Planetary, and Space Sciences 3 through 17 or Clusters 70A); one course from Earth, Planetary, and Space Sciences 51, 61, or M71; Chemistry and Biochemistry 14A, 14B, and 14BL, or 20A, 20B, and 20L; Life Sciences 7B or another introductory organismic biology course; Mathematics 3A and 3B, or 31A and 31B; Physics 1A or 5A.

The Major
Required: Two courses from Earth, Planetary, and Space Sciences 103A, 103B, 111, 112; one capstone 199 research course in the senior year; four additional upper-division courses from Earth, Planetary, and Space Sciences other than M187, and 189 through 199; two courses from Geography 101, M102, M103, 116, 120, M126, M131, 136.

Policies
Preparation for the Major
Each course must be passed with a minimum grade of C–.

Engineering Geology BS

Capstone Major
The Engineering Geology major has the following learning outcomes:

- Use of skills and knowledge set from coursework
- Definition of research methodology and data
- Placement of project into context of current state of understanding
- Completion of research project from conception to written report
- Oral presentation at a research symposium, or brief published report, of field experience results

Entry to the Major
Transfer Students
Transfer applicants to the Engineering Geology major with 90 or more quarter units (60 semester units) must have completed one introductory Earth sciences course with laboratory, one general chemistry course with laboratory for majors, and one year of calculus. A second general chemistry course and one course of calculus-based physics with laboratory are recommended.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements
Preparation for the Major
Required: Three courses from Earth, Planetary, and Space Sciences 1 (or any course from Earth, Planetary, and Space Sciences 3 through 17 or Clusters 70A), 51, 61, M71; Chemistry and Biochemistry 20A, 20B, 20L; Civil and Environmental Engineering M20; Mathematics 31A, 31B, 32A, 33A; Physics 1A, 1B, 1C, 4AC, 4BL. Recommended: Mathematics 32B.

The Major
Required: Earth, Planetary, and Space Sciences 103A, 103B, 111, 112, 136A, 139; four courses selected from Civil and Environmental Engineering 108, 120, 121, 125, 129L, 150, 151, C158; two capstone field research courses (Earth, Planetary, and Space Sciences 121, 121F).

Policies
Preparation for the Major
Each course must be passed with a minimum grade of C–.
Earth, Planetary, and Space Sciences / 373

Entry to the Major

Transfer Students

Transfer applicants to the Geophysics major with 90 or more quarter units (60 semester units) must have completed one introductory Earth sciences course with laboratory, one general physics course with laboratory for majors, and one year of calculus. A third calculus course and a second calculus-based physics with laboratory course are recommended.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Earth, Planetary, and Space Sciences 1, 51, 61, M71, and one course from 1 (preferred) through 15; Mathematics 31A, 31B, 32A, 32B, 33A, 33B; Physics 1A, 1B, 1C, 4A, 4B.

The Major

Required Core: Earth, Planetary, and Space Sciences 136A, 171, one capstone field research course (136C), one course from 152, 153, 154, 155; Physics 105A, 105B, 110A, 110B, 131. At least three courses from one of the following areas are also required: (1) applied geophysics—Earth, Planetary, and Space Sciences 111, 112, 122, 136B, M140, 150, 152, (2) marine geophysics—courses 119, 122, 136B, M140, 150, 153, (3) planetary geophysics—courses M140, 150, 153, 154, 155, (4) solid earth geophysics—courses 119, 122, 136B, M140, 150, 152, or (5) space physics—Atmospheric and Oceanic Sciences C170, Earth, Planetary, and Space Sciences 136B, M140, 154, 155, Physics M122. Any course used to satisfy an area requirement cannot also be applied toward the core requirements listed above.

Honors Program

The honors program in geophysics is intended to provide exceptional students an opportunity for advanced research and study under the tutelage of a faculty member.

Students must complete a minimum of two terms (8 units) of Earth, Planetary, and Space Sciences 198 leading to the preparation of a satisfactory honors thesis. Students demonstrating exceptional ability are awarded highest honors.

Capstone Major

The Geophysics major is a designated capstone major. Students are required to use skill and knowledge sets from previous coursework to complete a field-based research project from conception to written report. Projects must be placed into context within the current state of understanding, and results are presented at a research symposium or published as a brief report.

Learning Outcomes

The Geophysics major has the following learning outcomes:

- Use of skills and knowledge set from coursework
- Definition of research methodology and data
- Placement of project into context of current state of understanding
- Completion of research project from conception to written report
- Oral presentation at a research symposium, or brief published report, of field experience results

Requirements

Preparation for the Major

Required: Earth, Planetary, and Space Sciences 136A, C143, 150, C162, 165

Surface processes: Earth, Planetary, and Space Sciences 136A, C143, 155, C179

Tectonics/Structural Geology: Earth, Planetary, and Space Sciences 119, 133, 136A, 165

Honors Program

The honors program in geology is intended to provide exceptional students an opportunity for advanced research and study under the tutorial guidance of a faculty member.

Students must complete a minimum of two terms (8 units) of Earth, Planetary, and Space Sciences 198 leading to the preparation of a satisfactory honors thesis.

Policies

Preparation for the Major

Each course must be passed with a minimum grade of C–.

Honors Program

Requirements for admission to candidacy are the same as those required for admission to the Honors Programs of the College of Letters and Science. Qualified students wishing to enter Honors Programs of the College of Letters and Science. Qualified students wishing to enter

Geochemistry: Earth, Planetary, and Space Sciences 103C, C106, C107, C109, C113, 152, 153

Planetary science: Earth, Planetary, and Space Sciences 136A, C143, 155, C179

Surface processes: Earth, Planetary, and Space Sciences 136A, C143, 150, C162, 165

Tectonics/Structural Geology: Earth, Planetary, and Space Sciences 119, 133, 136A, 165

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Tectonics/Structural Geology: Earth, Planetary, and Space Sciences 119, 133, 136A, 165

Honors Program

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Students must complete a minimum of two terms (8 units) of Earth, Planetary, and Space Sciences 198 leading to the preparation of a satisfactory honors thesis.

Policies

Preparation for the Major

Each course must be passed with a minimum grade of C–.
the program must submit a completed application form to the departmental honors committee near the end of their junior year. Honors in geophysics are awarded at graduation to those students who have a cumulative grade-point average of 3.5, have completed at least 90 graded units at the University of California, and have completed a minimum of two terms (8 units) of Earth, Planetary, and Space Sciences 198 leading to the preparation of a satisfactory honors thesis. Students demonstrating exceptional ability are awarded highest honors.

Undergraduate Minors

Earth and Environmental Science Minor

In the Earth and Environmental Science minor students study the interaction of the solid Earth, oceans, and atmosphere with human activities. The minor provides background in Earth sciences that is especially appropriate for students intending to become K through 12 teachers in Earth, physical, or life sciences. It may also be of interest to students who plan careers in business, dentistry, environmental sciences, government, journalism, law, medicine, or public health.

Admission

To enter the minor, students must have an overall grade-point average of 2.0 or better.

The Minor

Required Lower-Division Courses (9 units):
- Earth, Planetary, and Space Sciences 1 (or any course from Earth, Planetary, and Space Sciences 3 through 17 or Clusters 70A), and one course from Earth, Planetary, and Space Sciences 51, 61, or M71; or two courses from Earth, Planetary, and Space Sciences 51, 61, or M71.
- Required Upper-Division Courses (20 units minimum): Five 100-level Earth, planetary, and space sciences courses (except Earth, Planetary, and Space Sciences M187, and 189 through 199).

Policies

A minimum of 20 upper-division units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Geology Minor

Geology is the study of the surface of the Earth and the rocks and processes that created it. Field methods, interpretation of rocks, and modern plate-tectonic models are emphasized, with the goals of finding valuable or hazardous materials and inferring geologic history. These skills are valuable in engineering, urban planning, and environmental and resource studies.

Admission

To enter the Geology minor, students must have an overall grade-point average of 2.0 or better.

The Minor

Required Lower-Division Courses (8 or 9 units):
- Earth, Planetary, and Space Sciences 1 (or any course from Earth, Planetary, and Space Sciences 3 through 17 or Clusters 70A), and one course from Earth, Planetary, and Space Sciences 51, 61, or M71; or two courses from Earth, Planetary, and Space Sciences 51, 61, or M71.
- Required Upper-Division Courses (20 to 26 units): Two courses from Earth, Planetary, and Space Sciences C106, C107, C109, and three courses from 103A, 103B, 103C, C106 or C107 or C109 (whichever course was not applied above), C113, CM114A or CM114B, 152, 153.

Policies

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Geophysics and Planetary Physics Minor

Classical physics, supported by field data, mathematics, and computing, is used to understand diverse processes from ocean circulation and earthquakes to the formation of planets and the flow of particles and electromagnetic fields in space. These skills are valuable in environmental, engineering, and resource studies and more broadly in any kind of career that requires quantitative analysis.

Admission

To enter the Geophysics and Planetary Physics minor, students must have an overall grade-point average of 2.0 or better.

The Minor

Required Lower-Division Courses (8 or 9 units):
- Earth, Planetary, and Space Sciences 1 (or any course from Earth, Planetary, and Space Sciences 3 through 17, 51, 61, or Clusters 70A), M71.
- Required Upper-Division Courses (20 units):
  - Earth, Planetary, and Space Sciences 136A, M171, and three courses from M140, 152, 153, 154, 155.

Policies

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Majors

Geochemistry MS, CPhil, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Geology MS, CPhil, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.
Geophysics and Space Physics MS, PhD

Requirements
Official, specific degree requirements are detailed in program requirements. Offered in the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Planetary Science MS, PhD

Requirements
Official, specific degree requirements are detailed in program requirements. Offered in the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Earth, Planetary, and Space Sciences

Lower-Division Courses

1. Introduction to Earth Science. (5) Lecture, three hours; laboratory, two hours; field days. Not open to students with credit for or currently enrolled in course 100, Elements of Earth science; study of Earth materials; nature and interpretation of geologic evidence; study of geologic processes; historical aspects of geology. Mandatory field trips introduce students to solving of geologic problems in field. P/NP or letter grading.

3. Astrobiology. (5) Lecture, three hours; discussion, one hour, Origin, evolution, distribution, and future of life on Earth and in universe. Course material primarily from planetary and Earth sciences, paleontology and biology, astronomy, chemistry, and physics. P/NP or letter grading.

5. Environmental Geology of Los Angeles. (4) Lecture, three hours; discussion, two hours; field trips. Geologic hazards and natural resources of greater Los Angeles region. Topics include Los Angeles geologic hazards such as earthquakes, landslides, and floods; Southern California oil fields; gold and gem mining in region; local beach processes; and Los Angeles water resource problems. Field trips to San Andreas fault, California aqueduct, active landslides, and historic gold mines. P/NP or letter grading.

7. Perils of Space: Introduction to Space Weather. (5) Lecture, three hours; discussion, two hours; field trips. Discussion of and critical thinking about issues of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

9. Major Events in History of Life. (5) Lecture, three hours; laboratory, two hours; one field trip. Designed for nonmajors. History of life on Earth as revealed through fossil record. P/NP or letter grading.

11. Dinosaurs and Their Relatives. (5) Lecture, three hours; laboratory, two hours; one optional field trip. Designed for nonmajors. Exploration of biology, evolution, and extinction of dinosaurs and close relatives, in context of history of biosphere. Information from paleontology, biology, and geology. P/NP or letter grading.

15. Blue Planet: Introduction to Oceanography. (5) Lecture, three hours; laboratory, two hours. Not open for credit to students with credit for or currently enrolled in Ecological and Evolutionary Biology 25. General introduction to geophysical, physical, chemical, biologic processes and history of Earth’s global ocean system. P/NP or letter grading.

16. Major Events in History of Life. (5) Lecture, three hours; laboratory, two hours; one field day. Causes and effects of earth processes. Not open to students with credit for course 100, Elements of Earth science; study of Earth materials; nature and interpretation of geologic evidence; study of geologic processes; historical aspects of geology. P/NP or letter grading.

18. Earthquakes. (5) Lecture, three hours; interpretation of published maps in laboratory. Preparation: one lower-division atmospheric science course. Exploration of topics in greater depth through supplemental readings, papers, or other activities. May be repeated for credit to students with credit for course 100, Elements of Earth science; study of Earth materials; nature and interpretation of geologic evidence; study of geologic processes; historical aspects of geology. P/NP or letter grading.

Earth, Planetary, and Space Sciences

Upper-Division Courses

100. Principles of Earth Science. (4) Lecture, three hours. Designed for nonmajors. Not open to students with credit for course 100, Elements of Earth science; study of Earth materials; nature and interpretation of geologic evidence; study of geologic processes; historical aspects of geology. P/NP or letter grading.

101. Earth’s Energy: Diminishing Fossil Resources and Prospects for Sustainable Future. (4) Lecture, three hours; laboratory, two optional field trips. Preparation: one lower-division atmospheric science course. Study of and critical thinking about issues of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

103A. Igneous Petrology. (5) Lecture, two to three hours; laboratory, six hours; field trips. Enforced requisite: course 51, Chemistry 14B and 14BL, or 20B and 20BL. Basic principles of chemical composition, and field occurrence of igneous rocks with reference to their origin by melting in earth. Introduction to thermodynamics as applied to petrology. Formation of magma, its movement, eruption, crystallization, and chemical evolution. Petrologic structure of crust and mantle and its relation to seismology. Overview of petrologic and chemical evolution of Earth, moon, and other planets from their origin to present. P/NP or letter grading.

103B. Sedimentary Petrology. (5) Lecture, two to three hours; laboratory, six hours; field trips. Enforced requisite: course 103A. Recommended: course 61. Study of sedimentary rocks based on characteristics of sedimentary particles and dynamics of depositional processes. Lectures focus on development of depositional models, and laboratories emphasize recognition of sedimentary rocks from each major depositional facies. P/NP or letter grading.

103C. Metamorphic Petrology. (5) Lecture, two to three hours; laboratory, six hours; field trips. Enforced requisite: course 103A. Interpretation of metamorphic rocks based on field occurrence, mineralogical composition, texture, and application of physical and chemical principles. P/NP or letter grading.

106. Physical Geochemistry. (4) Lecture, three hours. Recommended: course 51, Chemistry 14B and 14BL. Basic principles of chemical composition, and field occurrence of igneous rocks with reference to their origin by melting in earth. Introduction to thermodynamics as applied to petrology. Formation of magma, its movement, eruption, crystallization, and chemical evolution. Petrologic structure of crust and mantle and its relation to seismology. Overview of petrologic and chemical evolution of Earth, moon, and other planets from their origin to present. P/NP or letter grading.

110. Isotope Geochemistry. (4) Lecture, three hours; discussion, one hour. Designed for junior/senior and graduate physical and biological sciences students. Topics: principles of isotope geochemistry, mass spectrometry, and applications to geology and biogeochemistry. P/NP or letter grading.
Stable isotopes as indicators of environment and pa-leoclimate. Concurrently scheduled with course C209. P/NP or letter grading.

111. Stratigraphic and Field Geology. (6) Lecture, three hours; laboratory, three hours; fieldwork, eight hours per week. Enforced requisite: courses 61, 112. Principles of stratigraphy; geologic mapping of selected area; preparation of geologic report. Letter grading.

111G. Field Geology. (2 to 4) Lecture, two hours; laboratory, three hours; fieldwork, one day per week. Designed for graduate students. Geologic mapping, principles of stratigraphy, structural geology, and map interpretation. Letter grading.

112. Structural Geology. (5) Lecture, three hours; laboratory, six hours. Requisites: courses 1, 61. Recommended: course 51. Planar and linear structures at different scales in sedimentary, metamorphic, and igneous rocks. Stress, strain, dislocation, classification, and kinematic and dynamic analysis. Deformation, strength, fracture, and tectonic properties of rocks. P/NP or letter grading.

C113. Biological and Environmental Geochemistry. (4) Lecture, three hours. Requisites: Chemistry 14A and 14B (or 20A and 20B), Mathematics 3A, 3B, and 3C (or 31A and 31B). Recommended: at least one lower-division course in biological or Earth science. Introductory course for junior/senior life and physical sciences students. Study of chemistry of Earth’s surface environment and interplay between biology, human activity, and geology. Introduction to origin and composition of Earth, including atmosphere, crust, and hydrosphere. Examination of how these reservoirs are affected by biological cycles and feedbacks to biological evolution. Local and global-scale movements of biologically important elements like carbon, nitrogen, and phosphorus. Concurrently scheduled with course C213. P/NP or letter grading.

CM114A. Aquatic Geomicrobiology: Metabolisms. (4) (Formerly course 114A.) (Same as Atmospheric and Oceanic Sciences CM114A.) Lecture, three hours. Recommended requisite: course C107 or Atmospheric and Oceanic Sciences M105. Study of fundamental geomicrobiological metabolism and biogeochemical reactions occurring in aquatic systems and how these processes interact with environment. Metabolisms include photoautotrophic (anoxic and oxic photosynthesis), chemoheterotrophic (fermentation and respiration of organic mate), photoheterotrophic (organic matter degradation with light), and chemoautotrophic (iron, nitrogen, manganese, etc., metabolism). Emphasis on microbial community interactions and biodiversity. P/NP or letter grading.

CM114B. Aquatic Geomicrobiology: Environments. (4) (Same as Atmospheric and Oceanic Sciences CM114B.) Lecture, three hours. Recommended requisite: course CM114A. Broad overview of aquatic geomicrobiological processes in diverse environmental settings (e.g., sediments, microbial mats, water column, wetlands, cold seeps, hydrothermal vents, coral reef systems and how these processes drive element cycling on Earth. Concurrently scheduled with course CM214A. P/NP or letter grading.

Paleontology. (4) Lecture, three hours; laboratory, three hours. Requisite: Life Sciences 7A or 7B. Review of major groups of fossil organisms and their significance in geology and biology. P/NP or letter grading.

M118. Advanced Paleontology. (4) (Same as Ecology and Evolutionary Biology M118.) Lecture, three hours. Requisite: course 116 or Ecology and Evolutionary Biology 110 or 117. Consideration of major factors that have influenced history of life, including analytical approaches to analyzing patterns in fossil record, nature of rock record, and contribution of data from stable isotopes, functional morphology, phylogenetics, and developmental biology. P/NP or letter grading.

119. Continental Drift and Plate Tectonics. (4) Lecture, three hours; computer laboratory/discussion, one hour. Requisite: course 1 or 100. Designed for juniors/seniors in physical sciences. Exploration of history and phenomenology of plate tectonics theory, with particular focus on obervations and kinematics. Evidence supporting the theory (magnetic anomalies, seismicity, gravity), Tectonic, igneous, and metamorphic processes at plate boundaries. Focus on plate kinematics both past and present and learn how to compute and plot velocities. Exploration of plate dynamics and faculty member content varies from year to year. If laboratory work is required, course 199 must be taken concurrently. P/NP or letter grading.

121. Advanced Field Geology. (4) Lecture, two hours; discussion, one hour; laboratory, two hours; fieldwork, 10 hours. Enforced requisite: course 136A. Application of seismic, gravimetric, magnetic, electrical, and other geophysical methods to geologic and engineering problems. Practical aspects of geophysical exploration, including planning, data collection, data reduction, and interpretation. Fieldwork on unsolved problems. Letter grading.

137. Petroleum Geology. (4) Lecture, three hours. Requisites: courses 61, 111, 111. Geology applied to exploration for and production of natural gas and petroleum; techniques of surface and subsurface geology; problems of petroleum geology. P/NP or letter grading.

139. Engineering and Environmental Geology. (4) Lecture, three hours; discussion, one hour. Requisite: course 1 or 100. Recommended: course 111. Principles of engineering geology in light of geologic conditions, recognition, prediction, and control or abatement of subsidence, landslides, earthquakes, and other geologic activities. Letter grading.


C143. Advanced Physical Sedimentology. (4) Lecture, three hours; fieldwork, three hours. Requisites: courses 103B, 111, or equivalent. Advanced topics related to sediments, sedimentary rocks, and information that can be extracted from each. Interpretation of depositional environment from complex sedimentary structures and textures, and lecture component and builds on previous sedimentology basics. Concurrently scheduled with course C243, P/NP or letter grading.


52. Physics of Earth. (4) Lecture, three hours; discussion, one hour. Requisites: Mathematics 33A, Physics 1C (or 1CH). Crust-to-core tour of Earth and physics used to explore it. Isostasy, plate tectonics, mantle convection, and geodynamo as discovered with tools of elasticity, fluid mechanics, and thermodynamics. P/NP or letter grading.

153. Oceans and Atmospheres. (4) Lecture, three hours; laboratory, three hours. Requisites: Mathematics 31A, 31B, 32A, Physics 1A, 1B, and 1C (or 1AH, 1BH, and 1CH). Physics and chemistry of Earth’s oceans and atmosphere; origin and evolution of planetary atmospheres; biogeochemical cycles, atmospheric radiation and the Ultimate, energetics and dynamics of water and atmospheric circulation systems. P/NP or letter grading.

154. Solar Terrestrial Physics. (4) Lecture, three hours; discussion, one hour. Requisite: Physics 10A. Particle and electromagnetic emis-
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199. Directed Research or Senior Project in Earth, Planetary, and Space Sciences. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty. Culminating written report required. May be repeated for credit. Individual contract required. P/N or letter grading.

Graduate Courses


200D. Planetary Surfaces. (4) Lecture, three hours. Introduction to basic physical processes (both exogenic and endogenic) shaping solid surfaces in the solar system and description of their optical and thermo-physical properties, with emphasis on simple physics-based approach. Discussion of current literature. S/U or letter grading.

200E. Planetary Origins and Evolution. (4) Lecture, four hours. Designed for graduate students who are interested in origins of planetary systems and history of solar system. Open to advanced undergraduate students with consent of instructor. Provides background needed to understand and/or participate in research related to formation and evolution of solar system and of other planetary systems. Description of star/planet formation process and subsequent evolution of planetary systems by integrating observations and theory. Fosters interdisciplinary knowledge and communication between Departments of Earth, Planetary, and Space Sciences and Astronomy, graduate students and faculty members. S/U or letter grading.


220. Principles of Paleobiology. (4) Lecture/discussion, two hours. Series of advanced topics in evolutionary biology; phylogenetic algorithms. Themes may vary from year to year. May be repeated for credit. S/U or letter grading.

221. Field Geology. (4) Lecture, one hour; discussion, one hour; fieldwork, 10 days. Enforced requisite: course 121F. Planning, execution, and presentation of geologic field mapping projects at professional level. Research: S/U or letter grading.

222. Introduction to Seismology. (4) Lecture, three hours. Types of seismic waves; travel-time seismology; epicenter location; amplitude variations; seismograph theory; seismology; seismic; focal conditions; surface wave analysis; microseisms and tsunamis. S/U or letter grading.


225. Physics and Chemistry of Planetary Interiors. (4) Lecture, four hours. Chemical compositions of Earth and planets; high-pressure and temperature effects, phase transitions; volume; variations of density and temperature with depth; thermal and compositional evolution. S/U or letter grading.

226. Advanced Petrology. (4) Lecture, three hours; laboratory, three hours; field trips. Requisite: course 103A. Recommended for graduate students. Understanding the conditions of igneous rocks based on geochemical, tectonophyiscal, and other geological evidence and principles. Concurrently scheduled with course C126. Graduate students required to read more recommended references, make class presentations on particular topics resulting from that reading, and lead seminar-type discussions on their selected topics. S/U or letter grading.

227. Mars. (4) Lecture, three hours. Limited to graduate students. Results of recent and ongoing missions to Mars are revising many aspects of our understanding of planet and its history. Study highlights major revolutions in thinking about planet and provides comprehensive overview as well as current controversies related to Mars’ core and magnetism, thermal evolution and volcanism, geology and cratering history, volatiles and climate, atmosphere and its interaction with space environment, and potential pre-biological and biological history. S/U or letter grading.

228. Introduction to Planetary Dynamos. (4) Lecture, three hours; laboratory, three hours. Requisites: courses 200A, 200B, 200C. Designed for graduate students. Basic principles of planetary dynamo generation. Planetary core dynamics and core convection; mean field dynamo theory; kinematic dynamo theory; survey of modeling techniques and results. S/U or letter grading.

229. Meteoral Atmospheres and Climates. (4) Same as Atmospheric and Oceanic Sciences M210.) Lecture, three hours. Enforced requisite: Physics 1C. Planetary atmospheric structure and composition, radiative transfer, and climate dynamics. Topics include origin and evolution of atmospheres, paleoclimate of Earth and Mars, atmospheric thermodynamics, plane-parallel radiative transfer, climate dynamics, climate forcings/feedbacks, bifurcation, and climate hysteresis. S/U or letter grading.

230. X-Ray Crystallography. (4) Lecture, three hours; laboratory, three hours. Requisite: course 51. Point, translation, and space group symmetry, diffraction of X-ray, reciprocal lattice theory, single crystal X-ray methods, diffraction symmetry and elementary crystal structure analysis. S/U or letter grading.

231. Crystal Chemistry and Structure of Minerals. (4) Lecture, three hours; laboratory, three hours. Requisite: course 51. Bonding, interatomic configurations, polymorphic transformations, isomorphism, thermal and positional disorder; survey of structures of common minerals, and relation of physical and chemical properties to crystal structure. S/U or letter grading.


234. Petrologic Phase Equilibria. (4) Lecture, three hours; discussion, three hours. Requisites: course 51, Chemistry 110B. Principles governing homogeneous and heterogeneous equilibria, with selected applications. Elemental stability relations, high-temperature and pressure phase transitions, mineral assemblages from high-pressure, high-temperature overgrowths, phase diagrams, phase relations. S/U or letter grading.

235. Current Research in Geobiology. (1–1–1) Seminar, one hour. Limited to graduate Earth, planetary, and space sciences students. Seminars presented by staff, outside speakers, and graduate students stressing current research in Earth and planetary chemistry. May be repeated for credit. S/U grading.

237. How to Write and Publish Scientific Papers. (4) Same as Atmospheric and Oceanic Sciences M237. Three hours. Preparation and publication: planning to prepare or in the process of preparing manuscripts. Introduction to process of scientific manuscript writing and publishing. Offers insights into the editorial and peer review process, manuscript preparation, formatting and manuscript preparation, planning to prepare or in the process of preparing manuscripts. Introduction to process of scientific manuscript writing and publishing. Offers insights into the peer review process, manuscript preparation, formatting and scientific language, and advice on how to deal with review process. Students gain familiarity with general principles of the scientific publishing process. Addresses different stages of manuscript writing and publishing by answering what are the criteria for publication, where to publish, how to structure manuscript, how to present data, and translating the writing ethics. S/U or letter grading.

238. Introduction to Geologic Mapping. (3) Lecture: planning to prepare or in the process of preparing manuscripts. Introduction to process of scientific manuscript writing and publishing. Offers insights into the peer review process, manuscript preparation, formatting and scientific language, and advice on how to deal with review process. Students gain familiarity with general principles of the scientific publishing process. Addresses different stages of manuscript writing and publishing by answering what are the criteria for publication, where to publish, how to structure manuscript, how to present data, and translating the writing ethics. S/U or letter grading.
238. Metamorphic Petrology. (4) Lecture, three hours; laboratory, six hours. Preparation: one introductory petrology and petrography course. Interpretation of metamorphic rocks in light of observation, theory, and experiment. Geological relations, petrographic evidence, metamorphic zoning, thermodynamics of phase equilibria, projections, chromatic relations, usage of piezobrieffing haloes, Rayleigh deple-
tion mechanisms, magnetic alignment, environment, applications to solar or planetary winds, steady-state magnetos-
tospheres, magnetospheric convection, substorm processes, magnetic merging, field-aligned currents. Applications to
solar or planetary winds, processes leading to segregation of continental-type rocks. S/U or letter grading.

241. Analysis. (4) Lecture, three hours; laboratory, three hours. Requisites: courses 103B, 111. Mechanical and basin development, depositional and thermal subsidence, isostasy, subsidence analysis, quantitative basin modeling, sediment proven-

242. Sandstone Petrology. (4) Lecture, two hours; laboratory, four hours. Requisite or corequisite: course C141. Petrographic study of sandstones, with emphasis on depositional facies, diagenesis, and weathering. S/U or letter grading.

243. Advanced Physical Sedimentology. (4) Lecture, three hours; fieldwork, three hours. Requisites: courses 103B, 111, or equivalent. Advanced topics related to sediments, sedimentary rocks, and information that can be extracted from each. Interpretation of depositional environment from complex sedimentary structures and textures. Includes field and laboratory component. S/U or letter grading. Concurrently scheduled with course C143. S/U or letter grading.

244. Tectonics of Sedimentary Basins. (4) Lecture, two hours; discussion, two hours; field trips. Requisites: courses 103B, 111. Principles governing fracture, folding, and flow of rocks; solutions of structural problems at various scales; regional tectonic problems. S/U or letter grading.

251. Seminar: Mineralogy. (4) Seminar, three hours. Examination of groups of rock-forming minerals (e.g., feldspars), integrating such aspects as crystal structure, crystal chemistry, phase equilibria, and petrogen-
esis. S/U or letter grading.

252. Seminar: Geochemistry. (4) Seminar, two hours; discussion, two hours. Phase equilibria under crustal conditions, chemistry of ocean waters, recent and ancient climates, structure and chemistry of upper mantle and lower crust: petrology, cosmochemistry, and cos-
mochemistry. S/U or letter grading.

253. Seminar: Petrology. (4) Seminar, three hours. Problems of igneous or metamorphic petrology: methods of evaluating physical conditions of meta-
morphism; diffusion in mineralogic systems; origin of ultramafic rocks and problems of mantle; element fractionation among coexisting phases; other current subjects in field. S/U or letter grading.

255. Seminar: Structural Geology and Tectonics. (4) Seminar, three hours. Flow and fracture in Earth's crust from microscopic to continental scale and in ex-
periments. Examples may include metamorphic fractures, glaciers, plutos, volcanoes, and consolidated or unconsolidated sediments. Modern concepts of oceanic basins; processes leading to segregation of continental-type rocks. S/U or letter grading.


267. Seminar: Paleontology. (4) Seminar/discussion, three hours. Advanced topics in paleobiology, biostra-
tigraphy, paleoecology, and paleobiogeography, with emphasis on relations to other disciplines. S/U or letter grading.

269. Seminar: Paleotectonics. (4) Seminar, two hours; discussion; two hours. Requisite: course 244. Basin evolution and paleogeography, with emphasis on Pha-
erozic of Western U.S. S/U or letter grading.

270. Field Seminar. (2 to 6) Seminar, three hours. Discussion, one hour; fieldwork, five to 20 days. Requi-
site: course 61. Field-based teaching and discussion forum that varies in focus from general geology to through structure and tectonics, sedimentology, igneous and metamorphic petrology, volcanology, and other subdisciplines as prescribed. May be repeated for credit. Concurrently scheduled with course C160. S/U or letter grading.

261. Topics in Magnetospheric Plasma Physics. (4) Lecture, four hours. Lectures, discussions, and exer-
cises on specific advanced topics in magnetospheric plasma physics. Previous courses examined magnetic storms, geomagnetic storms, auroras, storms, frec-
quency waves, and adiabatic particle motion in Earth's radiation belts. S/U or letter grading.

262. Application of Remote Sensing in Field. (4) Fieldwork, five hours; laboratory, two hours. Requisite: course 261. Application of remote sensing techniques in to field situations. Digital analysis and interpretation of near-infrared, thermal-infrared, and microwave data from satellites and aircraft. Field observation of study site in California desert for testing hypotheses during week between Winter and Spring Quarters. Concur-
rently scheduled with course C162. S/U or letter grading.

263A. Solar System Magneto-hydodynamic. (4) (Same as Atmospheric and Oceanic Sciences M250A.) Lecture, three hours. Requisite: Atmospheric and Oceanic Sciences C205A. Derivation of MHD equations and application to problems involving Ohm's Dye-
law, small amplitude waves, discontinuities, shock waves, and instabilities. Applications to statics and dynamics of solar wind and planetary magnetic fields. Emphasis on methods and techniques in to planetary sciences, Atmospheric and Oceanic Sciences, Physics and Astronomy Departments. Review of current interest concerning moon, planets, and mete-
orites. May be repeated for credit. S/U grading.

263B. Origin and Evolution of Solar System. (4) (Same as Astrophysics M285.) Lecture, four hours. Dynamical problems of solar system; chemical ev-
dences from geochemistry, meteorites, and solar at-
mosphere; nucleosynthesis; solar origin, evolution, and destruction; solar system: solar wind, cosmic rays, particle interactions in the solar system. S/U grading. May be repeated for credit. S/U grading.

266A-286B-286C. Current Research in Geology. (1–1–1) Seminar, one hour. Limited to graduated Earth, planetary, and space sciences students. Seminars present topics of current interest concerning moon, planets, and meteorites. May be repeated for credit. S/U grading.

279. Seminar: Fluid Dynamics. (2) Seminar, one to two hours. Problems of current interest in fluid dy-
namics, with emphasis on geophysical applications. May be repeated for credit. S/U grading.

283A-293B-293C. Space Physics Journal Club. (1–1–1) Seminar, one hour. Limited to graduate space sciences students in Earth, Planetary, and Space Sciences. Emphasis on geophysical, Atmospheric Sciences, and Physics and Astronomy Departments. Review of current
space physics literature. May be repeated for credit. S/U grading.
EAST ASIAN STUDIES

Interdepartmental Program
College of Letters and Science
10256 Bunche Hall
Box 951487
Los Angeles, CA 90095-1487

East Asian Studies
310-206-6571
Program e-mail
William Marotti, PhD, Chair

Faculty Committee
Stephanie Balkwill, PhD (Asian Languages and Cultures)
Michael S. Berry, PhD (Asian Languages and Cultures)
William M. Bodiford, PhD (Asian Languages and Cultures)
Michelle L. Carriger, PhD (Theater)
Torquil Duthie, PhD (Asian Languages and Cultures)
Michael D. Emmerich, PhD (Asian Languages and Cultures)
Andrea S. Goldman, PhD (History)
Christopher P. Hanscom, PhD (Asian Languages and Cultures)
Katuya Hirano, PhD (History)
Jennifer J. Jung-Kim, PhD (Asian Languages and Cultures)
Kristopher W. Kersey, PhD (Art History)
Hui-Shu Lee, PhD (Art History)
Seiji M. Lippit, PhD (Asian Languages and Cultures)
William Marotti, PhD (History)
Sean A. Metzger, PhD (Film, Television, and Digital Media; Theater)
Kyeyoung R. Park, PhD (Anthropology, Asian American Studies)
Shu-mei Shih, PhD (Asian American Studies, Asian Languages and Cultures, Comparative Literature)
Michael F. Thies, PhD (Political Science)
Yinghui Wu, PhD (Asian Languages and Cultures)

Overview
The Master of Arts (MA) degree in East Asian Studies offers an interdisciplinary and highly flexible program of study. With opportunities to take a range of advanced courses in the social sciences and humanities, students are able to tailor their programs to emphasize particular methodological and disciplinary approaches and to focus in depth on the region as a whole and on its dynamics in particular countries. Coursework and language offerings range from the ancient to the contemporary and allow students to prepare for a broad range of individual needs and career interests with a thorough grounding in the history and culture of the region.

Undergraduate Study
Information on the undergraduate major in Asian Studies and minor in East Asian Studies can be found in the International and Area Studies section.

Graduate Major
East Asian Studies MA

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

East Asian Studies Lower-Division Course
19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many path[s of discovery at UCLA. P/NP grading.

Graduate Courses
291A-291B. Variable Topics in East Asian Studies. (4–4) Seminar, three hours. Selected topics on East Asia. May be repeated for credit with topic change. S/U or letter grading.

ECOLOGY AND EVOLUTIONARY BIOLOGY

College of Letters and Science
101 Hershey Hall
Box 957426
Los Angeles, CA 90095-7246

Ecology and Evolutionary Biology
Graduate Office, 310-825-1959
Graduate e-mail
Undergraduate Office, 310-825-1680
Message Center
Michael E. Alfaro, PhD, Chair

Faculty Roster

Profs
Michael E. Alfaro, PhD
Priyanga A. Amarasekare, PhD
Paul H. Barber, PhD
Dan T. Blumenthal, PhD
Peggy M. Fong, PhD
Gregory F. Grether, PhD
David K. Jacobs, PhD
Nathan J.B. Kraft, PhD
James O. Lloyd-Smith, PhD
Kirk E. Lohmueller, PhD
Glen M. MacDonald, PhD (Professor of California and the American West)
Peter N. Nonacs, PhD
Noa Pinter-Wollman, PhD
Lawren Sack, PhD
Van M. Savage, PhD
Barrett A. Schlinger, PhD

Overview
The Master of Arts (MA) degree in East Asian Studies offers an interdisciplinary and highly flexible program of study. With opportunities to take a range of advanced courses in the social sciences and humanities, students are able to tailor their programs to emphasize particular methodological and disciplinary approaches and to focus in depth on the region as a whole and on its dynamics in particular countries. Coursework and language offerings range from the ancient to the contemporary and allow students to prepare for a broad range of individual needs and career interests with a thorough grounding in the history and culture of the region.

Undergraduate Study
Information on the undergraduate major in Asian Studies and minor in East Asian Studies can be found in the International and Area Studies section.
all influence human decisions on matters ranging from conservation of the environment to advancement of medical science.

**Undergraduate Study**

The Bachelor of Science (BS) degrees combine essential background studies in mathematics, chemistry, and physics with a general introduction to all of the biological subjects, as well as advanced in-depth exposure to some of them. Students may earn a BS degree in one of three different majors within the department: Biology (general biology); Ecology, Behavior, and Evolution; and Marine Biology. The majors build on similar lower-division introductory courses and differ primarily in the upper-division requirements. The Biology major is designed for students who desire exposure to a wide range of biological subjects. The remaining two majors—Ecology, Behavior, and Evolution and Marine Biology—provide more specialized instruction and strong preparation for employment or subsequent graduate study in the respective disciplines.

**Graduate Study**

The Master of Science (MS) and Doctor of Philosophy (PhD) degrees provide opportunities for advanced, concentrated study. The MS degree requires, in addition to specified coursework, completion of either a comprehensive examination or the performance of original research culminating in a thesis. The PhD degree requires independent and innovative research that ultimately results in a dissertation.

**Undergraduate Majors**

**Biology BS**

The Biology major is designed for students with a broad interest in biology who desire to pursue careers in a wide range of biological and related fields. It provides students with excellent background preparation for postgraduate training in medicine and other health sciences, in tracks leading to academic and public service careers in biology, in biological industries, and even in nonbiological careers such as business, agriculture, and law. Emphasis is on breadth of training to expose students to all levels of modern biology.

**Learning Outcomes**

The Biology major has the following learning outcomes:

- Broad understanding of basic biology concepts and principles across different levels of biological organization, from molecules to ecosystems
- Effective oral and written communication of scientific information
- Demonstrated understanding of the processes involved in new knowledge generation, including the scientific method, data collection, and data analysis
- Ability to critically evaluate scientific concepts presented in diverse media, from scientific articles to the popular press

**Entry to the Major**

**Transfer Students**

Transfer applicants to the Biology major with 90 or more units must complete the following introductory courses prior to admission to UCLA:
- one year of general biology with laboratory for majors, preferably equivalent to Life Sciences 7A, 7B, and 7C, one year of calculus, one year of general chemistry with laboratory for majors, and one semester of organic chemistry with laboratory. A second semester of organic chemistry or one year of calculus-based physics is strongly recommended but not required for admission.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

**Requirements**

**Preparation for the Major**

**Life Sciences Core Curriculum**

Required: Chemistry and Biochemistry 1A, 1B, 1C, 14A, 14B, 14AL, 14D, or 20A, 20B, 20L, 20L, 30A, 30AL, and 30B; Life Sciences 7A, 7B, 7C, 23L; Life Sciences 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, 3C, and Life Sciences 40 or Statistics 13, or Mathematics 31A or 31AL, 31B, 32A, and Life Sciences 40 or Statistics 13, Physics 1A, 1B, 1C, 4AL, and 4BL, or 5A, 5B, and 5C.

The Major

Students must take two courses from each principle:

**Evolution and Genetics:** Anthropology 120, 122P, 124P, 124Q, 125S, 125P, Earth, Planetary, and Space Sciences 116, Ecology and Evolutionary Biology 103, 108, 109, 109L, 110, 111, 112, 113A, 113AL, 114A, 115, 117, 118, 120 (not open for credit to students with credit for course 185), 121, 126, 129, 130, 135, 136, 140, 143, 144, 144L, M145, C146, 149, 150, 150L, 160, 171, CM173, C174, 175, 181, 184, 185 (not open for credit to students with credit for course 120), 186, Life Sciences 107, Microbiology, Immunology, and Molecular Genetics CM156, 158, Molecular Cell, and Developmental Biology 138, CM156, Society and Genetics CM142

**Information Flow:** Anthropology 124P, 125P, Chemistry and Biochemistry C100, 153A, 153B, 160, and Evolutionary Biology 100, 100L, 116, 120 (not open for credit to students with credit for course 185), 121, 122, 125, 126, 129, 132, 134B, C135, 136, 137, 143, C146, 149, 150, 150L, 153, 156, 162, 162L, 168, 170 (not open for credit to students with credit for Physiological Science 166), 171, 172, C174, 176, M178, C179, 180A, 180B, 183, Life Sciences 107, Microbiology, Immunology, and Molecular Genetics 100L and 101 (must be taken together to satisfy requirement), 103AL, 103BL, 109AL, 109BL, 123, 126, C156, 156E, C185A, Molecular Cell, Developmental Biology 100, 138, 139, 144, 145, C150, 150AL, C156, 156B, 168, M175A, M175B, M175C, 187AL, Neuroscience M101A, M101B, M101C, 102, Physiological Science M106, 111A, 111B, CM123, CM124, 126, C127, 128, C130, 136,
field biology

The department offers three quarter-long programs of advanced courses in field biology: the Field Biology Quarter (FBQ), the Marine Biology Quarter (MBQ), and the joint Field Marine Biology Quarter (FMBQ). These programs focus on the biology of organisms living in their natural environments, emphasize independent student research projects, and take place at field sites away from the UCLA campus. The course composition varies somewhat from year to year, but each program always carries 16 units of course credit. The Field Biology Quarter involves some combination of Ecology and Evolutionary Biology 113B, 114B, 118, 124A, 124B, 125, 126, 132, 134B, and 151B. The Marine Biology Quarter includes some combination of Ecology and Evolutionary Biology 102, 106, 123A, 123B, 147, 148, 163, 164, 165, and 182. The Field and Marine Biology quarters may occur during fall, winter, or spring quarter, depending on location and faculty participation. To participate, students must enroll in all courses in the respective program. Participants in both programs are selected by personal interview. Information and applications are available in the Undergraduate Advising Office.

Honors Program

An overall grade-point average of 3.4 and a 3.4 in the major at graduation and who have successfully completed Ecology and Evolutionary Biology 198A and 198B. Students do not need to apply for departmental honors. All students are reviewed for honors.

Computing Specialization

Majors may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major, (2) completing Program in Computing 104, 105, 10C, 30, and 60, and (3) completing one course from Computer Science CM186, Psychology 186A, or 186B. A grade of C– or better is required in each course, with a combined grade-point average of 2.0. Students must petition for admission to the program and are advised to do so after completing Program in Computing 103 (petitions should be filed in the Undergraduate Advising Office). Students graduate with a bachelor’s degree in their major and a specialization in Computing.

policies

Preparation for the Major

Each core curriculum course must be passed with a grade of C– or better, and all courses must be completed with an overall grade-point average of 2.0 or better. Students receiving a grade below C– in two core curriculum courses, either in separate courses or repetitions of the same course, are subject to dismissal from the major.

The Major

Each Life Sciences core curriculum course must be passed with a grade of C– or better, and all courses must be completed with an overall grade-point average of 2.0 or better. Students receiving a grade below C– in three core curriculum courses, either in separate courses or repetitions of the same course, are ineligible for the Biology major. A minimum of five upper-division courses for the major must be taken within the Ecology and Evolutionary Biology Department.

A minimum of two laboratory courses must be taken, including a minimum of one upper-division ecology and evolutionary biology laboratory course.

Courses applied to major requirements may be applied to one core principle only. Courses listed in multiple principles may not be applied simultaneously.

Field quarter instructors determine to which core principle courses apply (four requirements).

A maximum of 8 units of the Ecology and Evolutionary Biology 198 series or 4 units of Ecology and Evolutionary Biology 199 may be applied toward the major. The principal investigator determines to which principle the course applies, after the student’s work and quarter composition are complete. The course must be for a minimum of 4 units. Credit for 199 courses from other departments may not be applied.

Each course applied toward requirements for the major must be taken for a letter grade. Courses applied to upper-division major requirements must have a minimum of 4 units. Courses with fewer than four units may be taken together to satisfy one course requirement. A maximum of one course requirement may be satisfied. A 6-unit course counts as one course on the requirements for the major.

With consent of the instructors and department, a maximum of 4 units of 200-level courses may be applied toward major requirements.

Ecology, Behavior, and Evolution BS

The Ecology, Behavior, and Evolution major is appropriate for students preparing for graduate study in ecology, behavior, and evolution or for employment in areas such as environmental biology, animal behavior, conservation, teaching, museum work, and governmental positions dealing with environmental issues of wide importance and impact. A strong field component involving study in terrestrial and marine locales
such as coastal, desert, and mountain environments in California and the Southwest and in the Neotropics is required.

Capstone Major
The Ecology, Behavior, and Evolution major is a designated capstone major. Students apply theory and technique learned through four years of classroom and laboratory experience to their own independent projects. The main purpose of the capstone is to provide a unique field experience that involves designing and executing a research project. Students are aided in the scientific process of learning about a new ecosystem, developing relevant questions, designing conceptually based projects, troubleshooting and completing the work, and writing a publication-ready manuscript. They are also expected to exhibit strong teamwork, problem-solving, and communication skills.

Learning Outcomes
The Ecology, Behavior, and Evolution major has the following learning outcomes:

- Demonstrated broad knowledge of fundamental concepts of ecology, behavior, and evolution, or marine biology acquired through coursework
- Development of skills in library research, data interpretation, synthesis, and scientific writing
- Use of current primary scientific literature, including database searches, identification of appropriate sources, and reading and understanding papers
- Understanding of key questions and hypotheses, interpretation of results and conclusions, and discrimination of quality through critique
- Use of knowledge gained for conception and execution of student project that includes self-developed questions and hypotheses, design of appropriate theoretical or empirical/experimental approach, execution of that approach, and analysis and interpretation of data
- Communication of original scientific work to colleagues and mentors through capstone scientific paper
- Demonstrated communication skills through oral or poster presentation at a symposium
- Display of strong teamwork and problem-solving skills

Entry to the Major

Transfer Students
Transfer applicants to the Ecology, Behavior, and Evolution major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general biology with laboratory for majors, preferably equivalent to Life Sciences 7A, 7B, and 7C; one year of calculus, one year of general chemistry with laboratory for majors, and one semester of organic chemistry with laboratory. A second semester of organic chemistry or one year of calculus-based physics is strongly recommended but not required for admission. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Life Sciences Core Curriculum
Required: Chemistry and Biochemistry 14A, 14B, 14BL, 14C, and 14D, or 20A, 20B, 20L, 30A, 30AL, and 30B; Life Sciences 7A, 7B, 7C, 23L; Life Sciences 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, 3C, and Life Sciences 40 or Mathematics 31A or 31AL, 31B, 32A, and Life Sciences 40 or Statistics 13: Physics 1A, 1B, 1C, 4AL, and 4BL, or 5A, 5B, and 5C.

The Major
Students must complete the following courses:
1. At least 4 morphology and systematics units (one course) from Ecology and Evolutionary Biology 101, 103, 105, 110, 111, 112, 113A, 113AL, 114A, 115, 117, 130, 140, 144L, M157, or 184.
2. At least 4 physiology units (one course) from Ecology and Evolutionary Biology 117, M157, 162, 162L, 170, Physiological Science 165, or 166. Students with credit for Ecology and Evolutionary Biology 170 cannot also take Physiological Science 166.
3. At least 12 ecology, behavior, and evolution units (three courses) from Anthropology 128P, Ecology and Evolutionary Biology 100, 113A, 113AL, 116, C119A, C119B, 120, 121, 122, C126, 128, 129, 130, 133, C135, 136, 137, 142, 143, 144, 144L, C146, 149, 150, 150L, 151A, 152, 153, 154, 155, M157, 161, 162, 168, CM173 (or Earth, Planetary, and Space Sciences CM173), C174, 175, M178 (or Bio-engineering CM186 or Computational and Systems Biology M186 or Computer Science CM186), 183, 184, 185, 186, Life Sciences 107 (students with credit for Life Sciences 4 cannot take Life Sciences 107). Students with credit for Ecology and Evolutionary Biology 120 cannot also take course 185.
4. One capstone field quarter consisting of 12 to 16 units from the Field Biology Quarter (FBQ), Marine Biology Quarter (MBQ), join Field Marine Biology Quarter (FMBQ), or pre-approved equivalent (see undergraduate adviser)
5. At least 8 units (two courses) from Anthropology 128P, chemistry (except Chemistry and Biochemistry 188SA through 199; Chemistry and Biochemistry 153A and 153L are strongly recommended), Earth, planetary, and space sciences (geology only; except Earth, Planetary, and Space Sciences 188 through 199), ecology and evolutionary biology (except Ecology and Evolutionary Biology 188SA through 199), geography (except Geography 188SA through 199), Life Sciences 107 (students with credit for Life Sciences 4 cannot take Life Sciences 107), mathematics (except Mathematics 105A, 105B, 105C, 106, 188SA through 199), microbiology (except Microbiology 193A through 199), Molecular, Cell, and Developmental Biology 172, physics (except Physics 188SA through 199); recommended: taxon-oriented courses in ecological, behavioral, and evolutionary processes such as Ecology and Evolutionary Biology 111, 112, 113A, 113AL, 114A, 115

Field Biology
The department offers three quarter-long programs of advanced courses in field biology: the Field Biology Quarter (FBQ), the Marine Biology Quarter (MBQ), and the Joint Field Marine Biology Quarter (FMBQ). These programs focus on the biology of organisms living in their natural environments, emphasize independent student research projects, and take place at field sites away from the UCLA campus. The course composition varies somewhat from year to year, but each program always carries 16 units of course credit. The Field Biology Quarter involves some combination of Ecology and Evolutionary Biology 113B, 114B, 118, 124A, 124B, 125, C126, 132, 134B, and 151B. The Marine Biology Quarter includes some combination of Ecology and Evolutionary Biology 102, 106, 123A, 123B, 147, 148, 163, 164, 165, and 182. The Field and Marine Biology quarters may occur during fall, winter, or spring quarters, depending on location and faculty participation. To participate, students must enroll in all courses in the respective program. Participants in both programs are selected by personal interview. Information and applications are available in the Undergraduate Advising Office.

Honors Program
An overall grade-point average of 3.4 and a 3.4 in the major are required for graduation with honors. Highest honors are awarded to majors who have a GPA of 3.6 overall and a 3.6 in the major at graduation and who have successfully completed Ecology and Evolutionary Biology 198A and 198B. Students do not need to apply for departmental honors. All students are reviewed for honors.

Computing Specialization
Majors may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major, (2) completing Program in Computing 10A, 10B, 10C, 30, and 60, and (3) completing one course from Computer Science CM186, Psychology 186A, or 186B. A grade of C– or better is required in each course, with a combined grade-point average in the specialization of at least 2.0. Students must petition for admission to the program and are advised to do so after completing Program in Computing 10B (petitions should be filed in the Undergraduate Advising Office). Students graduate with a bachelor’s degree in their major and a specialization in Computing.

Policies

Preparation for the Major
Each core curriculum course must be passed with a grade of C– or better, and all courses must be completed with an overall grade-point average of 2.0 or better. Students receiving a grade below C– in two core curriculum courses, either in separate courses or repetitions of the same course, are subject to dismissal from the major.
The Major
A maximum of 8 units of the Ecology and Evolutionary Biology 198 series or 4 units of Ecology and Evolutionary Biology 199 may be applied toward the major. Credit for 199 courses from other departments may not be applied.

Courses offered as part of the Field Biology Quarter (FBQ) are open to all qualified students, but strict priority is given to students who are Ecology, Behavior, and Evolution majors, are graduating seniors, have taken a broad range of ecology, behavior, and evolution coursework, and have maintained a good grade-point average.

With consent of the instructors and department, students may enroll in 200-level courses and apply them toward major requirements.

Each course applied toward requirements for preparation for the major and the major must be taken for a letter grade. Ecology, Behavior, and Evolution majors must earn a C− or better in each course taken as preparation for the major, and at least a 2.0 (C) overall average in all courses applied toward the major. Courses applied to upper-division major requirements must have a minimum of 4 units. A 6-unit course counts as one course on the requirements for the major.

As requisites for the Marine Biology Quarter, students must have a 3.0 overall grade-point average and have taken Statistics 13 or equivalent. Preference for the Marine Biology Quarter is given to Ecology, Behavior, and Evolution and Marine Biology majors. It is strongly recommended that students complete Ecology and Evolutionary Biology 109 and 109L prior to applying for the Marine Biology Quarter. Contact the Undergraduate Advising Office for all requirements for the Marine and Field Biology quarters.

Marine Biology BS
The Marine Biology major is designed for students who wish to specialize in the area of marine sciences. Completion of this major provides students with both an excellent background in biology and specialization in various disciplines such as oceanography, subtidal and intertidal ecology, and physiology of marine organisms. Graduates are well prepared for postgraduate opportunities in the marine sciences, many other areas of biology, and medicine. The major provides valuable field experience with concomitant individual research opportunities in marine biology.

Capstone Major
The Marine Biology major is a designated capstone major. Students apply theory and technique learned through four years of classroom and laboratory experience to their own independent projects. The main purpose of the capstone is to provide a unique field experience that involves designing and executing a research project. Students are aided in the scientific process of learning about a new ecosystem, developing relevant questions, designing conceptually based projects, troubleshooting and completing the work, and writing a publication-ready manuscript. They are also expected to exhibit strong teamwork, problem-solving, and communication skills.

Learning Outcomes
The Marine Biology major has the following learning outcomes:

- Demonstrated broad knowledge of fundamentals of ecology, behavior and evolution, or marine biology acquired through coursework
- Development of skills in library research, data interpretation, synthesis, and scientific writing
- Use of current primary scientific literature, including database searches, identification of appropriate sources, and reading and understanding papers
- Understanding of key questions and hypotheses, interpretation of results and conclusions, and discrimination of quality through critique
- Use of knowledge gained for conception and execution of student project that includes self-developed questions and hypotheses, design of appropriate theoretical or empirical/experimental approach, execution of that approach, and analysis and interpretation of data
- Communication of original scientific work to colleagues and mentors through capstone scientific paper
- Demonstrated communication skills through oral or poster presentation at a symposium
- Display of strong teamwork and problem-solving skills

Entry to the Major
Transfer Students
Transfer applicants to the Marine Biology major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general biology with laboratory for majors, preferably equivalent to Life Sciences 7A, 7B, and 7C, one year of calculus, one year of general chemistry with laboratory for majors, and one semester of organic chemistry with laboratory. A second semester of organic chemistry or one year of calculus-based physics is strongly recommended but not required for admission.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements
Preparation for the Major
Life Sciences Core Curriculum
Required: Atmospheric and Oceanic Sciences 1 or Earth, Planetary, and Space Sciences 15; Chemistry and Biochemistry 14A, 14B, 14BL, 14C, and 14D, or 20A, 20B, 20L, 30A, 30AL, and 30B; Life Sciences 7A, 7B, 7C, 23L; Life Sciences 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, 3C, and Life Sciences 40 or Statistics 13, or Mathematics 31A or 31AL, 31B, 32A, and Life Sciences 40 or Statistics 13: Physics 1A, 1B, 1C, 4AL, and 4BL, or 5A, 5B, and 5C.

The Major
Students must complete the following courses:
1. Ecology and Evolutionary Biology 109 and 109L
2. At least 4 laboratory units (one course) from Ecology and Evolutionary Biology 101, 105, 110, 112, 136, 170, or 181
3. At least 4 units of marine organismic biology or physiology (one course) from Ecology and Evolutionary Biology 101 (unless taken under item 2), 105 (unless taken under item 2), 107, 112, 117, 128, 140, 142, 170 (unless taken under item 2), 174, 184, or Physiological Science 166. Students with credit for Ecology and Evolutionary Biology 170 cannot also take Physiological Science 166
4. At least 4 units of ecology and behavior (one course) from Anthropology 128B, Ecology and Evolutionary Biology 100, 116, C119A, C119B, 122, C126, 128, 129, M131 (or Geography M110), 133, 136, 137, 140, 142, 143, C146, 151A, 152, 154, 155, M157, 161, 162, 170, C172, M178 (or Biogeography CM186) or Computational and Systems Biology M186 or Computer Science CM186, 181-184
5. At least 4 evolution units (one course) from Anthropology M128S (or Society and Genetics M142), Ecology and Evolutionary Biology 116, 117, 120, 121, 130, 133, C135, 140, 143, 144, 144L, C146, 149, 150, 150L, CM173 (or Earth, Planetary, and Space Sciences CM173, C174, 175, 184, 185, 186, or Life Sciences 107 students with credit for Life Sciences 4 cannot take Life Sciences 107). Students with credit for Ecology and Evolutionary Biology 120 cannot also take course 185
6. One capstone field quarter consisting of 12 to 16 units from the Marine Biology Quarter (MBQ) or pre-approved equivalent (see undergraduate adviser)
7. One additional physical, chemical, or geologic oceanography course from Atmospheric and Ocean Sciences 102, 103, 104, M105 (or Ecology and Evolutionary Biology M139), 130, Chemistry and Biochemistry 103, 153A, Earth, Planetary, and Space Sciences 100, 116, 119, C141, 153, Ecology and Evolutionary Biology M131 (or Geography M110), 153, 158, 183, 184, Geography 101, M118 (or Atmospheric and Ocean Sciences M106), 130, 182A, Mechanical and Aerospace Engineering 103, 150A, or Molecular, Cell, and Developmental Biology 172

Field Biology
The department offers three quarter-long programs of advanced courses in field biology: the Field Biology Quarter (FBQ), the Marine Biology Quarter (MBQ), and the joint Field Marine Biology Quarter (FMBQ). These programs focus on the biology of organisms living in their natural environments, emphasize independent student research projects, and take place at field sites away from the UCLA campus. The course composition varies somewhat from year to year, but each program always carries 16 units of course credit. The Field Biology Quarter involves some combination of Ecology and Evolutionary Biology 113B, 114B, 11B, 124A, 124B, 125, C126, 132, 134B, and 151B. The Marine Biology Quarter includes some combination of Ecology and Evolutionary Biology 102, 106, 123A, 123B, 147, 14B, 163, 164, 165, and 182. The Field and Marine Biology quarters
may occur during fall, winter, or spring quarter, depending on location and faculty participation. To participate, students must enroll in all courses in the respective program. Participants in both programs are selected by personal interview. Information and applications are available in the Undergraduate Advising Office.

**Honors Program**

An overall grade-point average of 3.4 and a 3.4 in the major are required for graduation with honors. Highest honors are awarded to majors who have a GPA of 3.6 overall and a 3.6 in the major at graduation and who have successfully completed Ecology and Evolutionary Biology 198A and 198B. Students do not need to apply for departmental honors. All students are reviewed for honors.

**Computing Specialization**

 Majors may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major, (2) completing Program in Computing 10A, 10B, 10C, 30, and 60, and (3) completing one course from Computer Science CM186, Psychology 186A, or 186B. A grade of C– or better is required in each course, with a combined grade-point average in the specialization of at least 2.0. Students must petition for admission to the program and are advised to do so after completing Program in Computing 10B (petitions should be filed in the Undergraduate Advising Office). Students graduate with a bachelor’s degree in their major and a specialization in Computing.

**Policies**

**Preparation for the Major**

Each core curriculum course must be passed with a grade of C– or better, and all courses must be completed with an overall grade-point average of 2.0 or better. Students receiving a grade below C– in two core curriculum courses, either in separate courses or repetitions of the same course, are subject to dismissal from the major.

**The Major**

Credit for 199 courses from other departments may not be applied.

With consent of the instructors and department, students may enroll in 200-level courses and apply them toward major requirements.

Each course applied toward requirements for preparation for the major and the major must be taken for a letter grade. Marine Biology majors must earn a C– or better in each course taken as preparation for the major, and at least a 2.0 (C) overall average in all courses applied toward the major. Courses applied to upper-division major requirements must have a minimum of 4 units. A 6-unit course counts as one course on the requirements for the major.

As requisites for the Marine Biology Quarter, students must have a 3.0 overall grade-point average and have taken Statistics 13 or equivalent. Preference for the Marine Biology Quarter is given to Ecology, Behavior, and Evolution majors, and Marine Biology majors. Students must complete Ecology and Evolutionary Biology 109 and 109L prior to participating in the Marine Biology Quarter. Contact the Undergraduate Advising Office for all requirements for the Marine and Field Biology quarters.

**Undergraduate Minors**

### Conservation Biology Minor

The Conservation Biology minor is designed for students who wish to augment their major program of study with courses addressing issues central to the conservation and sustainability of biodiversity and natural ecosystem processes. The minor seeks to provide students with a greater depth of experience and understanding of the role that science can play in developing conservation policy.

**Admission**

To enter the minor, students must (1) be in good academic standing (2.0 grade-point average or better), (2) have completed Life Sciences 7B and Ecology and Evolutionary Biology 100 with minimum grades of C or better, and (3) submit a petition through Message Center to the Undergraduate Advising Office. All degree requirements, including the specific requirements for this minor, must be fulfilled within the unit maximum set forth by the College of Letters and Science.

Non-life sciences majors wishing to minor in Conservation Biology should be aware that preparation courses in chemistry, life sciences, mathematics, and physics are requisites to some of the upper-division courses accepted for the minor.

**The Minor**

**Required Lower-Division Course (5 units):** Life Sciences 7B.

**Required Upper-Division Courses (28 units minimum):** Ecology and Evolutionary Biology 100, and four to six courses (24 units minimum) from 100L, 101, 103, 105, 109, 109L, 111, 112, 113A, 113AL, 114A, 114B, 119A, 119B, 121, 122, 127 (or Environment M102 or Geography M102), 129, M131 (or Geography M110), 140, 142, 143, 144, 144L, 146, 149, 151A, 152, 153, 154, 155, 161, 162L, 168, C174, 176, 176A, 180B, 180B, 183, 184, Geography M102, M103 (or Environment M103), 106, 107, 116, 117, M118 (or Atmospheric and Oceanic Sciences M106), M126 (or Environment M126), M131, 133. Courses completed as part of the Field Biology Quarter and Marine Biology Quarter may be applied if not taken to fulfill a field quarter requirement; consult with the undergraduate counselors for more information. A maximum of two upper-division geography courses may be applied to the minor.

**Policies**

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Transfer credit for any of the above is subject to departmental approval; consult with the undergraduate counselors before enrolling in any courses for the minor.

Each minor course must be taken for a letter grade, and students must have a minimum grade of C (2.0) in each and an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

### Evolutionary Medicine Minor

The Evolutionary Medicine minor is designed for students who wish to augment their major program of study with courses that combine the disciplines of ecology and evolutionary biology, anthropology, psychology, and zoology with medicine to create new paradigms for investigating and understanding disease. The minor provides students with a greater depth of experience and understanding of the integration of evolutionary biology and medical education.

**Admission**

To enter the minor, students must (1) be in good academic standing (2.0 grade-point average or better), (2) have completed Life Sciences 7B and Ecology and Evolutionary Biology 100 with minimum grades of C or better, and (3) submit a petition through Message Center to the Undergraduate Advising Office. All degree requirements, including the specific requirements for this minor, must be fulfilled within the unit maximum set forth by the College of Letters and Science.

Non-life sciences majors wishing to minor in Evolutionary Medicine should be aware that preparation courses in chemistry, life sciences, mathematics, and physics are requisites to some of the upper-division courses accepted for the minor.

**The Minor**

**Required Lower-Division Course (5 units):** Life Sciences 7B.


**Required Research Project or Internship (4 units minimum):** Ecology and Evolutionary Biology 198A and 198B or a suitable research internship from another department, and must be taken for letter grades.
Graduate Major
Biology MS, CPhil, PhD
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Ecology and Evolutionary Biology
Lower-Division Courses

10. Plants and Civilization. (4) Lecture, three hours; discussion, one hour. Preparation: for nonmajors. Origin of crop plants; man's role in development, distribution, and modification of food, fiber, medicinal, and other plants in relation to their natural history. P/NP or letter grading.

11. Biomedical Research Issues in Minority Communities. (5) Discussion, four hours. Limited to 30 students. Discussions and student presentations on biomedical research as it affects minority communities, with emphasis on methodology, design, consequences, and ethics of current research. Discussion leaders provide information on preparation and training for research careers. P/NP or letter grading.

12. Biodiversity and Extinction: Crisis and Conservation. (4) Lecture, three hours; discussion, one hour. Examination of ecological and evolutionary principles necessary to understand nature and importance of worldwide environmental crisis. Research by students of specific conservation issues and presentation of results to class. P/NP or letter grading.

17. Evolution for Everyone. (5) Lecture, three hours; discussion, two hours. Exploration of natural selection, with emphasis on evidence and implications for modern problems people and societies face, including antibiotic resistance, insect resistance to pesticides, and coevolution of pollinators with crop plants. Nature of science in context of questions about ongoing real-time Darwinian processes. Letter grading.

18. Why Ecology Matters. (4) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of disciplinary applications. Enrollment limited to 12 units (excluding course). Limited to students in College Honors Program. Not open for credit to students with credit for course 112, 122, 124A, 124B, 125, C126, 129, 132, 134B, 136, or 151B. Letter grading.

909HC. Honors Contracts. (1) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enroll in minimum of 12 units (excluding course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100. Introduction to Ecology and Behavior. (4) Lecture, three hours; discussion, one hour. Prerequisite: Life Sciences 7B. Not open for credit to students with credit for course 118, 122, 124A, 124B, 125, C126, 129, 132, 134B, 136, or 151B. Introduction to methods and topics in ecology and behavior. Growth of specific conservation issues and presentation of results to class. P/NP or letter grading.

100L. Introduction to Ecology and Behavior Laboratory. (4) Laboratory, four hours per week. Prerequisites: course 100 (may be taken concurrently), Life Sciences 1 or 7B. Introduction to research methods in ecology and behavior, resulting in independent research proposals for entry-level research for lower-division students. May be repeated. P/NP or letter grading.

101. Marine Botany. (6) Lecture, four hours; laboratory, six hours; three to four field trips. Prerequisite: Life Sciences 1 or 7B. Introduction to biology of marine plants, including algae, sea grasses, and mangroves, with focus on form and function of marine plants and their ecological role in different marine habitats and ecosystems. Letter grading.

102. Biology of Marine Invertebrates. (4) Five-week intensive course. Lecture, five hours; laboratory, 15 hours. Prerequisite: Life Sciences 1 or 7B. Morphology, systematics, life histories and natural history, ecology, behavior, and physiology of marine invertebrates. Given off campus at marine science center. P/NP or letter grading.

103. Plant Diversity and Evolution. (8) Lecture, three hours; laboratory, three hours; field trips. Prerequisites: Life Sciences 1 and 4, or 7A and 7B. Introduction to data-driven research, with emphasis on using phylogenetic perspective to examine major transitions in plant evolution, including the classification of land plants, vascular plants, seed plants, and currently ecologically dominant flowering plants. Introduction to phylogenetics, providing overview of theory
and methodology to reconstruct and use phylogenetic trees to study organismal evolution. Exploration of 700 million years of plant evolution, with emphasis on morphological and ecological transformations. Letter grading.

105. Biology of Invertebrates. (6) Lecture, three hours; laboratory/feld trips, six hours. Requisites: Life Sciences 1 or 7B. Introduction to systematics, evolution, natural history, and the physiology of invertebrates. P/NP or letter grading.

106. Experimental Marine Invertebrate Biology. (4 or 6) Lecture, two hours; laboratory, 12 hours. Requisites: course 105, Physiological Science 166 (may be taken concurrently). Offered either as 4-unit quarter-long course or as 4-unit Marine Biology Quarter course. Advanced course of natural history, physiology, biochemistry of invertebrates, with emphasis on independent experiments and field investigations. P/NP or letter grading.

107. Evolution, Development, and Function of Invertebrate Animals. (6) Lecture, three hours; laboratory, three hours; three weekend field trips. Requisite: course 105 or completion of Marine Biology Quarter. Advanced invertebrate biology course exploring evolutionary relationship of animal groups and evolution of marine species, comparative development and development genetics of invertebrate form, and function as they relate to marine invertebrates. Letter grading.

108. Biodiversity in Age of Humans. (5) Lecture, two and one half hours; field trips, six hours; two one-hour laboratory meetings. Two-week explorer of the concept of biodiversity, with special focus on human impacts. Letter grading.

109. Introduction to Marine Science. (4) Lecture, three hours; discussion, one hour. Requisite: Life Sciences 1 or 7B. Introduction to marine environments and conservation biology of world’s reptile and amphibian fauna. Topics include conservation assessments both globally and in California, discussion sections focused on student-led discussion and problem-solving, and in-class meetings with professional herpetologists to share their professional experiences and job opportunities. Letter grading.

113AL. Herpetology Laboratory. (4) Laboratory, six hours; field trips. Directed field trips for students with special interests in amphibians and reptiles. Letter grading.

113B. Field Herpetology. (8) Requisite: Life Sciences 1. Recommended: courses 100, 111. Two weeks of off-campus research projects followed by two-week lecture and offered as part of Field Biology Quarter. Biology, particularly ecology and behavior, of reptiles and amphibians in their natural habitat. Students carry out supervised research projects, then write up and orally present their results in seminar fashion. Letter grading.

114A. Ornithology. (5) Lecture, three hours; laboratory/feld trips, three hours. Requisite: Life Sciences 1 or 7B. Recommended: course 100. Systematics, distribution, behavior, and ecology of birds. Letter grading.

114B. Field Ornithology. (8) Requisite: Life Sciences 1. Recommended: course 100. Two to three weeks of off-campus research projects followed by basic course and offered only as part of Field Biology Quarter. Biology, particularly ecology and behavior, of birds in their natural habitat. Letter grading.

115. Mammalogy. (5) Lecture, three hours; laboratory, three hours. Requisite: Life Sciences 1 or 7B. Topics in mammalian biology, including evolution, ecology, behavior, functional morphology, systematics, physiology, and biogeography. Letter grading.

116. Conservation Biology. (4) Lecture, three hours; discussion, two hours. Requisite: Life Sciences 1 or 7B. Recommended: course 100. Not open for credit to students with credit for Environment 121. Study of ecological and evolutionary principles as they apply to preservation of genetic, species, and ecosystem diversity. Discussion sections focus on interactions of science, policy, and economics in conserving biodiversity. Oral and written student presentation on specific conservation issues. Letter grading.

117. Evolution of Vertebrates. (5) Lecture, three hours; laboratory, three hours. Recommended requisite: course 100. Systematics of evolution of vertebrates through examination of fossil record. Focus on fossil record of tetrapods, with emphasis on anatomical and physiological transformations in amphibians, reptiles, birds, and mammals. Letter grading.

118. Plant Adaptations. (8) Lecture, one hour; field trip, 10 hours. Requisite: course 100. Five-week course offered only as part of Field Biology Quarter. Field-oriented introduction to mechanisms by which vascular plants adapt themselves to their abiotic and biotic environments using community, population, and ecophysiological levels of integration. Letter grading.

C119A. Mathematical and Computational Modeling in Ecology. (4) Lecture, three hours; discussion, one hour. Requisite: Mathematics 3B or 31A. Recommended: courses 100, 122, Life Sciences 1 or 7B. Mathematics 3C. Introduction to modeling dynamics of ecological systems, including formulation and analysis of mathematical models, basic techniques of scientific programming, probability and stochastic modeling, and methods to relate models to data. Examples from ecology but techniques and principles are general. Concurrently scheduled with course C219A. P/NP or letter grading.

C119B. Modeling in Ecological Research. (4) Lecture, two hours; laboratory. Recommended requisite: course C119A. Advanced techniques in mathematical and computational modeling of ecological dynamics and other population dynamic problems. Independent research projects developed by students. Topics include modeling population, stochastic models, fitting models to data, sensitivity analysis, presentation of model results, and other topics from current literature. Concurrently scheduled with course C219B. P/NP or letter grading.

120. Evolution. (4) Lecture, three hours; discussion, two hours. Requisites: Life Sciences 1, 2, 3, 4, and 23L, or 7A, 7B, 7C, and 23L, Mathematics 3A and 3B (or 31A or Life Sciences 30B). Not open for credit to students with credit for course 110. Field-oriented introduction to evolutionary genetics of invertebrate form, and form and function as they relate to marine invertebrates. Letter grading.

121. Molecular Evolution. (4) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 3, 4, and 23L, or 7A and 23L. Molecular biology, with emphasis on evolutionary aspects. DNA replication, RNA transcription, protein synthesis, gene expression, and molecular evolution. Letter grading.

122. Ecology. (4) Lecture, three hours; discussion, two hours. Requisites: Life Sciences 1 or 7B. Mathematics 3B or 31A or Life Sciences 30B. Highly recommended: Mathematics 31B, 32A. Designed for departmental majors specializing in environmental and population biology. Introduction to mechanics and processes of evolution, with emphasis on natural selection, population genetics, speciation, ecology, behavior, functional morphology, systematics, physiology, and biogeography. Letter grading.

123A-123B. Field Marine Ecology. (4 or 8 each) Lecture, five hours; laboratory, 15 hours. Recommended requisites: courses 100, 111. Five-week 4- or 8-unit five-week intensive course given off campus as part of Marine Biology Quarter. Survey of current topics in marine ecology, including analysis of primary research literature combined with field study of marine biology of marine organisms, populations, communities, and ecosystems. Original research project required. Letter grading. 123A. In residence at research station located outside continental U.S. 123B. In residence at research station located within U.S., including Alaska and Hawaii.

124A-124B. Field Ecology. (4 or 8 each) Lecture, five hours; laboratory or field trip, 15 hours. Requisites: course 100, Life Sciences 1 or 7B. Recommended: courses 111, 120, 122. Offered as part of Field Biology Quarter. Field and laboratory research in ecology; collection, analysis, and write-up of numerical data, with emphasis on design and experimental methodology. Letter grading. 124A. In resident in research station located outside continental U.S. for part or for duration of term. 124B. In residence at research station located within U.S., including Alaska and Hawaii, for part of or for duration of term.

125. Tropical Animal Communication. (4 or 8) Lecture, three hours; discussion, two hours. Requisites: course 100, Life Sciences 1 or 7B. Offered either as 4- or 8-unit quarter-long course or as 8-unit Field Ecology Quarter course. Animal communication behavior, tropical vertebrate biology, and evolution of information processing systems. Eight-unit course covers same basic lecture material in five or six intensive weeks, followed by extended field trips where students do individual projects in animal communication. Letter grading.

C126. Behavioral Ecology. (4 or 8) Lecture, three hours; discussion, two hours. Requisites: course 100, Life Sciences 1 or 7B. Offered either as 4- or 8-unit quarter-long course or as 8-unit Field Ecology Quarter course. Animal communication behavior, tropical vertebrate biology, and evolution of information processing systems. Eight-unit course covers same basic lecture material in five or six intensive weeks, followed by extended field trips where students do individual projects in animal communication. Concurrently scheduled with course C242. Letter grading.
128. Plant Physiological Ecology. (5) Lecture, three hours; laboratory, three hours; one two-day field trip. Requisites: Life Sciences 1 or 7B, Physics 1C and 4BL, or 5B or 6C. Study of plant/environment interactions under natural conditions. Transpiration and photosynthesis, leaf temperature, and water movement in soil/plant/atmosphere continuum. Letter grading.

129. Animal Behavior. (4) Lecture, three hours; discussion, two hours. Requisites: course 100, Life Sciences 1 or 7B. Principles and methods of comparative behavioral ecology. Methods and results of evolutionary approaches to study of animal behavior, including foraging strategies, social communication, migration, mating systems, cooperation, and social organization. Letter grading.


M131. Ecosystem Ecology. (Same as Geography M110) Lecture, three hours; laboratory/field trip, 10 hours. Development of principles of ecosystem ecology, with focus on understanding links between ecosystem structure and function. Emphasis on energy and water balances, nutrient cycling, plant-soil-microbe interactions, landscape heterogeneity, and human disturbance to ecosystems. P/NP or letter grading.

132. Field Behavioral Ecology. (8) Lecture, two hours; laboratory/field trip, 10 hours. Requisite: course 100, Life Sciences 1 or 7B. Recommended: course 129. Five-week intensive course as part of Field Biology Quarter. Lecture in field behavioral ecology; emphasizing animal communication. Design and execution of individual and small group field projects during extended field trip. Letter grading.

133. Elements of Theoretical and Computational Biology. (4) Lecture, three hours; discussion, one hour; laboratory, two hours. Requisites: Life Sciences 1, 2, 3, 4, 23L, and Mathematics 3A, 3B, and 3C, or 31A and 31B; Life Sciences 30B. Strongly recommended: elementary statistics course. Introduction of basic core mathematical ideas and models necessary to understand contemporary ecology and evolutionary biology. Population ecology and growth, community ecology, population genetics, natural selection. P/NP or letter grading.

14B. Field Physiological Ecology of Desert Animals. (8) Fieldwork, 15 hours. Requisite: Life Sciences 1 or 7B. Recommended: course 100. Two weeks of off-campus research projects with two-week lecture course (four hours per day) and offered only as part of Field Biology Quarter. Consideration of physiological, behavioral, morphological, and ecological mechanisms desert animals use to enhance their survival in arid habitat. Students carry out supervised research projects, then write up and orally present their results in seminar and laboratory. Letter grading.


136. Ecological Restoration. (4) Lecture, two and one half hours; laboratory, three hours; three field trips. Requisites: course 100, Life Sciences 1 or 7B. Study of ecosystems that have been degraded by overuse or unsustainability and the exploration and foundations of restoration ecology including historical knowledge, reference sites, soil preparation, biodiversity, California natives, succession, disturbances, and best management practices for managing landscapes. Students learn to identify classic symptoms of unhealthy ecosystem and important metrics to determine if and when ecosystems are recovering. Students evaluate specific threats that impact an ecosystem, conduct site and vegetation maps, conduct soil and water tests, and assess overall health of area. Students develop recommendations for restoration plan. Mandatory all-day field trips. Letter grading.

137. Chemical Communication. (4) Lecture, three hours; discussion, one hour. Requisites: Chemistry 14A, 14B, 14BL, 14C, 14CL, and 14D, or 20A, 20B, 20L, 30A, 30AL, 30B, and 30BL; Life Sciences 1, 2, 3, 23L, and Atmospheric and Oceanic Sciences M105. Chemical signals and their role in communication. How organisms communicate, exploration of chemical signals, compounds, and influences on communication. P/NP or letter grading.

M139. Introduction to Chemical Oceanography. (4) (Same as Atmospheric and Oceanic Sciences M105) Lecture, three hours; discussion, one hour. Introductory course for physical sciences, life sciences, and engineering majors interested in oceanic environment. Chemical composition of oceans and nature of physical, chemical, and biological processes governing this composition in past and present. Cycles of major and minor oceanic constituents, with focus on those that are most important to marine ecosystems (nitrogen, phosphorus, silicon, and oxygen). Investigation of primary production, export production, remineralization, diazotrophy, air-sea gas exchange processes. Letter grading.

140. Biology of Marine Mammals. (4) Lecture, three hours; discussion, one hour. Requisite: Life Sciences 1 or 7B. Examination of evolution, systematics, natural history, anatomy, physiology, and conservation of marine mammals. Marine mammals include marine ceteaceans, pinnipeds, sirenians, marine otters, and polar bear. Through lectures and readings from recent primary literature, students gain understanding of special adaptations that enable marine mammals to live in the marine environment. Laboratory includes experimental studies of local marine organisms, with emphasis on primary and secondary production and nutrient flux. Letter grading.

147. Biological Oceanography (4) Five-week intensive course. Lecture, five hours; concurrent lab, five hours. Requisites: Chemistry 14A, 14B, and 14BL, or 20A, 20B, 20L, and 30AL; Life Sciences 1, 2, 3L. Lectures include physical, chemical, and biological factors affecting primary and secondary production in the marine environment. Laboratory includes experimental studies of local marine organisms, with emphasis on primary and secondary production and nutrient flux. Letter grading.


149. Evolutionary Genomics. (4) Lecture, two hours; laboratory, two hours; concurrent requisites: Life Sciences 7A, 7B, 7C, 23L. Evolutionary genomics is study of variation and changes in genomic sequences due to natural selection pressures. Virtually all organisms on this planet are considered to be evolving. Evolutionary pressures act on genomic variation, and in turn can change genomic composition of populations and whole species. Study of how evolutionary forces of mutation, drift, selection, and gene migration can change genomes. Analysis of genomic data to make evolutionary inferences. Letter grading.

150. Principles of Genetics. (4) Lecture, three hours; discussion, one hour. Requisites: Chemistry 14A or 20A, 14C or 30A, Life Sciences 7A, 7B, 7C, 23L. Ge-
netics in most diverse and inclusive of biological sciences. Fields as divergent as medicine and evolution require understanding of fundamental concepts of heredity as they apply to individuals and populations. Many important social questions require understanding of genetics for informed decision making. Study of foundations of genetics at level expected of all biologists. Students learn basic terminology of field and principles of genetic basis of variation and evolution. Students gain understanding of some social implications of various aspects of genetics, and tools necessary to form informed opinions on these issues. Letter grading.

150L. Principles of Genetics Laboratory. (4) Lecture, four hours. Corequisite: course 150. Genetics is most diverse and most inclusive of biological sciences. Principles medicine and evolution require understanding of fundamental concepts of heredity and human society to better understand how scientific advances have both promoted and mitigated social inequality. Letter grading.

154L. Introduction to Plant Biology. (4) Lecture, four hours; discussion, two hours. Corequisites: Life Sciences 1 or 7B. Broad introduction to biodiversity, community structure, and dynamics and ecosystem function of range of tropics discussion of aspects such as biogeography, forest structure, plant growth forms, animal communities, herbivory, forest dynamics, and disturbance regimes. P/NP or letter grading.

153. Physics and Chemistry of Biotic Environments. (4) Lecture, three hours; discussion, one hour. Corequisites: Chemistry 1A, 1B, 1BCL, and 20A, 20B, 20CL. Life Sciences 1. Recommended: Life Sciences 20A. Chemical and physical principles that are critical to functional responses by organisms to their habitats. Focus is integrative, providing comprehensive training in basic sciences of physics, chemistry, and biology. Focus on processes across scales from cells to ecosystem to globe, instrumentation for environmental and ecophysiological measurements, and experiments used to make discoveries about plant adaptation. Letter grading.

155. Biological Modeling: Mathematical and Computational Approaches. (5) (Same as Computational and Systems Biology M150.) Lecture, four hours; laboratory, three hours. Corequisites: Life Sciences 7A, 7B, CGS 20A, and 20B, or CGS 20A, 20B, and 20CL. Recommended: Physics 1A and 1C, or 5A, 5B, and 5C, with grades of C or better. Students learn experience training and translation about systems through many examples across range of biological levels, such as predator-prey, disease transmission, cancer cell division, neural systems, vascular networks, sleep, drug interactions, gene expression, and more. Students learn how to manipulate data, basics of coding, and how to instantiate their mathematical or computational solutions through numerical solutions and simulations. Letter grading.

156. Biology and Social Justice. (4) Lecture, four hours. Consideration of intersection of biological discovery and human society to better understand how scientific advances have both promoted and mitigated social inequality. Letter grading.

157. Biology of Superheroes: Exploring Limits of Form and Function. (4) (Same as Society and Genetics M157.) Lecture, four hours; discussion, one hour. Corequisites: Life Sciences 1 and 4, or 7A and 7B. Combines topics in bioinformatics, movies, and television with primary scientific literature to explore bizarre phenomena in natural world and delve into basic scientific theory and principles. Topics covered include evolution, genetics, physiology, bio-mechanics, brain-machine interfacing, and artificial intelligence among others. Students synthesize primary literature on diverse subjects presented. Letter grading.

158. Introduction to Diversity, Health Disparities, and Environment. (2) Seminar, one hour; discussion, one hour. Corequisites: Life Sciences 7B. Focus on intersection of health disparities and environment. Seminar includes guest lectures and environmental determinants of health, and panel discussions focused on careers addressing health disparities. Discussion will be a constructivist talk to better understand science and how research on health disparities is conducted. Entry course for three-quarter UCLA-Hughes Medical Institute Health Disparities program. Letter grading.

161. Plant Ecology. (4) Lecture, three hours; fieldwork, five hours. Corequisites: course 100, Life Sciences 1 or 7B. Broad introduction to biodiversity, community structure, and dynamics and ecosystem function in tropical forest habitat. Letter grading.


166. Biology of Marine-Land Interface. (4) Lecture, five hours; fieldwork, 15 hours. Enforced requisites: course 106. Overview of plant and animal biology associated with human-caused changes in environment. Examination of both biotic and abiotic elements of environment that influence distribution and abun-
CM173. Earth Process and Evolutionary History. (6) (Same as Earth, Planetary, and Space Sciences CM173.) Lecture, four hours; laboratory, three hours. Requisite: Life Sciences 1, 2, 3, 4, and 7A, 7B, and 7C (or 7A and introductory course in geology). Exploration of relationships between physical processes, such as tectonics, weathering, and climatic change and impact biology of Earth. Study of evolution of universe, Earth, and life, with integration of history of science, including Darwinian evolution and plate tectonics. Evolutionary adaptations of matter offer tools to understand geologic process of climate and ecology of Earth. Past climate change to examine expected future human-influenced climate. Consideration of major events in history of life on Earth. Data and methods from geology, genetics, and geochemistry are integrated to reconstruct past events. This renews how Earth processes shaped life and how life shaped Earth. Concurrently scheduled with course CM228. Letter grading.

C174. Comparative Biology and Macroevolution. (4) Lecture, three hours; laboratory, three hours. Requisite: Life Sciences 1 or 7B. Recommended: one introductory course in physiology or anatomy. Comparative biology provides framework for studying broad questions in evolution—how do body shapes evolve? What are dynamics of evolutionary arms race? Why are there so many beetles and so few crocodiles? Did dinosaurs put brakes on diversification of mammals? Examination of why tree of life is essential to understanding patterns of biological diversity and how phylogenetic comparative methods are used to test macroevolutionary hypotheses. Concurrently scheduled with course C230. Letter grading.

C175. Evolutionary Theory of Sex. (4) Lecture, three hours; discussion, one hour. Requisite: Life Sciences 1 or 7B. Fitness dynamics of reproduction when females and males are in conflict over reproductive decisions, with focus on animals with human examples as appropriate. Emphasis on natural selection thinking, sexual selection, and origins of sexual conflict, including Fisherian sex allocation, evolution of manipulation through deceptive communication, and theory of Darwinian sexual conflict. Letter grading.

C176. Ecological Ethics. (4) Seminar, four hours. Requisite: Life Sciences 1 or 7B. Debates and discussions on current ethical considerations relevant to fields of ecology, evolution, conservation, and behavior. Letter grading.

C177. Practical Computing for Evolutionary Biologists and Ecologists. (4) Lecture, three hours; laboratory, two hours. Requisite: Life Sciences 1 or 7B. Introduction to fundamental skills needed for parameter analysis, and visualization of large data sets. Basic programming and scripting in Python as well as working in shell, regular expressions, and related topics. Concurrently scheduled with course C234. Letter grading.

C178. Computational Systems Biology: Modeling and Simulation of Biological Systems. (5) (Same as Bioinformatics and Systems Biology M186, and Computer Science CM186.) Lecture, four hours; laboratory, two hours; discussion, one hour. Requisites: Life Sciences 30A, 30B, Mathematics 31A, 32A, or 32T, 33A, and 33B; or Mathematics 31A, 31B, 32A or 32T, 33A, and 33B. Dynamic bio-system modeling and computer simulation methods for studying biological/biomedical processes and systems at molecular, cellular, and population levels. Both theory- and data-driven modeling, with focus on translating biomodeling goals and data into dynamical mathematical models, and implementing them for simulation, quantification, and analysis. Numerical simulation, optimization, and parameter identification and search algorithms, with model discrimination and analysis and software exercises in PC laboratory assignments. Letter grading.

C179. Communicating Science to Informal Audiences. (4) Lecture, four hours; discussion, one hour. Requisites: courses 158, 187. Science communication is essential skill for advancing scientific research and society. Students work collaboratively to communicate results of original research using forms (e.g., written paper and/or multimedia presentation) and/or informal (e.g., video, brochure, digital media, etc.) forms of science communication. Students also create interactive communication piece (written, podcast, video) about what they learned through process of research that could be shared with broad audience. Concurrently scheduled with course C237. Letter grading.

190A-190B. Seminars: Biology and Society. (2–4) Seminar, two hours (course 190A) and four hours (course 180B). Investigations and discussions of current socially important issues involving substantial biological considerations, either or both as background for policy and as consequences of policy. May be repeated once for credit with instructor change. Letter grading.

191. Parasitology. (4) Lecture, three hours; laboratory, six hours. Requisites: Life Sciences 1, 3, and 23L, or 7A, 7B, and 23L. Introduction to principles, biology, and evolution of infectiousness, symbiosis, and parasitism, emphasizing protozoan and helminth parasites, including those of man. Letter grading.

192. Marine Parasitology. (4) Lecture, five hours; laboratory, 15 hours. Requisite: Life Sciences 1 or 7B. Recommended: courses 112, 181. Five-week intensive course offered only as part of Marine Biology Quarter. Introduction to natural history and ecology of host-parasite interaction involving intertidal fish hosts. Laboratory includes collection and preparation techniques. Given off-campus at marine science center. Letter grading.

193. Finding Ecological Solutions to Environmental Problems. (4) Seminar, two hours; discussion, two and one half hours. Requisite: course 100. Ecological problem-solving in which students work in teams with client (e.g., non-profit, governmental) to research and propose solutions to diverse ecological problems. Students learn practical skills to apply ecological science to solving of diverse and interdisciplinary environmental problems, in intimate and participatory environment. Students learn and are expected to produce high-quality academic work at professional level. Letter grading.

194. Evolution, Development, and Disease. (4) Lecture, three hours; discussion, one hour. Requisite: Life Sciences 7B. Recommended requisite: course 103, 110, 120, M157, C174, or 185. Exploration of developmental mechanisms underlying animal design, including impacts of environment on these mechanisms. Exploration of what happens to animal form, including that of humans, when these developmental mechanisms are disrupted by environmental and genetic effects. Letter grading.

195. Evolutionary Medicine. (4) Lecture, two and one half hours; discussion, one hour. Requisite: Life Sciences 7B. Not open for credit to students with credit for course 120. Designed for departmental majors specializing in environmental and population biology and in medicine. Introduction to mechanisms and consequences of evolution, with emphasis on natural selection, population genetics, speciation, evolutionary rates, and patterns of adaptation. Coverage of fundamental principles of evolution, with special focus on population design and human health and disease.

196. Evolutionary Medicine: Clinical Perspective on Medical, Surgical, and Psychiatric Disorders. (4) Lecture, three hours; discussion, one hour. From breast cancer and heart failure to self-injury, obses- sive-compulsive and eating disorders, all contemporary medical issues have evolutionary roots. Understanding of application of evolutionary thought to issues faced by physicians, veterinarians, psychologists, and other healthcare professionals requires awareness and understanding of evolutionary roots of these disorders provides future healthcare providers
with expanded perspective that enhances their prac-
tice and benefits their patients in whatever field they
enter. Letter grading.

187. Variable Topics in Ecology and Evolutionary Bi-
ology. (4) Seminar, three hours. Internationally spon-
sored experimental or temporary courses, such as
those taught by visiting faculty members. May be re-
peated for credit. P/NP or letter grading.

188A. Individual Studies for USIE Facilitators. (1)
Tutorial, to be arranged. Enforced corequisite: Honors
College 101E. Limited to junior/senior USIE facilita-
tors. Individual study in regularly scheduled meetings
with faculty mentor to discuss selected USIE seminar
topic, conduct preparatory research, and begin prepa-
ration of syllabus. Individual contract with faculty
mentor required. May not be repeated. Letter grading.

188B. Individual Studies for USIE Facilitators. (1)
Tutorial, to be arranged. Enforced corequisite: 188A.
Enforced corequisite: Honors College 101E. Limited
to junior/senior USIE facilitators. Individual study in
regularly scheduled meetings with faculty mentor.
Individual contract with faculty mentor required. May
not be repeated. Letter grading.

188C. Individual Studies for USIE Facilitators. (2)
Tutorial, to be arranged. Enforced corequisite: course
188B. Limited to junior/senior USIE facilitators. Indi-
vidual study in regularly scheduled meetings with fac-
ulty mentor while facilitating USIE 885 course. Indi-
vidual contract with faculty mentor required. May
not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar,
three hours. Limited to 20 students. Designed as adjunct
to undergraduate lecture course. Exploration of topics
in greater depth through supplemental readings, papers,
or other activities and led by lecture course instructor.
May be applied toward honors credit for eligible stu-
dents. Honors content noted on transcript. P/NP or
letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours.
Limited to students in College Honors Program. De-
signed as adjunct to upper-division lecture course.
Individual study with lecture course instructor to explore
topics in greater depth through supplemental read-
ings, papers, or other activities. May be repeated for
maximum of 4 units. Individual honors contract re-
quired. Honors content noted on transcript. Letter
grading.

190. Research Colloquia in Ecology and Evolution-
ary Biology. (1) Seminar, one hour. Designed to bring
together students undertaking supervised tutorial re-
search in seminar setting with one or more faculty
members to discuss their own work or related work in
discipline. Led by one supervising faculty member.
P/NP grading.

191. Variable Topics Research Seminars: Ecology and
Evolutionary Biology. (4) Seminar, three hours. Semi-
nar in research methodology and evolutionary biology.
Consult Schedule of Classes for topics and instructors.
If content is approved in ad-
vance by Undergraduate Advising Office, undergrad-
uate departmental majors may petition to use course
to satisfy or partially satisfy elective requirement.
May be repeated for credit with consent of instructor.
P/NP or letter grading.

192A-192B. Undergraduate Assistant in Ecology
and Evolutionary Biology. (4–2) Seminar, 12 hours
(course 192A) and six hours (course 192B). Limited
to juniors/seniors. Training and supervised practicum
for advanced students in assisting instructors in assisting
courses related to biology. Students assist in prepara-
tion of materials and development of innovative pro-
grams with guidance of faculty members in small
course settings. Consult Undergraduate Advising Of-
lice for further information. May not be applied toward
course requirements for departmental majors. May be
repeated for credit. P/NP grading.

193. Journal Colloquia: Seminar: Ecology and Evolution-
ary Biology. (1) Seminar, two hours. Designed to of-
count open journals in ecology and evolutionary bi-
ology. Contact Undergraduate Advising Office for cur-
tent topics. May be repeated for credit. P/NP or letter
grading.

194. Special Courses in Ecology and Evolutionary
Biology. (Seminar, hours. Internationally spon-
sored experimental or temporary courses, such as
those taught by visiting faculty members. May be re-
peated for credit. P/NP or letter grading.

194A. Research Group or Internship Seminars: Ac-
to Research Careers. (2) Seminar, six hours. Designed
for seniors/graduate students in research traineeships
or those who have strong interests in pursuing an
undergraduate study of various aspects of research. May be
repeated for credit. P/NP grading.

194B. Research Group or Internship Seminars: Ecol-
ey and Evolutionary Biology. (1) Seminar, two
hours. Designed to encourage participation and stimu-
late progress in specific research areas for un-
dergraduate students who are part of departmental re-
search group or project. Discussion of use of spe-
cific research methods and current literature in field of
or of research of faculty members or students. May be
repeated for credit or letter grading.

195. Community or Corporate Internship in Eco-
ey and Evolutionary Biology. (4) Tutorial, 12 hours.
Internship course for juniors/senior to be supervised
by Center for Community Learning, fieldwork site, and
faculty advisor. Consult Undergraduate Advising Of-
office for more information. Students meet on regular
basis with instructor and provide periodic reports of
their experience. May not be applied toward require-
ments for departmental majors. May be repeated for
credit twice. Individual contract with supervising
faculty member required. P/NP grading.

196. Research Apprenticeship in Ecology and Evo-
utionary Biology. (1) Tutorial, three hours. Projects
in greater depth through supplemental readings, papers,
or other activities and led by lecture course instructor.
May be applied toward honors credit for eligible stu-
dents. Honors content noted on transcript. P/NP or
letter grading.

196A-196D. Honors Research in Ecology and Evo-
olutionary Biology. (4 each) Tutorial, 12 hours. Limited
to juniors/seniors. Supervised individual research de-
signed to broaden and deepen students’ knowledge of
special topic in Ecology and Evolutionary Biology. Department
faculty for at least two terms and for total of at least
8 units. Eight units may be applied toward departmental
majors. Individual honors contract (196A) and letter
(196B) grading. Students may enroll in additional
research through courses 196C and 196D (letter grading).
Report on progress must be presented to
undergraduate adviser each term 196 course is taken.

197. Directed Research in Ecology and Evolutionary
Biology. (2 to 4) Tutorial, six to 12 hours. Preparation:
submission of written proposal outlining study or re-
search to be undertaken. May involve laboratory
or field-related research, not literature surveys or li-
brary research. Proposal to be developed in consulta-
tion with instructor and submitted for approval to un-
dergraduate adviser. Begins in spring term. Limited to
juniors/seniors. Supervised individual research under
guidance of faculty mentor. At end of term, research
report and summary of progress of study on research
at end of term. Student and instructor must be presented
to undergraduate adviser. Only one 197 course may be applied toward depart-
mental majors. May be repeated for credit. Individual
contract required. Letter grading.

Graduate Courses

200A. Evolutionary Biology. (Formerly numbered M200A.) Lecture, two hours; discussion, two hours. Current concepts and topics in evolutionary biology, including microevolution, speciation and species con-
cept, analytical biogeography, adaptive radiation,

200B. Ecology. (4) Lecture, two hours; discussion, two hours. Principles of the scientific study of living organisms. Topics may include island biogeography, disturbance ecology, chemical ecology, and physiological ecology. S/U or letter grading.

200C. Advanced Animal Behavior. (4) Lecture, two hours; discussion, two hours. Survey of major topics in field of behavioral ecology. Topics include introduc-
tion to variety of research pursuits in field and ques-
tions and debates at leading edges of research. Ad-
vanced interdisciplinary presentation spans topics from
mechanisms of behavior at molecular and cellular
levels to consequences of behavior for Darwinian fit-
ness and ecological and evolutionary processes. S/U or
letter grading.

201. Introduction to R for Ecology and Evolutionary
Biology. (1) Lecture, six hours; discussion, six hours.
Designed for departmental PhD students. Offered as
intensive two-day course at beginning of term. Intro-
duction of language. Topics include working at com-
mand line, writing scripts and functions, flow control,
graphics, and conducting basic simulations in discrete
and continuous time. S/U grading.

202. Advanced Statistics in Ecology and Evolutionary
Biology. (4) Lecture, two hours; laboratory, two hours.
Enforced Requisite: Life Sciences 40 or Statistics 10 or 12. Overview of and application of ad-
vanced statistical methods, including statistical
models and mean comparison, including bootstrapp-
ing, permutations, Bayesian statistics, mixed models,
classification, and network analysis. At course end
students should be able to explain which statisti-
cal approaches are appropriate for different types of
research questions and critically evaluate their out-
puts. All statistical analysis conducted in R. Concur-
rently scheduled with course C172. S/U or letter
grading.

203. Marine Botany and Physiology. (4) Lecture,
two hours; discussion, one hour; laboratory, six hours;
experimental project. Designed for graduate students.
Structure, reproduction, life histories, and biology of
marine algae, with emphasis on physiological ecology
and biochemistry. Techniques in culture and physio-
logical, ecological, and biochemical investigation of algae.
Offered off campus at marine science center. S/U or
letter grading.

204. Advanced Biology of Algae. (4) Lecture, four hours;
discussion, one hour; laboratory, six hours; experimental
project. Designed for graduate students. Structure,
reproduction, life histories, and biology of marine algae,
with emphasis on physiological ecology and bio-
chemistry. Techniques in culture and physiological
ecology and algal processes in ocean and freshwater habitats. S/U or letter grading.

205. Marine Invertebrate Biology. (4) Lecture,
four hours; laboratory, eight hours. Functional morphology,
life histories, and systematics of marine invertebrates
of all major and most minor taxa; emphasis on living
animal and its habitat. Offered off campus at marine sci-
ence center. S/U or letter grading.

206. Advanced Ichthyology. (4) Lecture, three hours;
laboratory, three hours; Requisite: course 111 or 112.
Advanced study of various aspects of fish biology.
Theme varies from year to year. May be repeated for
credit. S/U or letter grading.

208. Advanced Vertebrate Morphology. (4) Lecture,
two hours; laboratory, eight hours. Requisite: course
110. Emphasis on functional approach to evolution of
vertebrate locomotor, feeding, and circulatory sys-
tems. Laboratory includes comparative and experi-
mental analyses of morphological adaptation. Inde-
pendent project required. May be repeated once for
credit. S/U or letter grading.

209. Behavior of Arthropods. (4) Lecture, three hours;
discussion, one hour. Advanced study of topics in be-
havioral ecology. Focus on neural architecture, commu-
nication, feeding, reproductive, and social behavior. Em-
phasis on both mechanism and adaptive approaches toward understanding behavior. Independent project
required. S/U or letter grading.
210. Advanced Ornithology. (4) Lecture, two hours; laboratory, two hours; fieldwork, two hours. Requisite: course 114A. Advanced study of topics in modern avian biology. Emphasis on experimental design and to investigations of physiology (energetics, nutrition, osmoregulation), ecology (population and community organization), and behavior (foraging, breeding, sociability). S/U or letter grading.


C219A. Mathematical and Computational Modeling in Ecology. (4) Lecture, three hours; discussion, one hour. Requisite: Life Sciences 30B or 31A, Principles of Chemistry 100, 122, Life Sciences 1 or 7B, Mathematics 3C. Introduction to modeling ecological systems, including formulation and computational methods. Basic techniques of scientific programming; probability and stochastic modeling, and methods to relate models to data. Examples from ecology but techniques and principles applicable throughout life and physical sciences. Concurrently scheduled with course C119A. S/U or letter grading.

C219B. Modeling in Ecological Research. (4) Lecture, two hours; discussion, two hours. Recommended requisite: course C219A. Advanced techniques in mathematical and computational modeling of ecological dynamics and other population dynamic problems. Independent research projects developed by students. Topics include model formulation, chaotic models, fitting models to data, sensitivity analysis, presentation of model results, and other topics from current literature. Concurrently scheduled with course C211B. S/U or letter grading.

220. Conservation Science: Theory and Practice. (3) Lecture, three hours. Limited to graduate students. Conceptual foundations of conservation science and its applications to real-world conservation problems. Designed for graduate students and to be used as a reference for conservation researchers and want to learn about conservation in a way that can make research immediately relevant, and those who intend to be conservation practitioners and want to learn to apply scientific analysis to conservation problems in the wild. May be repeated for credit. S/U grading.


M225. Global Health Measures for Biological Emergencies. (4) (Same as Epidemiology 225B.) Lecture, four hours. Requisite: Epidemiology 200. Mitigation of bioterrorism falls outside traditional public health programs and public health graduate education. Because of seriousness of such threats, it is important that individuals trained in public health understand problems and responses. Letter grading.

CM228. Earth Process and Evolutionary History. (6) (Same as Earth, Planetary, and Space Sciences CM273.) Lecture, four hours; laboratory, three hours. Requisite: Chemistry 14A, 14B (or 20A, 20B); Life Sciences 1, 2, 3, and 4, or 7A, 7B, and 7C (or 7A and introductory course in geology). Exploration of relationship between physical processes, such as tectonics and climate, and their impact on the evolution and impact biology of Earth. Study of evolution of universe, Earth, and life, with integration of history of science, including Darwinian evolution and plate tectonics revolutions. Study of formation of matter offers tools to understand geologic process of climate and evolution of Earth. Past climate change to examine expected future human-influenced climate. Consideration of major events in history of life on Earth. Data and methods from geology, genetics, and geochemistry are integrated to reconstruct past events. This reveals how_ Earth's processes shaped life and how life shaped Earth. Concurrently scheduled with course CM173. Letter grading.

C230. Comparative Biology and Macroevolution. (4) Lecture, three hours; laboratory, three hours. Requisite: Math 11B or equivalent. The introduction to the introductory course. Comparative evolutionary modern comparative biology provides framework for studying broad questions in evolution—How do body shapes evolve? What are dynamics of evolutionary arms race? Why are there so many species in tropics? Why are there so many beetles and so few crocodiles? Did dinosaurs put brakes on diversification of mammals? Examination of why tree of life is essential to understanding patterns of biological diversity and how phylogenetic comparative methods are used to test macroevolutionary hypotheses. Concurrently scheduled with course C174. S/U or letter grading.

M231. Molecular Evolution. (4) (Same as Earth, Planetary, and Space Sciences M217.) Lecture, two hours; discussion, two hours. Series of advanced topics in molecular evolution, with special emphasis on molecular and systematic approaches. Application of gene expression, neutral evolution, molecular clocks, concerted evolution, molecular systematics, statistical tests, and phylogenetic algorithms. Themes may vary from year to year. May be repeated for credit. S/U or letter grading.

M232. Evolutionary Ecology. (4) (Formerly numbered 232.) (Same as Biocomputing M212.) Lecture, two hours; discussion, one hour. Given off campus at La Kretz Hall (or equivalent). Concepts and topics include fundamental concepts of evolutionary ecology, including life history theory, quantitative genetics and phenotypic evolution, and advances in last decade. May be repeated for credit. Letter grading.

233. UCLA/La Kretz Workshop in Conservation Genomics. (2) Lecture, two hours; discussion, one hour; laboratory, two hours. Five-day field experience at La Kretz Center Field Station and Stunt Ranch in Santa Monica Mountains. Conservation biology and genetics have had long and intimate relationship and constitute one key application of evolutionary analysis to real-world biological problems. Conservation genetomics has been particularly striking for conservation biology and have helped solve some of the most pressing problems in biological conservation, such as the creation of effective biodiversity. Hands-on experience on efficient collection, trouble-shooting, and analysis of large datasets for conservation-relevant problems. Active participation from members of several U.S. government agencies at forefront of endangered species protection and management, providing forum for exploring relevant aspects of conservation genomics to managers. S/U grading.

C234. Practical Computing for Evolutionary Biologists and Ecologists. (4) Lecture; three hours; laboratory, two hours. Requisite: Life Sciences 1 or 7B. Introduction to fundamental skills needed for manipulation, analysis, and visualization of large data sets. Basic programming and analysis of as well as working in shell, regular expressions, and related topics. Concurrently scheduled with course C177. Letter grading.


C237. Communicating Science to Informal Audiences. (4) Lecture, three hours; discussion, one hour. Requisites: courses 158, 187. Science communication is essential skill for advancing scientific research and society. Students work collaboratively to communicate results of original research using formal (e.g., written paper and poster/multimedia presentation) and informal (e.g., video, brochure, digital media, etc.) forms of science communication. Students also create reflective communication piece (written, podcast, video) about what they learned through process that could be shared with broad audience. Concurrently scheduled with course C179. Letter grading.

M238. Ocean Biogeochemical Dynamics and Climate. (4) (Same as Atmospheric and Oceanic Sciences M225.) Lecture, three hours, interaction of ecosystems with physical climate system. Biogeochemical processes controlling carbon dioxide and oxygen in oceans and atmosphere over time-scales from few millions to over billions of years. Anthropogenic perturbation of global carbon cycle and climate. Response of ocean ecosystems to past and future global changes. Use of isotopes to study oceanic carbon cycle and variations between biogeochemical cycles on land and in ocean. S/U or letter grading.

240. Physiology of Marine Animals. (4) Lecture, four hours; discussion, one hour. Designed for graduate students. Lecture and laboratory on cellular, tissue, organ, and animal physiology; regulatory biology; metabolic characteristics of energy transduction in marine animals. Because marine animals are major players in the marine environment, they are also major players in the exchange of gases and energy with the atmosphere. Because of the importance of these animals and their role in regulating climate, it is important that marine biologists understand the fundamental workings of marine animals. Given off campus at marine science center. S/U or letter grading.

C242. Behavioral Ecology. (4) Lecture, three hours; discussion, two hours. Requisites: course 100, Life Sciences 1 or 7B, Mathematics 3C or 32A or Life Sciences 30B. Recommended: course 129. Evolutionary perspective of behavioral ecology, with extended consideration of selfish DNA, conflict with genomes, nat selection and coevolution, kin selection and diversification, and methods from geology, genetics, and geochemistry. Insectes systems and their impact on the evolution and impact biology of Earth. Study of evolution of universe, Earth, and life, with integration of history of science, including Darwinian evolution and plate tectonics revolutions. Study of formation of matter offers tools to understand geologic process of climate and evolution of Earth. Past climate change to examine expected future human-influenced climate. Consideration of major events in history of life on Earth. Data and methods from geology, genetics, and geochemistry are integrated to reconstruct past events. This reveals how_ Earth's processes shaped life and how life shaped Earth. Concurrently scheduled with course C126. Letter grading.

243. Animal Communication. (4) Lecture, three hours; laboratory, four hours. Requisites: course 100, Life Sciences 170, Life Sciences 7A, 7B, 7C. Conservation genetics is interdisciplinary field that integrates genetic methods and concepts from population genetics, evolutionary biology, molecular ecology, and systematics to understand how to conserve and manage populations and species of natural organisms, and understand genetic processes underlying why some go extinct. Case studies of plants and animals from a range of topics, including allopatric and sympatric speciation, natural and artificial selection, and recombination and the effects of constraints placed on each sensory modality. Experiments are designed to test the hypothesis that specific sensory species-specific information. S/U or letter grading.

244. Advanced Insect Physiology. (4) Lecture, two hours; laboratory, five hours. Detailed discussion of current problems in insect physiology, with advanced laboratory. S/U or letter grading.

C246. Conservation Genetics. (4) Lecture, three hours; discussion, one hour. Requisites: course 150 or Life Sciences 170, Life Sciences 7A, 7B, 7C. Conservation genetics is interdisciplinary field that integrates genetic methods and concepts from population genetics, evolutionary biology, molecular ecology, and systematics to understand how to conserve and manage populations and species of natural organisms, and understand genetic processes underlying why some go extinct. Case studies of plants and animals from a range of topics, including allopatric and sympatric speciation, natural and artificial selection, and recombination and the effects of constraints placed on each sensory modality. Experiments are designed to test the hypothesis that specific sensory species-specific information. S/U or letter grading.

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247. Advanced Plant Biology. (4) Lecture, three hours; discussion, two hours. Requisite: course 162 or Molecular, Cell, and Developmental Biology C141. Open to undergraduates with consent of instructor. Designed to expose first-year graduate students to topics of current interest in plant biology. Subjects include plant genetics, growth and development, organellar structure, development and function, and plant-specific metabolic processes (photosynthesis, nitrogen fixation, metabolism of small molecules). S/U or letter grading.

250. Professional Skills for Biological Research. (2 or letter grading. Requisite: course 162 or Molecular, Cell, and Developmental Biology C141. Optional field trip offered during some years for 1 extra unit. S/U or letter grading.

251. Seminar: Systems. (2) Seminar, two to four hours. Current topics in systematic biology, including methods development and specific applications in study of phylogeny. Theme varies from year to year. May be repeated for credit. S/U or letter grading.


255. Seminar: Invertebrate Zoology. (2) Seminar, two hours. S/U or letter grading.

259. Seminar: Herpetology. (2) Seminar, three hours. Seminar on current approaches to herpetology. Main theme varies from year to year in areas such as biogeography, ecology, behavior, environmental physiology. S/U or letter grading.


261. Molecular Ecology of Plant Populations. (2) Seminar, two hours. Requisite: course M200A. Integration of ecological, population genetic, and evolutionary concepts to understand evolutionary ecology and conservation biology of plant populations in natural and disturbed settings, with application to both terrestrial and aquatic systems. Letter grading.

263. Seminar: Population Genetics. (2 or 4) Seminar, three to six hours. Seminar on topics of current interest in population genetics, such as kin selection, sociobiology, cultural evolution, conservation genetics, etc. S/U or letter grading.

264. Seminar: Stomatal Function. (4) Seminar, two hours; discussion, two hours. Open to undergraduates with consent of instructor. Structure and function of guard cells; gas exchange; environmental and hormonal control of stomatal response; transduction; stomatal adaptations. S/U or letter grading.


270. Seminar: Environmental Physiology. (2) Seminar, two hours. S/U grading.


273. Seminar: Entomology. (2) Seminar, two hours. Discussion of specific topics in entomology and related fields varies from year to year, but usually emphasizes areas such as behavior, ecology, and evolution. S/U grading.


279. Seminar: Evolutionary Biology. (2) Seminar, two hours. Requisite: course M231. Emphasis on particular issue in evolutionary biology, varying in topic whenever offered. Topics may include advances in phylogenetic methodology, evolution of development and behavior, biochemical techniques, evolutionary patterns, and behavioral ecology. S/U or letter grading.

282. Seminar: Ichthyology. (2) Seminar, two hours. Requisite: course 111 or 112. Student presentations and discussion of specific topics in ichthyology. Theme varies from year to year. May be repeated for credit. S/U or letter grading.


289. Seminar: Phylogeny and Evolutionary Biology. (1 to 4) Seminar, three hours. Advanced study and analysis of current topics in cellular, organismic, and population biology. Discussion of current research and literature in research specialty of faculty member teaching course. S/U or letter grading.

291. Seminar: Physiology and Biochemistry of Arthropods. (2) Seminar, two hours. S/U or letter grading.

296. Seminar: Ecology and Evolutionary Biology. (1 to 4) Seminar, three hours. Advanced study and analysis of current topics in cellular, organismic, and population biology. Discussion of current research and literature in research specialty of faculty member teaching course. S/U or letter grading.

297. Seminar: Topics in Ecology and Evolutionary Biology. (1 to 4) Seminar, one to three hours. Advanced study and analysis of variable research topics in research issues in ecology and evolutionary biology. Seminar, two and one half hours. Discussion of specific topics in comparative physiology of animals. Topics vary from year to year, with emphasis on systems physiology, neuro-ecology, or behavioral physiology. S/U or letter grading.

299. Seminar: Parasitology. (2) Seminar, two hours. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, two hours. Preparation and teaching apprentice practicum. S/U or letter grading.

495. Preparation for Teaching Biology in Higher Education. (2) Seminar, to be arranged. Designed for graduate students. Study of problems and methodologies in teaching biology, which includes workshops, seminars, apprentice teaching, and peer observation. S/U grading.

496. Preparation for Teaching Biology in Higher Education. (2) Lecture, two hours. Designed for graduate students. Students strongly recommended as sequel to course 495 discussions on teaching, theory, and development of advanced skills. Study of methods and approaches to teaching of specific areas in biology, with emphasis on laboratory teaching, instructor/student interaction, and undergraduate motivation. S/U grading.

The undergraduate students are equally impressive. They are among the brightest students on campus and consistently go on to find success in the job market and in graduate school. Approximately 3,000 majors make the department the largest among major economics departments across the country, and one of the largest majors on campus. Students come from countries around the world, but the majority call California their home. Many are the first in their families to attend college, and the department is proud of them and their accomplishments.

An economics degree opens the door to a world of opportunities beyond UCLA. Department alumni play important roles in business, entertainment, and academia. Many maintain strong ties with UCLA and with the department. Undergraduate students go on to attend business school, law school, medical school, and graduate school in a variety of disciplines.

Undergraduate Study

The Economics Department undergraduate program is designed for students who wish to gain a thorough understanding of both empirical and theoretical approaches to economics. Emphasis is on economic principles applied to resolving interpersonal conflicts of interest and coordinating productive activity in a world of scarce resources. Because students must gain a thorough theoretical and technical competence before extensive study of the applied specializations in the discipline, the analytic core of the major in Economics is closely structured. Some courses are appropriate for non-majors, but the curriculum is most suitable for students who wish to make the study of economics the primary focus in their undergraduate education.

The undergraduate major provides students with analytical training in reference to socio-economic phenomena and provides an excellent theoretical background for those pursuing graduate education in economics, law, management, public administration, journalism, social welfare, architecture and urban planning, and education.

Graduate Study

The graduate program is designed primarily for students pursuing the PhD degree. The doctorate is awarded to those students who have achieved the level of study and training required for a professional economist. The degree recognizes students' ability to make scholarly contributions in their fields of specialization and to undertake advanced research in those areas.

Undergraduate Majors

Economics BA

Learning Outcomes

The Economics major has the following learning outcomes:

- Application of economic analyses to everyday life, and visualization of economics in real-world situations
- Application of learning to policy-relevant issues
- Ability to understand current events
- Ability to assess the likely impact of specific policies put forth by government entities
- Evaluation of the role played by assumptions in arguments made for and against economic and policy issues
- Use of quantitative evidence and economic models to assess the validity of economic and policy-relevant arguments
- Understanding of statistical methodology and interpretation of statistical evidence
- Use of data to construct quantitative economic arguments, and to understand the statistical problems associated with interpreting the results
- Understanding of the role of sample selection/endogeneity in affecting results, and how to correct for these issues
- Formulation of written arguments that state assumptions and hypotheses, and evaluation of their pros and cons based on evidence
- Oral presentation of a carefully reasoned economic argument, and response to related questions
- Graphic presentation of a carefully reasoned economic argument by means of graphs, figures, charts, and presentation software
- Working knowledge of information databases, and knowledge of how to use the Web in gathering reliable information
- Location and use of primary data sources such as surveys
- Use of knowledge gained to understand and evaluate current economic events and new economic ideas

Entry to the Major

Admission

Application for the Economics major should be submitted to the department undergraduate counseling office through the Message Center. To apply, students must have completed at least 72 quarter units (but no more than 135 quarter units), one 12-unit term in residence in regular session at UCLA, and all courses listed under preparation for the major. Grades for preparation for the major courses must be reflected on the Degree Audit Report (DAR) prior to submission.

Pre-major

While students are completing the lower-division preparation for the major courses, they may be classified as Economics pre-majors.

Transfer Students

Transfer applicants to the Economics major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one microeconomics course, one macroeconomics course, two calculus courses from the mathematics/physical sciences sequence, and one English critical reading and writing course. Transfer students must successfully complete all remaining pre-major re-
Transfer credit for any of the above is subject to department approval; consult with an undergraduate counselor before enrolling in any courses for the major.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Economics 1, 2, 11, 41; one Writing II course or English Composition 129B; Mathematics 31A, and 31B or 31E.

The Major

Required: Twelve upper-division economics courses as follows: Economics 101, 102, 103, 103L, 104, 104L, and six Economics Department upper-division elective courses. No more than two of the elective courses may also be selected from Management 120A, 120B, 122, 127A, 130A, 180 (real estate finance only).

Honors Program

Students must complete Economics 198A and 198B in which a thesis is written.

Business Economics BA

The Business Economics BA program offers a major for students seeking a business orientation in their study of economics. It does not replicate the traditional undergraduate business school curriculum. Instead, it offers a more tightly focused curriculum that is guided by the rigorous logic and integrative perspective of economics. It is designed to prepare students for graduate education in business, economics, and law. The program requires students to include specific courses offered by the department and the John E. Anderson Graduate School of Management (see the major).

Learning Outcomes

The Business Economics major has the following learning outcomes:

- Understanding, through application of microeconomics, of the interaction of individuals and organizations in markets; and of the role of public policy in shaping those interactions
- Understanding, through application of macroeconomics, of the functioning of market economies at regional, national, and global levels; and of the role of public policy in shaping those interactions
- Understanding and application of accounting principles to analysis of business problems
- Acquisition and use of data to evaluate hypotheses with tables, charts, and statistical analyses
- Use of appropriate analytical perspectives and approaches to frame problems involving the interaction of people, organizations, markets, and society; identify effective strategic approaches to problem solving; and gather and organize key information to facilitate problem solving

Entry to the Major

Admission

Applications for admission by current UCLA students are handled exclusively by the Department of Economics. To apply, students must have completed at least 72 quarter units (but no more than 135 quarter units), one 12-unit fall, winter, or spring term in residence at UCLA, and all courses listed under preparation for the major. Applications are available on the undergraduate economics Bruin Learn website and are accepted online during the first three weeks of each quarter as well as summer session A. In addition, they must (1) have a 2.0 (C) minimum grade in each preparation course, (2) have a minimum 3.0 (B) overall average in all preparation courses excluding the Writing II course, and (3) have a minimum 2.0 (C) grade-point average in their upper-division courses taken for the major before applying (Economics 101 applies on the major preparation grade-point average).

The requisite grade-point averages plus completion of the preparation for the major courses do not guarantee admission to the program.

Pre-major

While students are completing the preparation courses for the major, they may be classified as Business Economics pre-majors.

Transfer Students

Transfer applicants to the Business Economics major must complete the following introductory courses prior to admission to UCLA: one microeconomics course, one macroeconomics course, two calculus courses from the mathematics/physical sciences sequence, one English composition/critical thinking course. Transfer students who wish to enter UCLA as Business Economics pre-majors must meet the admission screening requirements. For information, contact Undergraduate Admission.

Transfer credit for any of the above is subject to department approval; consult with an undergraduate counselor before enrolling in any courses for the major.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Economics 1, 2, 11, 41, 101; one Writing II course; Management 1A, 1B; Mathematics 31A, and 31B or 31E.

The Major

Required: Economics 102, 103, 103L, 104, 104L, and at least two courses from the 106 series; English Composition 131B; five upper-division elective courses in economics and management (no more than three management courses from Management 108, 120A, 120B, 122, 123, 124, 126, 127A, 127B, 130A, 140 may be applied toward the elective requirement). In addition to Economics 103 and 103L, and 104 and 104L, at least two economics courses with laboratories must be completed.
and may be selected from either the Economics 106 series or an economics elective.

Honors Program

Students must complete Economics 198A and 198B in which a thesis is written.

Policies

Preparation for the Major

Each course must be taken for a letter grade. For students admitted to UCLA in fall 2023 and later, repetition of more than two pre-major economics courses or of any preparation course more than once, including equivalent courses taken elsewhere, results in automatic denial of admission to the major.

For students admitted to UCLA prior to fall 2023, repetition of more than one preparation course more than once, including equivalent courses taken elsewhere, results in automatic denial of admission to the major.

The Major

Each upper-division major course must be taken for a letter grade. Transfer credit for any of the major courses is subject to department approval; consult with an undergraduate counselor before enrolling in any courses for the major. Laboratory courses are required for all upper-division economics courses when they are offered and listed as mandatory co-requisite.

To graduate, students must have a minimum 2.0 grade-point average in their upper-division major courses, with at least a C- in each course. (Economics 101 applies on the preparation for the major, therefore requiring a minimum grade of C.)

Honors Program

The departmental honors program is open to majors who have a cumulative grade-point average of at least 3.5 in the major and in all courses taken at UCLA prior to application.

To qualify for departmental honors at graduation, students must (1) select at least seven of the required upper-division economics courses from the approved list designated for departmental honors committee in Economics 198A and 198B, and (3) complete the major requirements with at least a 3.5 grade-point average in the economics courses. Highest honors are awarded at the discretion of the departmental honors committee based on grade-point average and quality of the senior thesis.

Economics 198A and 198B, the courses required for thesis preparation, may be counted as upper-division courses toward the field in which the thesis is written (for purposes of satisfying the requirements for the major). More information and application forms are available from an undergraduate counselor in 2263 Bunche Hall.

Mathematics/Economics BS

See the Mathematics/Economics interdepartmental program section for a description of the major.

Graduate Majors

Economics MA, CPhil, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Master of Quantitative Economics

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Economics

Lower-Division Courses

1. Principles of Economics. (4) Lecture, three hours; discussion, one hour. Not open to students with credit for former course 100. Introduction to principles of economic analysis, economic institutions, and issues of economic policy. Emphasis on understanding the sources and distribution of income through price system. P/NP or letter grading.

2. Principles of Economics. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 1. Not open to students with credit for former course 100. Introduction to principles of economic analysis, economic institutions, and issues of economic policy. Emphasis on understanding the sources and distribution of income through price system. P/NP or letter grading.

3A. Introduction to Investments. (2) Lecture, two hours. Introduction to investments. No previous financial, economic, or math background required. Students learn organizing framework with which to understand investing landscape with highlight on key concepts and functionality related to business and personal investments. Topics include why financial markets exist and how they work, efficient market hypothesis, risk versus reward, investment styles, valuation techniques, simple quantitative analysis, power of compound interest, financial crises, and role private equity, venture capital, innovation and start-ups, personal financial advisers, exchange rates, central banks, financial statements, value creation, interpreting financial ratios, understanding present value, diversification, capital asset pricing model, Sharpe ratio, and understanding asset’s beta, hedge funds. Serves as excellent introduction to career paths in finance and for those who want to increase their financial literacy. P/NP grading.

4. Introduction to Investments. (4) Lecture, two hours. Broad introduction to investments. No previous financial, economic, or math background required. Students learn organizing framework with which to understand investing landscape with highlight on key concepts and functionality related to business and personal investments. Topics include why financial markets exist and how they work, efficient market hypothesis, risk versus reward, investment styles, valuation techniques, simple quantitative analysis, power of compound interest, financial crises, and role private equity, venture capital, innovation and start-ups, personal financial advisers, exchange rates, central banks, financial statements, value creation, interpreting financial ratios, understanding present value, diversification, capital asset pricing model, Sharpe ratio, and understanding asset’s beta, hedge funds. Serves as excellent introduction to career paths in finance and for those who want to increase their financial literacy. P/NP or letter grading.

5. Economics for everyone. (5) Lecture, three hours; discussion, one hour. Introduction to models and tools used by economists in practical real-world context. Study of important topical issues such as education, quality, health care, and environmental policies. Students learn about available data sources and become better equipped to understand current events. May not be used to fulfill entrance requirements for any Economics Department major. P/NP or letter grading.

10P. Economics Toolkit: Introduction to Python for Economists. (4) Lecture, three hours. Python is commonly used programming language for data science. It is powerful and easy to learn tool that can be applied to make simple diagrams or fit complicated machine learning models. Introduction to using Python for basic data exploration, analysis, and visualization. Emphasis on applications with economic data and econometric analysis. P/NP grading.


11. Microeconomic Theory. (4) Lecture, three hours; discussion, one hour. Enforced requisites: courses 1, 2, Mathematics 31A, 31B, with grades of C or better. Laws of demand, supply, returns, and costs; price and output determination in different market situations. P/NP or letter grading.

12. Introduction to Personal Finance. (4) Lecture, three hours; discussion, one hour. Introduction to personal finance. No previous financial, economic, or mathematics background required. Open to nonmajors. Covers wide array of topics at introductory level that are of interest to students on practical level and more broadly for students seeking to deepen their understanding of key features of financial system, financial institutions, and various aspects of personal finance encountered by typical household over their life cycle. Topics covered include timing your money, types of loans most relevant to typical household, credit and debit cards, savings and investment, stocks and bonds, risk and diversification, personal income taxes, varieties of insurance, retirement savings, and savings plans, macroeconomic concepts, social security, Medicare, and aspects of behavioral economics. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

41. Probability and Statistics for Economists. (4) Lecture, three hours; discussion, one hour. Enforced requisites: Mathematics 31A, 31B, with grades of C or better. Open to students with credit for former Statistics 11. Introduction to theory and practice of math-


98. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

97. Economic Toolkit. (4) Lecture, three hours. Coverage of essential mathematical and programming skills needed for study of Economics. Review of calculus (first derivatives, partial derivatives, elementary integrals), Excel (handling data, using simple arithmetic, mathematical, and financial functions, use of Solver), and extended introduction to statistical language and use of StatTools and other computer software. Offered in summer only. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses


103. Introduction to Econometrics. (4) Lecture, three hours; discussion, one hour. Enforced requisites: courses 11, 41 or Mathematics 170A and 170B or 170E and 170L, Statistics 100A and 100B. Enforced corequisite: 103L. Introduction to theory and practice of univariate regression analysis with emphasis on its use in economics. Introduction to method of least squares, Gauss-Markov theorem, confidence intervals and hypothesis tests in univariate regression context, and standard errors in case of heteroscedasticity and serial correlation. Emphasis on applications with real data and computer software (R programming language) to implement discussed methods. P/NP or letter grading.

103L. Econometrics Laboratory. (1) Lecture, one hour; laboratory, one hour. Enforced requisites: courses 11, and 41 or Mathematics 170A and 170B or 170E and 170L, or Statistics 100A and 100B. Enforced corequisite: 103L. Econometric analysis of case-based studies. Hands-on data collection and problem solving. Use of econometric software. P/NP or letter grading.

104. Data Science for Economists. (4) Lecture, three hours; laboratory, one hour. Enforced requisites: courses 11, 103. Enforced corequisite: course 104L. In-depth introduction to univariate regression. Introduction to estimation of multivariate regression, and confidence intervals and hypothesis tests in context of multivariate regression. Discussion of instrumental variables and identification models. Emphasis on hands-on experience on data analytics and real data applications. P/NP or letter grading.


106A. Economics in Practice. (4) Seminar, three hours. Enforced requisites: courses 11, 101, 102. Enforced corequisite: course 104. Discussion of three small problems and one large and more complex problem. Discussion of student-proposed solutions to problems in their groups, with small-group discussions to student presentations of results to class. Detailed coaching and feedback by MBA students on student analysis and presentations. Final written and oral presentations required. P/NP or letter grading.

106AL. Economics in Practice Laboratory. (1) Lecture, one hour; laboratory, one hour. Enforced corequisite: course 106A. Case-based analysis requiring students to apply material from course 106A to real-world problems regarding issues such as economic theory and empirical methods. Hands-on data collection and problem solving and presentation of student analyses both orally and in writing. P/NP or letter grading.

106D. Designed Markets. (4) Lecture, three hours; discussion, one hour. Requisites: courses 11, 101. Enforced corequisite: course 106DL. Discussion of market designs and market mechanisms designed, mostly by economists. Choices designers face when designing such markets. Markets and their content and corresponding economic models. Topics include matching between medical residents and hospitals, matching between high school students and New York and Boston high schools, kidney transplants, course allocation in business schools, eBay auctions, and prediction markets. Examination of how to optimize one’s actions and our outcomes in such markets. P/NP or letter grading.

106DL. Designed Markets Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisites: courses 11, 101. Enforced corequisite: course 106D. Case-based analysis requiring students to apply material from course 106D to real-world problems regarding topics such as matching between medical residents and hospitals, matching between high school students and New York and Boston high schools, kidney transplants, course allocation in business schools, eBay auctions, and prediction markets. Hands-on data collection and problem solving and presentation of student analyses both orally and in writing. P/NP or letter grading.

106E. Economics of Entrepreneurship. (4) Lecture, three hours. Requisite: course 101. Enforced corequisite: course 106E. Case-based analysis requiring students to apply material from course 106E to real-world problems involving topics such as how entrepreneurs make decisions of strategy, marketing, and entrepreneurial finance courses. Examination of both strategic decisions of entrepreneurs (pricing, advertising, deterring entry) and more practical issues (funding, business plans, patents). Letter grading.

106EL. Economics of Entrepreneurship Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisite: course 101. Enforced corequisite: course 106E. Economics of Entrepreneurship Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisite: course 101. Enforced corequisite: course 106E. Hands-on data collection and problem solving and presentation of student analyses both orally and in writing. P/NP or letter grading.

106F. Finance. (4) Lecture, three hours. Requisite: course 102. Enforced corequisite: course 106FB. Not open for credit to students with credit for Management 130A. Only one course from Economics 106F and Management 130A may be applied toward Economics and Business Economics majors. Enrolled priority to Business Economics majors. Introduction to the basic ideas of game theory and strategic thinking. Discussion of ideas such as dominance, backward induction, Nash equilibrium, commitment, credibility, asymmetric information, and signaling with applications to examples from economics, politics, business, and other real-life situations. Letter grading.

106FL. Introduction to Game Theory Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisite: course 106E. Enforced corequisite: course 106FL. Hands-on data collection and problem solving and presentation of student analyses in writing with possible oral presentations. P/NP or letter grading.


106GL. Organization of Firms Laboratory. (1) Lecture, one hour; laboratory, one hour. Enforced requisites: courses 11, 101. Enforced corequisite: course 106GL. Financial Markets and Financial Institutions. (4) Lecture, three hours; discussion, one hour. Enforced requisites: courses 11, 101. Enforced corequisite: course 106G. Case-based analysis requiring students to apply material from course 106G to real-world problems involving topics such as information, competing firms, property rights and asset ownership, boundaries of firms, employment versus independent contracting, internal organization of firms, roles and levels of firm hierarchy. P/NP or letter grading.

106H. Financial Markets and Financial Institutions. (4) Lecture, three hours; discussion, one hour. Requisites: courses 11, 101, 102. Enforced corequisite: course 106ML. Application of analytical tools of economics and finance to real-world problems in financial markets to link models students have learned in prior courses to patterns observed in financial markets and to understand when it is that further theoretical refinement are required to better account for certain observed patterns. Development of understanding of potential effects of monetary and regulatory policies on financial markets. Topics include bond market, stock market, foreign exchange market, international crises, and financial regulation. Analysis and discussion of lessons from subprime crisis and European sovereign debt crisis. P/NP or letter grading.

106ML. Financial Markets and Financial Institutions Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisites: courses 11, 101, 102. Enforced corequisite: course 106ML. Financial Markets and Financial Institutions. (4) Lecture, three hours; discussion, one hour. Enforced requisites: courses 11, 101, 102. Enforced corequisite: course 106ML. Case-based analysis requiring students to apply material from course 106ML to real-world problems involving topics such as information, competing firms, property rights and asset ownership, boundaries of firms, employment versus independent contracting, internal organization of firms, roles and levels of firm hierarchy. P/NP or letter grading.

106N. Financial Market and Financial Institutions Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisite: course 101. Enforced corequisite: course 106N. Financial Market and Financial Institutions. (4) Lecture, three hours; discussion, one hour. Requisites: courses 11, 101, 102. Enforced corequisite: course 106N. Case-based analysis requiring students to apply material from course 106N to real-world problems involving topics such as information, competing firms, property rights and asset ownership, boundaries of firms, employment versus independent contracting, internal organization of firms, roles and levels of firm hierarchy. P/NP or letter grading.

106PL. Pricing and Strategy Laboratory. (1) Lecture, one hour; discussion, one hour. Enforced corequisite: course 106P. Case-based analysis requiring students to apply material from course 106P to real-world problems involving linear programming and shadow pricing, peak load pricing, two-part pricing, strategic pricing, and auctions and bidding. Hands-on data collection and problem solving and presentation of student analyses in writing. P/NP or letter grading.

106S. Competitive Strategy. (4) Lecture, three hours. Enforced requisites: courses 11, 101. Enforced corequisite: course 106SL. Examination of competitive strategy and competitive advantage using game theoretic models and case studies. Topics include economic models of scale, network effects, switching costs, and platform markets. Written final project and presentation required. P/NP or letter grading.

106SL. Competitive Strategy, E-Commerce. (4) Lecture, three hours. Requisites: courses 11, 101. Enforced corequisite: course 106ST. Use of rigorous economic tools to analyze world of technology and e-commerce. Examination of economic theory, empirical analysis, and case studies to study variety of new markets. Topics include bidding in student auctions, two-sided markets, matching markets, and reputation mechanisms. Written case on one particular firm and presentation required. P/NP or letter grading.

106T. Economics of Technology and E-Commerce Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisites: courses 11, 101. Enforced corequisite: course 106TL. Use of rigorous economic tools to analyze world of technology and e-commerce. Examination of economic theory, empirical analysis, and case studies to study variety of new markets. Topics include bidding in student auctions, two-sided markets, matching markets, and reputation mechanisms. Hands-on data collection and problem solving and presentation of student analyses both orally and in writing. P/NP or letter grading.

106V. Investments. (4) Lecture, three hours. Requisite: course 102. Recommended: course 106V. Enforced corequisite: course 106VL. Lecture, one hour; laboratory, one hour. Requisite: course 101. Enforced corequisite: course 106VSL. Use of rigorous economic tools to analyze world of technology and e-commerce. Examination of economic theory, empirical analysis, and case studies to study variety of new markets. Topics include bidding in student auctions, two-sided markets, matching markets, and reputation mechanisms. Hands-on data collection and problem solving and presentation of student analyses both orally and in writing. P/NP or letter grading.

106VL. Investments Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisite: course 102. Recommended: course 106VL. Enforced corequisite: course 106VSL. Use of rigorous economic tools to analyze world of technology and e-commerce. Examination of economic theory, empirical analysis, and case studies to study variety of new markets. Topics include bidding in student auctions, two-sided markets, matching markets, and reputation mechanisms. Hands-on data collection and problem solving and presentation of student analyses both orally and in writing. P/NP or letter grading.


111. Theories of Development. (4) Lecture, three hours. Requisites: courses 11, 101, 103. Corequisite: course 111L. Application of theoretical and empirical tools from microeconomics to provide insights into problems confronting low-income countries today and to evaluate policies that are likely to be effective in improving well-being of poorest on globe. P/NP or letter grading.

111L. Theories of Development Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisites: courses 11, 101, 103. Corequisite: course 111L. Case-based analysis requiring students to apply material from course 111L to real-world problems involving development economics, sources of income growth and development, impediments to development, and policy prescriptions. P/NP or letter grading.


112A. International Development. (4) Same as Public Policy CM171L. Lecture, three hours. Requisite: course 102 or 111. Why are some countries rich, while other countries are poor? What can policymakers do to reduce poverty? Discussion of current research on these questions. Study of both methodologies used to answer questions in development economics, like natural experiments and randomized control trials as well as relationship between development and institutions, education, growth, culture, and gender. Reading intensive, seminar-style course. Students are expected to read academic articles and actively participate in discussions. Students also learn how to use data to evaluate policies. P/NP or letter grading.

113. Globalization and Gender. (4) Lecture, three hours. Requisite: course 111. Examination of gender dimensions of economic development and globalization from perspective of feminist economics. This perspective implies foregrounding labor, broadly defined to include unpaid work; examining gender differences in work; access to resources; and well-being outcomes; and how these are affected by macroeconomic policies and how gender inequalities are relevant for societal well-being. Since early 1980s economic globalization has been achieved on basis of common set of macroeconomic policies pursued in industrial and developing countries alike. These policies frame both gender-differentiated impacts of policy and initiatives that are implemented to reduce inequalities between men and women. Examination of impact of these policies on gender inequalities in developing countries. P/NP or letter grading.

114. International Trade Theory. (4) Lecture, three hours; discussion, one hour. Requisite: course 101. Corequisite: course 114L. Not open to students with credit for former course 120. Theory of international trade; demand, supply, and gains of trade. Effects of tariffs, quantitative restrictions, and international integration. Effects of free and restricted trade on economic welfare and political stability. P/NP or letter grading.

114L. International Trade Theory Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisite: course 101. Corequisite: course 121L. Case-based analysis requiring students to apply material from course 121L to real-world problems involving international trade. Topics and analysis include theory of international trade: bases, direction, terms, volume, and gains of trade; effects of tariffs, quantitative restrictions, and international integration; effects of free and restricted trade on economic welfare and political stability. P/NP or letter grading.

115. International Finance. (4) Lecture, three hours; discussion, one hour. Requisite: course 114. Corequisite: course 122L. Not open to students with credit for former course 120. Examination of balance of payments and adjustment to national and international monetary imbalances. Study of international financial flows and the management of the exchange rate. P/NP or letter grading.

122. International Finance Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisite: course 102. Enforced corequisite: course 122L. Case-based analysis requiring students to apply material from course 122L to real-world problems involving international financial flows and the management of the exchange rate. Topics and analysis include balance of payments, exchange rates under various monetary arrangements, capital flows, exchange controls, and international financial markets. Students gain applied research and presentation skills. Discussion of books and newspaper articles about financial markets and impact of economic news on exchange rates, topics expected to be familiar with use of spreadsheets, such as Excel. Coding basics is highly recommended. P/NP or letter grading.

123L. Forecasting Exchange Rates and Constructing Currency Portfolios Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisites: courses 11, 102, 103L, or consent of instructor. Enforced corequisite: course 123. Hands-on approach in which students write computer code associated with concepts learned in Economics 123 to forecast exchange rates using these codes to real-world data in order to generate exchange rate forecasts and evaluate prediction accuracy of their forecasting models. Students use forecasting methods to construct short-long portfolios of currency codes and assess reward-risk trade-offs of such portfolios. To generate and evaluate forecasts, students use Tradestation software, which can be accessed in Social Sciences Computing laboratories. P/NP or letter grading.


130L. Public Economics Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisites: courses 11, 101, 103. Enforced corequisite: course 130. Case-based analysis requiring students to apply material from course 130 to real-world problems regarding government spending programs, taxation, deficit financing, and federal credit programs. Hands-on data collection and problem solving and presentation of student analyses both orally and in writing. P/NP or letter grading.

131. Economics of Health and Healthcare. (4) Lecture, three hours. Requisites: courses 11, 101, 103. Enforced corequisite: course 131L. Economic analysis of health and healthcare. Presentation of several detailed economic models, including models of addiction, demand for healthcare, demand for insurance, insurance behavior, and congestion. Examination of quantitative information from course readings and development of better understanding of economic concepts and results. P/NP or letter grading.
131L. Economics of Health and Healthcare Laboratory. (1) Lecture, one hour; laboratory, one hour. Enforced corequisite: courses 11, 101, 103. Enforced corequisite: course 143L. Case-based analysis requiring students to apply theory from course 131 to real-world problems regarding economics of health and healthcare. Hands-on data collection and problem solving and presentation of student analyses both orally and in writing. P/N/P or letter grading.

132. Topics in Taxation and Social Insurance. (4) Lecture, three hours; discussion, one hour. Requisites: courses 11, 101, 103. In-depth examination of selected topics centered on current policy debates. Topics vary from year to year but typically emphasize tax policy or courses 11, 101. In-depth examination of selected problem solving and presentation of student analyses and healthcare. Hands-on data collection and real-world problems regarding economics of health corequisite: course 131. Case-based analysis requiring students with credit for former course 147A or 147B. Heteroskedasticity, limited dependent variable, panel data, time-series. P/N/P or letter grading.

142. Topics in Microeconomics: Probabilistic Microeconomics. (4) Lecture, three hours. Requisite: course 101. Combination of basic probability introduced in Statistics 11 with microeconomic models presented in courses 11 and 101 in order to explain phenomena such as insurance, job search, and stock market behavior. Optimal production and consumption in inter-temporal and inter-personal dimensions. Introduction to alternative measures of risk and risk aversion. P/N/P or letter grading.

143. Advanced Econometrics. (4) Lecture, three hours; discussion, one hour; laboratory, one hour. Requisite: course 103. Nonlinear models with student choice of courses 114 or 147. Stochastic trends, volatility measure, and evaluation of forecasting techniques. Hands-on approach to real-world data analysis methods widely used by econometricians and other professionals. P/N/P or letter grading.

144. Economic Forecasting. (4) Lecture, three hours. Preparation: familiarity with data analysis software (e.g., R, Excel, MATLAB, Stata) and/or programming experience. Enforced requisites: courses 101, 103, 107. Study of 10–20 series methods to forecasting in economics, business, and government. Topics include modeling and forecasting trend, seasonality, and cycles. Discussion of stochastic trends, volatility measure, and evaluation of forecasting techniques. P/N/P or letter grading.

145. Topics in Microeconomics: Mathematical Econometrics. (4) Lecture, three hours. Requisite: course 101. Possible topics include game theory; competitive equilibrium analysis; examination of market failure and role for market intervention. P/N/P or letter grading.

146A-C. C146B-C146C. Seminars: Asset Pricing. (4-4-4) Seminar, three seminars: electives. Courses 111, 112, 101, 102. Limited to seniors. Overview of current developments in asset pricing theory for advanced undergraduate and graduate students. Introduction to graduate level material in the field. Different topics each week, with presentation and discussion of new papers. Research in progress presented, discussed, and critiqued by visiting experts. UCLA faculty members, and advanced graduate students. Concurrently scheduled with courses C298A-C298B-C298C. P/N/P or letter grading.


147L. Computational Finance and Data Analysis for Financial Engineering Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisites: courses 141, 142, 143L. Introduction to tools of economics to understand genuine
related issues. Review of economic models of household, fertility, and labor supply. Discussion of how they help interpret long-term trends in marriage and divorce, fertility, and labor-force participation. Review of economic models of wage determination, with focus on explanations of and policy remedies for earnings differentials between women and men. Examination of gender-based research in economics on gender-related topics. Enforced corequisite: course 122G or course 171L. P/N or letter grading.

152L. Women, Men, and Economy Laboratory. (1) Lecture, three hours; laboratory, one hour. Requisites: courses 11, 101, 103. Corequisite: course 152L. Enforced requisite: students to apply theoretical and empirical tools from course 152 to real-world gender-related issues, and to further discuss latest research in field. P/N or letter grading.

156. Money and Banking. (4) Lecture, three hours. Enforced corequisite: course 156L. Use of neoclassical growth model to address various issues, with emphasis on quantitative analysis. Development of economic theory and application to study of long-run growth, industrial revolution, and Great Depression. P/N or letter grading.

164L. Advanced Topics in Macroeconomics: Theory of Economic Growth Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisite: course 102. Enforced corequisite: course 164L. Case-based analysis requiring students to apply theory within course 164 to real-world macroeconomic growth problems. Hands-on data collection and problem solving and presentation of student analyses in writing. P/N or letter grading.

165. History of Capitalism in American Economy. (4) Lecture, three hours. Enforced requisite: course 102. Enforced corequisite: course 165L. How capitalism—what economists call market economy with well-defined and protected civil rights and property rights—has contributed to America's economic growth. Quantitative course, with analysis of how different features of capitalist economies impact economic growth, investment, consumption, and technical change, using computer simulations based on prominent historical examples. P/N or letter grading.

165L. History of Capitalism in American Economy Laboratory. (1) Lecture, one hour; laboratory, one hour. Enforced requisite: course 102. Enforced corequisite: course 165L. Case-based analysis requiring students to apply theory and historical data from course 165 to simulate and analyze how variety of macroeconomic policies affect price level, employment, and economic activity. Hands-on data collection and problem solving and presentation of student analyses in writing. P/N or letter grading.

C156A-C156B-C156C. Seminars: Labor Economics. (4–4–4) Seminars. Enrollments limited. Review of economic models of wage determination, requiring students to apply theoretical and empirical tools from course 152 to real-world gender-related issues, and to further discuss latest research in field. P/N or letter grading.

167. Victims and Villains; Panics and Bubbles. (4) Lecture, three hours. Requisites: course 101, Management 1A, 1B. Focus on phenomena of panics, bubbles, and financial crises. Review of depression analysis and discussion of underlying causes, private and public policy responses, similarities, and contemporaneity issues in today's financial landscape. Focus on student-led research. Emphasis on effective written and oral communication, professional treatment of financial and banking panics, with discussion of underlying housing and stock market bubbles. Also covers five other financial crises: panic of 1907, Great Depression, 1929 bubble and stock market bubbles of 1980s, American banking crises of 1980s, and Asian Contagion of late 1990s. Highlights various components of financial crises with case and discussion of each component. Students read case studies relating to each, and more general related readings including speeches, papers, and articles. Letter grading.

168. Introduction to Principles of Value Investing. (4) Lecture, three hours. Requisite: course 102. Preparation: calculus. Case-based analysis requiring students to provide empirical analysis to material covered in course 171, with emphasis on antitrust issues and policies. In particular, use of standard empirical and analytical techniques to assess antitrust regulations and measures. Use of standard empirical and analytical techniques to assess antitrust regulations and measures. P/N or letter grading.

173AX-173BX. Introduction to Social Entrepreneurship. (4–4) Formerly numbered 173A-173B. Lecture, one hour; research group meeting, two hours. Course 173A is requisite to 173BX. Full-scale immersion into world of social entrepreneurship. Introduction to basics of business planning for social enterprises. Students are assigned in teams for venturing to social enterprises in Los Angeles area to implement new revenue-generating business plan for social enterprises to which they are assigned. Teams receive financial analyst on each team to help understand how to work effectively together and how to resolve issues that arise with staff of assigned social enterprise. Courses 173AX and 173BX must be taken in consecutive semesters. P/N or letter grading.

174. Economics of Sports. (4) Lecture, three hours. Enforced requisite: courses 11, 41, 101. Recommended prerequisites: courses 102 or 174L. Empirically-based analysis of economics that employs both theoretical and empirical tools to analyze wide range of topics related to sports industry. Topics include history of labor relations and antitrust policy, player salaries in professional sports, market for professional franchise sales and sports broadcast rights, league expansion and relocation decisions, understanding of role of economic impact studies (cost-benefit analysis) and public/private partnerships in facility financing, relationship between academics and athletics in collegiate sports, racial discrimination in sports, exploration of behavioral issues such as strategic effort, measuring return on investment from sport sponsorships, and calculation of economic damages in legal cases involving athletes. P/N or letter grading.

C176A-C176B-C176C. Seminars: Industrial Organization. (4–4–4) Seminars. Three hours. Enrollments limited. Overview of current offerings, spin-offs, restructuring, and liquidations. Students are assigned in teams for venturing to social enterprises in Los Angeles area to implement new revenue-generating business plan for social enterprises. Students are assigned in teams for venturing to social enterprises in Los Angeles area to implement new revenue-generating business plan for social enterprises. Teams receive financial analyst on each team to help understand how to work effectively together and how to resolve issues that arise with staff of assigned social enterprise. Courses 173AX and 173BX must be taken in consecutive semesters. P/N or letter grading.
Lecture, three hours; Western Europe Laboratory. (1) and persistence of institutions and organizations, 182B. U.S. Economics History: From the Civil War to there was persistence. P/NP or letter grading. Study of the past, with its very different institutions, to inform the present. For example, there was no U.S. currency until the Civil War. It printed its own currency, and each state had different banking regulations. Investigation of how the system worked, whether it was effective in allocating capital, and how stability depended on banking regulations. P/NP or letter grading.

182A. U.S. Economics History: From Colonial Times to the Civil War. (4) Lecture, three hours; discussion, one hour. Requisites: courses 11, 41 (or equivalent). Enforced corequisite: course 182BL. Examination of the development of the U.S. economy up to and including the Civil War. Focus on using economic models and numbers to understand what drove the evolution of the economy, why structural changes occurred, and why there was persistence. While the past persists for a long time in the form of people and institutions, there are periods of dramatic change brought on by technological change and by war. Study of the past, with its very different institutions, to inform the present. For example, during the 2007-2008 financial crisis, economists looked to the Great Depression, a topic on which then Federal Reserve chairman Ben Bernanke published. Economists look to the past to understand the role of government deficits in inflation and in economic growth. P/NP or letter grading.

182CL. U.S. Economics History: World War I to 1980s Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisite: course 11, 41 (or equivalent). Enforced corequisite: course 182C. Empirical analysis requiring application of material from course 182C to the development of the U.S. Economy from World War I to 1980s. Focus on application of economic models and empirical analysis to understand what drove the evolution of the economy, why structural changes occurred, and why there was persistence. P/NP or letter grading.


183L. Development of Economic Institutions in U.S. Laboratory. (4) Lecture, one hour; laboratory, one hour. Requisite: course 11. Enforced corequisite: course 183L. Empirical analysis requiring students to apply material from course 183 to selected historical issues such as migration, slavery, industrialization, capital formation, Great Depression, human capital formation, and California development and relate them to current real-world issues. Hands-on data collection and problem solving and presentation of student research. P/NP or letter grading.

165. Career Development. (1) Lecture, one hour. Enrollment required. Focus on how successful alumni have solved the problem or if the regulators were captured. Career development of departmental majors. Designed to provide Business Economics majors with key knowledge and practical skills used in real world that complement traditional academics to maximize internships, communication, and presentation skills and strengthen résumé building. Coverage of career paths in business profession in various aspects to broaden students’ understanding of career opportunities. Review of current business environment, financial markets, economy, unemployment, banking crises, market updates, and all related business topics. P/NP grading.

C186A-C186B-C186C. Seminars: Economic History for Advanced Undergraduate and Graduate Students. (4) Seminar, three hours. Limited to seniors. Overview of most current developments in economic history for advanced undergraduate and graduate students. Introduction to graduate-level research in this field. Different topic each week, with presentation and discussion of new papers. Research in progress presented, discussed, and criticized by visiting experts, UCLA faculty members, and advanced graduate students. Concurrently scheduled with courses C246A-C246B-C246C. P/NP or letter grading.

187. Upper-Division Research Seminar: Applications of Economic Theory. (4) Seminar, three hours. Requisite: course 182CL. Examination of the development of the U.S. economy from World War I to 1980s. Focus on using economic models and numbers to understand what drove the evolution of the economy, why structural changes occurred, and why there was persistence. P/NP or letter grading.

182D. U.S. Economics History: From World War I to 1980s. (4) Lecture, three hours; discussion, one hour. Requisites: courses 11, 41 (or equivalent). Enforced corequisite: course 182CL. Examination of the development of the U.S. economy from World War I to 1980s. Focus on using economic models and numbers to understand what drove the evolution of the economy, why structural changes occurred, and why there was persistence. P/NP or letter grading.


201C. Microeconomics: Theory with Asymmetric Information and Applications. (4) Lecture, three hours. Perfect Bayesian equilibrium and refinement mechanisms. Design applied topics such as adverse selection and moral hazard, screening, insurance, and the role of information in preventing discrimination, and public goods provision. S/U or letter grading.


203A. Introduction to Econometrics I. (4) Lecture, three hours. Survey of regression theory and applications. Topics include ordinary least squares estimation and testing. Basic linear regression model, tests of hypotheses. Descriptive, optimal, and overlapping generations models of consumption. Life cycle theory. S/U or letter grading.

203B. Introduction to Econometrics II. (4) Lecture, three hours. Simple and multiple regression. Linear regression, residual analysis. Basic analysis of variability, estimation, goodness of fit, and hypothesis testing. S/U or letter grading.

203C. Introduction to Econometrics III. (4) Lecture, three hours; discussion, one hour. Econometrics methods for time-series econometrics, including theory and applications. Topics include deterministic and stochastic trending, techniques, unit root tests, cointegration theory and applications. Basic analysis of stationary and nonstationary time-series models. S/U or letter grading.

204A. Applications of Economic Theory: California Population Research Topical Seminar Series. (4) (Same as Sociology M225A) Seminar, three hours. Limited to California Center for Population Research (CCPR) affiliates. Examination of issues such as demography, health, aging, labor, and broad array of topics concerned with effects of economic, social, and political transformations on human behavior both in U.S. and abroad. S/U or letter grading.

204B. Applications of Economic Theory: California Population Research Seminar Series. (4) Seminar, three hours. Examination of issues such as demography, health, aging, labor, and broad array of topics concerned with effects of economic, social, and political transformations on human behavior both in U.S. and abroad. S/U or letter grading.

204C. Applications of Economic Theory: California Population Research Topical Seminar Series. (4) Seminar, three hours. Examination of issues such as demography, health, aging, labor, and broad array of topics concerned with effects of economic, social, and political transformations on human behavior both in U.S. and abroad. S/U or letter grading.

204D-204K. Applications of Economic Theory. (4 each) Lecture, three hours. S/U or letter grading.

204M. Seminar: Pharmaceutical Economics and Policy. (4) (Same as Health Policy M224) Seminar, three hours every other week. Required: Health Policy M224. Limited to graduate public health and economics students. Various topics in economics of pharmaceutical industry, including rates of innovation, drug regulation, and economic impact of pharmaceuticals. In Progress grading (credit to be given only on completion of course M224M).

204N. Seminar: Pharmaceutical Economics and Policy. (2) (Same as Health Policy M224C) Seminar, three hours every other week. Required: Health Policy M236. Limited to graduate public health and economics students. Various topics in economics of pharmaceutical industry, including rates of innovation, drug regulation, and economic impact of pharmaceuticals. Letter grading.

204F. Applications of Economic Theory. (4) Lecture, three hours. Preparation: completion of first-year microeconomics and economic history courses. In Progress grading (credit to be given only on completion of course M224F).

205. Economic Model Theory. (4) Lecture, three hours. Development of modeling skills by considering sequence of economic issues such as income, price, regulation, monopoly, capital asset pricing. S/U grading.

207. History of Economic Thought. (4) Lecture, three hours. Topics from classics to modern economists, including work of Smith, Ricardo, and Mill, and developments from 1870s, including contributions of major figures of marginalist revolution, socialist controversy, and history of welfare economics. S/U or letter grading.

208. Introduction to Demographic Methods. (4) (Same as Health Sciences M208, and Sociology M213A) Lecture, four hours. Preparation: one introductory statistics course. Introduction to methods of demographic analysis. Topics include demographic techniques, decomposition of differences, life tables, survival analysis, cohort analysis, birth interval analysis, models of population growth, stable populations, population projection, and demographic data sources. Letter grading.

209A-209B-209C. PhD Research Seminar. (4-4-4) Seminar, three hours. Designed to help PhD students transition from graduate seminars to independent research, including preparation and presentation of original research. Covered includes finding research ideas, writing introductions, building narratives, writing models, presenting empirical analysis, writing research papers, discussing field conferences, presentation, elevator pitch, etc. For each topic, students study canonical examples and work on their own papers. Faculty provide feedback and build supportive environment in which students can learn and experiment. S/U grading.

Economic Theory

211A. Contract Theory. (4) Lecture, three hours. Preparation: introductory microeconomics course. In Progress grading (credit to be given only on completion of course 201C).

211B. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201A. In Progress grading (credit to be given only on completion of course M201B).

211C. Economic Theory of Total Quality Management. (4) Lecture, three hours. Preparation: Microeconomics M201B. In Progress grading (credit to be given only on completion of course M201C).

211D. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201C. In Progress grading (credit to be given only on completion of course M201D).

211E. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201D. In Progress grading (credit to be given only on completion of course M201E).

211F. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201E. In Progress grading (credit to be given only on completion of course M201F).

211G. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201F. In Progress grading (credit to be given only on completion of course M201G).

211H. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201G. In Progress grading (credit to be given only on completion of course M201H).

211I. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201H. In Progress grading (credit to be given only on completion of course M201I).

211J. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201I. In Progress grading (credit to be given only on completion of course M201J).

211K. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201J. In Progress grading (credit to be given only on completion of course M201K).

211L. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201K. In Progress grading (credit to be given only on completion of course M201L).

211M. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201L. In Progress grading (credit to be given only on completion of course M201M).

211N. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201M. In Progress grading (credit to be given only on completion of course M201N).

211O. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201N. In Progress grading (credit to be given only on completion of course M201O).

211P. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201O. In Progress grading (credit to be given only on completion of course M201P).

211Q. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201P. In Progress grading (credit to be given only on completion of course M201Q).

211R. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201Q. In Progress grading (credit to be given only on completion of course M201R).

211S. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201R. In Progress grading (credit to be given only on completion of course M201S).

211T. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201S. In Progress grading (credit to be given only on completion of course M201T).

211U. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201T. In Progress grading (credit to be given only on completion of course M201U).

211V. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201U. In Progress grading (credit to be given only on completion of course M201V).

211W. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201V. In Progress grading (credit to be given only on completion of course M201W).

211X. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201W. In Progress grading (credit to be given only on completion of course M201X).

211Y. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201X. In Progress grading (credit to be given only on completion of course M201Y).

211Z. Economic Theory of Organization. (4) Lecture, three hours. Preparation: Microeconomics M201Z. In Progress grading (credit to be given only on completion of course M201Z).
adverse selection, and incomplete contracting, starting with static models of moral hazard and mechanism design and development of their dynamic counterpart. Consideration of environments where agents cannot use formal contracts, studying relational contracts and trading relationships with no contracts. Analysis of wide variety of applications from industrial organization, corporate finance, personnel economics, and public and nonmarket exchange.

211B. Economics of Uncertainty, Information, and Games. (4) Lecture, three hours. Preparation: Introductory probability. Enforced requisite: course 201C. Theory of individual decision making under uncertainty, applied to topics such as asset pricing models, adverse selection, moral hazard, bargaining, signaling, auctions, and search. S/U or letter grading.

211C. Game Theory and Economic Applications. (4) Lecture, three hours. Preparation: Introductory probability. Enforced requisite: course 201C. Intended for students who are interested in doing research in microeconomic theory and for students who want to acquire good theory background to do applied work. Coverage of combination of standard results in field and topics of current research, including notions of equilibrium in static and dynamic games, reasoning in games, repeated games, games of incomplete information, and experiments. S/U or letter grading.

212A. Topics in Advanced Theory: Search Theory. (4) Lecture, three hours. Preparation: calculus, introductory probability. Use of theory of Bayesian games to study bargaining, monetary theory, and oligopoly. Use of theory of mechanisms to study auction design and imperfectly competitive markets. May be repeated for credit. S/U or letter grading.

212B. Topics in Advanced Theory: Applied Game Theory. (4) Lecture, three hours. Preparation: calculus, introductory probability. Use of theory of Bayesian games to study bargaining, monetary theory, and oligopoly. Use of theory of mechanisms to study auction design and imperfectly competitive markets. May be repeated for credit. S/U or letter grading.

212A-212B. General Equilibrium and Game Theory. (4–4–4) Lecture, three hours. Requisite: course 201C. Selected advanced theoretical topics of current interest and introduction to modern mathematical economics, including general equilibrium theory and game theory. S/U or letter grading.

214A. Topics in Mathematical Economics: General Equilibrium Theory. (4) Lecture, three hours. Requisite: course 201C. Core convergence theorem, cooperative and noncooperative approach to competitive equilibrium theory, perfectly competitive, no-surplus, Walrasian equilibrium, applications to mechanism theory and incomplete market models. May be repeated for credit. S/U or letter grading.

M215. Topics in Applied Game Theory. (4) (Same as Political Science M209B.) Lecture, three hours. Preparation: Calculus or introductory probability: Designated for graduate economics and political science students. Survey and applications of major solution concepts to models of bargaining, oligopoly, cost allocation, and voting power. S/U or letter grading.


Monetary Economics


221B. Monetary Economics II. (4) Lecture, three hours. Emphasis on theoretical, historical, and policy aspects of monetary economics. Financial intermediation, bank panics, asset price volatility, game theoretic information acquisition, monopolistic competition, search and coordination failures, central bank operations, and evolution of monetary institutions. S/U or letter grading.


221D. Monetary Economics IV. (4) Lecture, three hours. Requisites: courses 202A, 202B, 202C. Emphasis on applied macroeconomics, with topic change each year. Students select one particular data set to study. Each week class studies article from recent work in applied macroeconomics or applied econometrics that teaches one of theoretical or methodological construction. S/U or letter grading.

222B-222C. Topics in Monetary Economics. (4 each) Lecture, three hours. Current research in monetary economics. Content varies. May be repeated for credit. S/U or letter grading.

226A-C226B-C226C. Seminars: Monetary Economics/Macroeconomics. (4–4–4) Seminar, three hours. Designed for predissertation and dissertation writers. Overview of most current developments in macroeconomic and financial theory. Topics to be decided by the instructor, with students chosen on theoretical or methodological construction. Subgroups of students report back to class using technique on their selected data set. S/U or letter grading.

228A-228B-228C. Topics in Mathematical Economics. (4–4–4) Seminar, three hours. Workshops for predissertation and dissertation writers. Research in progress presented, discussed, and criticized by visiting experts, UCLA faculty members, and advanced graduate students. Research paper required. S/U or letter grading.

Economic History


243A–243Z. Topics in Economic History. (4) (4) Seminar, three hours. Preparation: Two upper-division courses in economic history, political economy, or international relations. Seminar on current research at intersection of labor economics, public economics, and U.S. economic history, focusing on period after 1940. Topics include economic and wage inequality; intergenerational mobility; increasing (and stalling) educational attainment; changes in health and health care; Great Migration; gender gap in pay and rise of married women’s work; baby boom and bust; racial inequality from slavery to Civil Rights era; and war on poverty. S/U or letter grading.

246A-C246B-C246C. Seminars: Economic History. (4–4–4) Seminar, three hours. Designed for predissertation and dissertation writers. Overview of most current developments in economic history for advanced undergraduate and graduate students. Introductions to graduate-level research in this field. Different topics each week, with presentation and discussion of new papers. Research in progress presented, discussed, and criticized by visiting experts, UCLA faculty members, advanced graduate students, and advanced graduate students. Concurrently scheduled with courses C166A-C166B-C166C, S/U (C226A and S/U or letter (C226A, C226B, C226C).)


LASSO and Dantzig Selective techniques, and bootstrap. May be repeated for credit. S/U or letter grading.
404 / Economics


Public Finance


251B. Cost-Benefit Analysis of Public Projects and Programs. (4) Lecture, three hours. Requisite: course 251A. Presentation of those aspects of applied capital theory that are relevant in decisions concerning investment projects in first part of course. Differences between social and private benefits and costs (shadow prices) for foreign exchange, capital, and labor, with applications to public investment decisions, in second part of course. S/U or letter grading.

252. Economics of Federalism. (4) Lecture, three hours. Theories of social and industrial organization. Role of government, collective goods, collective defense, local public goods, spillovers, and intergovernmental relations. S/U or letter grading.


254A-254B-254C. Workshops: Public Economics. (4–4–4) Lecture, three hours. Designed for graduate students. Workshops for advanced graduate students. Research in progress discussed by graduate students, UCLA faculty members, visiting experts. S/U grading.

Applied Microeconomics


262A. Topics in Labor Economics. (4) Lecture, three hours. Current research in labor economics. Content varies. May be repeated for credit. S/U or letter grading.

262D. Topics in Labor Economics: Development Economics. (4) Lecture, three hours. Preparation: completion of first-year graduate microeconomics and econometrics courses. Coverage of important key topics in microeconomics of development, such as health, education, risk coping, savings, credit, and household economics. Discussion of empirical methods. I, II or letter grading.

262F. Topics in Labor Economics: Public Sector Microeconomics. (4) Lecture, three hours. Preparation: completion of first-year graduate microeconomics and econometrics courses. Coverage of topics related to tax incidence, deadweight loss, public expenditure, income taxation and transfer programs, with emphasis on impacts of such programs on labor supply and savings, social security, unemployment insurance, and other insurance programs. S/U or letter grading.

262P. Topics in Labor Economics. (4) Lecture, three hours. Current research in labor economics. Content varies. May be repeated for credit. S/U or letter grading.

263. Topics in Urban Economics. (4) Lecture, three hours. Current research in urban and regional economics. Content varies. Serves as forum for presenta-


266A-C266B-C266C. Seminars: Labor Economics. (4–4–4) Seminar, three hours. Quarterly seminars for advanced undergraduate and graduate students. Introduction to graduate-level research in this field. Different topics each quarter, with presentation and discussion of new papers. Research in progress presented, discussed, and critiqued by visiting experts, UCLA faculty members, and advanced graduate students. S/U or letter grading.

267A-C276B-C276C. Seminars: Industrial Organization. (4–4–4) Seminar, three hours. Designed for pre- and postdoctoral students. Overview of most current developments in industrial organization for advanced graduate and graduate students. Introduction to graduate-level research in this field. Different topics each week, with presentation and discussion of new papers. Research in progress presented, discussed, and critiqued by visiting experts, UCLA faculty members, and advanced graduate students. Concurrently scheduled with courses C176A-C176B-C176C, S/U (C276B and S/U letter (C276A, C276C) grading.


269A-269B-269C. Workshops: Corporate Governance. (4–4–4) Lecture, three hours. Workshops for pre- and postdoctoral students. Research in progress presented, discussed, and critiqued by visiting experts, UCLA faculty members, advanced graduate students. Research paper required. S/U grading.

270P. Topics in Labor Economics. (4) Lecture, three hours. Examination of labor economics. Topics include tax equivalents, Ramsey rules, and alternative forms of taxation. S/U or letter grading.


271B. Industrial Organization, Price Policies, and Regulation II. (4) Lecture, three hours. Requisite: course 271A. Study of firm organization and pricing under conditions of less than perfect competition; in-


271E. International Economics. (4) Lecture, three hours. Course for graduate and advanced undergraduate students. Introduction to graduate-level research in this field. Different topics each week, with presentation and discussion of new papers. Research in progress presented, discussed, and critiqued by visiting experts, UCLA faculty members, advanced graduate students. Research paper required. S/U grading.

International Economics

282A-282Z. Topics in International Economics. (4) Lecture, three hours. Quarterly seminars for pre- and postdoctoral students. Overview of most current developments in international organization for advanced graduate and graduate students. Introduction to graduate-level research in this field. Different topics each week, with presentation and discussion of new papers. Research in progress presented, discussed, and critiqued by visiting experts, UCLA faculty members, and advanced graduate students. Concurrently scheduled with courses C176A-C176B-C176C, S/U (C276B and S/U letter (C276A, C276C) grading.

283A-283B-283C. Seminars: Industrial Organization. (4–4–4) Seminar, three hours. Requisite: course 271A. Study of firm organization and pricing under conditions of less than perfect competition; in-

284. Soviet Economic Theory and Organization. (4) Lecture, three hours. Overview of current development of economics for advanced undergraduate and graduate students. Introduction to graduate-level research in this field. Different topics each week, with presentation and dis-

Development Economics


286B. Cost-Benefit Analysis of Development Projects. (4) Lecture, three hours. Requisite: course 286A. Methodology for evaluating investments. Their use in not special attention to types of issues that arise in developing countries. Discussion of social versus private evaluation criteria; applications to highway, electricity, and irrigation projects. S/U or letter grading.


287B. Topics in Development Economics: Economic Development in East Asia. (4) Lecture, three hours. Recent trends in East Asia, focusing on the postwar development of Japan, Korea, and China. Emphasis on role of international investment and trade, especially with U.S., in area's economic development. May be repeated for credit. S/U or letter grading.

287C. Topics in Development Economics: Economic Development. (4) Lecture, three hours. Designed for graduate students. Topics in monetary and exchange rate policy in developing countries. Students expected to develop analytical tools and underlying policy issues. May be repeated for credit. S/U or letter grading.

287D. Topics in Development Economics. (4) Lecture, three hours. Current research in development economics. Content varies. Courses in this sequence not ordinarily given every year. May be repeated for credit. S/U or letter grading.

288A-288B-288C. Proseminars: International and Development Economics. (4-4-4) Seminar, three hours. Quarterly seminars for preservice and dissertation writers on current issues in international trade and finance and development economics. Presentation of work-in-progress feedback from faculty and other graduate students. Participation or research paper required. S/U grading.

291A. Asset Pricing. (4) Lecture, three hours. Introduction to modeling of equilibrium of valuation of firms, and embedding of these models in general equilibrium for purposes of understanding market valuation of corporate sector as whole. Introduction also to continuous-time search-and-matching models and their applications to financial economics. S/U or letter grading.

291B. Asset Pricing. (4) Lecture, three hours. Recent theoretical and empirical research on monetary policy. Includes issues such as how monetary policy is implemented in practice. What are effects of different monetary policy tools, what restrictions on government does monetary policy impose, transmission mechanisms of monetary policy, how does monetary policy interact with credit markets and how does it affect asset prices. S/U or letter grading.

296A-296B-296C. Seminars: Asset Pricing. (4-4-4) Seminar, three hours. Designed for preservice and dissertation writers. Overview of most current developments in asset pricing theory for advanced undergraduate and graduate students. Introduction to graduate-level research in this field. Different topics each week, with presentation and discussion of new papers. Research in progress presented, discussed, and critiqued by visiting experts. UCLA faculty members, and advanced graduate students. Concurrently scheduled with courses C146A-C146B-C146C. S/U (C296B) and S/U or letter (C296A, C296C) grading.

296A-296B-296C. Proseminars: Asset Pricing. (4-4-4) Seminar, three hours. Seminar for preservice and dissertation writers on empirical issues in asset pricing, broadly defined. Presentation of work-in-progress or background material for proposed dissertation. With presentation and discussion of issues discussed by faculty members and fellow students. Presentation or research paper required. S/U grading.

Teaching Practicum

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

Master of Quantitative Economics

401A. Microeconomic Theory. (4) Lecture, three hours. Limited to Master of Applied Economics students. Coverage of fundamentals of optimization, choices by price-taking agents, consumer and producer surplus, properties of demand and supply, monopolistic competition and two welfare theorems, constant returns to scale, perfect competition, and uncertainty, and information and market design. Letter grading.

401B. Applied Economics. (4) Lecture, three hours. Limited to Master of Applied Economics students. How to be sophisticated users and producers of research on issues and policies in several core areas of labor, public, and health economics. Rigorous analysis of core policy questions with cutting-edge empirical analysis. Letter grading.

402A. Macroeconomic Theory. (4) Lecture, three hours. Limited to Master of Applied Economics students. Introduction to main topics of graduate macroeconomics, including trade-offs models of economic growth, supply and demand of factors of production, business cycle models, unemployment, monetary policy and inflation, and fiscal policy and deficits. Letter grading.

402B. Applied Macroeconomics. (4) Lecture, three hours. Limited to Master of Applied Economics students. Study of alternative theories of causes of unemployment and inflation, with focus on Keynesian approach to monetary and fiscal policy and modifications and extensions of Keynesian ideas designed to explain financial crises. Letter grading.

403A. Introduction to Statistical Methods and Econometrics. (4) Lecture, three hours. Limited to Master of Applied Economics students. Introduction to probability, statistics, econometrics, and time-series methods used in economics, business, and government. Topics include random variables, hypothesis testing, estimation, distribution functions, simple and multiple regression, and estimation with stationary/temporary models. Letter grading.


404A. Writing and Presentation Skills for Economists I. (4) Seminar, three hours. Limited to Master of Applied Economics students. Designed to help students develop communication and presentation skills essential for success in any aspect of business. Practice in writing economics documents for variety of purposes, including technical papers and expository writing such as research papers, theses, non-technical reports, and non-technical presentations. Letter grading.

404B. Writing and Presentation Skills for Economists II. (4) Seminar, three hours. Limited to Master of Applied Economics students. Builds on skills learned in course 404A. Incorporates content on summarizing, critiquing, and report writing. Process writing used and self-editing skills stressed. Presentations include summary/outline, critique, opinion piece, and final group presentation that includes proposals. Grammar incorporated as needed, especially in regard to writing. Letter grading.


406. Money and Banking. (4) Lecture, three hours. Limited to Master of Applied Economics students. Introduction to models and data used to understand connection between asset prices, health of financial sector, and macroeconomy, including review of recent papers to gain introduction to questions being addressed on research frontier. Letter grading.


408. Environmental Economics. (4) Lecture, three hours. Limited to Master of Applied Economics students. Introduction to major ideas in environmental economics by studying causes and consequences of pollution, with special emphasis on understanding China’s environmental challenges and policy options. Letter grading.

409. Forecasting Asset Prices. (1 to 4) Seminar, three hours. Limited to Master of Quantitative Economics students. Introduction to recent developments in international finance. Coverage of lending booms and financial crises both theoretically and empirically, as well as foreign exchange market anomalies and different approaches to forecasting exchange rates. Letter grading.


413. Data Analytics and Big Data. (4) Lecture, three hours. Recommended corequisite: course 412. Limited to Master of Applied Economics students. Designed for end users of big data, those who translate analytic results into business applications, with guest lecturers from wide spectrum of industrial and corporate...

415. Evidenced-Based Policy Analysis in Labor, Public, and Health Economics. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Introduction to key policy questions in labor, public, and health economics, including health care, education, unemployment, training programs, and welfare. Economic principles at heart of these topics and main approaches to scientifically evaluate policies that affect them, including data, current case evidence, cutting-edge empirical methods, and their relation to microeconomic theory. Letter grading.

421. Incentives, Information, and Markets. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Introduction to concepts of economics that lie at heart of modern economics and application of them to understand incentives within firms, as well as competition between theoretical models and functioning of real-life markets, such as insurance, labor, and consumer markets. Consideration of whether we can design policies that improve market outcomes. Role of models, and how to tie data and theory together. Letter grading.

422. International Economics. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Investigation of several theoretical frameworks in international economics followed by applications to empirical questions. Neoclassical trade models, analysis of firms and heterogeneous producers, and economic geography topics. Case studies analyze the role of institutions in determining the determinants of trade patterns and on measurement of aggregate and distributive effects of international trade. Discussion of recent research on effects of NAFTA and Brexit, effect of trade on inequality in developed and developing countries, and impact of infrastructure investments on trade and development. Letter grading.

423. Introduction to Applied Data Science. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Designed to build strong bases in tools and methods of data science and analytics. Introduction of tools for capture, transformation, visualization, and analytics, and impact of data for downstream processing in analytics pipeline. Introduction of analytics subsystems and scalable storage and processing of very large and complex datasets. Information theory, computational analysis, and behavioral economics with specific emphasis on data science in economics. Letter grading.

424. Income Inequality. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Investigation of rise of earning inequality (with emphasis on U.S.), focusing on how to use data to quantify and understand impact of forces on inequality. Overview of broad empirical trends, with emphasis on understanding how to document these facts ourselves. Consideration of three classes of potential explanations for these patterns: international connections (e.g., trade and immigration), institutional change (e.g., minimum wage and unionization), and technical change (e.g., computerization and automation). Focus on using data to understand these forces ourselves. Study of top income inequality: why have extremely rich become much richer than very rich? Focus on CEO compensation. Letter grading.

425. Machine Learning for Economists. (4) Formerly numbered 425.) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Covers set of fundamental machine learning algorithms, models, and theories, and introduces advanced engineering practices for implementing data-intensive intelligent systems. Topics include both supervised methods (e.g., support vector machines), unsupervised methods (e.g., clustering, dimensionality reduction, etc.), and their applications in classification, regression, data analysis, and visualization. Letter grading.

426. Knowledge Discovery and Data Mining. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Study of theoretical and practical techniques in field of data mining and knowledge discovery. Topics include data processing, and supervised learning, clustering, etc., and their applications in visualization, social network analysis, sentiment mining, and opinion analysis. Focus on making sense of large-scale or web-scale datasets through hands-on, first-hand project experiences. Letter grading.

427. Applied Machine Learning. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Preparation: basic understanding of technology principles, basic programming skills, sufficient mathematical background in probability, statistics, and matrix analysis. Foundational course with primary application to data analytics. Intended to be accessible to backgrounds such as economics or mathematics, and to students from less technical backgrounds. Covers some fundamental topics in machine learning such as Bayesians, decision trees, naive Bayes, metric learning, and various classification, regression, clustering techniques, and other advanced topics. Real-world data-intensive problems. Letter grading.

428. Health Care Analytics: Methods and Applications. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Introduction to basic concepts of health economics. Development of skills in analyzing and real-world data analysis. Written policy briefs and business cases evaluating pros and cons of different approaches to improving health care markets. Letter grading.

429A. Professional Development for Emerging Economists L1 to 2 (Seminar, two hours. Limited to Master of Applied Economics students. Designed to help students develop professional skills essential for success in professional business settings. Aids students in translating topics covered in other courses into language and format that is accessible to industry/non-academic settings. Students conduct labor market research, analyze industry trends, and develop targeted plan to achieve professional success. Exploration of skills identification, goal setting, researching employment market, and resume writing. Letter grade.

429B. Professional Development for Emerging Economists L1 to 2 (Seminar, two hours. Enforced requisite: course 429A. Limited to Master of Applied Economics students. Designed to help students develop professional, communication, and presentation skills essential for success in professional business settings. Aids students in translating topics covered in other courses into language and format that is accessible to industry/non-academic settings. Students practice presenting for variety of professional audiences. Exploration of presentation skills, personal branding, salary negotiation, and interviewing techniques.


434. Machine Learning and Big Data for Economists. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Exploration of machine learning techniques including lasso, regression trees, random forests, and neural networks. Covers most recent developments at intersection of machine learning and econometrics, now commonly referred to as double machine learning. Study of double machine learning in detail, and discussion of how to apply it to enhance analysis of classical econometric problems, such as program evaluation and demand estimation. Letter grading.

435. Principles of Big Data Management Systems. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Focus on modern data management systems that are used in data analytics. Students are exposed to cutting-edge data management concepts and systems and provided with working knowledge needed to manage large-scale data. Covers modern data management techniques of cloud storage systems, NoSQL data, databases, and map-reduce computing paradigm. Letter grading.

436. Introduction to Financial Accounting. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Financial accounting is concerned with preparation and public dissemination of financial reports designed to reflect corporate performance and financial condition. By providing timely, relevant, and reliable information, these reports facilitate decision-making of investors, creditors, and other interested parties. Financial markets depend on information contained in these reports to evaluate executives, estimate future stock returns, assess firms’ riskiness, and allocate society’s resources to their most productive uses. Letter grading.

437. Health Economics: Understanding Roles of Regulation, Public Policy, and Demographic Change. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Applied microeconomics study of economics of health care costs, functioning of health care sector, structure of insurance markets, and current public health issues. Study of how underlying economic concepts such as adverse selection, moral hazard, etc., lead to market failures. Examination of impact of policy and demographic change on future costs. Letter grading.

441A. Data Management for Economists. (4) Lecture, three hours. Limited to Master of Applied Economics students. Covers database practices in data gathering, cleaning, and warehousing. Topics include web scraping using application programming interfaces, engineering of R packages, and database manipulation in Structured Query Language (SQL). Emphasis on applications of data pipeline expected of entry-level analyst. Supplements Master of
Applied Economics coursework by offering solutions to expedite R coding techniques and dissemination of analytic findings. Letter grading.


447. Applied Financial Forecasting and Machine Learning. (2 to 4) Lecture, three hours. Requisites: Courses 430, 431. Limited to Master of Quantitative Economics students. Outlook of economy is of vital importance for many key decisions. Introduction to theory and application of cutting-edge tools used by economists and business leaders to inform their views of economy. These tools are applied to forecast or nowcast key economic indicators such as inflation, unemployment, and gross domestic product. Examination of how forecasts of fundamentals can be used to inform our views on asset prices. Letter grading.

448. Teamwork and Leadership in Data Science. (2 to 4) Lecture, three hours. Limited to Master of Quantitative Economics students. Core competencies and leadership skills are essential to excelling in virtually any role in any field. Understanding of how teams work and why, and how one can obtain and thrive in leadership role is critical. Students learn how to lead, manage, negotiate, and effectively participate in teams of data scientists, learning from, interacting with, and presenting data science leaders and other distinguished experts. Students gain practical insights and skills that can be applied in field of data science, in related fields, and more broadly, in their lives and careers. Letter grading.

449. Collaboration and Team Management for Emerging Economists. (1 to 4) Seminar, three hours. Limited to Master of Quantitative Economics students. Designed to help students develop social-emotional learning skills through interactive activities and lessons to improve their abilities to succeed in variety of team settings. Lessons and activities are designed to be highly interactive, expressive, and creative and aid students in stress reduction, emotion management, and team building. Students are aided in translating topics covered in other courses into language and format that is accessible to industry/non-academic settings. Letter grading.

450. Master of Quantitative Economics Capstone Project. (1 to 4) Tutorial, three hours. Limited to Master of Quantitative Economics students. Semi-independent or directed-study in which students complete their capstone project. Capstone project is final element of Master of Quantitative Economics program, and is intended to help students transition from academic studies to professional world. Includes analysis of quantitative and/or qualitative data, research techniques, and writing strategies. Students submit drafts of project components throughout quarter to adviser. Letter grading.

451. Financial Institutions and Monetary Policy. (4) Lecture, three hours; discussion, one hour. Limited to Master of Quantitative Economics students. Study of complex financial architecture that has emerged in last several decades, and its effect on economic time. Covers institutional detail, and theoretical and empirical research on monetary policy. Development of some basic models and production of Python code to produce plots relating to policy. Letter grading.

452. Empirical Industrial Organization. (4) Lecture, three hours; discussion, one hour. Limited to Master of Quantitative Economics students. Introduction to empirical methods and applications in industrial organization ([IO]). Development of empirical toolkit to estimate industry models of demand and supply and apply it to analysis of emerging issues in IO from regulator, consumer, and firm perspective. Underlying theme is that most real-world markets are neither perfectly competitive, nor strict monopolies, but rather involve strategic interactions among firms and consumers. To capture these interactions empirically, development of empirical models of consumer demand and firm competition, and use of these models to analyze interactions of firm strategies (including pricing, product quality choices, and advertising) and market structure across range of industries. Letter grading.

455. Teaching College Economics. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate adviser and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate adviser and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.

502. Individual Study. (1 to 8) Tutorial, to be arranged. Directly supervised individual study or research. S/U grading.

503. Individual Study: Graduate Examinations. (2 to 8) Tutorial, to be arranged. Directly supervised individual study in preparation for MA comprehensive examination or PhD qualifying examinations. S/U grading.


**Education / 407**

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Tyrone C. Howard, PhD (Pritzker Family Endowed Professor of Education and Strengthen Families)
Sylvia Hurtado, PhD
Connie L. Kasari, PhD
Catherine Lord, PhD, in Residence
Teresa L. McCarty, PhD (George F. Kneller Professor of Education and Anthropology)
Rashmita S. Mistry, PhD
Undergraduate Major

Education and Social Transformation BA

Learning Outcomes

The Education and Social Transformation major has the following learning outcomes:

- Understanding of educational landscape
- Understanding of learning and human development
- Understanding of education and educational institutions in social, cultural, and historical contexts
- Understanding of organizational cultures and dynamics
- Ability to interpret social data and research and critically evaluate research studies
- Ability to apply these understandings to imagine, assess, and implement solutions to specific problems in education
- Clear and cogent communication
- Understanding of multiple perspectives, diversity, pluralism, and social justice

Entry to the Major

Pre-major

Students entering UCLA directly from high school can select the Education and Social Transformation pre-major on the UCLA admission application. Transfer students may also select the pre-major. See Transfer Students for details.

Continuing students who were not admitted directly to the pre-major may apply for admission if they are able to complete the preparation for the major by the end of their second year to apply by the fall of their third year.

Admission

Students must submit an application to declare the Education and Social Transformation major. Admission is based on academic performance in preparation for the major courses and overall academic record at UCLA. The application is available on the major website.

First-Year Students

After completing the required lower-division courses and 45 lower-division units, students identified as Education and Social Transformation pre-majors may formally apply to declare the major.

Transfer Students

Transfer applicants to the Education and Social Transformation major with 90 or more units are considered for admission based on academic achievement. Transfer credit is subject to department approval. Consult an undergraduate counselor before enrolling in any courses for the major.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Transfer students who were not admitted directly to the Education and Social Transformation pre-major may apply for admission if they are able to complete the preparation for the major by the end of their second quarter at UCLA.

Requirements

Preparation for the Major

Required: Education 10 or 11, and 35.

The Major

Required: at least nine upper-division courses distributed as follows:

1. Two courses from each of the following three areas of competency: Histories and Philosophy of Education—Education 100 through 119; Contexts of Teaching, Learning, and Development—Education 120 through 149; Inquiry and Design for Learning—Education 150 through 169
2. At least one additional course in education, which may come from any of the areas of competency or from courses designated as electives (Community Engagement and Social Change 130, Education 170 through 179)
3. Education 180
4. One community engagement course selected from Education M129XP, 130AX, 130BX, 130CX, M131A, M131B, M131C, M142, 144XP, 159, 171, 176, 195, 195CE, or 196XP (this course may also be applied toward an area of competency). Students must complete Education 180 prior to taking a community engagement course
5. Capstone course: Education 181. Students must complete five out of the six courses from the areas of competency and complete the community engagement course requirement before enrolling in the capstone course
Policies

Preparation for the Major
Preparation for the major courses must be completed with a C grade or better.

The Major
Each course must be taken for a letter grade and be a minimum of 4 units. Students must have a grade-point average of 2.0 or better in upper-division education courses.

Undergraduate Minors

Education Studies Minor
The Education Studies minor is intended to address the diverse information needs of the UCLA undergraduate community to allow students to learn more about the multitude of contemporary professional research issues confronting the field of education, understand the complex interactions between the legal, social, political, and economic forces that influence and shape educational policies in America, provide an introduction for students who wish eventually to pursue careers in education either as teachers or researchers.

Admission
To enter the minor, students must have at least sophomore standing with a cumulative grade-point average of 2.3 or better, have completed one education course with a grade of C or better, and submit the minor application. Applicants are expected to be committed to inquiry of issues central to educational research and practice. Students must follow the program of study in effect at the time of their admission.

Students may apply for admission once they have completed one approved Education course. Students must apply by the spring quarter of their third year.

The Minor
Required Courses (28 units minimum): Any seven education courses (minimum of 4 units each), one of which may be a lower-division course.

Policies
A maximum of 8 graded units of Education 195 through 199 may be applied toward the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade and be a minimum of 4 units. Students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Information and Media Literacy Minor

The Information and Media Literacy minor is designed for students who wish to augment their major program with a group of related courses that provide a systematic, focused, and critical introduction to information and media literacies. The core courses together with electives provide students with an understanding of the processes, dynamics, and societal implications of the production and dissemination of information and media and skills for their judicious evaluation, consumption, and productive use.

Admission
To enter the minor, students must have a cumulative grade-point average of 2.3 or better, have completed one required lower-division or upper-division course with a grade of B or better, and submit the minor application. Applications are available on the minor website.

The Minor
Required Lower-Division Core Courses (10 units): Two courses selected from Information Studies 10, 20, 30.

Required Upper-Division Core Courses (9 units): Information Studies C115, M121 (or Education M121).


Policies
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade and be a minimum of 4 units. Students must have a cumulative grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Majors

Doctor of Education

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Articulated Degree Program
Articulated degree programs permit no credit overlap; students must complete degree requirements separately for each degree.

• Education MA/Doctor of Medicine

Concurrent Degree Program
Concurrent degree programs allow students to reduce the number of courses required for two degrees, since some courses may apply to both degrees.

• Education MA, PhD/Juris Doctor

Educational Administration

EdD
The Department of Education offers a Doctor of Education (EdD) degree in Educational Administration jointly with UC Irvine.

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Master of Education

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Articulated Degree Program
Articulated degree programs permit no credit overlap; students must complete degree requirements separately for each degree.

• Master of Education/Latin American Studies MA

Concurrent Degree Program
Concurrent degree programs allow students to reduce the number of courses required for two degrees, since some courses may apply to both degrees.

• Master of Education/Juris Doctor
Special Education PhD

The Department of Education offers a Doctor of Philosophy (PhD) degree in Special Education jointly with California State University, Los Angeles.

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in Announcements, other publications, and websites of the schools, departments, and programs.

Education

Lower-Division Courses

10. Introduction to Educational Issues and Scholarship. (8) Lecture, two hours; discussion, two hours. Introduction to broad landscape of public education in U.S. Intended for those interested in educational research, policy, or teaching in both formal and informal educational contexts. Readings highlight work of educational researchers from UCLA Department of Education, especially ways their scholarly interests intersect with policy and practice. Students work in groups to identify real-life problems affecting public education in Los Angeles. Study of this problem from multiple perspectives. Conceptualization of socially-just solution. Letter grading.

11. Education, Equality, and Future of American Society: Problems, Prospects, and Policies. (5) Lecture, four hours. Schools are primary institutions charged with preparing young people for their roles as citizens so that they can participate in our democracy. Public schools also serve as key sites where two essential, and at times conflicting, functions are carried out: students are sorted based on measures (and perceptions) of their ability to fill occupations and roles that are essential to economy; and students are educated in hopes that next generation will acquire knowledge, creativity, and problem-solving skills to solve problems created by previous generations. Focus on understanding challenges, conflicts, contradictions, and complexities associated with carrying out these functions. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of critical thinking about topics of current relevance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

35. Introduction to Inquiry and Research in Education. (9) Lecture, two hours; discussion, two hours. Introduction to empirical and analytical educational research. Intended for undergraduates interested in learning how to find, interpret, and evaluate educational research. Overview of different methods of conceptualizing inquiry and gathering evidence, including qualitative approaches (e.g., ethnographic, semi-structured interviews, case study), quantitative approaches (e.g., survey, measurement, experimental, descriptive, correlational, and design-based research). Highlights multiple methods of inquiry and research, ethics of conducting research in social sciences, and norms of conducting and reporting research in field of education. Overview of selected strands of research-oriented research in education. Letter grading.

89HC. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

98. Critical Issues in Education. (4) Seminar, 30 minutes; laboratory, 30 minutes. Introduction to critical educational issues and approaches taken by researchers, policymakers, and education advocates as they respond to these issues. Laboratory portion of course engages students in small research groups where they acquire background on particular issue of interest, learn about social sciences research, and conduct mini-research projects. May be repeated for credit. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrollment in 12 units (including this course), individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100. Introduction to Philosophy of Education. (5) Seminar, four hours. Introduction to major Western philosophical thinkers on education including Dewey, Freire, Freiberg, Levinas, Foucault, Rivas, and others. Examination of ultimate goals of education, content of education, and processes of teaching and learning according to these theorists and their influence on later educational thought and practice. Assignments include readings, response papers, film analyses, educator interviews, document analysis (for their underlying educational philosophy), and proposal of educational philosophy. Letter grading.


101C. History of Higher Education. (5) Formerly numbered C101. Lecture, three hours; discussion, one hour. Exploration of major eras in history of higher education. Topics include issues concerning access, diversity, parental choice, cultural literacy, teacher empowerment, and more. Letter grading.

M102. Mexican Americans and Schools. (4) Same as Chicana/o and Central American Studies M102.) Seminar, two hours; discussion, two hours. Theoretical and empirical overview of Chicana/o/Chicana educational issues in historical context of U.S. Disentangling effects of race, gender, class, and immigrant status on Chicana/o/Chicana educational attainment and achievement. Examination of how historical, social, political, and cultural conditions have influenced Chicana o/Chicana educational experience. P/NP or letter grading.

M103. Asian American Education and Schooling. (4) Same as Asian American Studies M114.) Seminar, four hours. Examination of existing body of research from various disciplines on Asian/Pacific American educational experiences. Letter grading.

104A. Introduction to Exceptional Learners. (4) Formerly numbered 134.) Lecture, two hours; discussion, one hour. Survey of characteristics and related educational needs of students (preschool through high school) who vary in mental, physical, psychological, and social characteristics. Focus on disabilities, with exploration in area of gifted/talented education. Emphasis on inclusion, and legal, social, and philosophical issues. Students assume roles of various areas and exceptionalities of special education with emphasis on role of student special needs in context of general education settings. Letter grading.

105A. Early Childhood Education and Policy. (5) Formerly numbered E133.) Seminar, four hours. Research seminar designed to enable students to gain basic understanding of ways in which public policies are established and implemented, learn about policy landscape in service of child and family life in U.S. and other countries, and use scientific research on children’s cognitive and social development to evaluate and understand effects of social and economic policies. Letter grading.

105C. Comparative Educational Policies and Practices. (5) Formerly numbered 109C.) Seminar, four hours. Cross-national survey of educational policies and practices in delivery of education services. Comparative perspective on national context defining institutional differences in policy and practices in delivery and access, types (within tier and sector diversity), and outcomes across both formal and informal educational contexts. Letter grading.

105D. Policy Analysis and Real Politics of Education. (5) (Formerly numbered 110.) Lecture, two hours; discussion, two hours. Exploration of relationship between scholarly policy analysis and actual workings of policy systems. Selected topics include achievement standards and assessment, school finance, equal access to education, and school reform. Letter grading.

105E. Organization for Economic Cooperation and Development and Education. (8) Seminar, three hours. Introduction to education policy analysis at international level with focus on Organization for Economic Cooperation and Development (OEC) program of work and outputs related to field of education. Overview of history of OECD and model of governance related to education, criticisms of OECD’s power and influence on education, as well as coverage of range of OECD comparative data, comparative studies, and thematic and policy reviews related to education. Letter grading.

106A. Education and Law. (5) Formerly numbered 115.) Seminar, four hours; discussion, one hour. Overview of high-profile legal controversies that shape so many policy debates at both K-12 and higher education levels. Major areas of focus include campus safety, religion, and sexual equality and law, broad-based right to equal educational opportunity, and Internet-related issues and concerns. Letter grading.
106B. Lesbian, Gay, Bisexual, and Transgender Issues in Education and Law. (4) (Formerly numbered 147.) Lecture, four hours. Lesbian, gay, bisexual, and transgender issues and controversies that shape many of the debates regarding access to higher education and equity for underrepresented students, free speech and expression, academic freedom and other First Amendment-related legal issues. Letter grading.

107A. Race, Class, and Education Inequality in U.S. (5) (Formerly numbered 130.) Lecture; two hours; discussion, two hours. Focus extensively on understanding educational experiences of following groups in U.S.: African Americans, Asian Americans and Pacific Islanders, Chicana/Chicanos/Latinos/Latinas, and low-income white Americans. Examination of how historical development of public education in U.S. has influenced its present form. Critical look at current issues and policy debates in education, including debate over school reform, bilingual education, and affirmative action. Letter grading.

107B. Race, Ethnicity, Access, Equity, and Achievement. (5) (Formerly numbered 164.) Seminar, four hours. Social/psychological perspective on education, with particular attention to race, ethnicity, and inequities. Focus on the social, emotional, and psychological determinants of educational outcomes. Consideration of relationship of schools to social context and other societal institutions. Examination of how education sets life trajectories for America and effects of race/ethnicity on access to educational opportunity in our society. Letter grading.

M108. Sociology of Education. (5) (Same as Sociology M175.) Lecture, four hours; discussion, one hour. Study of how U.S. educational system both reproduces and transforms socioeconomic opportunities and maintains socioeconomic inequalities: historical and theoretical perspectives on role of education in U.S. society; trends in educational attainment; ways in which family background, race, class, and gender affect educational achievement and attainment; stratification between and within schools; effects of education on socioeconomic status, family, health, attitudes, and social participation; educational policies to improve school quality and address socioeconomic inequalities. Letter grading.

109A. Globalization and Learning. (4) (Formerly numbered 152A.) Lecture, two hours; discussion, two hours. Introduction to different conceptualizations of globalization and their relationship to educational processes and learning in contemporary societies. Discussion of several concepts and theoretical lenses as basis for approaching and understanding how dialectics of global and local are affecting educational systems and learning over lifespans. Letter grading.

109B. Global Citizenship Education. (4) (Formerly numbered 152B.) Lecture, four hours. Exploration of issues of global citizenship in education and society as whole by analyzing critical challenges and envisions what nature of education should be at the levels of theoretical, empirical, and practical implementation of global citizenship education. Examination of how global citizenship education and education for sustainable development are beginning to impact life, actions, policies, and practices of educators, students, non-government organizations, governments, multinational organizations, and other key players in local and global society. Students will analyze how globalization and education impacts our worldview, teaching, and learning as we strive to envision and work toward more just and sustainable society. Letter grading.

C111. Politics of Education. (5) (Formerly numbered C125L.) Lecture, two hours; discussion, two hours. Political dimensions of education institutions as organizations. Relationships between education institutions and political institutions in society. Political theory as foundation for public policy analysis; interest groups in education policy formation and implementation; and focus on Freirean pedagogy. Concurrently scheduled with course C207. P/NP or letter grading.

112. Black Student Activism: History of Resistance on Campus. (4) Lecture, four hours. Activism is long-standing component of student life on U.S. college and university campuses. Focus on Black student activism. As higher education became more accessible to students of color, a wave of activism entered college campuses, with Black Lives Matter movement being one of most recent examples. Examination of philosophical, intellectual, social, political dimensions of education institutions as organizations and bridging differences in schools and communities, research and evaluation of intergroup dialogues and other educational methods for improving intergroup relations, and core competencies for planning, delivering, and evaluating intergroup dialogues in multicultural contexts. Concurrently scheduled with course C244. Letter grading.

CM125XP. Narratives of Justice: Disrupting School-to-Prison Pipeline—Arts, Activism, and Agency. (4) (Formerly numbered CM163.) Seminar, four hours. Topics include social psychology of intergroup relations, intercultural and dialectic communication theories, methods for reconciling and bridging differences in schools and communities, and popular culture. Students guided to analyze dominant ideologies, and create counter-hegemonic media messages. Through application of critical media literacy framework, students expand notions of literacy to be more inclusive of all types of texts; and deepen their abilities to question power of word, image, and sound-bite to represent social and environmental injustice. Letter grading.

123. Teaching Profession. (5) Seminar, four hours. Examines professional roles of teachers as leaders in teaching practices and public responses to teachers teaching and students learning. Examination of education in socioeconomic context and discussion of some philosophical questions that challenge teaching profession. Letter grading.

C124. Theory and Practice of Intergroup Dialogue: Building Facilitation Skills. (4) (Formerly numbered C160.) Seminar, four hours. Topics include social psychology of intergroup relations, intercultural and dialectic communication theories, methods for reconciling and bridging differences in schools and communities, and popular culture. Students guided to analyze dominant ideologies, and create counter-hegemonic media messages. Through application of critical media literacy framework, students expand notions of literacy to be more inclusive of all types of texts; and deepen their abilities to question power of word, image, and sound-bite to represent social and environmental injustice. Letter grading.

126. Language, Literacy, and Academic Development: Educational Considerations for School-Age Multilingual and English Language Learner Students. (5) (Formerly numbered 166.) Seminar, five hours. Use of child-centered approach to examine instructional strategies and assessment practices with preK-12 multilingual and English learner (EL) students who are learning academic content at same time they are acquiring English (and possibly additional languages) in school. Critical comparison of effectiveness of English-only programming with dual-language approaches (e.g., bilingual education, English language immersion, comprehensive bilingual education) and roles of summative and formative assessments in educational decision making with multilingual and EL students. Letter grading.

127. Educational Policy Center for Teaching and Learning. (5) Lecture, two hours; discussion, two hours. Not open for credit to students with credit for course 128. Broad overview of educational policy and its impact on teaching and learning; various perspectives as to how children learn; issues of teaching and learning that arise based on child’s social class, ethnic background, gender, age, and level of ability; policies and agents of change. Letter grading.

128. Educational Psychology: Contexts for Learning and Development. (4) Lecture, four hours. Not open for credit to students with credit for course 127. Overview of theories, methods, and research in educational psychology. Education psychology involves study of
how students learn and contexts that support this learning. Learning is complex process. Study of re- search and theory related to different aspects of learning including cognitive, motivation, and self-regula- tion. Discussion of ways in which educators can support these processes in students. Letter grading.

M129. Arts Education Undergraduate Practicum: Preparation, Observation, and Practice. (4) (Formerly numbered M129) Seminar, three hours. Enforced requisite: course M142. Limited to juniors/seniors. Training and supervised practicum for advanced undergraduate students in UCLA Lab School (Corina A. Seeds campus), K-6 elementary school on UCLA campus. Students gain understanding of innovative educational work that goes into teaching and learning at UCLA Lab School seminars, rehearsals, observations, and discussions. Individual meetings with faculty mentor throughout term. Letter grading.

M130X. Instructional Apprenticeship in Teaching and Learning at UCLA Lab School. (4) (Formerly numbered M130X) Tutorial, 10 hours. Enforced requisite: course 180. Limited to juniors/seniors. Not open for credit to students with credit for course 130BX or 130CX. Introduction to K-12 teaching profession through field observation and off-campus experiences at UCLA partner schools. Students gain grounded understanding of social issues in education through readings, observations, direct support in classrooms, and tutoring activities. Individual meet- ings with faculty mentor throughout term. Letter grading.

M131A. Language, Literacy, and Human Development Research Group Seminars. (5) (Formerly numbered M131A) Seminar, three hours; outside study, nine hours. Introduction to research with focus on arts education for multiple communities. Look inside schools through community service learning seminar designed to provide opportunity to examine case studies on how two institutions, UCLA and learning at UCLA Lab School. This course intends to expose students to current arts education research and practice with practical applications of new digital media and information technology, as well as traditional print-based means of communication. Exploration of media representations of race, class, gender, sexual orientation, and other identity markers. Students analyze and create media projects related to education. Letter grading.

M132. Autism: Mind, Brain, and Education. (4) Lecture, two hours; discussion, two hours. Study of au- tomism spectrum disorders (ASD) and related disabilities. Discussion of characteristics of disorder, effective interventions, and exploration of impact of children with ASD on families. Limited number of independent ob- servations of individuals in community required. Letter grading.

M133. Literacy in Society. (5) (Formerly numbered M133) Lecture, four hours. Literacy plays significant role in cognition and language, political governance and law, and economic, social, and cultural development. Explo- ration of these aspects of literacy and their implica- tions for teaching and learning. Examination of literacy in workplace, healthcare, and community. Consider- ation of new literacies, interrelation between litera- cy and technology, and impact of illiteracy on con- come and opportunity. Letter grading.

M134. Early Childhood Mathematics Education. (5) Seminar, two hours; fieldwork, two hours. Focus on how research in early childhood mathematics can be used to engage young people in learning mathe- matics. Study addresses research on how young chil- dren learn mathematcs, teaching preschool mathe- matics, and policy context that shapes student opportu- nities in early childhood education. Particular attention paid to equity issues. Includes fieldwork at local preschool site working with students in mathe- matics. Letter grading.

M135. Environmental Justice through Lens of Media and Education. (5) (Same as Information Studies M135) Seminar, four hours. Exploration of human re- lationships with natural world, historical and today. Students take critical media and information studies information has be- en shared, audiences positioned, and movements manipulated to promote commercial interests over public good. Exploration of progressive movements that have in past challenged—and currently chal- lenge—neoliberal agendas, extractive policies, and unsustainable practices. Letter grading.

M136. Working Families and Educational Inequal- ities in Urban Schools. (5) (Formerly Labor Studies M136) Seminar, three hours; fieldwork, five hours. Ex- ploration of complex relationship between working- class and poor communities and inequalities in Amer- ican urban schools. Students examine disciplinary frameworks that address issues of race, ethnicity, and immigration, as well as school performance. School communities viewed as sites where iniqui- ties are produced and resisted. Review of history of exclusionary treatment conceptual frameworks that educational researchers have used to under- stand notion of inequality, access to quality public education, and how race, ethnicity, and class affect school experiences and outcomes for commu- nities. Look inside schools through community ser- vice learning opportunity to examine systems, struc- tures, and everyday practices that sustain and repro- duce inequality and respond to remedies of educational inequalities in urban schools. Opportunity to investigate issues of working-class families and in- equalities as they relate to students’ own communities and experiences. P/NP or letter grading.

M137. Critical Digital Media Literacies. (4) (Formerly numbered M137) (Same as Information Studies M137) Lecture, four hours. Students question relationships with digital media and information society and explore how digital media and information technologies are improving society, strengthening democracy, and opening up opportunities for challenging hege- mony and promoting social transformation. Problematiza- tion of digital media and information society is how it is being used to surveil, capture data, spread hate, mis- lead, distract, and destabilize democracies. Students analyze media representations of normalization of dominating ideologies, and create counter- hegemonic media messages. Combines theoretical foundations of cultural studies and critical pedagogy with practical applications of new digital media and technologies as well as traditional print-based means of communication. Exploration of media representations of race, class, gender, sexual orientation, and other identity markers. Students analyze and create media projects related to education. Letter grading.

M138. Cognitive Development and Schooling. (5) Lecture, four hours; discussion, one hour. Overview of theories, methods, and research on children’s cogni- tive development and implications of this work for edu- cational practice. Covers range of research from dif- ferent perspectives, drawing from domains such as developmental psychology, cognitive psychology, de- velopmental and cognitive neuroscience. Students learn about basic cognitive processes. Ex- ploration of ways in which contexts—including those at home, early-care settings, and school—impact chil- dren’s development. Letter grading.

M139. Culture and Cognition. (4) Lecture, four hours. Introduction to theoretical foundations of research on culture and cognition. Drawing from insights of cultural psychology and anthropology, study of various defini- tions of community spaces, etc.; and consideration of social, political, and educational implications of ways these terms are conceptualized. Study address ques- tions of relationship between culture and development of mind, how this relationship works; what insights we gain about what it is, what insight research on culture and cognition offers for the organization of learning environments; and for under- standings of diversity and equity. Letter grading.

M140. Educational Perspectives of Relational Practic- es in Modern Medicine. (5) Seminar, four hours. Systematic discussion of personhood and body con- cepts, in context of asymmetric person-to-person rel- ationships in high-tech medical training and practice. Exploration of diverse implications for building theories of relational practice. Students learn to use phenomenological approach, to make sense of lived experience of medical humanities and medical education. What insight research on culture and cognition offers for the organization of learning environments; and for understand- ings of diversity and equity. Letter grading.

M141. Adolescent Development. (5) Lecture, four hours. Introduction to adolescence—period of tremendous change and growth across all domains of develop- ment, including physical, social, cognitive, and emo- tional during second decade of life. Topics may in- clude pubertal development, adolescent brain devel- opment, family, friends, peer, and intimate relationships, social identity and intergroup relations, school, work, and civic engagement. Draws on developmental sci- ence research on adolescence and applies what knowl- edge is available to inform policy. Con- temporary and global conceptualizations of adoles- cence and more complex understandings of developing self in relation to significant others (i.e., friends, family, peers, and communities) and how we com- petition towards them making sense of them, others, and ourselves. Letter grading.

M142. Introduction to Arts Education for Multiple Publics: Theory and Practice. (4) (Formerly numbered M142) Same as Information Studies M142) Seminar, three hours; outside study, nine hours. Introduc- tory course with focus on arts education for multiple publics in inner-city settings. Study of core issues in arts education, creativity, and social justice as stu- dents develop, implement, and assess original syllabi,
lesson plans, and community learning projects for multiple publics in inner-city schools and arts organizations. Collaboration with partner schools in planning, teaching, and evaluation of arts education programs in dance, music, theater, and visual arts. P/NP or letter grading.

143. Understanding Pathways to College. (4) Lecture, two hours; discussion, two hours. Examination of inequities and injustices that contribute to how people learn as well as sociocultural contexts that shape teaching and learning. Consult Schedule of Classes for topics and instructors. May not be repeated for credit. Letter grading.

Inquiry and Design

150. Quantitative Research in Education: Claims and Evidence. (5) Lecture, two hours; discussion, two hours. Preparation of students interested in working in UCLA programs in dance, music, theater, and visual arts. P/NP or letter grading.

144. Pedagogies of Global Citizenship Education. (4) Formerly numbered 152C.) Lecture, four hours. Not open for credit to students with credit for course 144-X. Questions regarding nature and possibilities of education that can foster global citizenship necessary to understand and resolve world’s most pressing issues. Focus on curriculum and instruction of global citizenship education. Using local and global research, explore various perspectives, curricula, and pedagogies pertaining to teaching and implementation of global citizenship education at different levels of education. Letter grading.

144-X. Pedagogies of Global Citizenship Education. (5) Lecture, three hours; field work, one hour. Requisite: course 180. Not open for credit to students with credit for course 144. Questions regarding nature and possibilities of education that can foster global citizenship necessary to understand and resolve world’s most pressing issues. Focus on curriculum and instruction of global citizenship education. Using local and global research, explore various perspectives, curricula, and pedagogies pertaining to teaching and implementation of global citizenship education at different levels of education. Letter grading.

145. Children, Immigration, and Education. (4) Lecture, four hours. Exploration of diverse experiences of young people across globe whose lives have been shaped by movement across geopolitical, social, cultural, and linguistic borders from sociological, anthropological, psychological, public policy, and educational perspectives. Bringing together these multiple epistemological lenses, study addresses issues of identity, acculturation, and the ways in which growing up in mixed and bilingual communities, learning in and out of schools, educational processes and policies, school-family connections, and more. Letter grading.

146. Critical Perspectives on Educational Assessment and Evaluation in Prekindergarten to College. (4) Seminar, three hours. Introduction of foundational concepts and approaches in large-scale and classroom assessment. Brings critical perspectives to assessment design, uses, and interpretations, looking weekly at specific use cases in diverse learning contexts. Letter grading.

147. Social Context of Learners in K-12: Diversity, Residential Mobility, Immigration, and Food Security Conditions in California. (5) Formerly numbered 139.) Seminar, four hours. Examination of K-12 student experience in California schools. Comparison of geographic and demographic experiences, and prevalence of special and difficulty circumstances that have implications for learning and learning outcomes. Key areas identified include race and ethnic diversity in schools, language diversity, and associated procedures. Development of evaluation plans. Data-driven, school-level analysis relying on statistics from California Department of Education and Los Angeles Unified School District. Data from other states offers points of comparison with respect to student demographic and geographic experience across categories explored. Examination of potential impact of differential burden of inequality and disparity in resource opportunity on student learning and learning outcomes. Letter grading.

149. Variable Topics in Contexts of Teaching and Learning. (4) Seminar, four hours. Variable topics course organized around topics that teach students how people learn as well as sociocultural contexts that shape teaching and learning. Consult Schedule of Classes for topics and instructors. May not be repeated for credit. Letter grading.

151. Quantitative Research in Education: Measurement and Assessment. (5) Lecture, four hours; discussion, two hours. Preparation of students interested in working in UCLA programs in dance, music, theater, and visual arts. P/NP or letter grading.

152. Quantitative Research in Education: Regression Analysis. (5) Lecture, two hours; discussion, two hours. Preparation of students interested in working in UCLA programs in dance, music, theater, and visual arts. P/NP or letter grading.

153. Quantitative Research in Education: Social Inequality in California. (5) Seminar, four hours. Preparation of students interested in working in UCLA programs in dance, music, theater, and visual arts. P/NP or letter grading.

154. Qualitative Research in Education: Ethnography. (5) Seminar, four hours. Preparation of students interested in working in UCLA programs in dance, music, theater, and visual arts. P/NP or letter grading.

155. Qualitative Research in Education: Inquiry and Design. (5) Seminar, three hours. Preparation of students interested in working in UCLA programs in dance, music, theater, and visual arts. P/NP or letter grading.

156. Introduction to Transformative Research in Education for Social Transformation. (5) Lecture, two hours; discussion, two hours. Preparation of students interested in working in UCLA programs in dance, music, theater, and visual arts. P/NP or letter grading.

157. Qualitative Research in Education: Ethnography. (5) Seminar, four hours. Preparation of students interested in working in UCLA programs in dance, music, theater, and visual arts. P/NP or letter grading.

158. Research and Design Approaches: Pre-Kindergarten to College. (4) Formerly numbered 188A.) Lecture, four hours; fieldwork, one hour. Preparation of students interested in working in UCLA programs in dance, music, theater, and visual arts. P/NP or letter grading.

159. Educational Research and Equity in Informal Learning: Collaboration between Hammer Museum and UCLA Education. (5) Seminar, three hours. Preparation of students interested in working in UCLA programs in dance, music, theater, and visual arts. P/NP or letter grading.

160. Transformative Research in Community-Based Settings. (5) Formerly numbered 188A.) Lecture, four hours; fieldwork, one hour. Preparation of students interested in working in UCLA programs in dance, music, theater, and visual arts. P/NP or letter grading.

161. Educational Program Evaluation. (5) Formerly numbered 139.) Seminar, four hours. Preparation of students interested in working in UCLA programs in dance, music, theater, and visual arts. P/NP or letter grading.

162. Program Evaluation Theories and Practice. (5) Seminar, four hours. Preparation of students interested in working in UCLA programs in dance, music, theater, and visual arts. P/NP or letter grading.

170. Exploration of Topics in Education. (Formerly numbered 184B.) Lecture, one hour. Variable topics course, with emphasis on theories of teaching and learning, connecting them to instructional activities for students in various settings, including libraries and schools. P/NP grading.

171. Community Service Learning for Academic Achievement. (Formerly numbered 185.) Lecture, two hours; discussion, two hours. Emphasis on cognitive learning and social skills and on the service-learning component of courses in the Social Sciences, social institutions, and community organizations. Seminar, one hour. P/NP grading.

172. Activism through Community Service. (5) Seminar, four hours. Exploration of impact and importance of activism in addressing health, educational, and social disparities that have led to discrimination, segregation, and marginalization of people of color. Students acquire methodology to combat these issues through participating in activism and community service at UCLA to further address issues that marginalized populations experience. Students apply their experiential knowledge from their respective projects in Community Programs Office Student Association, Student Initiated Outreach Center, Community Service Commission, or other community activity. Seminar format to provide critiques and solutions to issues they are combating in their respective projects. Letter grading.

173. Dialog across Difference. (4) Seminar, three hours. Offers safe and inviting space to engage in open, constructive discourse on issues related to social identities, such as race/ethnicity, socio-economic class, and sexual orientation identities. Students learn from one another’s perspectives, participate in experiential learning exercises, read and discuss relevant materials, and explore their own and other groups’ experiences in such social and institutional contexts. Offers opportunities to appreciate and learn to bridge differences, discover and maximize commonalities, in interaction with others around controversial issues pertaining to various forms of privilege and oppression, and work to create social change. Letter grading.


174B. Experiential Learning in Secondary Classrooms: Law. (2) Formerly numbered 170D.) Lecture, one hour; fieldwork, four hours. Training and supervised practicum for undergraduate mathematics students interested in teaching in secondary classrooms, including working with 8th- through 12th-grade students in school sites. Focus on law requirements from California Commission on Teacher Credentialing. Lecture format. Fieldwork format. Experiential learning format. Fieldwork format. Letter grading.

175A. Educational Innovations in Sport and Entertainment in Context of Diversity. (4) Seminar, four hours. Introduction to central issues at nexus of education, sports, entertainment, and diversity. Examination of how sport intersects with educational and social-cultural issues as a vehicle for social equity and social justice. Topics include, but are not limited to, the role of sport in promoting social change, the intersection of sport and social equity, and the impact of sport on social justice. Letter grading.

175B. Educational Leadership and Diversity in Sports: Equity, Access, and Future Prospects. (4) Seminar, three hours. Examination of how leadership of sport, especially within intercollegiate athletics, impacts higher education, businesses, and other related organizations at many levels. Examination of equity across racial, gender, and social-class lines in both collegiate and professional sports. Addresses access in terms of which institutional mechanisms are in place at cultivating a culture that empowers student-athletes, women, and people of color to positively manipulate in terms of social mobility. Approach to evaluating success of various organizations with diverse leadership and participation in decision-making processes on both qualitative and quantitative measures. Letter grading.

175C. Education, Hip-Hop Culture, and Sport. (4) Lecture, three hours. Exploration of intersection of hip-hop culture, sport, and how hip-hop culture serves as instrument of critical and culturally relevant education in K-12 education, higher education, and informal learning contexts. Exploration of development and evolution of hip-hop culture in underground movement to dominant, cultural phenomenon, and its appropriation by prominent sports personalities. Exploration of hip-hop’s connection to television, social media, fashion, art, and film. Exploration of how this cultural art form intersects with development of social identities and cultural learnings in traditional and non-traditional educational settings (e.g., public schools, private schools, charter schools, and home schooling); and its enormous educational impact in general. Exploration of potential of hip-hop music and its cultural art form for furthering culturally relevant pedagogical strategies. Letter grading.

175D. Education of Contemporary Athletes: Leadership Themes and Principles. (4) Seminar, three hours. Introduction to educational and business themes surrounding leadership in athletics. Emphasis on requisite experiences, knowledge, abilities/characteristics for pursuing career in sport team operations; and how this impacts educational experiences of athletes. Study dissects current (mis)perceptions related to careers as general managers or sports agents, and supplies students with actionable plans for career development and advancement. Students learn about potential educational and career impact of impending college student-athlete name, image, and likeness rights of contemporary college student-athletes, including detailed discussion and analysis of how California bill fits within overall higher education and athletic programs; and how this impacts educational experiences of athletes. Letter grading.

176. Transformative Research in Community-Based Settings: Practicum. (5) Formerly numbered 188B.) Lecture, four hours; fieldwork, one hour. Requisites: courses 15, 160. Emphasis on traditional of transformative research in education—public scholarship that aims to disrupt long-standing educational inequities and support communities. This tradition includes Youth Participatory Action Research (YPAR), Community-Based Action Research (CBAR), and other collaborative approaches that value diverse forms of expertise and knowledge. Through variety of community-engaged learning opportunities, students are supported to develop ability to analyze education in social and political context, develop skills for effecting change, demonstrate understanding of multiple perspectives, diversity, pluralism, and social justice. Letter grading.

177. Creating Safe and Welcoming Schools. (4) Same as Public Affairs M125S.) Lecture, two hours; discussion, one hour. Examination of historical context and causes of school violence, theories, and diverse school climate interventions. Focus on the emphasis on impact of school climate on oppressed groups and how social contexts such as poverty and how neighborhood resources influence school safety. Letter grading.

CM176. Critical Media Literacy and Politics of Gender: Theory and Production. (4) (Same as Gender Studies CM176.) Seminar, three hours. Corequisite: course CM176. Use of range of pedagogical approaches to theory and practice of critical media literacy that necessarily involves understanding of new technologies and media forms. Study of both theory and production techniques to inform student analysis of media and critical media literacy pedagogies. Concurr-ently scheduled with course CM278. Letter grading.

CM178L. Critical Media Literacy and Politics of Gender: Laboratory. (2) (Same as Gender Studies CM178L.) Laboratory, two hours. Corequisite: course CM178. Hands-on production experiences. Integral component of course CM178. Concurrently scheduled with course CM278L. Letter grading.

Required Courses

180. Orientation to Community Engagement. (4) Seminar, four hours. First course in three-part series to satisfy community engagement requirement for Education and Social Transformation major capstone project. Introduction to concepts and contexts of community engagement, focusing on possibilities and complexities of critical and asset-based approaches to community engagement. In preparation for students majoring in community organization, early childhood centers, or schools in Los Angeles, emphasis on reflecting on possibilities and complexities of critical and asset-based approaches to community engagement. Students create a foundation for understanding experiences, emphasis on reflecting on positionality, identifying forms of privilege and privilege, and understanding relationships between systemic issues and community engagement. Letter grading.

180W. Orientation to Community Engagement. (5) Seminar, four hours. Requisite: English Composition 3. Limited to Education and Social Transformation majors. Not open for credit to students with credit for course 180. First course in three-part series to satisfy community engagement requirement for Education and Social Transformation major. Emphasis on understanding experiences, emphasis on reflecting on positionality, identifying forms of privilege and privilege, and understanding relationships between systemic issues and community engagement. Satisfies Writing II requirement. Letter grading.

181. Capstone in Education and Social Transformation. (5) Seminar, four hours. Third course in required capstone sequence for Education and Social Transformation major. Students reflect on their coursework, community engagement experiences, and other curricular and co-curricular opportunities while completing major. Students compile portfolio that incorporates work completed through Education and Social Transformation major curriculum as well as form reflection paper where students synthesize their learning. This includes reflection on their personal development, how coursework/engagement experience contributed to their fulfillment of learning outcomes for major, and plans for future. Students produce compelling final public presentation of their portfolio. Letter grading.

187. Variable Topics in Education. (5) Seminar, five hours; discussion, two hours. Limited to juniors/seniors. Variable topics course organized around discipline-specific knowledge central to contemporary understandings of educational and learning processes, phenomenon, policies, methods, and instruction. Development of culminating project. Consult Schedule of
Classes for topics and instructors. May be applied as core credit for Education Studies minor students. May be repeated three times for credit. Letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, one hour; fieldwork, eight to 10 hours. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: course 188SA. Enforced corequisite: Honors Colloquium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor to discuss selected USIE seminar topics. Individual study in regularly scheduled meetings with faculty mentor. Individual contract required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 885 course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

191A-T. Seminar in Education. (4 each) Seminar, four hours. Limited to juniors/seniors. Variable topics course organized on selected current issues, based on skills learned in course C160. In addition to co-facilitating weekly dialogues, students are expected to participate in the administrative aspects of apprentice practice and seminars. Readings, discussions of group dynamics, and one-on-one meetings with assigned coach. Fosters supportive learning environment where each student facilitator can gain more insight and knowledge into skills of dialogue facilitation and continue process of self-reflection and critical inquiry of one’s identities, biases, beliefs, and perspectives. Includes learning as a large group and regularly receive individual feedback, with content as co-facilitation dyad from instructor. Concurrently scheduled with course C292A. Letter grading.

195. Community Internships in Education. (4) Tutorial, one hour; fieldwork, eight to 10 hours. Requisite: course 180. Limited to junior/senior Education and Social Transformation majors. Internship in approved educational or community setting to be supervised by instructor. Students meet biweekly with instructor, write reflective journal, and prepare final paper. May be repeated for credit. Individual contract with supervising faculty member required. Letter grading.

195C. Community or Corporate Internships in Education. (4) Tutorial, one hour; fieldwork, eight to 10 hours. Requisite: course 180. Limited to juniors/seniors. Internship in supervised preapproved K-12 settings coordinated through Center for Community Engagement/Student Internship on regular basis with faculty sponsor or designee to construct series of reading and writing assignments that examine educational issues related to meaningful work at internship site. Students examine, analyze, identify, and conduct in-depth study in urban school site. Studies are structured, organized, and operate. May be repeated for credit. Individual contract with supervising faculty member required. P/NP or letter grading.

196R. Research Apprenticeship in Education. (2 to 4) Lecture, four hours. Limited to juniors/seniors. Research apprenticeship in community setting for upper-division students under guidance of faculty mentor. May be repeated for credit. Individual contract required. P/NP or letter grading.

196XP. Community-Engaged Research Apprentice- ship. (4) Tutorial, 12 hours. Requisite: course 180. Recommended: course 180. Limited to junior/senior Education and Social Transformation majors. Research apprenticeship in community setting for upper-division students under guidance of faculty mentor. Faculty adviser must be actively engaged in work of that community and focus of research must address needs of that community. May be repeated for credit. Individual contract required. Letter grading.

197. Individual Studies in Education. (2 to 4) Tutorial, four hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research or Senior Project in Education. (2 to 4) Tutorial, to be arranged. Limited to juniors/seniors. Directed research or senior project in education, investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200A. Historical Research and Writing. (4) Lecture, four hours. Methods of historical research and writing for students who are or who will be engaged in research and in report or paper or thesis writing, regardless of their field of interest. S/U or letter grading.


201C. History of American Education. (4) Same as History M264.) Discussion, three hours. History of educational thought and of social forces impinging on American education from 1880s to present. Analysis of relation between these ideas and forces, and aims and practices of American education today. S/U or letter grading.


204A. Introduction to Education and Social Sciences. (4) Lecture, four hours. Designed for graduate students. Analysis of various social sciences perspectives and methodologies (including modernization, dependency, Marxist, neo-Marxist, liberation theology, and world-system theories of change and development) and changing notions of role of education in development of less-industrialized countries of the world. S/U or letter grading.

204B. Introduction to Comparative Education. (4) Lecture, four hours. Examination of conceptual and methodological questions underlying comparative education. Particular attention to development of field and to styles of analysis that may be applied to comparative and cross-national studies in education. S/U or letter grading.

204D. Minority Education in Cross-Cultural Per- spective. (4) Lecture, four hours. Historical and contemporary analyses of educational policies with regard to ethnic, religious, and linguistic minorities through selected national and international case studies. Introduction to cross-cultural education and its applications in education; in society. S/U or letter grading.

204E. International Efforts in Education. (4) Lecture, four hours. Designed for graduate students. Critical analysis of contemporary world of development cooperation, with particular reference to bilateral and multilateral efforts in education. S/U or letter grading.

204F. Nonformal Education in Comparative Per- spective. (4) Lecture, four hours. Comparative international study of organized and systematic educational activity for children, youth, and adults carried on outside of schools. Types of programs include, among others, consciousness raising, community action, skills training, literacy, and extension programs. S/U or letter grading.

206A. Philosophy of Education: Introduction. (4) Lecture, four hours. Exposed to major eras in history of higher education. Topics include issues concerning access, diversity, parental choice, cultural literacy, teacher empowerment, and role of popular media. S/U or letter grading.

209A. History of Higher Education. (Formerly course 209A.) Seminar, four hours. Exploration of experiences of immigrant youth in U.S. schools, with focus on language, culture, and educational equity in urban settings. Letter grading.

210. Application and further development of content and skills learned in course C160. In addition to co-facilitating weekly dialogues, students are expected to participate in the administrative aspects of apprentice practice and seminars. Readings, discussions of group dynamics, and one-on-one meetings with assigned coach. Fosters supportive learning environment where each student facilitator can gain more insight and knowledge into skills of dialogue facilitation and continue process of self-reflection and critical inquiry of one’s identities, biases, beliefs, and perspectives. Includes learning as a large group and regularly receive individual feedback, with content as co-facilitation dyad from instructor. Concurrently scheduled with course C292A. Letter grading.


212A. Learning and Education. (4) Lecture, four hours. Requisite: course 209A or equivalent, and one course in education measurement (course 200B, 211A, 211B, or equivalent). Evaluation (course 209A) or equivalent. Introduction to linear factor analysis (FA) and item response theory (IRT) models and their uses in research and assessment. Topics include specification, estimation, evaluation, and interpretation of exploratory and confirmatory models. S/U or letter grading.

212B. Motivation and Affect in Educational Process. (4) Lecture, four hours. Review of theoretical and empirical literature on a number of topics, including current research and theoretical models; consideration of theoretical and methodological research on family, peer group, and school; application of development of affective outcomes. S/U or letter grading.

217A. Social Development and Education. (4) Seminar, four hours. Biological and familial, school, and other influences on children’s development, in context of current research and theoretical models; consideration of theoretical and methodological research on family, peer group, and school; application of development of affects and research proposal writing. Letter grading.

218A. Perspectives on Sociology of Education. (4) Lecture, four hours. Sociological perspectives on current issues in educational policy and practice, including desegregation, decentralization, equality of educational opportunity, structure of educational organizations, teacher/student relationships, reform in education at elementary, secondary, postsecondary levels. S/U or letter grading.

220B. (Im)migrant Youth, Ethnography, and Educa- tion. (2 to 4) Seminar, four hours. Exploration of experiences of immigrant youth in U.S. schools, with focus on language, culture, and educational equity in urban settings. Letter grading.

220C. Research and Evaluation in Higher Education. (4) Lecture, four hours. Development of conceptual and practical understanding of research and evaluation in higher education. Topics include basic statistical methods and data analysis, content, and research proposal writing. Letter grading.

217B. Cognitive Development and Education. (4)
Lecture, two hours; discussion, two hours. Designed for graduate students. Critical review of theories and research in educational psychology, with focus on work of Piaget and Vygotsky, and relation of this work to issues in educational practice. S/U or letter grading.


217D. Language Development and Education. (4)
Lecture, four hours. Research and theory on how children develop their first language; sociolinguistic and psycholinguistic issues in preschool and primary years; bilingual and dialectical issues. S/U or letter grading.

M217F. Adolescent Development. (4) (Same as Psychology M242G) Seminar, four hours. Designed for graduate students. Review of recent research on adolescent development and development of social competence in special education populations. S/U or letter grading.

219. Laboratory: Advanced Topics in Research Methodology. (4) Laboratory, four hours. Provides assistance in design of research and interpretation of data to advanced students from other divisions. Coverage of special topics not included in other courses on research methods. S/U or letter grading.

220A. Inquiry into Schooling: Organization and Change. (4) Lecture, four hours. Critical analysis of issues in reconstruction of schooling; concepts of function and structure of schooling; organization theory; systems approaches in analysis of organization development and change. S/U or letter grading.

221. Computer Analyses of Empirical Data in Education. (4) Lecture, two hours; laboratory, two hours. Requisites: courses 209C (section 1), 230A. Designed to develop conceptual and technical skills needed for designing and executing empirical research utilizing statistical packages. Each student conducts two original studies. Equal emphasis on techniques of data analysis and interpretation of results. S/U or letter grading.

222A. Introduction to Qualitative Methods and Design Issues in Research. (4) Lecture, three hours; discussion, one hour. Introductory course for students interested in epistemology, theories, and styles of qualitative research in educational settings. Theory and practicum. Qualitative research design covered in second half of course. Letter grading.

222B. Participant-Observation Field Methods. (4)
Lecture, two hours; discussion, two hours. Requisites: course 222A. First of two courses on participant-observation field methods. Key skills (e.g., observation, recording, interviewing, role management, data storage) learned through classroom lectures and simulations, plus by conducting actual field-based research project. Letter grading.

222C. Qualitative Data Reduction and Analysis. (4)
Lecture, two hours; discussion, two hours. Requisites: course 222B. Continuation of fieldwork project started in course 222B, with focus on practical skills and conceptual/methodological issues involved in reducing and analyzing qualitative data. Letter grading.

222D. Qualitative Inquiry: Special Topics, (4)
Lecture, four hours. Special topics course on some field or aspect of qualitative inquiry. Topics may include classroom ethnography, advanced ethnographic writing and/or multimedia design, discourse analysis, and microethnography of social interaction. S/U or letter grading.

223. Procedural Issues in Evaluation. (4)
Lecture, four hours. Assessment methodologies appropriate for evaluation problems. Writing evaluation proposals, developing program monitoring procedures, selecting appropriate evaluation design strategies, coping with ethical considerations in evaluation, framing decision context, and reporting evaluation results. Letter grading.

224. Leading Change through Evaluation: Methods of Continuous Improvement. (4) Lecture, four hours. Introduction to disciplined inquiry and continuous improvement methods as means for driving change in complex systems. Introduction to organizational learning and change, and adult learning concepts. Focus on disciplined inquiry as strategy to lead change, whether for individuals, teams, or organizations, and its application in education, health care, and other disciplines. S/U or letter grading.

225A. Issues in Education of Exceptional Individuals. (4) Lecture, four hours. Designed for graduate students. Analysis of major research regarding contemporary issues in education of exceptional individuals; consideration of commonalities and differences among exceptional individuals. S/U or letter grading.


227B. Research on Behavioral and Social Characteristics of Exceptional Individuals. (4) Lecture, four hours. Designed for graduate students. Analysis of major research regarding contemporary issues in education of exceptional individuals; consideration of commonalities and differences among exceptional individuals. S/U or letter grading.

229. Seminar: Special Topics in Urban Schooling. (4) Seminar, four hours. Research on selected topics in fields of administration, policy, curriculum, and teaching in urban schools. Emphasis on hypothesis generation and research programs on division topics and issues. Letter grading.

232B. Linear Statistical Models in Social Science Research: Multiple Regression Analysis. (4) Lecture, four hours. Requisite: course 232A or passing score on screening examination. Solid and comprehensive training in multiple regression models for analyzing quantitative social science data. Letter grading.

232B. Linear Statistical Models: Computer Laboratory. (1) Laboratory, one hour. Corequisite: course 232B. Computer data analysis laboratory for introductory research design and statistics. Instruction in SPSS, Stata, SAS, and other relevant statistical analysis packages. S/U or letter grading.


231C. Advanced Item Response Theory. (4) (Formerly numbered 211C) Lecture, four hours. Requisites: courses 231A, 231B. Review of standard item response theory models, multidimensional models, multiple group models and models with covariates, item and person parameter estimation, differential item functioning analysis, testing model fit, linking and scale alignment, computerized adaptive testing. S/U or letter grading.

231D. Advanced Quantitative Models in Nonexperimental Research: Multilevel Analysis. (4) Lecture, four hours. Requisites: courses 230B, 230C. Examination of conceptual, substantive, and methodological issues in analyzing multilevel data (i.e., on individuals in organizational settings such as schools, corporations, hospitals, communities); consideration of alternative analytical models. Application of hypothesis testing and research programs on division topics and issues. Letter grading.

233. Professional Writing in Education. (4) Lecture, four hours. Intended to assist in professional development as writers, with focus on style and organization, scholarly genres, modes of discourse, and broader issues of conceptualization and method. Letter grading.

234. Critical Perspectives on Economic Approaches to Education. (4) Seminar, four hours. Introduction to critical economic theories and concepts and principles in economics of education using critical perspective. Overview of evolving relationship between education and economics, including growing importance of economic and social factors in education policy and process, increased role of economic principles in internal functioning of educational systems. S/U or letter grading.

235. Comparative Political Economy of Education and Skills. (4) Seminar, four hours. Use of political economy of education perspective for exploring, at international and comparative levels, link between alternative models of governing, providing and financing education and training systems and impact of alternatives on outcomes such as unequal chances to learn, types of skill formation, and well-being. S/U or letter grading.

237. Law and Urban Education. (4) Lecture, four hours. Examination of recent legal controversies that may impact on role of urban educators to meet needs of students in multicultural society, with special emphasis on how social equity-related issues as desegregation, school finance, standardized testing, and rights of language minority students. Letter grading.


240. Immigrant Children and Education. (4) Seminar, four hours. Examination of immigrant child and youth experience, with primary focus on educational outcomes. Topics include the experiences of immigrant youth, dynamics of immigrant families, cultural, ethnic, and socioeconomic status-related influences in immigrant youths’ adjustment, and school-family connections. Letter grading.
241. Conceptual Frameworks for Research in Urban Education. (4) Seminar, four hours. Examination of di-
242. Learning, Culture, and Schooling. (4) Seminar, four hours. Education typically refers to explicit efforts by expe-

C244. Theory and Practice of Intergroup Dialogue: Building Facilitation Skills. (4) Seminar, four hours. Topics include social psychology of intergroup relations, intercultural and dialogue communication theories, methods for reconciling the logic and realities of differences in schools and communities, research and evaluation of intergroup dialogues and other educational methods for improving intergroup relations, and core competencies for planning, delivering, and evaluating intergroup dialogues in multicultural settings. While providing foundational grounding in theory and peda-
gogy of intergroup dialogue, particular attention to re-
lationships among social identity, group dynamics, structural inequalities, systems of privilege and oppression, and mental health outcomes and disparities among popula-

246A. Decision Analysis and Advanced Computer Methods for Educational Policy and Planning. (4) Seminar, four hours. How information technology and decision analysis impact K-12 schooling, higher edu-
cation, and technical training/workplace settings. With research paper, oral presentation, and two research briefs, students can pursue decision analysis areas of special interest to their professional and career objec-
tives. S/U or letter grading.

248. Seminar: Special Topics in Child Development and Education. (4) Seminar, four hours. Content varies; limits of investigation set by individual in-
structor. S/U or letter grading.

249. Theories and Methods in Developmental Science. (4) Lecture, three hours. Broad overview of the-
tories and methods used to study development of chil-
dren in context. Introduction to foundational theories in field of developmental science, and exposure to range of methodological approaches ranging from sources of data to analytic approaches—those re-
searchers use to characterize developmental change. S/U or letter grading.

250A. Fundamentals of U.S. Higher Education Sys-
tem. (4) Lecture, four hours. Designed for graduate students. Two-course sequence designed to orient new students to issues, ideas, and literature that con-
stitute this division, with emphasis on underlying so-
cial and political issues that shape higher education and organizational change. Letter grading.

250B. Organizational Analysis of Higher Education. (4) Lecture, four hours. Designed for graduate stu-
dents. Two-course sequence designed to orient new students to issues, ideas, and literature that constitute this division, with emphasis on underlying social and political issues that shape higher education and organ-
izational change. Letter grading.

250C. Theoretical Frameworks of Higher Education. (4) Lecture, four hours. Designed for graduate stu-
dents. Overview of various social sciences theories and of issues and aspects of contempo-
rary higher education. Explanation of how theory and methodology affect research design and framing of re-
search questions in studies of higher education. Letter grading.

252B. Educational Enterprise. (4) Lecture, two hours; discussion, two hours. Requisite: course 252A. Lim-
ited to Educational Leadership Program students. Use of structural, human resource, political, and symbolic fac-
to study K-16 education, with focus on educa-
tional environments, organizations, and curriculum and instruction. Letter grading.

M253A. Seminar: Current Problems in Comparative Education. (4) Seminar, two research methods courses. Seminar, four hours. Examination of some of most in-
fluential critical theorists, including Marx, Nietzsche, Freud, Marcuse, Foucault, Fanon, and de Beauvoir and their contributions to critique of contemporary edu-
cation, society, and politics. S/U or letter grading.

253B. Seminar: African Education. (4) Seminar, four hours. Designed for graduate students. Contemporary issues in African educational systems, including ques-
tions of access and equity, quality and efficiency, rele-
vance and responsiveness, links between schools and communities, and policy and practice in education. S/U or letter grading.

253C. Seminar: Asian Education. (4) Seminar, four hours. Pre-requisite: course 253A. Seminar, four hours. Examination of most of influ-
ential critical theorists, including Marx, Nietzsche, Freud, Marcuse, Foucault, Fanon, and de Beauvoir and their contributions to critique of contemporary edu-
cation, society, and politics. S/U or letter grading.

253D. Seminar: Latin American Education. (4) Seminar, four hours. S/U or letter grading.

253G. Seminar: Asian Americans and Education. (4) Seminar, four hours. Basic issues and topics related to Asian Americans in field of education. Examples of is-
tuies and topics include Asian Americans and commu-
nity, socioeconomic status, education-to-work transi-
tion, language and culture question. S/U or letter grading.

253H. Seminar: Chicanos/Hispanics and Education. (4) Seminar, four hours. Basic issues and topics re-
lated to Chicanos and other Hispanic groups in edu-
cation. Review of literature on specific educational levels and Chicanos/Hispanics programming (e.g., early childhood, elementary, higher education; specific topics: assessment, access, tracking, segregation; im-
plications for schooling). S/U or letter grading.

253I. Education and Social Change in Middle East and Islamic World. (4) Seminar, four hours. Critical and analytic examination of historical and current role of traditional and modern (Western) education in af-
fected societies, economic and political changes in countries of Middle East and Islamic world (including and Pacific Rim, South and Central Asia). S/U or letter grading.

254. Seminar: History of Education. (4) Seminar, four hours. Requisite: course 254A. Seminar, four hours. Examination of educational change from innova-
tions in historical education and critical reading of texts in history of education. S/U or letter grading.

255A-255B-255C. Seminars: Special Topics. (4—4—4) Seminar, four hours. Prerequisite: course 255A. Seminar, four hours. Prerequisite: course 255B. Seminar, four hours. Prerequisite: course 255C. S/U or letter grading. 255A. Measurement; 255B. Design; 255C. Data Analysis.


256B. Seminar: Special Topics in Teacher Development. (4) Seminar, four hours. S/U or letter grading.

259. Administration of International Programs in Higher Education. (4) Seminar, four hours. Introduc-
tion to theory and practice of internationalization in U.S. higher education, looking at meaning of concept of comprehensive internationalization across campus, issues of effective leadership and management, and individual aspects of internationalization, including study abroad program development and implementa-
tion. Requires commitment to support international teaching and research. S/U or letter grading.

M260A. Introduction to Programming and Data Management. (4) Formerly numbered 260A. (Same as Public Policy M276A) Lecture, three hours. Funda-
mental skills of data management. Development of strong foundation in R programming language. R is most popular language for statistical analysis and one of most popular languages for data science applica-
tions (e.g., web-scraping, interactive maps, network analysis). Students become proficient in data manage-
ment and R programming through weekly problem sets, completed in groups. No prior experience with R required. S/U or letter grading.

M260B. Fundamentals of Programming. (4) Formerly numbered 260B. (Same as Public Policy M276B) Lecture, three hours. Recommended requisite: course M260A. Second course in programming/data science sequence. Designed for those who have pro-
gramming background. Uses primarily R programming language. Organized around practical programming skills/concepts that are fundamental across modern object-oriented programming languages (e.g., Python, Javascript). Topics include organizing files, folders, and scripts; reading (importing) and writing (exporting) data; using Git and Github for version control and col-
laboration; iteration (e.g., loops); conditional execu-
tion; writing functions; strings and regular expressions. These general programming skills are prerequisite for flashier data science applications (e.g., web-scraping, interactive maps). Students proficient in pro-
gramming skills/concepts through weekly problem sets, completed in groups. S/U or letter grading.

261E. Higher Education Seminar: Diversity Issues and Research Perspectives. (4) Seminar, four hours. Examination of how racial diversity and its related dy-
namics have transformed and at same time been re-
shaped by institutions of higher education, with focus specifically on student experiences, curricula, institu-
tional climate, educational policies, and administrative practices. Letter grading.

261F. Seminar: Cognitive and Personal Develop-
ment of College Students. (4) Seminar, four hours. Examination of cognitive and personal develop-
ment of college students; issues of personal and social development, in-
cluding leadership, and interpersonal relations and skills. S/U or letter grading.

262B. Seminar: Reading. (4) Seminar, four hours. S/U or letter grading.

263. Seminar: Higher Education. (4) Seminar, four hours. May be repeated for credit. S/U or letter grading.

264. Seminar: Teacher Education. (4) Seminar, four hours. Research, issues, and practices in preservice and in-service teacher preparation, evaluation, and certification. Social, philosophical, and methodolog-
ical issues and current trends in America and abroad. Opportunities to observe, participate in, and discuss teacher education programs. S/U or letter grading.

265. Higher Education Policy. (4) Lecture, four hours. Requisite: courses 250A, 250B. Understanding public policy for higher education requires under-
standing of both issues and policy process. Review of major topics on which U.S. government is active, as well as key actors and their influence. Letter grading.

M266. Feminist Theory and Social Sciences Re-
search. (4) Same as Gender Studies M266) Lecture, four hours. Examination of how diverse feminist theo-
ries from the last quarter century have challenged and strengthened conventional social sciences theo-
ries and their methodologies. Introduction especially to feminist standpoint theory, distinctive critical theory methodology now widely used in social sciences. Letter grading.
270. Introduction to Cultural Studies. (4) Lecture, four hours. Investigation of current trends in cultural studies through examination of different methods of cultural inquiry, theories of written and visual texts in cultural studies, and practical criticism engaging popular artifacts of media culture. Emphasis on developing critical media literacy as goal of cultural studies. Letter grading.

272. Case-Study Research in Education Policy and Practice. (4) Seminar, two hours. Case-study methods in education research, providing opportunities for applying methodological skills to actual case-study research projects. Focus on single and multiple case-study research projects that investigate issues in education policy and practice. Letter grading.

274. Science, Technology, and Social Research after Eurocentrism. (4) Lecture, four hours. Philosophy of natural sciences for social scientists that examines challenges for researchsthatare raised by multicultural and postcolonial science and technology studies that have emerged since World War II. Focus on sciences and technologies in third-world development projects, comparative ethnoscientific movements, and new theories of knowledge and how to do maximally objective research emerging from these literatures. Letter grading.

275. Race and Education. (4) Seminar, four hours. Designed for graduate students. Examination of role of race in educational policymaking. Exploration of broad interpretation of how schools contribute to racial stratification and inequity by linking sociological and sociocultural theories of race, racial attitudes, and conflict to historical policy analysis. Letter grading.

276. Contemporary Theories of Writing. (4) Lecture, four hours. Reviews of recent theories of writing and literacy research and examination of relationships among writing and literacy, culture, and human development. In particular, examination of history of writing research over last three decades as part of broader intellectual history. Letter grading.

CM278. Critical Media Literacy and Polics of Gender: Theory and Production. (4) Same as Gender Studies CM278.) Seminar, three hours. Corequisite: course CM278L. Use of range of pedagogical approaches to theory and practice of critical media literacy that necessarily involves understanding of new technologies and media forms. Study of both theory and production techniques to inform student analysis of media and critical media literacy projects. Concurrently scheduled with course CM178. Letter grading.


280A. Seminar: Selected Topics in Special Education. (2 to 6) Seminar, to two to six hours. Focus on research and clinical problems in special education. Introduction to range of clinical services and research strategies. Exploration of current topics in field. S/U or letter grading.

281. College Access Seminar. (4) Seminar, two hours; discussion, two hours. Knowledge of changing dynamics of college access at individual, organizational, and national levels helps in linking efforts of K-12 and postsecondary stratification and how educational advantage and disadvantage accumulates throughout education and affects equity in college access. Letter grading.

284. Critical Theory in Education: Power, Politics, and Liberation. (4) Lecture, four hours. Designed for graduate students. Introduction to major theoretical issues, such as the debate between liberal, neo-Marxist, left liberal/postmodernist, and Marxist subfields of critical education tradition. Letter grading.

285. Education Law. Lecture, four hours. Examination of recent high-profile, education-related disputes at both K-12 and higher education levels. Exploration of topics including campus safety and privacy, student freedom of expression, related issues and concerns, religion in schools, cyberbullying, and accountability for off-campus behavior. Examination of access to quality education by analyzing disputes arising at every stage of education process, from issues related to the school-to-prison pipeline to ongoing legal battles regarding race-conscious policies, Every Student Succeeds Act, K-12 teacher tenure, school sports, unmet needs of English language learners, misuse of special education, and his work as Secretary of Education, charter school movement, and rights of undocumented students. Concurrently taught with Law 282. Letter grading.

M286. Language, Culture, and Education. (4) (Same as Anthropology M286.) Seminar, three hours. Examination of ongoing movement to reclaim and reimagine schooling as site to sustain indigenous, Black, Latinx, Asian and Pacific Islander identities. Ingredients are the ways these identities/memberships intersect with gender identity and expression, sexuality, disability, language, migration, place, class, and more. For centuries of teaching and learning, communities have sought to push against ways nation-state schools have devalued communities, their lifeways, and their lives. Most recently, this movement is indebted to several decades of research, theory, and practice in asset- and strength-based pedagogy tradition. Work on culturally sustaining pedagogy (CSP) has joined these decades (and centuries) of work to offer vision of school that seeks to perpetually sustain—inquisitive, literate, and cultural pluralism as part of schooling for positive social transformation and revitalization. S/U or letter grading.

287. Research on Language Issues in Education. (4) Seminar, four hours. Reviews of recent theories of writing and literacy research and examination of relationships among writing and literacy, culture, and human development. In particular, examination of history of writing research over last three decades as part of broader intellectual history. Letter grading.

288. Research Apprenticeship Course. (2) Discussion, two hours. Course facilitates mentorship model of training for PhD students with focus on development of graduate student research topics. Assignment of common readings related to these topics; students have opportunity to offer and receive feedback. May be repeated for credit. S/U grading.

C292A. Practicum in Intergroup Dialogue Facilitation. (4) Seminar, three hours. Requisite: course C244. Application and further development of content and skills learned in course C244. In addition to co-facilitating weekly discussion, expected to participate in weekly teaching apprentice practicum seminars. Readings, discussions of group dynamics, and one-on-one meetings with assigned coach. Fosters development of skills such as self-reflection and critical inquiry of own identities, biases, and perspectives. Includes learning as large group and time to receive individualized consultation as co-facilitation dyad from instructor. Concurrently scheduled with course C192A. Letter grading.

295. Freire, (4) Seminar, four hours. Requisite: course C125 or C207 or prior knowledge of Freire’s work. Analysis of intellectual production of Paulo Freire linked to social context in which it took place. Study of his life and work in five phases: Brazilian Experience (1921-1961); Brazilian Liberation (1961-1964); Chile Experience, where he published Education as Practice of Freedom and Pedagogy of Oppressed, as well as other lesser-known works, while also devoting most of this period to emigration; fourth phase consists of his work at Harvard, and then World Council of Churches in Geneva (1970 to 1980), including his consulting with postcolonial revolutionary governments in Africa; his return to Brazil and his work as Secretary of Education in São Paulo (1989 to 1992); and his global travels from 1980 until his death in 1997. Focus on work left incomplete before his death (including ecoeducation and liberatory science) and his work in Brazil. Examines critiques and, in impact on world, his methodology of generative word, and comparisons with other theoretical referents. Letter grading.

296A-296D. Seminars: Research Topics in Education. (2) Seminar, three hours. Advanced study and analysis of current topics in education. Discussion of current research and literature in research specialty of faculty member teaching course. S/U grading.

296G. Research Topics in Education: Legal Aspects of Educational Management. (2) Lecture, two hours. Examination and analysis of legal issues, especially as they apply to school organizations. Letter grading.

296H. Research Topics in Education: Methodological Issues of Educational Research. (2) Lecture, two hours. Examination and analysis of organizational theories, especially as they apply to school organizations. Letter grading.

296I. Theory in Educational Inquiry. (2) Seminar, two hours. Theory and its applications in the study of educational settings and institutions. Examination of major paradigms, important schools of thought, and particular theoretical areas and theories within field of education, with focus both on conceptually and empirically based works as means for grounding discussions of theory and application. Letter grading.

296J. Introduction to Survey Research Methods. (2) Seminar, two hours. Introduction to conceptual and methodological issues involved in survey-based research in education, offering structured opportunity to practice various practical aspects of survey (instrument development, questionnaire design, data collection, data analysis, and report writing). Letter grading.

296K. Research Design. (2) Seminar, two hours. Effective educational leaders require ability to accurately diagnose educational problems before jumping to proposed solutions. Study designs must include systematic ways to collect and analyze data, as well as minimize potential threats to validity of data and analysis. Designed to equip students with tools needed to design research studies that address specific real-world educational problems. Basic concepts of research designs as strategies for investigating educational problems, such as types of questions that can be answered appropriately with qualitative and mixed methods studies, design components, planning for fieldwork and data collection, sampling, ethics, and credibility. Letter grading.

299A-299B-299C. Research Practicum: Education. (4-4-4) Clinical, to be arranged. May be repeated for credit. Letter grading.

301. Introduction to Information and Presentation Tools. (2) Laboratory, two hours. Limited to credential program students. Sequence of laboratory sessions providing service teaching students to education technology infrastructure and classroom presentation tools, introduction to resources and services, e-mail functions and Internet, and presentation software and multimedia. Letter grading.

305. Health Education for Teachers. (2) Lecture, two hours. Limited to Teacher Education Program students. Teaching/learning process as applied to personal and community health. Topics include psychoactive drugs (alcohol, tobacco, and narcotics), human sexuality, nutrition, community health resources, and analysis of state’s health framework. S/U grading.

309. Methodologies for English Language Learners. (2) Laboratory, two hours. Limited to credential program students. Sequence of laboratory sessions providing service teaching students to education technology infrastructure and classroom presentation tools, introduction to resources and services, e-mail functions and Internet, and presentation software and multimedia. Letter grading.

310. Health Education for Teachers. (2) Lecture, two hours. Limited to Teacher Education Program students. Teaching/learning process as applied to personal and community health. Topics include psychoactive drugs (alcohol, tobacco, and narcotics), human sexuality, nutrition, community health resources, and analysis of state’s health framework. S/U grading.


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315B. Elementary Literacy Methods. (3) Seminar, three hours. Theoretical principles and pedagogical strategies necessary for developing and maintaining balanced literacy programs in elementary schools. Examination of how children learn to read, write, and use language. Letter grading.

318A. Integrated Methods for Elementary Teachers. (3) Lecture, three hours. Examination and development of instructional programs and analyses of practices of instructional methods for teaching K-6 content, with emphasis on interdisciplinary approach that integrates content areas. Aligned with California state frameworks and California content standards for grades K-12 that address needs and interests of diverse students. Letter grading.

318B. Integrated Methods for Elementary Teachers. (4) Lecture, four hours. Examination and development of instructional programs and analyses of practices of instructional methods for teaching K-6 content, with emphasis on interdisciplinary approach that integrates content areas and infuses literacy, technology, and strategies for second language learners. Aligned with California state frameworks and California content standards. Letter grading.


320A-320B-320C. Secondary Content and Literacy Methods. (4–3–3) Lecture, three hours. Examination and development of instructional programs and analyses of practices of instructional methods for teaching content in grades 7–12. Emphasis on interdisciplinary approach that integrates content areas and infuses literacy, technology, and strategies for second language learners. Methods courses are aligned with California state frameworks and California content standards for grades K-12, including English Language Development Standards—all of which address needs and interests of diverse students. Letter grading.

321A. Secondary Content and Literacy Methods in Ethnic Studies. (3) Lecture, three hours. Examination and development of instructional programs, analyses, and pedagogies that teach the ethnic studies curriculum to students in grades 7 through 12, with emphasis on interdisciplinary approach that integrates content areas and infuses literacy, technology, and strategies for second language learners. Methods courses align with California state frameworks and California content standards for grades K-12, including English Language Development Standards—all of which address needs and interests of diverse students. Letter grading.

321B. Ethnic Studies Curriculum Development. (3) Lecture, three hours. Examination and development of theoretical frameworks and second language curricula for use in teaching ethnic studies in grades 7 through 12, with emphasis on interdisciplinary approach that integrates content areas and infuses literacy, technology, and strategies for second language learners. Methods courses align with California state frameworks and California content standards for grades K-12, including English Language Development Standards—all of which address needs and interests of diverse students. Ethnic studies curriculum focuses on Chicano studies, African American/Black studies, indigenous studies, Asian American studies, gender/sexuality studies, and how to develop curriculums focused on local histories in Los Angeles urban classrooms. S/U grading.


401. Research Methods. (3) Lecture, four hours. Critical analysis of major concepts, underlying assumptions, policy issues, and processes in development and implementation of curriculum in educational setting. Problems in formulation of pur-
42A. Program Development and Program Evaluation in Student Affairs. (2–2) Lecture, two hours. Introduction to program development and planning, as well as assessment of programs. Development of management and implementation of leadership principles of strategic planning and coordination of academic and student affairs. Letter grading.

440C. Administration of Instructional Programs. (4) Lecture, four hours. Examination of planning, implementing, and assessing effectiveness of one program. In Progress (426A) and letter (426B) grading.

441A. Instructional Supervision A. (4) Lecture, four hours. Analysis of teaching in light of research-substantiated elements of instruction: task analysis, appropriate objectives, principles that increase motivation, rate, and duration of retention and transfer, monitoring and adjusting instruction to meet needs and capacities of learners. S/U or letter grading.

442B. Legal Aspects of Educational Management and Practice. (4) Lecture, four hours. Examination of structures and kinds of legal systems in U.S.; constitutional dimensions of church/state relations; employees' civil rights and legal aspects of hiring, firing, and negotiating procedures; student attendance, control, and civil rights. S/U or letter grading.

443. Policy Analysis in Education. (4) Lecture, four hours. Overview of political, economic, and legal contexts that impact fiscal policy and its transformation. Inclusion in examination are issues that impact on minorities (e.g., bilingual education, desegregation, affirmative action, role of subordinates in policy-making process). S/U or letter grading.

448A. Urban School Leadership. (4) Lecture, four hours. Examination of problems of urban school leadership. Emphasis on changing nature of urban principalship, with considerable attention to role of other school and community agencies that interact with urban school leaders. S/U or letter grading.

448B. Urban Leadership Laboratory. (4) Laboratory, four hours. Analysis of and opportunity to practice human and technical skills requisite for success as urban school leaders. Topics include: operations, conflict resolution, applied computer technology, and effective communication. Activities include game, simulation, computer programming, and group dynamics. S/U or letter grading.

450. Leadership Capacity Building. (4) Lecture, one hour; discussion, three hours. Limited to Educational Leadership Program students. Course taken in year three of Educational Leadership Program to help students with their communication and leadership capacities. S/U grading.

451. Foundations of Organizations and Leadership. (4) Lecture, four hours. Limited to Educational Leadership Program students. Understanding of traditional and contemporary conceptions of leadership and organizational theory, with application of these conceptions to student professional work settings. Letter grading.

452A–452B. Educational Enterprise. (4–4) Lecture, two hours; discussion, two hours. Limited to Educational Leadership Program students. Course taken in year three of Educational Leadership Program to help students with their communication and leadership capacities. S/U grading.

455. Writing and Inquiry. (4) Lecture/workshop, eight hours per month; discussion, one hour; laboratory, one hour. Limited to doctoral students in Educational Leadership Program. Designed to assist students in professional development as writers, addressing style and organization, scholarly genres, modes of discourse, and broad issues of conceptualization and method. Letter grading.

456. Altering Structure and Culture of Schooling. (4) Lecture, four hours; discussion, four hours. Limited to Educational Leadership Program students. Using applied orientation, examination of variety of approaches to organizational change and ways to sustain change. Letter grading.

458A–458B. Practicum: Dissertation. (2–2) Seminar, four hours per month; discussion, one hour. Limited to doctoral students in Educational Leadership Program. Intended to assist students in professional development as writers, addressing style and organization, scholarly genres, modes of discourse, and broad issues of conceptualization and method. Letter grading.

466. Critical Media Literacy: Teaching Youth to Critically Read and Create Media. (4) Lecture, four hours. Preparation for educators to teach K-12 students to explore their relationships with media by critically examining media representations and locating their own alternative media messages. Critical media literacy combines theoretical foundations of cultural studies and critical pedagogy with practical classroom applications of new digital media as well as traditional print-based means of communication. Exploration of media representations of race, class, gender, sexual orientation, and other identity markers. Educators critically question media and technology, as well as explore new alternatives for creating multimedia messages in their own classroom. Analysis and creation of media projects related to teaching required. Letter grading.

470A. Seminar: Large Systems and Individual Schools. (4) Seminar, four hours. S/U or letter grading.

471. Principles of Effective Coaching and Leadership. (4) Seminar, four hours. Introduction to principles of effective coaching and teaching for aspiring coaches considering careers in professional and collegiate athletics, K-12 schools, and community-based sports organizations. Premised on principles of social justice and on value and promise of equity, inclusion, and diversity for contributing to creation of more humane, equitable, and harmonious society and nation. Letter grading.

472. Introduction to Philosophies of Coaching. (4) Seminar, four hours. Introduction to philosophies of coaching—overarching frameworks, perspectives, deep beliefs, and values that drive coaches’ specific practices—as they are manifested in writings and conduct of professional and college sport coaches. Exploration of these through study of successful coaches in variety of sports unpacking their fundamental keys of success. Reflection on and cultivation of their own personal and intentional philosophy of coaching answering questions what is your why and what is your how. Exploration of questions such as what is coach, what is coach’s overall purpose, what are desired results, how best to produce these results. Methods and assignments include presentations, analyzing videos, group work, interviews, analyses of coaching philosophies, and constructing statement of one’s own philosophy of coaching. Letter grading.
473. Diversity Leadership in Sports and Athletics. (4) Seminar, four hours. Coaching and transformational leadership requires examination of important topics that depend upon analysis of complex, yet essential concepts. Examination and discussion of how and why sports, diversity, and leadership must be interconnected in order to meet needs of universities, professional organizations, and most importantly student-athletes. Sports as industry and as enterprise. Covers its history, purpose, evolution, and role in higher education and wider society. Emphasis on student-athlete perspectives and outcomes, well-being, and readiness for educational and professional opportunities in sports and beyond. Addresses growing need for greater gender, ethnic, and racial diversity in athletic leadership. While those who participate in athletics are likely to face numerous ethical issues and dilemmas in urban classrooms. Debriefing of field experiences in subject area centering around theoretical beliefs. Body has history tied to theological beliefs. Assumptions, procedures, and constraints of each strategy considered in terms of learner and task variables. Laboratory experiences in classroom settings permit students systematically to apply and evaluate alternative instructional strategies. S/U or letter grading.

474. Ethical Issues in Sports. (4) Lecture, three hours. Coaches and sport management professionals are likely to face numerous ethical issues and dilemmas in their daily work in sports, which involves a wide range of responsibilities, values, drug use, and testing, race and gender equity, media, and commercialization of college sports. Includes lectures, discussions, analysis of case studies, and applications of decision-making tools to resolve ethical issues. Letter grading.

475. Mental Health in Athletics and Coaching. (4) Lecture, three hours. Introduction to mental health issues in context of athletics and coaching. Mental health issues are prevalent and on the rise among athletes. Coaches and other sports personnel are often first line of defense and are best positioned to recognize symptoms and refer athletes to appropriate care and interventions. Cultivates greater awareness of prevalence of mental health issues among athletes. Enables students to recognize common symptoms and manifestations of mental health concerns (e.g., depression, anxiety, eating disorders, etc.). Students gain knowledge base for appropriate referrals and interventions, and range of tools for creation of safe spaces within teams to address mental health concerns. Cultivates informed practitioners who are sensitive to mental health concerns and empathetic to plight of many who suffer from these issues. Letter grading.

476. History and Philosophy of Sport and Physical Education. (4) Lecture, four hours. Focus on philosophical positions of body as determined by philosophical schools and intellectuals, past and present. Investigation that philosophical position of body has been significant factor in determining historic development of sport and physical activity/physical education; e.g., throughout history there were times where body was not valued, which negatively impacted development of sport. Theology also had impact upon how people viewed body. Sometimes sport thrived; sometimes it was condemned depending on theological beliefs. Body has history that is tied to sport history. Modernization theory used to explain how sport and physical activity evolved from pre-modern practice to modern practice. Study takes chronological, descriptive, and interpretive approaches. Letter grading.

477. Leadership and Management of Athletic Departments in Educational Institutions. (4) Seminar, four hours. Introduction to principles and practices of leadership and management of athletic departments in higher education with emphasis on social justice leadership. Students develop their own, authentic and intentional leadership philosophy for leading with purpose and integrity, and gain knowledge, skills, and values to effectively lead in athletic departments. Introduction to various models of leadership and to fundamental management skills such as strategic planning, project management, effective communication, team building, team leadership, program evaluation, and effecting organizational change. Includes reading, research, application to inquiry techniques and outcomes, well-being, and readiness for educational and professional opportunities in sports and beyond. Addresses growing need for greater gender, ethnic, and racial diversity in athletic leadership. While those who participate in athletics are likely to face numerous ethical issues and dilemmas in urban classrooms. Debriefing of field experiences in subject area centering around theoretical beliefs. Body has history tied to theological beliefs. Assumptions, procedures, and constraints of each strategy considered in terms of learner and task variables. Laboratory experiences in classroom settings permit students systematically to apply and evaluate alternative instructional strategies. S/U or letter grading.

481. Knowledge and Inquiry in Classroom. (4) Lecture, four hours. Logical features of instruction and their application to inquiry techniques and outcomes, well-being, and readiness for educational and professional opportunities in sports and beyond. Addresses growing need for greater gender, ethnic, and racial diversity in athletic leadership. While those who participate in athletics are likely to face numerous ethical issues and dilemmas in urban classrooms. Debriefing of field experiences in subject area centering around theoretical beliefs. Body has history tied to theological beliefs. Assumptions, procedures, and constraints of each strategy considered in terms of learner and task variables. Laboratory experiences in classroom settings permit students systematically to apply and evaluate alternative instructional strategies. S/U or letter grading.

482D. Instructional Strategies in Urban Education: Visual and Performing Arts. (1 to 4) Lecture, two hours; discussion, two hours. Emphasis on instructional practices that integrate visual and performing arts into urban classrooms. Debriefing of field experiences in subject area centering around theoretical beliefs. Body has history tied to theological beliefs. Assumptions, procedures, and constraints of each strategy considered in terms of learner and task variables. Laboratory experiences in classroom settings permit students systematically to apply and evaluate alternative instructional strategies. S/U or letter grading.

489A-499B-499C. Advanced Directed Field Experience. (4 to 8 each) Clinical, to be arranged. Dissertazione practicum that supports students in developing their proposals. Guides students on how to write their dissertation proposals and serves as writing workshop where students have opportunities to receive feedback from instructors, fellow students, and peers. May be repeated for credit. Letter grading.

501. Cooperative Program in Special Education. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA academic advisor and graduate dean, and host campus instructor, department chair, and graduate dean. Limited to UCLA doctoral students in special education. Used to record enrollment in practicum courses taken under cooperative arrangements with USC. S/U grading.

506. Directed Independent Study. (1 to 12) Tutorial, to be arranged. Individuals may qualify for master’s comprehensive examinations or for PhD or EdD qualifying examinations. May be repeated for credit. S/U grading.


### Electrical and Computer Engineering

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**Professors**

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Abeer A.H. Alwan, PhD

Danijela Cabric, PhD

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Overview
Electrical and computer engineers are responsible for inventions that have revolutionized our society, such as the electrical grid, telecommunications, and automated computing and control. The profession continues to make vital contributions in many domains, such as the infusion of information technology into all aspects of daily life. To further these ends, the Department of Electrical and Computer Engineering fosters a dynamic academic environment that is committed to a tradition of excellence in teaching, research, and service. It has state-of-the-art research programs and facilities in a variety of fields. Departmental faculty members are engaged in research efforts across several disciplines in order to serve the needs of industry, government, society, and the scientific community. Interactions with other disciplines are strong. Faculty members regularly conduct collaborative research projects with colleagues in the Geffen School of Medicine; School of Education and Information Studies; School of Theater, Film, and Television; and College of Letters and Science.

Research
The primary areas in the department are circuits and embedded systems, computer engineering, physical and wave electronics, and signals and systems. These areas cover a broad spectrum of specializations in, for example, communications and telecommunications, computer vision, control systems, cybersecurity, electromagnetics, embedded computer networking, embedded computing systems, engineering optimization, integrated circuits and systems, machine learning, microelectromechanical systems (MEMS), nanotechnology, photonics and optoelectronics, plasma electronics, signal processing, and solid-state electronics.

Undergraduate Majors

Computer Engineering BS
The undergraduate curriculum provides all Computer Engineering majors with preparation in the mathematical and scientific disciplines that lead to a set of courses that span the fundamentals of the discipline in the major areas of data science and embedded networked systems. These collectively provide an understanding of many inventions of importance to our society, such as the Internet of Things, human-cyber-physical systems, mobile/wearable/implantable systems, robotic systems, and more generally smart systems at all scales in diverse spheres. The design of hardware, software, and algorithmic elements of such systems represents an already dominant and rapidly growing part of the computer engineering profession. Students are encouraged to make use of their computer science and electrical and computer engineering electives and a two-quarter capstone design course to pursue deeper knowledge within one of these areas according to their interests, whether for graduate study or preparation for employment.

Capstone Major
The Computer Engineering major is a designated capstone major that is jointly administered by the Computer Science and Electrical and Computer Engineering departments. Undergraduate students complete a design course in which they integrate their knowledge of the discipline and engage in creative design within realistic and professional constraints. Students apply their knowledge and expertise gained in previous mathematics, science, and engineering coursework. Students identify, formulate, and solve engineering problems and present their projects to the class.

Learning Outcomes
The Computer Engineering major has the following learning outcomes:

• Application of mathematical, scientific, and engineering knowledge
• Design of a software or hardware system, component, or process to meet desired needs within realistic economic, environmental, social, ethical, health, safety, security, reliability, manufacturability, and sustainability constraints
• Function productively on a team with others
• Identification, formulation, and solution of computer engineering problems
• Effective communication
Requirements

Preparation for the Major

Required: Computer Science 1 (or Electrical and Computer Engineering 1), 31, 32, 33, 35L, 551A (or Electrical and Computer Engineering M16); Electrical and Computer Engineering 3: Engineering 96I; Mathematics 31A, 31B, 32A, 32B, 33A, 33B, 61; Physics 1A, 1B, 1C, and 4AL or 4BL.

The Major

Required: Computer Science 111, 118 (or Electrical and Computer Engineering 132B, M151B (or Electrical and Computer Engineering M116C), M152A (or Electrical and Computer Engineering M116L), 180; Electrical and Computer Engineering 100, 102, 113, 115C; one course from Civil and Environmental Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, 170E; Statistics 100A; 8 units of computer science and 8 units of electrical and computer engineering upper-division electives; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; 8 units capstone design from either Electrical and Computer Engineering 180DA/180DB or 183DA/183DB.

Policies

The Major

An approved list of technical breadth courses is available in the Office of Academic and Student Affairs.

For information on UC, school, and general education requirements, see the Samueli school section in College and Schools.

Electrical Engineering BS

The undergraduate curriculum provides all Electrical Engineering majors with preparation in the mathematical and scientific disciplines that lead to a set of courses that span the fundamentals of the three major departmental areas—mathematics, science, and engineering course—the remaining 4 units may be from upper-division electrical and computer engineering courses—the remaining 4 units may be from upper-division electrical and computer engineering courses—or from another engineering school department; and one two-term electrical and computer engineering capstone design course (8 units).

Policies

The Major

An approved list of technical breadth courses is available in the Office of Academic and Student Affairs.

Electrical and Computer Engineering 100 and CM182 may not satisfy elective credit.

For information on UC, school, and general education requirements, see the Samueli school section in College and Schools.

Undergraduate Minor

Data Science Engineering Minor

The minor is intended to expose students to the entire data science life cycle from both professional constraints. Students apply their knowledge and expertise gained in previous mathematics, science, and engineering coursework. Within a multidisciplinary team structure, students identify, formulate, and solve engineering problems and present their projects to the class.

Learning Outcomes

The Electrical Engineering major has the following learning outcomes:

- Application of knowledge of mathematics, science, and engineering
- Design of a system, component, or process to meet desired needs within realistic constraints
- Function as a productive member of a multidisciplinary team
- Effective communication
- Identification, formulation, and solution of electrical engineering problems

Requirements

Preparation for the Major

Required: Chemistry and Biochemistry 20A; Computer Science 31, 32; Electrical and Computer Engineering 2, 3, 10, 11L, M16 (or Computer Science M51A); Mathematics 31A, 31B, 32A, 32B, 33A, 33B; Physics 1A, 1B, 1C, 4AL, 4BL.

The Major

Required: Electrical and Computer Engineering 101A, 102, 110, 111L, 113, 131A; six core courses selected from Computer Science 33, Electrical and Computer Engineering 101B, 115A, 121B, 132A, 133A, 141, 170A; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; 12 units of major field elective courses, at least 8 of which must be upper-division electrical and computer engineering courses—the remaining 4 units may be from upper-division electrical and computer engineering courses or from another engineering school department; and one two-term electrical and computer engineering capstone design course (8 units).

Policies

The Major

An approved list of technical breadth courses is available in the Office of Academic and Student Affairs.

Electrical and Computer Engineering 100 and CM182 may not satisfy elective credit.

For information on UC, school, and general education requirements, see the Samueli school section in College and Schools.

Graduate Major

Electrical and Computer Engineering MS, PhD

The graduate program provides students with an opportunity to pursue advanced course-
work, in-depth training, and research investigations in several fields.

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Electrical and Computer Engineering

Lower-Division Courses

1. Undergraduate Seminar. (1 Seminar, one hour; outside study, two hours. Introduction by faculty members and industry lecturers to electrical engineering disciplines through current and emerging applications of autonomous systems and vehicles, biomedical devices, aerospace electronic systems, consumer products, digital science, and entertainment products (amusement rides, etc.), as well as energy generation, storage, and transmission. P/NP grading.

2. Physics for Electrical Engineers. (4 Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: Physics 1C. Introduction to concepts of modern physics necessary to understand solid-state devices, including elementary quantum theory, Fermi energies, and concepts of electrons in solids. Discussion of electrical properties of semiconductors leading to operation of junction devices. Letter grading.

3. Introduction to Electrical Engineering. (4 Lecture, two hours; laboratory, two hours; outside study, eight hours. Introduction to field of electrical engineering. Basic circuits techniques with application to explanation of electrical engineering inventions such as telecommunications, electrical grid, automatic computing and control, and enabling device technology. Research frontiers of electrical engineering. Introduction to measurement and design of electrical circuits. Letter grading.

10. Circuit Theory I. (4 Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: course 9 or Computer Science 1 or Mathematics 10, Mathematics 33A, Physics 1B. Corequisites: course 11L (enforced only for Computer Science and Electrical Engineering majors). Mathematics 33B. Introduction to linear circuit analysis. Resistive circuits, capacitors, inductors, and ideal transformers, Kirchhoff's laws, node and loop analysis, first-order circuits, second-order circuits, Thévenin and Norton theorems, sinusoidal steady state. Letter grading.

110L. Circuits Laboratory I. (1 Lecture, one hour; laboratory, one hour; outside study, one hour. Enforced corequisite: course 10. Experiments with basic circuits containing resistors, capacitors, inductors, and transistors. Ohm's law voltage and current division, Thévenin and Norton equivalent circuits, superposition, transient and steady state analysis. Letter grading.

M16. Logic Design of Digital Systems. (4 Same as Computer Science M51A) Lecture, four hours; discussion, two hours; outside study, six hours. Introduction to digital systems. Specification and implementation of combinational and sequential systems. Standard logic modules and programmable logic arrays. Specification and implementation of algorithmic systems: data and control functions. Number systems and arithmetic algorithms. Error control codes for digital information. Letter grading.

19. Flat Lux Freshman Seminars. (1 Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by students and faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1 Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course to extend material covered in course. Honors seminar grade will be determined by faculty mentor. Eligible students must be accepted into the Electrical Engineering Honors Program. Letter grading.

99. Student Research Program. (1 to 2 Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100. Electrical and Electronic Circuits. (4 Lecture, three hours; discussion, one hour; outside study, eight hours. Requisites: Mathematics 33A, 3B or Mechan- ical and Aerospace Engineering 82, Physics 1C. Not open for credit to students with credit for course 110. Electrical quantities, linear circuit elements, circuit principles, signal waveforms, transient and steady state circuit behavior, semiconductor diodes and transistors, small signal models, and operational amplifiers. Letter grading.

101A. Engineering Electromagnetics. (4 Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: Mathematics 32A and 32B, or 33A and 33B, Physics 1A or 1C or Physics 1C or Physics 14A. Introduction to basic mathematical concepts in wave mechanics in one and two dimensions: waves and transducers, transmitters, receivers, and their propagation. Vector calculus, vector fields, gradient, divergence, and curl. Letter grading.

101B. Electromagnetic Waves. (4 Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 101A. Time-varying fields and Maxwell's equations. Reflection and transmission of electromagnetic waves and waveguides, reflection and transmission coefficients, port impedance, port scattering parameters, sinusoidal waves and phasors, transmission lines and Smith chart, transient responses, vector analysis, introduction to Maxwell equations, static and quasi-static electric and magnetic fields. Letter grading.

110H. Circuit Theory II (Honors). (4 Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 110. Experiments with basic circuits containing resistors, capacitors, inductors, and transistors, AC steady state analysis, AC steady state power, network functions, poles and zeros, frequency response, mutual inductance, ideal transformer, application of Laplace transforms to circuit analysis. Letter grading.

110L. Circuit Measurements Laboratory. (2 Laboratory, four hours; outside study, two hours. Requisites: course 100 or 110. Experiments with basic circuits containing resistors, capacitors, inductors, and op- amps. Op-amp's law voltage and current division, Thevenin and Norton equivalent circuits, superposition, transient and steady state analysis, and frequency response principles. Letter grading.

111L. Circuits Laboratory II. (1 Lecture, one hour; laboratory, one hour; outside study, one hour. Enforced requisite: courses 10, 11L. Enforced corequi- site: course 110. Experiments with electrical circuits containing resistors, capacitors, inductors, transformers, and op-amps. Steady state power analysis, transient response, circuit synthesis, and two-port network principles. Letter grading.


113. Digital Signal Processing. (4 Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 113. Real-time implementation of digital signal processing algorithms on digital processor chips. Experiments involving D/A and A/D conversion, aliasing, digital filtering, sinusoidal oscillators, Fourier transforms, and finite word-length effects. Course project involving original design and implementation of machine learning and signal processing systems for communications, radar, medical and other imaging, speech, music, or video using DSP chip. Completion of projects begun in course 113DB. Letter grading.

113DB. Digital Signal Processing Design. (4 Lecture, two hours; laboratory, two hours; outside study, six hours. Enforced requisite: course 113. Real-time implementation of digital signal processing algorithms on digital processor chips. Experiments involving D/A and D/A conversion, aliasing, digital filtering, sinusoidal oscillators, Fourier transforms, and finite word-length effects. Course project involving original design and implementation of signal processing systems for communications, speech, audio, or video using DSP chip. Completion of projects begun in course 113DB. Letter grading.

114. Speech and Image Processing Systems Design. (4 Lecture, three hours; discussion, one hour; laboratory, two hours; outside study, six hours. Enforced requisite: course 113. Design principles of speech and image processing systems. Speech perception, analysis, and modeling in first half of course; design techniques for image enhancement, filtering, and reconstruction in second half of course. Lab component synchronized with lectures, lab components taught in parallel and complement each other. Letter grading.

115A. Analog Electronics Laboratory I. (4 Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 110 or 111A. Review of physics and operation of diodes and bipolar and MOS transistors. Equivalent circuits and models of semi-conductor devices. Analysis and design of single-stage amplifiers. DC biasing circuits. Small-signal analysis. Operational amplifier systems. Letter grading.

115AL. Analog Electronics Laboratory II. (4 Labo- ratory, four hours; outside study, two hours. Enforced requisite: course 110 or 111A. Experimental determination of device characteristics, resistive diode

115B. Analog Electronic Circuits II. (4) Lecture, four hours; discussion, one hour; outside study, eight hours. Enforced requisite: course 115A. Analog electronics: design of an operational amplifier, op-amp; circuits. Feedback and its properties. Stability issues and frequency compensation. Letter grading.

115C. Digital Electronic Circuits. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 110 or 115A, and Computer Science M51A. Transistor-level digital circuit analysis and design. Modern logic families (static CMOS, pass-transistor, dynamic logic), integrated circuit (IC) layout, digital circuits (logic gates, flip-flops, latches, counters, etc.), computer-aided simulation of digital circuits. Letter grading.

115E. Design Studies in Electronic Circuits. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 115E. Description and design of an electronic product to complement other laboratory-based design courses. Topics vary by instructor and include communication and control circuits, power electronics, integrated circuits, computer-aided design, and computer-aided testing and measurement and may entail simulation-based design projects. Emphasis through on design-oriented analysis and rigorous approach to practical circuit design. Lecture, discussion, one hour; outside study, seven hours. Enforced requisite: course 115E. Letter grading.

M116C. Computer Systems Architecture. (4) Same as Computer Science M115B). Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course M16 or Computer Science M51A. Hands-on design and debug of computer circuits, use of computer-aided design tools for schematic capture and simulation, implementation of complex circuits using programmed logic array design projects. Data compression, supercomputers, and computer organization. Letter grading.

M119. Fundamentals of Embedded Networked Systems. (4) Same as Computer Science M119) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 132B or Computer Science 118; one course from course 131A, Civil and Environmental Engineering 110, Mathematics 170A, 170E, Statistics 100A; Computer Science 33. Design tradeoffs and principles of operation of cyber physical systems such as devices and systems constituting Internet of Things. Topics include signal propagation and modeling, sensing, node architecture and operation, application, and deployment. Lecture, discussion, one hour; outside study, eight hours. Enforced requisite: course 2. Introduction to principles of operation of bipolar and MOS transistors, equivalent circuits, high-frequency behavior, voltage limitations. Letter grading.

121B. Principles of Semiconductor Device Design. (4) Lecture, three hours; discussion, one hour; outside study, eight hours. Enforced requisite: course 131A, and Civil Engineering M20 or Computer Science 31 or Mechanical and Aerospace Engineering 20. Introduction to numerical computing/analytics; analytic formulations versus numerical solutions; floating-point representations and rounding errors. Review of MATLAB; mathematical software; software tools; equations; LU factorization; solving systems of equations; bounds on error; iterative methods for solving linear equations; conditioning and stability; complexity. Interpolation and approximation; splines, zeros and roots of nonlinear equations. Linear least squares and orthogonal (QR) factorization; statistical interpretation. Numerical optimization; Newton method; non-linear least squares. Numerical quadrature. Solving ordinary differential equations; initial-value equations; boundary-value problems; boundary-value problems. Letter grading.

121DA-121DB. Semiconductor Processing and Device Design. (4-5) Design fabrication and characterization of p-n junction and transistors. Students perform various processing tasks such as water preparation, oxidation, diffusion, metallization, and photolithography. Introduction to CAD tools used in integrated circuit processing and device design. Design of photolithography and integrated circuit processing tools. Letter grading.


134. Graph Theory in Engineering. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Basics of graph theory, including trees, bipartite graphs, graph matching, planar graphs, and graph coloring. Emphasis on reducing real-world engineering problems to graph theory formulations. Letter grading.


142. Linear Systems: State-Space Approach. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 102. State-space methods of linear system analysis and synthesis, with application to problems in networks, control, and system modeling.

C143A. Neural Signal Processing. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: course 131A, Mathematics 33A. Topics include fundamentals of electrical activity in neurons; technology for measuring neural activity; spiking statistics and Poisson processes; generative models and classification; and Kalman filtering. Principal components analysis, factor analysis, and expectation maximization. Concurrently scheduled with course C243A. Letter grading.

M146. Introduction to Machine Learning. (4) Same as Computer Science M146) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 131A, 133A or 205A, and M146, or equivalent. Review of machine learning concepts: maximum likelihood, supervised classification; neural network architectures; backpropagation; regularization for training neural networks; optimization and training of feedforward neural networks; practical ANN architectures; deep learning libraries in Python; recurrent neural networks, backpropagation through time, long short-term memory and gated recurrent units; variational autoencoders; generative adversarial networks and variational autoencoders; supervised examples, unsupervised examples, and training. Concurrently scheduled with course C247. Letter grading.

M148. Introduction to Data Science. (4) Same as Computer Science M148) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: one course from 131A, Civil and Environmental Engineering 110, Mathematics 170A, Mathematics 170E, or Statistics 100A, and 101 or 101B. How to analyze data arising in real world so as to understand corresponding phenomenon. Covers topics in machine learning, data analytics, and statistical modeling clas-
sically employed for prediction. Comprehensive, hands-on overview of data science domain by blending theoretical and practical instruction. Data science literature search, selection and cleaning, feature engineering, model selection, and prediction methodologies. Letter grading.

149. Foundations of Computer Vision. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Required prerequisites: courses 102, 131A. Mathematics 33A. Covers foundations of computer vision from both theoretical and practical perspective. Particular emphasis on classical computer vision, which should be understood as a form of representation learning. Study is relevant for various majors in the sciences specializing in artificial intelligence, cyberphysical systems and information engineering, robotics, machine learning, perception, and others looking for applications. Letter grading.

M153. Introduction to Microscale and Nanoscale Manufacturing. (4) (Same as Bioengineering M153, Chemical Engineering M153, and Mechanical and Aerospace Engineering M153B) Lecture, three hours; laboratory, four hours; outside study, five hours. Enforced prerequisites: Chemistry 20A, Physics 1A, 1B, 1C, 4A. Introduction to general manufacturing methods, mechanisms, and technologies for micro- and nanofabrication. Focus on concepts, physics, and instruments of various microfabrication and nanofabrication techniques that have been broadly applied in industry and academia in various advanced technologies, physical and chemical deposition methods, and physical and chemical etching methods. Hands-on experience for fabricating microstructures and nanostructures in modern clean-room environment. Letter grading.

162A. Wireless Communication Links and Antennas. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced prerequisite: course 101B. Basic properties of transmitting and receiving antennas and antenna arrays. Array synthesis. Adaptive arrays. Friis transmission formula, radar equations. Antennas, types of antennas, Standard design budget. Noise in communication systems (transmission lines, antennas, atmospheric, etc.). Cell-site and mobile antennas, cell coverage for signal and traffic, interference, multipath fading, ray bending, and other propagation phenomena. Letter grading.

163A. Introductory Microwave Circuits. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced prerequisite: course 101B. Transmission lines description of waveguides, impedance matching techniques, power dividers, directional couplers, active devices, transistor amplifier design. Letter grading.

163DA. Microwave and Wireless Design I. (4) Lecture, four hours; recitation, one hour; outside study, seven hours. Enforced prerequisite: course 2, 101A. Development of solid foundation on essential principles of photonics from ground up with minimum prior knowledge on this subject. Topics include optical properties of materials, optical wave propagation and modes, optical interferometers and resonators, optical coupling and modulation techniques, and properties of laser and light-emitting diodes, and optical detection. Letter grading.

170B. Lasers and Photonic Devices. (4) Lecture, four hours; recitation, one hour; outside study, seven hours. Enforced prerequisite: course 170A. Coverage of laser physics, related photonic devices, and applications of lasers. Topics include resonators, thermal radiation, and laser amplifiers. Concluded with presentations of project results. Letter grading.

171L. Data Communication Systems Laboratory. (2 to 4) (Same as Computer Science M171L) Laboratory, four to eight hours; outside study, two to four hours. Recommended prerequisite: course M161L. Limited to seniors. Not open to students with credit for course 171. Introduction to interpretation of analog-signaling aspects of digital systems and data communications through experience in using contemporary test instruments to generate and display signals in relevant laboratory setups. Use of oscilloscopes, pulse and function generators, baseband spectrum analyzers, desktop computers, terminals, modems, PCs, and workstations in experiments on pulse transmission impairments, waveforms and their spectra, modern and terminal characteristics, and interfaces. Letter grading.

173DA-173DB. Photonics and Communication Design. (4) Lecture, four hours; discussion, one hour; outside study, eight hours. Introduction to measurement of basic photonic devices, including LEDs, lasers, detectors, and amplifiers; fiber-optic fundamentals and measurement of fiber systems. Modulation techniques, including AM, FM, phase and suppressed carrier methods. Possible projects include lasers, optical communication, and biomedical imaging and sensing. 173DA. Enforced prerequisite: course 101A. Recommended: course 170A or Bioengineering C170. Course project: project premise. Letter grading (credit to be given only on completion of course 173DB). 173DB. Enforced prerequisites: courses 101A, 173DA. Finalization of design and testing of project results. Letter grading.

176. Photonics in Biomedical Applications. (4) Lecture, four hours; discussion, one hour; outside study, eight hours. Enforced prerequisite: course 101A. Study of advanced topics of optical technologies, including biomedical imaging and sensing, lasers and laser systems, and materials. Letter grading. Limited to seniors. Required: course 173DA. Focus on the interaction of light with biological tissues and materials. Letter grading. Limited to seniors.

180DA-180DW. Systems Design. (4–4) Advanced systems design integrating communications, control, and signal processing subsystems. Introduction to advanced topics related to projects through lecture and laboratories. Open-ended projects vary each offering. Student teams create high-performance designs that manage trade-offs among subsystem components, including cost, performance, ease of use, and other factors. Project results form the basis of such systems. Professional technical writing instruction and assignments. Oral and written presentation of project results. 180DA. Lecture, two hours; laboratory, four hours; outside study, eight hours. Enforced prerequisite: course 173DA. Open-ended projects in design of project results. 180DW. Lecture, two hours; laboratory, four hours; outside study, eight hours. Enforced prerequisite: course 180DA. Open-ended projects in design of project results.

CM182. Science, Technology, and Public Policy. (4) (Same as Public Affairs M164 and Public Policy CM182) Lecture, three hours. Recent and continuing advances in science and technology are raising profound public policy issues. Consideration of selection of critical policy issues, each of which has substantial ethical, social, economic, political, scientific and technological aspects concurrently scheduled with course CM282. Letter grading.

183DA. Design of Robotic Systems I. (4) Lecture, four hours; laboratory, two hours; outside study, six hours. Required prerequisite: course 11. Course 183DA is limited to senior Electrical Engineering majors. Additional topics may include distributed and multirobot systems, bio-inspired robotics, project management, and societal implications. Open-ended projects vary annually. Student teams design and analyze robotic systems for various applications. Oral and
M206. Machine Perception. (4) [Same as Computer Science M208B.] Lecture, four hours; discussion, two hours; outside study, six hours. Designed for graduate students in all branches of engineering, science, and computer science. Introduction to computer vision and other sensory information. Unified treatment of early vision in man and machine. Integration of symbolic and iconic representations in process of image segmentation. Computing modomul sensory information for neural-net and neural-net models. Letter grading.


209AS. Special Topics in Circuits and Embedded Systems. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Special topics in one or more aspects of circuits and embedded systems, such as digital, analog, mixed-signal, and radio frequency integrated circuits (RF ICs); electronic design automation; wireless communication circuits and systems; embedded systems: embedded programming, embedded software; distributed sensor and actuator networks; robotics; and embedded security. May be repeated for credit with topic change. S/U or letter grading.

209BS. Seminar: Circuits and Embedded Systems. (2 to 4) Seminar, two to four hours; outside study, four to eight hours. Seminars and discussions on current and advanced topics in one or more aspects of circuits and embedded systems, such as digital, analog, mixed-signal, RFICs, and new trends in device technology such as nanoscale devices and embedded security. May be repeated for credit with topic change. S/U or letter grading.

210A. Adaptation and Learning. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Preparation: prior training in probability theory, random processes, and linear algebra. Recommended requisites: courses 205A, 241A. Mean-square-error estimation and filters, least-squares estimation and filters, steepest-descent algorithms, stochastic-gradient algorithms, convergence, stability, tracking, and performance algorithms for adaptation and learning, adaptive filters, learning and classification, optimization techniques. S/U or letter grading.


211A. Digital Image Processing I. (4) Lecture, three hours; discussion, one hour; laboratory, four hours; outside study, four hours. Preparation: computer programming experience. Requisite: course 113. Fundamentals of digital image processing theory and technology.
231A. Information Theory: Channel and Source Coding. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 131A. Fundamentals of information theory, transmission, processing, and learning. Topics include limits and algorithms for lossless data compression, connections to model estimation and learning, channel capacity, rate distortion versus lossy compression, and basics of multiterminal networks. Letter grading.

231B. Network Information Theory. (4) Lecture, four hours; outside study, eight hours. Enforced requisite: course 231A. Point-to-point multiple-input, multiple-output (MIMO) wireless channels: capacity and outage; single-hop networks: multiple access, broadcast, interference, and relay channels; channels and sources with side-information; basics of multiterminal lossy and lossless compression. Letter grading.

231E. Channel Coding Theory. (4) Lecture, four hours; outside study, eight hours. Requisite: course 131A. Fundamentals of error control codes and decoding algorithms. Includes block codes, convolutional codes, trellis codes, and turbo codes. Letter grading.


232B. Queuing Systems and Intelligent Transportation Networks. (4) Lecture, four hours; outside study, eight hours. Requisite: course 131A. Analysis, design, and implementation of queuing systems; traffic management and design of intelligent transportation systems, communications networks, autonomous vehicular networks, business and management systems. Markovian and non-Markovian queuing systems and networks. Applications to traffic engineering, transportation and autonomous vehicular systems; congestion control and management. Letter grading.

232D. Communications Networking and Traffic Management for Autonomous Mobile Systems. (4) Lecture, four hours; outside study, eight hours. Requisite: course 131A. Stochastic modeling, analysis, design of queuing systems; traffic management and design of intelligent transportation systems, communications networks, autonomous vehicular networks, business and management systems. Markovian and non-Markovian queuing systems and networks. Applications to traffic engineering, transportation and autonomous vehicular systems; congestion control and management. Letter grading.

232E. Random and Complex Networks: Design and Algorithms. (4) Lecture, four hours; recitation, one hour; outside study, seven hours. Modeling and design of large-scale complex networks, including social networks. Renewal-renewal networks. Network concepts and algorithms for various applications, such as e-mail spam detection, friendship recommendations, viral popularity, and epidemics. Introduction to network algorithms, computational complexity, combinatorial algorithms, and probabilistic analysis. Letter grading.

233. Wireless Communications System Design, Modeling, and Implementation. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 113. Covers algorithms, architectures, and implementation for radio transceivers, physical, and network layer functionalities. Topics include wireless channel modeling, single-carrier and multicarrier systems, multiple-input, multiple-output (MIMO) systems, radio impairments and their correction, architectures and circuits design trade-offs, wideband spectrum sensing, wideband signaling, cognitive radio, massive multiple-input, multiple-output (MIMO) systems, and applications. Letter grading.

234A. Network Coding Theory and Applications. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Algebraic approaches and the theory in network coding, combinatorial approach and alphabet size, linear programming approach and throughput benefits, network code design algorithms, secure network coding for wireless, other applications. Letter grading.

235A. Mathematical Foundations of Data Storage Systems. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 113A or equivalent. Research developments in new mathematical techniques for emerging large-scale, ultra-reliable, fast, and affordable data storage systems. Topics include, but are not limited to, graph-based codes and algebraic decoders for modern storage devices (e.g., Flash), rank modulation, rewinding codes, algorithms for data deduplication and synchronization, and redundant array of independent disks (RAID) systems. Letter grading.

236A. Linear Programming. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: Mathematics 115A or equivalent knowledge of linear algebra. Basic graduate course in linear optimization—basic theory, duality. Simplex method. Interior-point methods. Decomposition and large-scale linear programming. Quadratic programming and complementary pivot theory. Engineering applications. Introduction to integer linear programming and computational complexity theory. Letter grading.


237. Dynamic Programming. (4) (Same as Chemical Engineering M280C) Lecture, four hours; recitation, one hour; outside study, eight hours. Enforced requisites: course 233A or 236A. Introduction to mathematical analysis of sequential decision processes. Finite-state infinite horizon model in both deterministic and stochastic cases. Finite-state infinite horizon model. Methods of solution. Examples from inventory theory, finance, optimal control and estimation, Markov decision process, and optimal control. Letter grading.

238. Multimedia Communications and Processing. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 131A. Key concepts, principles, and algorithms of online learning and learning how to make decisions under uncertainty in broad context, including Markov decision processes, optimal stopping, reinforcement learning, structural results for online learning, multiarmed bandits learning, multiagent learning, multilevel deep learning. Letter grading.

239AS. Special Topics in Signals and Systems. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Special topics in one or more aspects of signals and systems, such as communications, control, image processing, information theory, multimedia, optimization, speech processing, telecommunications, and VLSI signal processing. May be repeated for credit with topic change. S/U or letter grading.

239BS. Seminar: Signals and Systems. (2 to 4) Seminar, four hours; outside study, eight hours. Seminars and discussions on current and advanced topics in one or more aspects of signals and systems, such as communications, control, image processing, information theory, multimedia, computer networking, optimization, speech processing, telecommunications, and VLSI signal processing. May be repeated for credit with topic change. S/U grading.

M240A. Linear Dynamic Systems. (4) (Same as Chemical and Aerospace Engineering M270A.) Lecture, four hours; outside study, eight hours. Requisite: course 141 or Mechanical and Aerospace Engineering 171A. State-space representation, linear time-invariant (LTI) and time-varying (LTV) systems in continuous and discrete time. Linear algebra concepts such as eigenvalues and eigenvectors of matrices, Cayley-Hamilton theorem, Jordan form; phasors and state space equations; stability, controllability, observability, realizability, and minimality. Stabilization design via state feedback and observers; separation principle. Connections with transformation techniques.

M240C. Optimal Control. (4) (Same as Chemical Engineering M280C and Mechanical and Aerospace Engineering M270C.) Lecture, four hours; outside study, eight hours. Requisite: course 240B. Applications of variational methods, Pontryagin maximum principle, Hamilton/Jacobi/Bellman equation (dynamic programming) to optimal control of dynamic systems modeled by linear and nonlinear ordinary differential equations. Letter grading.


M242A. Nonlinear Dynamic Systems. (4) (Same as Chemical Engineering M282A and Mechanical and Aerospace Engineering M272A.) Lecture, four hours; outside study, eight hours. Requisite: course 233A. Applications of nonlinear dynamical systems to such problems as communications, control, image processing, optimization, multimedia, computer networking, optimization, speech processing, telecommunications, and VLSI signal processing. Letter grading.

243A. Neural Signal Processing. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: course 131A, Mathematics 33A. Topics include fundamental properties of electrical activities of neurons; techniques of analysis of neural activity; spiking statistics and Poisson processes; generative models and classification; regression and Kalman filtering; principal components analysis, factor analysis, and expectation maximization. Prerequisites: concurrently scheduled with course C143A. Letter grading.

246. Foundations of Statistical Machine Learning. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced prerequisites: course 131A, Mathematics 33A. Introduction to foundations of statistical machine learning. Overview of several widely used learning algorithms including logistic and linear regression, kernel methods and support vector machines, decision trees and nearest neighbor classifiers. Connections to information theory through probably approximately correct (PAC) learning, stability, bias-complexity trade-
off, structural risk minimization, minimum description length (MDL), and universal learning. Introduction to representation learning with topics including unsupervised learning (e.g., autoencoders, deep Belief Networks), deep learning with convolutional neural networks, generative adversarial networks (GANs), reinforcement learning and deep Q-learning.

C247. Neural Networks and Deep Learning. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 131A, 133A or 205A, and M146, or equivalent. Review of machine learning concepts; maximum likelihood; supervised classification; neural networks architectures; back-propagation; regularization for training neural networks; optimization for training neural networks; convolutional neural networks; practical CNN architectures; deep learning libraries in Python; recurrent neural networks, back-propagation through time, long short-term memory and gated recurrent units; variational autoencoders; generative adversarial networks; adversarial examples and training. Corequisite scheduled with course C147. Letter grading.

M248S. Seminar: Systems, Dynamics, and Control Topics. (2) (Same as Chemical Engineering M297 and Mechanical and Aerospace Engineering M298A) Seminar, two hours. Long-term project and oral presentation by graduate students. Presentations of research topics by leading academic researchers from fields of systems, dynamics, and control. Students who work in these fields present their papers and results. S/U grading.

M250B. Microelectromechanical Systems (MEMS) Fabrication. (4) (Same as Bioengineering M250B and Mechanical Engineering M250B) Lecture, four hours; discussion, three hours; discussion, one hour; outside study, eight hours. Enforced requisite: course M153. Advanced discussion of micromachining processes used to construct a variety of MEMS devices, including deposition and etching processes, as well as their combination in process integration. Materials issues such as chemical resistance, corrosion, mechanical properties, and residual/intrinsic stress. Letter grading.

M252. Microelectromechanical Systems (MEMS) Device Physics and Design. (4) (Same as Bioengineering M252 and Mechanical and Aerospace Engineering M252B.) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course M153. Development of device-level design methods, design rules, sensing and actuation mechanisms, microsensors, and microactuators. Designing MEMS to be produced with both foundry and microfabrication processes. Treatment of MEMS design for MEMS. Design project required. Letter grading.

M255. Neuroengineering. (4) (Same as Bioengineering M256 and Neuroscience M260.) Lecture, four hours; laboratory, three hours; outside study, five hours. Requisites: Mathematics 32A, Physics 1B or SC. Introduction to principles and technologies of bioelectricity and neural signal recording, processing, and stimulation. Topics include bioelectricity, electrophysics (action potentials, local field potentials, EEG, ECOG), intracellular and extracellular recording, microelectrode technology, neural signal processing (neural signal filtering, spike detection, spike detection, spike sorting, stimulation artifact removal), brain-computer interfaces, deep-brain stimulation, and prosthetics. Letter grading.

M256A-M256B-M256C. Evaluation of Research Literature in Neuroengineering. (2–2–2) (Same as Bioengineering M256A-M256B-M256C and Neuroscience M212A-M212B-M212C.) Discussion; two hours; outside study, eight hours. Introduction to fundamentals of nanoscale science and technology. Basic physical principles, quantum mechanics, chemical bonding and nanostructures, top-down and bottom-up (self-assembly) nanofabrication, nanocharacterization; nanomaterials, nanoelectronics, and nanobiotechnology. Introduction to new knowledge and techniques in nano areas to allow students to understand the scientific and technological trends and inspire students to create new ideas in multidisciplinary nano areas. Letter grading.


M275. Micro- and Nanoscale Biosensing for Molecular Diagnostics. (4) (Same as Bioengineering M273.) Lecture, four hours; discussion, one hour; outside study, seven hours. Covers state-of-the-art and emerging biosensors in context of molecular diagnostics. Students learn relevant biology and biochemistry pertinent to molecular diagnostics. Students gain thorough understanding of interface technologies, biolabels, biofluids, and electronics. Topics include biosensor performance parameters, modes of detection, sample preparation challenges, microfluidics, and emerging wearable biosensing platforms, as well as proteomics, genomics, and DNA sequencing technologies. Letter grading.

279AS. Special Topics in Physical and Wave Electronics. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Covers state-of-the-art and emerging topics in one or more aspects of physical and wave electronics, such as electromagnetic, microwave and millimeter wave circuits, photonics and optoelectronics, plasma electronics, nanoelectromechanical systems, solid state, and nanotechnology. May be repeated for credit with topic change. S/U or letter grading.

279BS. Seminar: Physical and Wave Electronics. (2 to 4) Seminar, two to four hours; outside study, four to eight hours. Seminar and discussions on current and advanced topics in one or more aspects of physical and wave electronics, such as electromagnetic, microwave and millimeter wave circuits, photonics and optoelectronics, plasma electronics, nanoelectromechanical systems, solid state, and nanotechnology. May be repeated for credit with topic change. S/U grading.


CM282. Science, Technology, and Public Policy. (4) (Same as Public Policy CM282.) Lecture, three hours. Recent and continuing advances in science and technology raising new issues. Consequences of science and technology issues. Consideration of selection of critical policy issues, each of which has substantial ethical, social, economic, political, scientific, and technological aspects. Corequisite scheduled with course CM182. Letter grading.

285A. Plasma Waves and Instabilities. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 101A, and M185 or Physics M122. Wave phe-


295. Academic Technical Writing for Electrical Engineers. (2) Same as Technical Writing Pedagogies for Electrical Engineers. (2) Same as English Composition M495K. Seminar, two hours; outside study, eight hours. Preparation for MS comprehensive examination. S/U grading.

296. Seminar: Research Topics in Electrical Engineering. (2) Seminar, two hours; outside study, four hours. Advanced study and analysis of current topics in electrical engineering. Discussion of current research and literature in research specialty of faculty member teaching course. May be repeated for credit. S/U grading.

297. Seminar Series: Electrical Engineering. (1) Seminar, 90 minutes; outside study, 90 minutes. Limited to graduate electrical engineering students. Weekly seminars and discussion by invited speakers on research topics of heightened interest. S/U grading.

298. Seminar: Engineering. (2 to 4) Seminar, to be arranged. Limited to graduate electrical engineering students. Limited to graduate electrical engineering students. S/U grading.

299. MS Project Seminar. (4) Seminar, to be arranged. Required of all MS students not in thesis option. Supervised research in small groups or individually under guidance of faculty mentor. Regular meetings, culminating report, and presentation required. Individual contract required; enrollment petitions available in Office of Graduate Student Affairs. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personal employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

M495. Teaching Preparation Seminar: Teaching and Writing Pedagogies for Electrical Engineers. (2) Same as English Composition M495K. Seminar, two hours. Limited to graduate electrical engineering students. Required of all departmental teaching assistants (TAs). May be taken concurrently while holding a TA appointment. Seminar on pedagogy and logistics of being a TA with emphasis on student-centered teaching, clear communication, and multimodal teaching and learning. S/U grading.

596. Directed Individual or Tutorial Studies. (2 to 8) Tutorial, to be arranged. Limited to graduate electrical engineering students. S/U grading.

597A. Preparation for MS Comprehensive Examination. (2 to 12) Tutorial, to be arranged. Limited to graduate electrical engineering students. Reading and preparation for MS comprehensive examination. S/U grading.

597B. Preparation for PhD Preliminary Examinations. (2 to 16) Tutorial, to be arranged. Limited to graduate electrical engineering students. S/U grading.

597C. Preparation for PhD Oral Qualifying Examination. (2 to 16) Tutorial, to be arranged. Limited to graduate electrical engineering students. Preparation for oral qualifying examination, including preliminary research on dissertation. S/U grading.

598. Research for and Preparation of MS Thesis. (2 to 12) Tutorial, to be arranged. Limited to graduate electrical engineering students. Usually taken after students have been advanced to candidacy. S/U grading.

599. Research for and Preparation of PhD Dissertation. (2 to 12) Tutorial, to be arranged. Limited to graduate electrical engineering students. Usually taken after students have been advanced to candidacy. S/U grading.

Emergency Medicine
David Geffen School of Medicine
924 Westwood Boulevard, Suite 300
Box 951777
Los Angeles, CA 90095-1777
Emergency Medicine
310-794-0578
Gregory W. Hendey, MD, Chair

Overview
The Department of Emergency Medicine focuses on the teaching and management of diagnosis and treatment of unforeseen illness and injury. The practice of emergency medicine includes the initial evaluation, diagnosis, treatment, coordination of care among multiple providers, and disposition of any patient requiring expeditious medical, surgical, or psychiatric care. A three- or four-week subinternship rotation is offered to fourth-year medical students. The length of training in the residency program is four years.

For details on the Department of Emergency Medicine and courses offered, see the department website. Emergency Medicine faculty information is available from the department.

Engineering Schoolwide Programs

Henry Samueli School of Engineering and Applied Science
6426 Boelter Hall
Box 951601
Los Angeles, CA 90095-1601
Engineering Schoolwide Programs
310-825-9580

Overview
The Henry Samueli School of Engineering and Applied Science offers several schoolwide graduate degree programs.

Graduate Study
The Samueli School offers the Master of Engineering (MEng) degree, Master of Science (MS) online degree in Engineering, and Engineer (Eng) degree as schoolwide degrees. The following area-specific online degrees have also been established: MS in Engineering–Aerospace, MS in Engineering–Computer Networking, MS in Engineering–Electronic, MS in Engineering–Electronics, MS in Engineering–Materials Science, MS in Engineering–Mechanical, MS in Engineering–Signal Processing and Communication, and MS in Engineering–Structural Materials.

A certificate of specialization is available in all areas of specialization.

Graduate Majors

Engineer Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available on the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Master of Engineering Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available on the Graduate Education website. In many cases, more de-
tailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Engineering MS

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available on the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Engineering - Aerospace MS

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available on the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Engineering - Computer Networking MS

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available on the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Engineering - Electrical MS

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available on the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Engineering - Electronic Materials MS

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available on the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Engineering - Integrated Circuits MS

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available on the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Engineering - Manufacturing and Design MS

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available on the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Engineering - Materials Science MS

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available on the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Engineering - Mechanical MS

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available on the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Engineering - Signal Processing and Communication MS

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available on the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Engineering - Structural Materials MS

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available on the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Engineering Lower-Division Courses

2. Technology and Society. (2) Lecture, two hours; discussion, one hour; outside study, three hours. Introduction of broader societal opportunities, impacts, and challenges associated with technology. Drawing from historical and contemporary examples, consideration of some of ethical, policy, and legal questions spurred by rapid technological change. Development of perspectives to take broad, contextualized view of role of technology in society. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20. First-Year Engineering: Transition Bridge. (2) Seminar, 18 hours (two weeks). Designed primarily for new students to help them understand UCLA, its culture, structure (quarter system), and academic policies; and to facilitate their transition from high school to college. Examination of research on first-year experience of college students, studying at UCLA versus high school; policies and procedures, and campus resources. Advanced preparation and early exposure to fall quarter mathematics, chemistry, and computer science curricula. Collaborative learning techniques and community-building activities are integral processes to both day and evening programs. Intensive classroom instruction and collaborative learning workshops. May be repeated for credit. Offered in summer only. P/NP grading.

21. Computing Immersion Summer Experience. (2) Seminar, 18 hours three weeks. Designed primarily for new students to help them understand UCLA, its culture, structure (quarter system), and academic policies; and to facilitate their transition from high school to community college to university. Designed to immerse incoming computing students in foundation concepts and principles of computer science, with focus on fundamental computer programming principles, methodologies, and techniques. Basic concepts of programming and C++ computing language. Offered in summer only. P/NP grading.

22. Summer Bridge Review for Enhancing Engineering Students. (2) Seminar, 18 hours (two weeks). Designed primarily for new students to help them understand UCLA, its culture, structure (quarter system), and academic policies; and to facilitate their transition from community college to university. Intensive introduction of advanced topics covered in upper-division engineering courses. May be repeated for credit. Offered in summer only. P/NP grading.

23. Finding Industry Internship. (2) Seminar, two hours; outside study, four hours. Designed to engage engineering students in process of formal career development. Students learn about various components of internship/job application and practice preparing relevant materials. Preps students for career-related social interactions. Development of skills and insights to successfully secure future opportunities, such as first industry internship. P/NP grading.
24. Finding Undergraduate Research Opportunity. (2) Seminar, two hours; outside study, four hours. Designed to engage engineering students, primarily those with less than four years of work experience, in solving practical, hands-on, and safety issues, and beginning research. Students learn about various methods and resources used to obtain laboratory position. Exploration of opportunities and guidance on how to approach those openings. Offers students smooth transition into research laboratory. P/NP grading.

25. Communicating Undergraduate Research Results. (2) Seminar, two hours; outside study, four hours. Prepares students in the engineering profession for career-related social interactions. Students learn about various components required in publishing research. Offers templates and examples as guides for undergraduate student presentations and writing. Development of skills and insights to successfully publish first research project. P/NP grading.

26. Finding Entry-Level Job. (2) Seminar, two hours; discussion, two hours; outside study, two hours. Designed to engage engineering students in process of getting ready to graduate and need help joining work force. Focus on how to apply to entry-level positions in engineering field, and specifically industries that value engineering students with technical experience. Offers suggestions to overcome typical barriers students encounter in securing entry-level position including students with no industry internships, lack of professional network, low confidence, and other low-confidence students. Students learn about various components of job application, practice preparing relevant materials, and prepare for career-related social interactions. Students develop personal research and develop necessary skills to successfully secure entry-level job as soon as possible after graduation. P/NP grading.

87. Introduction to Engineering Disciplines. (4) Lecture, four hours; outside study, four hours. Introduction to engineering as professional opportunity for freshman students by exploring difference between engineering disciplines and functions engineers perform. Development of skills and techniques for academic excellence through team process. Investigation of national need underlying current effort to increase participation of historically underrepresented groups in U.S. technological work force. Letter grading.

95. Internship Studies in Engineering. (1 to 4) Tutorial, one hour. Limited to first years/sophomores. Internship studies course supervised by associate dean or designated faculty members. Further supervision by internship coordinator required to be provided by organization for which students are doing internship. Students may be required to meet on regular basis with instructor and provide periodic reports of their experience. May be repeated once for credit. Individual contract with associate dean required. P/NP grading.

96A. Introduction to Engineering Design. (2) Lecture, one hour; laboratory, one hour; outside study, four hours. Introduction to engineering design while building teamwork and communication skills and examination of engineering majors offered at UCLA and of completion of hands-on engineering design projects, preparation of short report describing projects, and presentation of results. Specific project details and relevant majors explored vary with instructor. May be repeated once for credit with topic or instructor change. Letter grading.

96B. Introduction to Engineering Design: Digital Imaging. (2) Lecture, one hour; laboratory, one hour; outside study, three hours. Introduction to engineering design while building teamwork and communication skills and examination of engineering majors offered at UCLA and of engineering careers. Hands-on experience with state-of-art solid-state imaging devices. How to focus, expose, record, and manipulate teleoscopic images. Development of photographic technology from early chemical experiments to widespread use of cell phone camera. Completion of hands-on engineering design projects, preparation of short report describing projects, and presentation of results. Letter grading.

96C. Cybernetics: Introduction to Robotic Control Systems. (2) Lecture, one hour; laboratory, one hour; outside study, four hours. Complete introduction to robotics and application of rapidly growing engineering technology with expanding societal impact. Designed to support entry-level students with principal modern control systems. Students learn about various components in hands-on technical experience in humanoid robotics. Hands-on control systems are provided in laboratory sections for each student for system design and characterization. Students connect personal computer to robotic control system and have real-time access for configuration and control. Convenient computing tools are provided to support each design method, as well as real-time visualization and performance characterization. Letter grading.

96E. Introduction to Engineering Design: Electrocardiogram. (2) Lecture, 90 minutes; laboratory, 90 minutes; outside study, three hours. Students learn and use concepts and techniques in electrical circuit design, physical electronics, analog and digital, bio-physics, microcontrollers, and computer programming. Students work in teams to design, construct, and test circuit boards capable of measuring human electrocardiograms and displaying results on the computer display monitor, with computer analysis and display. Students present their designs orally and in writing. Letter grading.

96G. Introduction to Engineering Design: Go-Karts. (2) Lecture, 90 minutes; laboratory, 90 minutes; outside study, three hours. Students learn and use concepts and techniques in car design, finite element analysis, and mechanical motion performance, steering linkages, and general mechanical design and assembly to work in teams and construct test go-karts. Students present their designs orally and in writing. Letter grading.

96I. Introduction to Engineering Design: Internet of Things. (2) Formerly numbered 96C. Lecture, one hour; laboratory, one hour; outside study, four hours. Recommended for undergraduate Aerospace Engineering, Bioengineering, Biomedical Engineering, Electrical Engineering, and Mechanical Engineering majors. Introduction to engineering design while building teamwork and communication skills and examination of engineering majors offered at UCLA and of engineering careers. Hands-on experience with state-of-art Internet of Things (IoT) technology to offer students opportunity to rapidly develop innovative and inspiring systems that provide ideal introduction to computing systems and IoT applications specific to their major field. IOT technology has become one of most important advances in technology history with applications ranging from wearable devices for healthcare to residential monitoring systems, natural resource protection and management, intelligent vehicles and transportation systems, robotics systems, and energy conservation. Hands-on on-consumers engineering design projects, preparation of short report describing projects, and presentation of results. Letter grading.

96R. Introduction to Engineering Design: Rockets. (2) Lecture, 90 minutes; laboratory, 90 minutes; outside study, three hours. Introduction to basic concepts in aerospace engineering, computer-aided design, finite element analysis, 3D printing, carbon fiber layup, telemetry, general mechanical design and assembly, and machine shop fabrication. Concepts applied to hands-on-based design, construction, and testing of small 3D-printed rockets and large, high-power rockets. Students present their designs orally and in writing, and conduct tests and experiments against other student teams. Rockets fired from Mojave Desert launch site in class field trip. No prior experience or coursework needed. Study led by experienced undergraduate members of Bruin Rocket Project. Meetings, and design and fabrication homework, make use of Maker-space facilities and tools. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 16 units (including course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

102. Synthetic Biosystems and Nanosystems Design. (4) Lecture, four hours; outside study, eight hours. Required: course M101, Life Sciences 3. Introduction to current progress in engineering to integrate biosciences and nanosciences into synthetic systems, where biological components are reengineered and recombined to perform desirable functions in both biological and artificial systems. Discussion of basic technologies and systems analysis that deal with dynamic behavior, noise, and uncertainties. Design project in which students are challenged to design novel biosystems and nanosystems for nontrivial task required. Letter grading.

M103. Environmental Nanotechnology: Implications and Applications. (4) Same as Civil Engineering M103. Lecture, four hours; outside study, six hours. Recommended requisite: course M101. Introduction to potential implications of nanotechnology to environmental systems as well as potential application of nanotechnology to environmental protection. Technical contents include three multidisciplinary areas: (1) physical, chemical, and biological properties of nanomaterials, (2) transport, reaction, and toxicity of nanomaterials in natural environmental systems, and (3) use of nanotechnology for energy and water production, pollution abatement, remediation, and disaster response.

110. Introduction to Technology Management and Economics for Engineers. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Fundamental principles of micro-level (individual, firm, and industry) and macro-level (government, international) economics as they relate to technology management. How individuals, firms, and governments impact successful commercialization of high-technology products and services. Letter grading.

111. Introduction to Finance and Marketing for Engineers. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Critical components of finance and marketing research and practice as they impact management of technology commercialization. Internal (within firm) and external (in marketplace) marketing and financing of high-technology innovation. Concepts include present value, future value, discounted cash flow, internal rate of return, return on assets, return on equity, return on investment, interest rates, cost of capital, and product, price, positioning, and promotion. Use of market research, segmentation, and forecasting in management of technological innovation. Letter grading.

112. Laboratory to Market, Entrepreneurship for Engineers. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Critical components of finance and marketing research and practice as they impact management of technology commercialization. Use of market research, segmentation, and forecasting in management of technological innovation. Letter grading.

113. Product Strategy. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Designed for juniors/seniors. Introduction to current management concept of product development. Topics include product strategy, product platform, and product lines; competitive strategy, vectors of different
116. Statistics for Management Decisions. (4) Lecture, four hours; outside study, eight hours. Management as a science. Decisions taken by managers in most companies are based on uncertain data. Application of probability to problems of reasoning from sample data, encompassing estimation, hypothesis testing, and regression analysis. Discussion of specific analytical techniques needed in later courses in program. Development of basic understanding of statistical analysis. Letter grading.

120. Entrepreneurship for Scientists and Engineers. (2) Seminar, two hours; outside study, four hours. Designed as an introduction to courses in entrepreneurship. Provides a foundation in entrepreneurship and need for constant learning on this subject. Letter grading.

160. Entrepreneurship and Venture Initiation for Engineers. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Not open to students with credit for course 171E. Emphasis on planning, funding, corporate structures, and financial accounting for entrepreneurial endeavors. Focus on fundamentals of building teams and also emphasis on inherent experiential nature of entrepreneurship and need for constant learning on this subject. Letter grading.

163. Entrepreneurship and New Product Development for Engineers. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Limited to juniors/seniors. Not open to students with credit for Management 163. Designed to deepen understanding of innovations and innovative processes related to creating new products. Inquiry into why, what, and how of making new products. New products are essential to any business (start-up or well-established) and thriving economies. Making successful new products requires various types of innovation. Availability of digital technology and broadband communications have accelerated pace of these innovations. Letter grading.

170. Project-Based Technology Bootcamp for Social Impact. (4) Seminar, two hours; offsite work, five hours; outside study, five hours. Study of design thinking or design, ethics, technology, and interpersonal topics such as data analysis, user interface and user experience, how to pitch, and collaboration. Application of learned skills to define social-impact problem and build solution in student teams coached by industry professionals. May be repeated for credit. P/NP or letter grading.

180. Engineering of Complex Systems. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Designed for junior/senior engineering majors. Holistic view of engineering discipline, covering life cycle of engineering, processes, and techniques used in industry. Major systems engineering perspective in which aspects of electrical, mechanical, material, and software engineering are incorporated. Three specific case studies in communication, sensor, and processing systems included to help students understand these concepts. Special attention paid to material covered to engineering curriculum offered by UCLA to help students integrate and enhance technical knowledge already acquired. Motivation of students to continue their learning and reinforce lifelong learning habits. Letter grading.

181EW. Ethical Negotiation in Technology. (4) Lecture, five hours; discussion, three hours; outside study, four hours. Requisite: English Composition 3, 3D, 3DS, 3E, or 3SL. Not open for credit to students with credit for course 182EW, 183EW, 185EW, or 188EW. Focuses on negotiation and complex ethical issues that emerge as result in areas such as biotechnology, information technology, nanotechnology, and energy technology. Discussion of nature of these issues; their ethical, legal, and social ramifications; and what society values in relation to these issues. Writing and revision of about 20 pages total, including two essays and one analysis of a negotiation from an ethical perspective. Satisfies engineering writing requirement. Letter grading.

182EW. Technology and Law. (4) Lecture, four hours; discussion, three hours; outside study, five hours. Requisite: English Composition 3, 3D, 3DX, or 3SL. Not open for credit to students with credit for course 181EW, 183EW, 185EW, or 188EW. Places engineer in broader societal context through examination of some of key ethical, legal, and regulatory issues, diversity of laws and cases, and role of deployment of emerging technology products and services. Historical examination of ethical and legal frameworks generally and in relation to technology. Exploration of some specific contemporary technology-related topics to examine their broader ramifications. Topics may include driverless cars, algorithms and artificial intelligence, social media, digital privacy, and impact of technology on employment. Offer students tools enabling them to think more proactively and holistically about ethical and societal dimensions of their work as technology creators. Satisfies engineering writing requirement. Letter grading.

183EW. Engineering and Society. (4) Lecture, four hours; discussion, three hours; outside study, five hours. Enforced requisite: English Composition 3, 3D, 3DS, 3E, or 3SL. Not open for credit to students with credit for courses 181EW, 182EW, 183EW, or 188EW. Limited to sophomores/junior/senior engineering students. Professional and ethical considerations in practice of engineering. Impact of technology on society and on development of moral and ethical values. Contemporary environmental, biological, legal, and other issues created by new technologies. Emphasis on research and writing in engineering environments. Writing and revision of about 20 pages total, including two individual technical essays and one team-written research report. Readings address technical issues and writing form. Satisfies engineering writing requirement. Letter grading.

185EW. Art of Engineering Endeavors. (4) Lecture, four hours; discussion, three hours; outside study, five hours. Enforced requisite: English Composition 3, 3D, 3DS, 3E, or 3SL. Not open for credit to students with credit for course 181EW, 182EW, 183EW, or 188EW. Designed for junior/senior engineering students. Non-technical skills and experiences necessary for engineering career success of group dynamics in engineering practice. Teamwork and effective group skills in engineering environments. Organization and control of multidisciplinary complex engineering projects, interpersonal skills, and characteristics of effective leaders. How engineering, computer sciences, and technology relate to major ethical and social issues. Societal demands on practice of engineering. Emphasis on research and writing in engineering environments. Satisfies engineering writing requirement. Letter grading.

188. Special Courses in Engineering. (4) Seminar, four hours; outside study, eight hours. Special topics in engineering for students taught on experimental or temporary basis, such as those taught by resident and visiting faculty members. May be repeated for credit with topic or instructor change. Letter grading.

188EW. Experimental Courses in Engineering Ethics. (4) Lecture; four hours; discussion, three hours; outside study, five hours. Enforced requisite: English Composition 3, 3D, 3DS, 3E, or 3SL. Not open for credit to students with credit for course 181EW, 182EW, 183EW, or 188EW. Limited to junior/senior engineering students. Professional and ethical considerations in practice of engineering and computer science. Emphasis on writing within engineering and computer science. Writing and revision of about 20 pages total, including two individual technical essays. Readings address technical issues and writing form. Satisfies engineering writing requirement. Letter grading.

191. Seminar Series in Engineering Research. (1) Seminar, one hour. Seminar series in cutting-edge engineering research at UCLA. Each seminar is given by UCLA graduate student researcher or post-doctoral faculty member. Designed to be accessible to undergraduate students in any science, technology, engineering, and mathematics (STEM) major. Offers undergraduate students window into excitement of graduate student research experience. Also offers opportunity for graduate students to learn about what their peers are doing. P/NP grading.

192. Fundamentals of Engineering Mentorship. (2) Seminar, two hours; outside study, eight hours. Limited to graduate students in engineering. Designed to provide experience and principles and practical techniques for instruction of hands-on engineering design projects. Curriculum planning, project preparation, classroom management, team dynamics, multidisciplinary projects, professional development, and group cohesion, and emergency procedures. Preparation of lessons and projects for academic year courses and high school summer outreach program, with practice presentations. May be repeated for credit. P/NP grading.

195. Internship Studies in Engineering. (1 to 4) Tutorial, one hour. Limited to juniors/seniors. Internship studies course supervised by associate dean or designated faculty member. P/NP grading. May be taken in place of internship program for students with credit for similar course supervised by associate dean or designated faculty member. Limited to maximum of 15 hours. May be repeated for credit. Letter grading.

199. Directed Research in Engineering. (2 to 8) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culumination of paper or project required. May be repeated for credit with school approval. Individual contract required; enrollment petitions available in Office of Academic and Student Affairs. Letter grading.

Graduate Courses

200. Program Management Principles for Engineers and Professionals. (4) Lecture, four hours; outside study, eight hours. Designed for graduate students. Practical review of necessary processes and procedures to successfully manage technology programs. Review of fundamentals of program planning, organizational structure, implementation, and performance measurement. Design projects with necessary information to support decision-making process that provides high-quality products on time and within budget. Letter grading.

201. Systems Engineering. (4) Lecture, four hours; outside study, eight hours. Designed for graduate students. Practical review of major elements of system engineering process. Coverage of key elements: system requirements and flow down, product development cycle, functional analysis, system synthesis and trade studies, budget allocations, risk management metrics, review and audit activities and documentation. Letter grading.

202. Reliability, Maintainability, and Supportability. (4) Lecture, four hours; outside study, eight hours. Requisite: course 201. Designed for graduate students with one to two years work experience. Interdisciplinary course on the system life-cycle cost and one key element of system engineering activities. Overview of engineering disciplines critical to this function—reliability, maintainability, and supportability—and their applications using reliability theory. Topics also include fault detections and isolation and parts obsolescence. Discussion of 6-sigma process, one effective design and manufacturing system to ensure system reliability, maintainability, and supportability. Letter grading.

203. System Architecture. (4) Lecture, four hours; outside study, eight hours. Requisite: course 201. Designed for graduate students with BS degrees in engineering or science and one to two years work experience in selected domain. Art and science of architecting. Introduction to architctural methodology—paradigm and tools. Principles of architecting through analysis of architecture designs of major existing sysytem
tems. Discussion of selected elements of architectural practices, such as representation models, design progression, and architecture frameworks. Examination of professionalization of system architecting. Letter grading.

204. Trusted Systems Engineering. (4) Lecture, four hours; outside study, eight hours. Trust is placed in information systems to behave properly, but cyber threats and breaches have become routine. Use of information from financial, medical, government, and national security systems. To build systems that can protect confidentiality, integrity, and availability involves more than just system components, network security, computer security, data security, cryptography, etc. One can use most secure components, and resulting system could still be vulnerable. Skills learned ensure that systems are architected, designed, implemented, tested, and operated for specific levels of trust. Aspects include assessing vulnerability and risk for systems, establishing protection principles, and using them to integrate smaller components into systems that perform these functions and design and construct following trusted development and implementation processes. Letter grading.

205. Model-Based Systems Engineering. (4) Lecture, four hours; outside study, eight hours. Model-based systems engineering (MBSE) and systems modeling language (SysML) taught through lectures and requirements of projects, one project. Lectures and readings to provide students with conceptual framework and vocabulary. Individual projects enable students to develop basic skills for creating SysML requirements and structural and behavioral diagrams. In group project students learn how to package, compartmentalize, and integrate smaller efforts while being constrained to meet schedules. In industry-recognized credentials may be obtained, as course covers Object Management Group (OMG) Certified Systems Modeling Professional (OCSPM) tests, such as Model User and Model Builder Fundamentals and Modeler. Letter grading.

206. Engineering for Systems Assurance. (4) Lecture, four hours; outside study, eight hours. Recommended prerequisites: course 204, Computer Science 236. Systems are constructed to perform complex functions and services. How to understand needs of users, analysis of requirements and derived requirements, creation of various system architecture products, and design and integration of various components into systems that perform these functions and services. System assurance addresses confidence that systems meet specified operational requirements based on requirements and by applying assurance techniques. Introduction, investigation, and analysis of framework of assurance to accomplish total system assurance. Development of secure, reliable, and dependable systems from complex requirements, such as air traffic control, Supervisory Control and Data Acquisition (SCADA), and autonomous vehicles to military realm such as command, control, communication, intelligence, and cyber. Letter grading.

210. Operations and Supply Chain Management. (4) Lecture, four hours; outside study, eight hours. Introduction to strategic and operating issues and decisions involved in managing enterprises. Operational processes transform resources into products or services into goods and utilizes them to provide service, or does both. Conceptual framework and set of analytical tools provided to enable students to better understand how processes behave as they do. Given this understanding, students are able to involve themselves in organization’s defining strategic decisions, those related to key processes affecting organizational unit’s performance. Letter grading.


472A-472D. Engineer in Business Environment. (3-3-3-1.5) Lecture, three hours (courses 472A, 472B, 472C) and 90 minutes (course 472D). Limited to Engineering Executive Program students. Design and integration of various components into systems that perform these functions and design and construct following trusted development and implementation processes. Examination of intellectual property law, not only by learning fundamental rules associated with patent, copyright, trademark, and trade secret protection, but by studying business strategies that these rules support. Examples and case studies to be taken from across content, technology, and pharmaceutical industries. Letter grading.

213. Data and Business Analytics. (4) Lecture, four hours; outside study, eight hours. Coverage of wide variety of spreadsheet models that can be used to solve business and engineering problems, with emphasis on management science models as integral part of analytic decision making. Managerial models include data modeling, regression and forecasting, linear programming, network and distribution models. Optimization of engineering or business problems. General nonlinear optimization, and Monte Carlo simulation. Problems from operations, finance, and marketing taught by spreadsheet examples and describe general managerial situations from various industries and disciplines. Development of spreadsheet models to facilitate decision making. Letter grading.

214. Management Communication. (4) Lecture, four hours. Exploration of knowledge, attributes, skills, and strategies necessary to succeed communicatively in workplace, with focus on business presentation skills, visual and verbal persuasion skills, and interpersonal communication skills. Letter grading.

215. Entrepreneurship for Engineers. (4) Lecture, four hours; outside study, eight hours. Limited to graduate engineering students. Topics in starting and developing high-tech enterprises and intended for students who wish to complement their technical education with introduction to entrepreneurship. Letter grading.

299. Capstone Project. (4) Activity, 10 hours. Preparation: minimum of four 200-level courses in engineering. Project course that satisfies UCLA final comprehensive examination requirement of MS online degree in Engineering. Project is completed under individual guidance from UCLA Engineering faculty member, and team. Project incorporates advanced knowledge learned in MS program of study. Letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: graduate assistant. For students who wish to complete their teacher education with a focus on composition pedagogy, assessment of student writing, guidance of revision process, and specialized writing problems that may occur in engineering writing contexts. Practical concerns of preparing students to write capstone assignments, marking and grading essays, and conducting peer reviews and conferences. S/U grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate advisor and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.

ENGLISH

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English / 435

472A-472D. Engineer in Business Environment. (3-3-3-1.5) Lecture, three hours (courses 472A, 472B, 472C) and 90 minutes (course 472D). Limited to Engineering Executive Program students. Design and integration of various components into systems that perform these functions and design and construct following trusted development and implementation processes. Examination of intellectual property law, not just topic for lawyers. Engineers who have design responsibilities must understand fundamentals, including knowing which protections are available for their designs and in other instances stands as obstacle to what would otherwise be most efficient design choice. Engineers with management responsibilities must understand legal doctrines or materials not required. Knowledge of legal doctrines or materials not required. Letter grading.

473A-473B. Analysis and Synthesis of Large-Scale Systems. (3-3) Lecture, two and one half hours; outside study, six hours. Limited to Engineering Executive Program students. Problem area of modern industry or government is selected as class project, and its solution is synthesized using quantitative tools and methods. Project also serves as laboratory in organization for goal-oriented technical group. In Progress (473A) and S/U or letter (473B) grading.

495S. Teaching Preparation Seminar: Writing for Engineers. (4) (Same as English Composition 495S) Seminar, two and one half hours; outside study, nine and one half hours. Limited to graduate students. Preparation of all teaching assistants for Engineering writing courses not exempt by appropriate departmental or program training. Training and mentoring, with focus on composition pedagogy, assessment of student writing, guidance of revision process, and specialized writing problems that may occur in engineering writing contexts. Practical concerns of preparing students to write capstone assignments, marking and grading essays, and conducting peer reviews and conferences. S/U grading.

M495S. Supervised Teaching Writing for Engi- neers. (2) (Same as English Composition M495S) Seminar, one hour; outside study, five hours. Enforced prerequisite: course M495S. Required of all teaching assistants in their initial term of teaching Engineering writing courses. Mentoring in group and individual meetings continued for engineers. Students. Seminar on communication of engineering principles, concepts, and methods, preparation, organization of material, presentation, use of visual aids, grading, advising, and rating of student. Letter grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate advisor and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.
Faculty Roster

Professors
Blake Allmendinger, PhD
Ali Behdad, PhD (John Charles Hillis Professor of Literature)
Adam F. Bradley, PhD
Joseph E. Bristow, PhD
Christine N. Chism, PhD
Jonathan H. Grossman, PhD
Yogita Goyal, PhD
Barbara Fuchs, PhD
Helen E. Deutsch, PhD
Elizabeth M. DeLoughrey, PhD
Felicity A. Nussbaum, PhD
Richard A. Lanham, PhD
Henry Ansgar Kelly, PhD
Robert N. Watson, PhD
Alexandra Minna Stern, PhD
Brian K. Stefans, MFA
Mona E. Simpson, MFA
Karen J. Cunningham, PhD
Senior Lecturers SOE
David Stuart Rodes, PhD, Emeritus
Senior Lecturers
Karen J. Cunningham, PhD, Emerita
Christopher M. Mott, PhD
Lecturers
Joseph A. Dimuro, PhD
Michelle R. Huneven, MFA
Colleen M. Jauretche, PhD
Reed D. Wilson, PhD
Adjunct Associate Professor
Jeffrey L. Decker, PhD

Overview
The Department of English is dedicated to the study of the literatures and cultures of those parts of the world in which English is a primary language. Although committed to no single method or approach, the department requires a knowledge of British, American, and Anglophone literary history and an engagement with a range of methodological approaches that foster intellectual curiosity and critical thinking and encourage its students to be not only expert readers and writers but engaged and ethical citizens.

An understanding and appreciation of literature can furnish lifelong rewards. In addition to offering students such personal benefits, the department seeks to foster critical analysis and lucid writing and to teach them to think about how language and representation function in the world. Such skills are essential to success in a variety of professions for which the major in English can provide excellent preparation, including law, administration, business, teaching, media, and entertainment.

Undergraduate Study
The department offers Bachelor of Arts (BA) degrees in English and in American Literature and Culture. When selecting courses to fulfill requirements for the majors, students are expected to choose those courses that best reflect their own interests and simultaneously contribute toward a coherent program in literary studies.

Undergraduate Policies
Students must have completed the Entry-Level Writing requirement before taking any courses in English (other than English Composition 1 or 2). For more information, see Entry-Level Writing in Undergraduate Study.

Graduate Study
A graduate program leading to the Master of Arts (MA) degree is available for students who wish to continue the study of literature at an advanced level. A parallel program continues to the PhD degree. Because the PhD program may require five years or more, it is intended only for qualified students who are seriously committed to advanced literary scholarship and, in some cases, to a career in college or university teaching.

Undergraduate Majors

English BA
Students pursuing the Bachelor of Arts degree in English are expected to meet with the undergraduate counselors and undergraduate faculty adviser to plan and follow a course of study that incorporates their interests and goals with the fulfillment of requirements for the degree.

Capstone Program
The English major is a designated capstone program. Students have the option of completing a capstone seminar or other culminating work that enables them to use knowledge and skills acquired through previous coursework to engage, under the guidance of a faculty member, in literary research or other creative projects that result in a final paper or other product.

Learning Outcomes
The English major has the following learning outcomes:

- Proficiency in a broad knowledge/skill set including research methods, critical thinking, and analytical writing
- Familiarity with basic project material including data from multiple sources
- Familiarity with relevant scholarly and current debates in the field
- Conception and execution of an independent project
- Demonstrated seminar or workshop skills
• Demonstrated oral and written communication skills
• Demonstrated defense-of-scholarship skills

Entry to the Major

Transfer Students

Transfer applicants to the English major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one English composition course, one English critical reading and writing course, one year of English literature survey courses, and either (1) level five or equivalent in any one foreign language or (2) level three or equivalent in one foreign language and two additional courses in foreign language or literature in translation.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: English Composition 3, English 4W or 4HW or 4WX, 10A, 10B, 10C taken in the stated sequence (each course is a prerequisite for the next course), and either (1) level five or equivalent in any one foreign language or (2) level three or equivalent in one foreign language and two additional courses in foreign language or literature in translation.

The Major

Required: Ten 4- or 5-unit upper-division English courses, including (1) four historical period courses, one from each of the following four periods: (a) literatures in English to 1500—course 140A through 148 or indicated sections of 149, (b) literatures in English, 1500 to 1700—course 150A through 157, 166A, indicated sections of 159 or 159R, (c) literatures in English, 1700 to 1850—course 160A through 165C, 166B through 168, or indicated sections of 169 or 169R or 176, and (d) literatures in English, 1850 to present—course M101B, M101C, M102A, M102B, M104A through M104D, M105B through M105E, 116B, 130, 131, 146B, 164C, 164D, 167A, 167B, 170A through 174C, 179, or 179R, or indicated sections of 176; (2) three breadth courses, one from each of three of the following four areas: (a) gender, race, ethnicity, disability, and sexuality studies—English 100 through 109, M126, 135, 155, 163C, 165B, 166C, or indicated sections of 119, 139, 149, 159R, 169, 169R, 179, or 179R, (b) imperial, transnational, and postcolonial studies—course M105A through M105D, 106, 112D, 128, 130 through 135, 154, 157, 163B, 164D, 165A, 166A, 166B, 176, or indicated sections of 149, 159, 159R, 169, 169R, 179, or 179R, (c) genre studies, interdisciplinary studies, critical theory—course 111A through 129, 144, 146, 147, 153, 156, 161A, 161B, 161C, 163A, 163C, 164A through 164D, 167A, 167B, 171A through 177, or indicated sections of 149, 159, 159R, 169, 169R, 179, or 179R, and (d) creative writing—courses 136, 137, M138; (3) two elective courses (English 195CE is not applicable); (4) one seminar from course 180 through 184, or M191A through M191E.

Admission to creative writing workshops (courses 136, 137, M138) is by application only.

Honors Program

Students must take one theory course from English 120 through 128 no later than winter quarter of the junior year. In spring quarter of the junior year, students must take course 191H. During fall and winter quarters of the senior year, students must take courses 198A and 198B, in which they write a thesis under the direction of a faculty member.

Policies

Preparation for the Major

A grade of C or better is required in each of English Composition 3, English 4W or 4HW or 4WX, 10A, 10B, 10C. A foreign literature in translation course list is available under Foreign Literature in Translation. Transfer students who have satisfied the College of Letters and Science foreign language requirement at the high-school level through the Intersegmental General Education Transfer Curriculum (IGETC) program may satisfy the departmental requirement with five foreign literature in translation courses. The courses may be taken on a Passed/Not Passed (P/NP) grading basis.

The Major

Each course applied toward requirements for the major must be 4 or 5 units and be taken for a letter grade.

Honors Program

Admission

The honors program is open to majors with a 3.5 departmental and a 3.25 overall grade-point average (GPA). Students with lower GPAs may petition for admission to the program, but these grade-point averages must be achieved before graduation in order to qualify for honors. Students should apply by winter quarter of the junior year. For application forms and more information, contact the departmental counselor.

Requirements

The one theory course from English 120 through 128 may fulfill one of three required breadth courses. Course 191H may fulfill one of the two electives for the major. Course 198B may fulfill the second of the two electives for the major.

Students in the creative writing concentration are required to have completed or been accepted into their third workshop in a single genre prior to or concurrent with enrollment in course 191H.

The thesis determines whether highest honors, honors, or no honors are received.

American Literature and Culture BA

Students are expected to meet with the undergraduate counselors and undergraduate faculty adviser to plan and follow a course of study that incorporates their interests and goals with the fulfillment of requirements for the degree.

Capstone Program

The American Literature and Culture major is a designated capstone program. Students have the option of completing a capstone seminar or other culminating work that enables them to use knowledge and skills acquired through previous coursework to engage, under the guidance of a faculty member, in literary research or other creative projects that result in a final paper or other product.

Learning Outcomes

The American Literature and Culture major has the following learning outcomes:

• Proficiency in a broad knowledge/skill set including research methods, critical thinking, and analytical writing
• Familiarity with basic project material including data from multiple sources
• Familiarity with relevant scholarly and current debates in the field
• Conception and execution of an independent project
• Demonstrated seminar or workshop skills
• Demonstrated oral and written communication skills
• Demonstrated defense-of-scholarship skills

Entry to the Major

Transfer Students

Transfer applicants to the American Literature and Culture major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one English composition course, one English critical reading and writing course, and either (1) level five or equivalent in any one foreign language or (2) level three or equivalent in one foreign language and two additional courses in foreign language or literature in translation.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: English Composition 3, English 4W or 4HW or 4WX taken in the stated sequence (English Composition 3 is requisite to any English course), 11, 87, and either (1) level five or equivalent in any one foreign language or (2) level three or equivalent in one foreign language and two additional courses in foreign language or literature in translation.

The Major

Required: Ten 4- or 5-unit upper-division courses, including (1) seven American literature courses, at least two in the time period before 1848 and two in the time period after 1848, selected from the following three areas with a minimum of two selected from each area: (a) origins—beginnings, events, and trajectories: studying the making of America in its myriad beginnings and manifestations—courses 100, M102A, M104A, 166A, 166B, 166C, 167A, 167B, 170A, or, when treating American topics, M101B, 106, 123, 131, 139,
The English minor is designed for students who wish to enhance their major program with the benefits of intensive study of English language and literatures, including a better understanding and appreciation of literatures in English and improvement in critical thinking, reading, and writing skills.

Admission
To enter the minor, students must have an overall grade-point average of 2.0 or better, have completed English 10A with a grade of C or better, and have satisfied the English Composition 3 requirement and completed English 4W. Students must file a petition to declare the minor by meeting with a student affairs officer in the Undergraduate Counseling Office, 158/160 Kaplan Hall, 310-825-1389. This allows them priority enrollment in many upper-division courses.

The Minor
Required Lower-Division Courses (10 units): English 10B and 10C, with grades of C or better.
Required Upper-Division Courses (25 units): Five courses selected from English 100 through M191E, including one course in literatures in English written before 1700 (see course lists 1a and 1b under English BA, the major) and one other course in literatures in English written before 1850 (see course lists 1a, 1b, and 1c under English BA, the major).

Policies
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. At least 15 upper-division units applied toward the minor must be taken in residence during the regular academic year (excluding summer sessions) at UCLA. Transfer credit is subject to department approval; consult with the undergraduate counselors before enrolling in any courses for the minor.

Each minor course must be taken for a letter grade (except elective courses offered only on a Passed/Not Passed (P/NP) basis; no more than 4 units of P/NP coursework may be applied), and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Creative Writing Minor
The creative writing minor allows students to develop the craft of poetry writing or short fiction writing, as well as to explore other and emerging areas of writing practice such as creative nonfiction, screenwriting, playwriting, hybrid genres, and electronic forms. The minor is excellent preparation for those who seek to pursue advanced degrees in writing, as well as for those who seek to pursue careers in writing and the creative industries.

Admission
To enter the minor, students must (1) have an overall grade-point average of 2.0 or better, (2) have completed the required lower-division courses, (3) have completed one upper-division course in poetry writing (English 136A or 136B) or short fiction writing (English 137A or 137B), and (4) submit a brief letter of application, a writing sample (at least 10 pages of prose or 7 to 10 poems), and a PDF copy of their degree audit report.

The Minor
Required Lower-Division Courses (9–10 units): One course selected from English 4W, 4W, or 4WX; and one additional course selected from English 10C, 11, 20, or 20W.
Required Upper-Division Courses (24–25 units): One course in a core genre selected from English 136A, 136B, 137A, or 137B; one advanced course in the same genre, or one intermediate or advanced course in the other genre, or one creative writing topics course selected from English 136A, 136B, 137A, 137B, or M138; one or two elective courses selected from Asian American Studies 112C, Chicana/o and Central American Studies CM135, English M101B, M101C, M102B, M104B, M104C, M105D, M136A, M136B, M137A, M137B, M138, M170C, M171B, M171C, M172B, M173B, M174A, M174B, M174C, M192 (must be taken twice), or English Composition M138; and one capstone course culminating in a project with a creative writing focus selected from English 184, 195CE, 198B, or 199.
nor. Successful completion of the minor is indicated on the transcript and diploma.

Literature and the Environment Minor

The Literature and the Environment minor provides students with both a solid foundation for literary interpretation and a superstructure that integrates those skills and perspectives with the questions about the past, present, and future of the biosphere. It is designed for undergraduate students who wish to enhance their major program with intensive study of literature in its relationship to the natural environment, while improving their skills in reading, writing, creative and critical thinking, and analysis of complex situations in an ethical frame. The minor examines how different cultural forms (for example, fiction, journalism, poetry, film, design, and other arts) represent environmental issues, including biodiversity, animal studies, wilderness, food, urban ecologies, postcolonial ecologies, environmental justice, and climate change.

Admission

To enter the minor, students must be in good academic standing with an overall grade-point average of 2.0 or better and have completed English 4HW, 4W, 4WX, or any Writing II course with a grade of C or better. Students must file a petition to declare the minor by meeting with a student affairs officer in the Undergraduate Counseling Office. 158/160 Kaplan Hall, 310-825-1389. For more information, see the minor website.

The Minor

Required Lower-Division Courses (10 units): English 4W, 4HW, 4WX, or any Writing II course and English M30 (or M30SL), with grades of C or better.

Required Upper-Division Courses (20 to 24 units): (1) English 118E and M118F or one additional 118E course on a different topic or one other English course that has a primary focus on environmental issues to be selected from a list available in the Undergraduate Counseling Office prior to the opening of enrollment each term, (students may petition to substitute other courses), (2) one course selected from American Indian Studies C178, Anthropology 133, 168P, Art History 132D, 133E, C145A, Chicana/o and Central American Studies M144, M183, Food Studies M170XP, Geography 130, 136, Honors Collegium 141, 174, Italian 124, Public Policy C115, Russian 122, Urban Planning M120, 121, or CM166 (3) one course selected from Atmospheric and Oceanic Sciences M105, 107, 141, Earth, Planetary, and Space Sciences 101, Ecology and Evolutionary Biology 105, 131, 154, 176, Environment M111, M125, M126, M131, M133, 134, 150, M153, 157, C159, M161, 163, M164, 166, M167, or Environmental Health Sciences 100, (4) one course selected from English 184, 195CE, 197, 198A, 198B, or 199 that culminates in a project focused primarily on literature from an ecocritical or other environmentally focused perspective.

Policies

Students may petition to substitute an internship course/independent study/directed research course (195CE, 197, 198, or 199) for an elective course as long as it is clearly and predominantly relevant to the topics covered in the minor and falls within the discipline of the requirement for which it serves as a substitute. No more than one upper-division independent study/directed research course (4 or 5 units) may be applied toward the minor. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Professional Writing Minor

The Professional Writing minor includes the study and practice of originating, designing, and communicating information and ideas. As a discipline, it is the core for creating, debating, and disseminating knowledge in the 21st-century multicultural economy. The minor enables students to expand their knowledge of the practices of writing in a diverse modern society.

Through courses that understand writing broadly—as encompassing written, oral, visual, and electronic multimodal communication—students in the Professional Writing minor acquire deep intellectual and practical skills needed to perform well as good writers within the professions they choose, or to become professional writers with specific areas of academic expertise. All Writing Programs courses in the minor include a segment on digital media.

Admission

To enter the minor, students must have an overall grade-point average of 2.0 or better, have satisfied the Writing II requirement, and submit a 500-word essay explaining why they want to declare the minor, and how they expect it to relate to their professional lives. Minor applications are submitted on the English Department website. For more information, contact the Writing Programs advisor, 146 Kaplan Hall, 310-206-1145.

The Minor

Required Lower-Division Courses (4-5 units): Any Writing II course or equivalent.

Required Upper-Division Courses (26-30 units): One core course from English Composition 130A through 130E; two courses selected from English 110A, 110B, 110C, 110E, 110P, 110V, M191P (or Comparative Literature M191P), M192 (or English Composition M192 or Environment M192), English Composition 131A, 131C, 131D, 132, 133, 134, 136, 137, or English M138 (or English Composition M138) when offered on a nonfiction topic; one course selected from African American Studies M194A (or Education M131A), Asian American Studies C142A, C142B, C142C, Community Engagement and Social Change 163SL, Communication 109, 110, Dance C184, Digital Humanities 150, Ecology and Evolutionary Biology C179, Education 133, Film, Television, and Digital Media C144, Life Sciences 110, M192A, Music Industry 102, 104A, 110, 122, Research Practice 192B; one additional upper-division course selected from the lists above; and one capstone, cumulative portfolio, independent study, or community and corporate internship course from English 195CE, 197, 199, English Composition 195, or 199.

Policies

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

No more than one lower-division course may be applied to the minor. Students may petition to substitute courses other than those listed to satisfy elective requirements.

Each minor course must be taken for a letter grade (unless the course is graded only on a P/NP basis; no more than 4 units of P/NP may be applied to the minor), and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Major

English MA, CPhil, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

English Lower-Division Courses

4HW. Critical Reading and Writing (Honors), (5) Lecture, four hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Introduction to literary analysis, with close reading and carefully written exposition of selections from principal modes of literature: poetry, prose fiction, and drama. Minimum of four papers (three to five pages each) and two in-class essays. Satisfies Writing II requirement. Letter grading.

4W. Critical Reading and Writing, (5) Lecture, four hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Introduction to literary analysis, with close reading and carefully written exposition of selections from principal modes of literature: poetry, prose fiction, and drama. Minimum of 15 to 20 pages of revised writing. Satisfies Writing II requirement. Letter grading.

4WX. Critical Reading and Writing (Community-Engaged Learning), (5) Formerly numbered 4WS. Lecture, four hours; fieldwork, two hours. Enforced requisite: English Composition 3. Introduction to literary analysis, with close reading and carefully written exposition of selections from principal modes of literature: poetry, prose fiction, and drama. Minimum of 15 to 20 pages of revised writing. Service learning com-
M30SL. Environmental Literature and Culture (Service Learning). (5) (Same as Environment M30SL.) Lecture, three hours; discussion, one hour; fieldwork, two hours. Enforced requisites: satisfaction of Entry-Level Writing requirement. Introduction to core themes, questions, and methods within interdisciplinary field of environmental humanities. Examination of how different culture forms (e.g., fiction, journalism, poetry, visual art) represent environmental issues. Topics may include biodiversity, wilderness, food, urban ecologies, postcolonial ecologies, environmental justice, and climate change. P/NP or letter grading.

30. Apocalyptic Imagination. (5) Lecture, four hours; discussion, one hour. Exploring what that world will come to end is common reaction to crises such as war, genocide, famine, epidemic, and natural disaster. It is also major component of some religious traditions and political movements that aim to change society from ground up. Exploration of narrative templates and visual images that have typically accompanied stories about end of world, historical moment and movement they emerge from, creators, audiences, and impacts. Exploration of these questions through wide range of textual and visual works from scholarship and journalism to novels, graphic novels, films, and videos. Typical story types include geographical, historical, and social context, and critical writing. Minimum of three papers (three to five pages each) or equivalent required. P/NP or letter grading.

11. Introduction to American Cultures. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: English Composition 3 or 4H, English 4W or 4HW, 10A. Study of major writers and genres, with emphasis on tools for literary analysis such as close reading, argumentation, historical and social context, and critical writing. Minimum of three papers (three to five pages each) or equivalent required. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20. Introduction to Creative Writing. (4) Lecture, four hours; discussion, one hour (when scheduled). Preparation: submission of creative or expository writing samples to seminar. Enforced requisites: satisfaction of Entry-Level Writing requirement, English Composition 3. Not open for credit to students with credit for any course in the 140 series. Honors content noted on transcript. P/NP or letter grading. 

20W. Introduction to Creative Writing. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: satisfaction of Entry-Level Writing requirement, English Composition 3. Not open for credit to students with credit for course 20W. Designed to introduce fundamentals of creative writing and writing workshop experience. Emphasis on poetry, fiction, drama, and creative nonfiction depending on wishes of instructor(s) during any given term. Readings from assigned texts and weekly writing assignments required. P/NP or letter grading.

M30. Environmental Literature and Culture. (5) (Same as Environment M30.) Lecture, three hours; discussion, one hour. Enforced requisites: satisfaction of Entry-Level Writing requirement, Introduction to core themes, questions, and methods within interdisciplinary field of environmental humanities. Examination of how different culture forms (e.g., fiction, journalism, poetry, visual art) represent environmental issues. Topics may include biodiversity, wilderness, food, urban ecologies, postcolonial ecologies, environmental justice, and climate change. P/NP or letter grading.

12. Medieval and Renaissance Literature and Culture. (5) Lecture, four hours; discussion, one hour. Enforced requisites: satisfaction of Entry-Level Writing requirement. Not open for credit to English majors or students with credit for any course in the 140 series. Introduction to medieval and modern texts juxtaposed with modern texts and media to analyze how and why the medieval (in form of crusade, quest, romance, world construction, etc.) is continually reproduced and reimagined. Examination of how works of art respond to conditions of social life as well as intimate personal experience. Consideration of poetry's political power, in-depth discussion about gender, race, class, sexuality, colonial violence, and, broadly, relationship between art and justice. Students are familiarized with key poetic forms, conventions, and techniques; learn how to read poems critically; and get better at putting thoughts in writing. Letter grading.

60. L.A. Women. (5) Lecture, four hours. Focus on women writers and filmmakers who live in and about Los Angeles. Essay, memoir, science fiction, romantic comedy, sitcom, and documentary, writers and filmmakers encountered in and around LA is a neighborhood's and their communities that expand, complicate, and enrich what we think we know about City of Angels. Students become particularly attuned to how race, ethnicity, gender, sexuality, and class inform one's understanding of who we are and to whom we belong. Letter grading.

90. Shakespeare. (5) Lecture, three hours; discussion, one hour. Enforced requisites: satisfaction of Entry-Level Writing requirement. Not open for credit to English majors or students with credit for course 150A or 150B. Survey of Shakespeare's plays, including comedies, tragedies, and histories. Topics covered will represent Shakespeare's breadth, artistic progress, and total dramatic achievement. P/NP or letter grading.

91A. Introduction to Poetry. (5) Lecture, three hours; discussion, one hour. Enforced requisites: satisfaction of Entry-Level Writing requirement. Examination of critical analysis of selected representative poems. P/NP or letter grading.

91B. Introduction to Drama. (5) Lecture, three hours; discussion, one hour. Enforced requisites: satisfaction of Entry-Level Writing requirement. Examination of representative plays; readings may range from Greek
to modern drama. Emphasis on critical approaches to dramatic text; study of issues such as plot construction, characterization, social commentary, and gender. May be repeated for credit with topic or letter grading.

91C. Introduction to Fiction. (5) Lecture, three hours; discussion, one hour. Enforced requisite: satisfaction of English-Related Writing Requirement. Introduction to prose narrative, its forms and techniques. Analysis of short texts of various critical issues such as plot, characterization, setting, narrative voice, realistic and nonrealistic forms. P/OP or letter grading.

91D. Introduction to Graphic Fiction. (5) Lecture, three hours; discussion, one hour (when scheduled). Enforced requisite: satisfaction of English-Related Writing Requirement. Introduction to popularly and important cultural work of comic books and graphic novels. Emphasis on how text and image combine to create meaning, including problem of appropriateness of comics for serious cultural topics. P/OP or letter grading.

97H. Honors Research Seminar for Freshmen and Sophomores. (4) Seminar, three hours. Enforced requisite: English Composition 3. English Composition 4 (or 4HW). Recommended for honors division students who desire familiarity with research methods in literary studies. Areas may include use of archives; locating, reading, and incorporating secondary criticism; critical and textual study of literature. Specific literatures vary with instructor. May not be repeated for credit. P/OP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research; scholarly work) one hour (when scheduled); discussion, one hour (when scheduled) per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in the College (excluding the Queer course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/OP or letter grading.

Upper-Division Courses

100. Ways of Reading Race. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Introduction to interdisciplinary study of race, gender, and immigration; primary emphasis on literature. Through examination of institutions that form understanding of race—citizenship, nationalism, class, gender, and labor—investigation of how we come to think of ourselves and others as belonging to particular racialized thinking. Course is not about any particular racial or ethnic group, but highlights creation of ethnic categories and their effects on cultural production. P/OP or letter grading.

M101A. Premodern Queer Literatures and Cultures. (5) (Same as Gender Studies M101A and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M101A.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Survey of discrete period of queer literature from beginning to circa 1850. Works by such writers as Sappho, Plato, Marlowe, Shakespeare, and Thomas Gray may be included. May be repeated for credit with topic or instructor change. P/OP or letter grading.

M101B. Contemporary Asian American Literary Issues and Criticism. (5) (Same as Asian American Studies M112A.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Survey of Asian American literature either produced from or thematically reflecting pre-1980 period. Issues include immigration, diaspora, and labor—interrogation of how we come to think of ourselves and others as belonging to particular racialized thinking. Course is not about any particular racial or ethnic group, but highlights creation of ethnic categories and their effects on cultural production. P/OP or letter grading.

M102B. Contemporary Asian American Literary Issues and Criticism. (5) (Same as Asian American Studies M112A.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Survey of post-1980 Asian American literature that explores key literary and critical issues, such as race and geography, aesthetics and politics of design, and relations of the individual and the community. Specific literatures vary with instructor. May not be repeated for credit. P/OP or letter grading.

M103. Studies in Disability Literatures. (5) (Same as Disability Studies M103C.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Survey of modes of disability in literature, with specific emphasis on thematic concerns. Topics may include introduction to disability studies; race, gender, and disability; disability narratives; etc. May be repeated for credit with topic or instructor change. P/OP or letter grading.

M104A. Early African American Literature. (5) (Same as African American Studies M104A.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Introductory survey of African American literature from 1820 to 1865, including oral and written forms (poetry, essays, novels, short stories, and drama) by writers such as Phillis Wheatley, Frances Harper, Frederick Douglass, Harriet Jacobs, Charles Chesnutt, Booker T. Washington, and Pauline Hopkins. P/OP or letter grading.

M104B. African American Literature from Harlem Renaissance to 1960s. (5) (Same as African American Studies M104B.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Introductory survey of Harlem Renaissance to present African American literature and culture from 1850 to 1970. Works by such authors as Langston Hughes, Zora Neale Hurston, James Baldwin, John Henrik Clarke, and James Baldwin may be included. May be repeated for credit with topic or instructor change. P/OP or letter grading.

M104C. African American Literature of 1960s and 1970s. (5) (Same as African American Studies M104C.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Introductory survey of African American literary expression from late 1960s through 1970s. Topics include rise of Black Arts Movement of 1960s and of women’s writing in early 1970s, with focus on authors such as Lorraine Hansberry, Amiri Baraka, Nikki Giovanni, Alice Walker, Toni Morrison, Ishmael Reed, Audre Lorde, Paule Marshall, and Ernest Gaines. P/OP or letter grading.

M104D. Contemporary African American Literature. (5) (Same as African American Studies M104D.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Introductory survey of African American literature from 1980s to present covering range of genres, with emphasis on diversity of perspectives and styles that have emerged over past 30 years or so. Authors may include Toni Morrison, August Wilson, Octavia Butler, Anna Deavere Smith, June Jordan, Charles Johnson, and Rita Dove. P/OP or letter grading.

M104E. Topics in African American Literature and Cultures. (5) (Same as African American Studies M104E.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Variable topics lecture course that provides periodic opportunity to consider a particular area of literature from wide range of theoretical, historical, format, and thematic perspectives. Topics may include African American autobiography, 20th-century African American literature and film, black diaspora literature, postmodern African American fiction, Afro-Futurism, and African American satire. May be repeated for credit with topic or instructor change. P/OP or letter grading.

M105A. Early Chicana/Chicana Literature, 1400 to 1920. (5) (Same as Chicana/o and Central American Studies M112A.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Introductory survey of Chicana/Chicana literature from 1400 to 1920, including oral and written forms (poetry, corridos, testimonios, fable, novels, short stories, and drama) by writers such as Junipero Serra, José de Escolástico de Baca, Lorenzo de Zavala, Maria Amparo Ruiz de Burton, Eusebio Chacón, Daniel Venegas, and Lorena Villagas de Magón. P/OP or letter grading.

M105B. Chicana/Chicana Literary Studies from Mexican Revolution to el Movimiento, 1920 to 1970s. (5) (Same as Chicana/o and Central American Studies M112B.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Introductory survey of Chicana/Chicana literature from mid-1920s through Great Depression and World War II, ending with Chicana/Chicana civil rights movement. Oral and written narratives by writers including Conrado Espinoza, Jovita González, Cleofas Jaramillo, Angelico Chávez, Mario Suárez, Oscar Acosta, and Evangelina Vigil. P/OP or letter grading.

M105C. Chicana/Chicana Literary Studies since el Movimiento, 1970s to Present. (5) (Same as Chicana/o and Central American Studies M112C.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Introductory survey of Chicana/Chicana literature from 1980s through present focusing on such topics as relationship between Chicana/Chicana and Central American origin. Representative works include those by John Rechy, Gloria Anzaldúa, Los Bros Hernández, Ana Castillo, and Dagoberto Gilb guide exploration of Chicana/Chicana and Chicano feminist studies, Reagan generation, immigration debates, and emerging Latina/Latino majority. P/OP or letter grading.

M105D. Introduction to Latina/Latino Literature. (5) (Same as Chicana/o and Central American Studies M112D.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Introductory survey of Latina/Latino literature and introduction to its major critical trends, with emphasis on groups of Caribbean, Mexican, South American, and Central American origin. Representative works read in relation to such topics as relationship between Latina/Latino populations and U.S. cultural sphere, struggle for self-determination, experiences of exile and immigration, border zones, oral forms and language, and mestizaje and its impact on cultural production. P/OP or letter grading.

M105E. Studies in Chicana/Chicana and/or Latina/Latina Literature. (5) (Same as Chicana/o and Central American Studies M112E.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Variable topics course to give students broad introduction to issues and themes in Chicana/o and/or Latina/Latina literature.
Topics include border, immigration, revolution, lan-
guage, gender, sexuality, and diaspora, among others. 
May be repeated for credit with topic or instructor 
change. P/N or letter grading.

M105XP. Seminar: Chicana/Chicano and/or Latina/
Latino Literature—Community-Engaged Learning. 
(Formerly numbered M105SL.) (Same as Chicana/o 
and Central American Studies M105XP) Seminar, 
three or four hours; discussion, one hour (when 
scheduled). Enforced requisite: English Composition 
3, 3D, or 3SL. Community-engaged learning 
experience. Defined in a course of study to be 
determined by consent of instructor. Workshop 
in writing of advanced, 
advancement of literacy; study of methods and tech-
iques of classroom and public 
engagement. May be repeated for credit. P/N or letter 
grading.

110E. Writing in English Major: Advanced Essay. 
(Formerly numbered M110E.) Seminar, four or five 
hours; discussion, one hour (when scheduled). Enforced 
requisite: course 4W (or 4HW or 4WS), English Compo-
sition 3. Enrollement by consent of instructor. Workshop in writing of ad-
vanced literary analyses; study of methods and tech-
niques of classroom and public 
engagement. May be repeated for credit. P/N or letter 
grading.

110P. Writing in English Major: Pre-Professional 
Portfolio. Seminar, four hours. Requisites: course 
4W, English Composition 3 or equivalent. Limited to 
American Literature and Culture and English majors. 
Writing for professionals. Students review written mate-
rials completed in previous English courses and de-
velop new documents, projects, and writing samples 
relevant to success in various professions including 
postgraduate study. Culminates in writing portfolio of 
each student’s work. May not be repeated for credit. 
P/N or letter grading.

110T. Writing in English Major: Transfer Students. 
(Formerly numbered M110T.) Lecture, four hours; 
discussion, one hour (when scheduled). Enforced 
requisite: course 4W (or 4HW or 4WS), English Compo-
sition 3. Focus on women writers that may include 
historical, regional, national, or thematic emphasis 
with possible topics such as authorship, 
self-writing, sexuality, gender, and genre. May be re-
peated for credit with topic or instructor change. P/N or letter 
grading.

110V. Variable Topics in Professional Writing. 
Lecture, four hours; discussion, one hour (when 
scheduled). Enforced requisite: English Composition 
3. Focus on women writers that may include 
historical, regional, national, or thematic emphasis 
with possible topics such as authorship, 
self-writing, sexuality, gender, and genre. May be re-
peated for credit with topic or instructor change. P/N or letter 
grading.

111A. Hebrew Bible in Translation. Lecture, 
four hours; discussion, one hour (when scheduled). 
Enforced requisite: English Composition 3 or 3H. Study of 
early Hebrew language. Requisites: course 1W or 4W, 
English Composition 3 or 4W, 4WS, or 4WH. Focus on 
Hebrew as a living language, including cultural 
and historical themes. P/N or letter grading.

Lecture, four hours; discussion, one hour (when sched-
uled). Enforced requisite: English Composition 3 or 3H. 
Study of ancient Near Eastern and Assyrian 
history. May be repeated for credit with topic or instructor 
change. P/N or letter grading.

111C. Topics in Biblical Literature. Lecture, 
four hours; discussion, one hour (when scheduled). 
Enforced requisite: English Composition 3 or 3H. Ref-
commended: course 111A or 111B. Study of biblical 
language and literary devices in the ancient texts of the Bible. 
May be repeated for credit with topic or instructor 
change. P/N or letter grading.

112A. Celtic Mythology. Lecture, four hours; dis-
cussion, one hour (when scheduled). Enforced requisite: 
English Composition 3 or 3H. Study of myth, 
mythology, and the cultural aspects of literature. 
P/N or letter grading.

112B. Celtic Folklore. Lecture, four hours; dis-
cussion, one hour (when scheduled). Enforced requisite: 
English Composition 3 or 3H. Study of oral oral 
literature and folktales of Ireland, Scotland, and 
Wales. May be repeated for credit with topic or instructor 
change. P/N or letter grading.

112C. Survey of Medieval Celtic Literature. 
Lecture, four hours; discussion, one hour (when 
scheduled). Enforced requisite: English Composition 
3 or 3H. Study of Irish and Welsh literature from earliest 
times to 14th century. P/N or letter grading.

112D. Celtic Studies. Lecture, four hours; discus-
sion, one hour (when scheduled). Enforced requisite: 
English Composition 3 or 3H. Comparative study of the 
history, art, architecture, and culture of the 
ancient Celts. May be repeated for credit with topic or instructor 
change. P/N or letter grading.

113A. History of English Language. Lecture, 
four hours; discussion, one hour (when scheduled). 
Enforced requisite: English Composition 3 or 3H. Study 
towards the development of the English language from 
Old English to Middle English to modern English. 
P/N or letter grading.

113B. Introduction to Structure of Present-Day 
English. Lecture, four hours; discussion, one hour 
when scheduled). Enforced requisite: English Composition 
3 or 3H. Study of English pronunciation, grammar, 
and vocabulary. May be repeated for credit with 
topic or instructor change. P/N or letter grading.

115A. American Popular Literature. Lecture, 
four hours; discussion, one hour (when scheduled). 
Enforced requisite: English Composition 3 or 3H. Exam-
ination of popular, genre, folk, and narrative litera-
tures, fiction, and speculative literatures. P/N or letter 
grading.

115B. British Popular Literature. Lecture, four 
hours; discussion, one hour (when scheduled). Enforced 
requisite: English Composition 3 or 3H. Historical and 
cultural aspects of literature. P/N or letter grading.

115C. Literature for Children and Adolescents. 
Lecture, four hours; discussion, one hour (when 
scheduled). Enforced requisite: English Composition 
3 or 3H. Study of literature for children and adolescents. 
P/N or letter grading.

115D. Detective Fiction. Lecture, four hours; 
discussion, one hour (when scheduled). Enforced requi-
site: English Composition 3 or 3H. Study of detective 
fiction and literature of detection. P/N or letter grading.

115E. Science Fiction. Lecture, four hours; dis-
cussion, one hour (when scheduled). Enforced requisite: 
English Composition 3 or 3H. Study of science fiction 
and speculative literatures. P/N or letter grading.

M115XP. Community-Based Studies of Popular 
Literature. (Formerly numbered M115SSL.) (Same as 
Community Engagement and Social Change M115XP) 
Lecture, four hours; discussion, one hour (when 
scheduled); fieldwork, two hours. Enforced requisite: 
English Composition 3 or 3H. Study of popular litera-
ture and contemporary mass media. May be repeated for credit with topic or instructor 
change. P/N or letter grading.
116A. Experimental Fiction. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisites: English Composition 3 or 3H. Study of novels and short stories that experiment with linguistic practices in language, narrative, hybridity (genre, medium), typography, and other material aspects of text such as binding and book design. Focus generally on texts from 20th century and later, but can include reading of a novella or beginning of novel. May be repeated for credit with topic or instructor change. P/NP or letter grading.

116B. Introduction to Electronic Literature. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Overview of literatures involving digital technology, such as hypertext fiction, interactive fiction, animation in contemporary poetics, multimedia video game narrative, and works employing networking protocols and print-based works influenced by digital culture. Basic introduction to new media theory. P/NP or letter grading.

116E. Environmental Ethics. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Study of literatures in English in relation to other disciplines such as sciences, history, politics, philosophy, music, photography, visual studies, psychology. May be repeated for credit with topic or instructor change. P/NP or letter grading.

117. Literature of California and American West. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Study of western US. P/NP or letter grading.

118A. Interdisciplinary Studies in Literature. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Study of literature in English in relation to other disciplines such as sciences, history, politics, philosophy, music, photography, visual studies, psychology. May be repeated for credit with topic or instructor change. P/NP or letter grading.

118B. Literature and Other Arts. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Investigation of relationship between literature and other art forms, including music (opera, musical theater), popular music (jazz), painting, photography, other visual arts, sculpture and other plastic arts, performance art, dance, architecture. May be repeated for credit with topic or instructor change. P/NP or letter grading.

118C. Studies in Visual Culture. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Study of visual images (photography, film, video) and their relation to literary and/or popular culture. Topics include adaptions, visual culture and image, image and literature, film and visual culture. May be repeated for credit with topic or instructor change. P/NP or letter grading.

118E. Literature and Environment. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Study of literature from environmental perspectives, including eco-critical and interdisciplinary consideration of issues such as environmental justice, animal studies, food studies, gender studies, urban and postcolonial ecologies, climate change, cultural biophilia and biophobia, and relationship of literature to sciences. May be repeated for credit with topic or instructor change. P/NP or letter grading.

119. Literary Cities. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Introduction to interdisciﬁed ﬁeld of food studies, with focus on how literature, art, science writing, and visual culture address political dimensions of food and agriculture. Referral to term papers and class projects. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M118F. Food Cultures and Food Politics. (5) Same as Food Studies M132 and Society and Genetics M132. Lecture; four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Introduction to interdisciplinary ﬁeld of food studies, with focus on how literature, art, science writing, and visual culture address political dimensions of food and agriculture. Referral to term papers and class projects. May be repeated for credit with topic or instructor change. P/NP or letter grading.

119XP. Literary Cities—Service Learning. (5) (Formerly numbered 119SL) Lecture, four hours; discussion, one hour (when scheduled); ﬁeldwork, two hours. Focus on place of urban literary imagination in making of cities, with focus on questions of cultural exchange, development, migration, urban rebellion, and style. Topics may include meaning of urban space and time, city as urban village, and relationship of place to history. May be repeated for credit with topic or instructor change. P/NP or letter grading.

120. History of Aesthetics and Critical Theory. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Investigation of concepts and modes of performance, technology, and relationship of literature to sciences. May be repeated for credit with topic or instructor change. P/NP or letter grading.

120, 121. Modern and Contemporary Aesthetics and Critical Theory. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisite: courses 10A, 10B, 10C, or 11 and 87. Investigation of concepts and modes of performance, critical theory, and interpretation from Greeks through 18th century. Readings may include Gorgias, Plato, Aristotle, Longinus, Biblical hermeneutics, Hume, Descartes, Kant, Schiller, and Hegel. May not be repeated for credit. P/NP or letter grading.

122. Keywords in Theory. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisite: courses 10A, 10B, and 10C, or 11 and 87. Recommended: courses 120, 121. Taking its model from Raymond Williams’ classic vocabulary of culture and society, investigation of fundamental theoretical concepts, or keywords, that have emerged from various intellectual disciplines to shape literary and cultural critical theory. Topics may include Marxism, psychoanalysis, structuralism, poststructuralism, feminism, and postcolonialism. May not be repeated for credit. P/NP or letter grading.

123. Theories of History and Historicism. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisite: courses 10A, 10B, and 10C, or 11 and 87. Recommended: courses 120, 121. Exploration of theories of history and historicism that offer productive approaches to literary texts. Investigation of how theories of history and historiography inform critical theory. Topics may include how they alter and enrich assumptions about textuality, readers, and authorship; and how they engender interpretive paradigms and methodologies for study of literature and culture. May be repeated for credit with topic or instructor change. P/NP or letter grading.

124. Theories of Religion. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisite: courses 10A, 10B, and 10C, or 11 and 87. Recommended: courses 120, 121. Examination of relationship between literary and religious practices and traditions. Topics may include theories of sacrifice, sacrament, gift, and mystical traditions, as well as history of allegory and theological approaches to reading. Selected topics may address literary applications of religious categories as treated in cultural anthropology, philosophy, and critical theory. May be repeated for credit with topic or instructor change. P/NP or letter grading.

125. Violence and Modernity: Theories of Literature. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Recommended: courses 120, 121. Examination of violence in literature, cultural violence, political violence, psychology, and cultural violence, political violence, psychology. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M126. Feminist and Queer Theory. (5) (Same as Gender Studies M126 and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M126) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Recommended: one course from 120, 121, Gender Studies 102, 103, or 104. Investigation of key concepts and debates in study of gender, sexuality, and kinship, with focus on theories that engage commodity, competition, industry, andUncorpus. Readings to be interdisciplinary, with possible emphasis on impact of changing ideas of gender and sexuality on national and local political histories. May be repeated for credit with topic or instructor change. P/NP or letter grading.

127. Performance, Media, and Cultural Theory. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, 10C, and 11 and 87. Recommended: courses 120, 121. Exploration of concepts and modes of performance, culture, and/or media, broadly construed. Evaluation of different models of inquiry or one or more of these concepts, as well as their intersection, in various intellectual traditions, including fields of cultural studies, performance studies, literary analysis, and film theory. May be repeated for credit with topic or instructor change. P/NP or letter grading.

128. Postcolonial and Transnational Theory. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, 10C. Recommended: courses 10A, 10B, 10C, and 11 and 87. Enforced requisites: courses 10A, 10B, 10C. Recommended: courses 120, 121. Consult Schedule of Classes for author, period, genre, or subject to be studied in speciﬁc term. Depending on instructor, emphasis may be on historiographical, regional, national, comparative, or thematic. May be repeated for credit with topic or instructor change. P/NP or letter grading.

129. Topics in Genre Studies, Interdisciplinary Studies, and Critical Theory. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, 10C. Recommended: courses 120, 121. Consult Schedule of Classes for author, period, genre, or subject to be studied in speciﬁc term. Depending on instructor, emphasis may be on historiographical, regional, national, comparative, or thematic. May be repeated for credit with topic or instructor change. P/NP or letter grading.

130. Introduction to Postcolonial Literatures. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, 10C. Introduction to major themes and issues in postcolonial literature, with focus on contemporary literatures of Africa, Asia and Latin America. Topics may include colonial legacies of British or other empires with emphasis on Anglophone writers from Africa, Caribbean, South Asia, and indigenous Pacific. May not be repeated for credit. P/NP or letter grading.

131. Studies in Postcolonial Literatures. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, 10C. Strongly recommended: course 130. Survey of how colonialism and decolonization have shaped literary and cultural expression, with speciﬁc emphasis on regional or thematic concerns. Topics may include literatures of Africa and African diaspora, environment and empire, Chinese contact zones, or literatures of indigenous Pacific. May be repeated for credit with topic or instructor change. P/NP or letter grading.

132. Culture and Imperialism. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, 10C, and 11 and 87. Exploration of relationship between culture and imperialism through lens of literary texts to raise questions about ways in which geographies of empire, colonization, and decolonization, or ethnic and racial identities are transformed. Emphasis on deconstruction of imperialist period or may adopt thematic approach, such as Orientalism. Topics may include construction of gender, race, otherness, nation, religion, and nation. May be repeated for credit with topic or instructor change. P/NP or letter grading.
133. Transatlantic Literatures and Cultures. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 10A, 10B, and 10C, or 11 and 87. Study of literatures of Atlantic to examine cultural, political, and ideological issues that followed from transatlantic movement of people, ideas, commodities, and cultural artifacts. In addition to literatures of Britain and U.S., coverage may include texts from Africa, South America, South Asia, and Spain, and other parts of Europe. May be repeated for credit with topic or instructor change. P/NP or letter grading.

134. Nationalism and Transnationalism. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 10A, 10B, and 10C, or 11 and 87. Examination of how critical frameworks of nation and migration, globalization, and transnationalism developed and their representation in literary and cultural production. May be repeated for maximum of 15 units. May not be used to satisfy workshop requirements for English creative writing concentration. P/NP or letter grading.

139. Individual Authors. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, and 10C, or 11 and 87. Study of major authors in the context of their works. May be repeated for credit with topic or instructor change. P/NP or letter grading.

140A. Chaucer: Canterbury Tales. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Introductory study of Chaucer’s language, versification, and historical and literary background, including analysis and discussion of one major poem, Canterbury Tales. P/NP or letter grading.

140B. Chaucer: Troilus and Criseyde and Selected Minor Works. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Intensive study of Troilus and Criseyde and selected minor works of Chaucer, such as Book of the Duchess, House of Fame, Parliament of Fowls, etc. P/NP or letter grading.

141A. Early Medieval Literature. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 10A, 10B. Major poetry and prose of early medieval Britain, including epic, romance, history, saints’ lives, and travel and topography. May include Beowulf, Vercelli Book, books of monsters, medical writing, etc. May be repeated for credit with topic or instructor change. P/NP or letter grading.

141B. Introduction to Old English Language and Literature. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 10A, 10B. Introductory study of Old English language and literature, including grammar and vocabulary, reading and translation of poetry and prose, and discussion of literatures and cultures of Anglo-Saxon England. P/NP or letter grading.

141C. Topics in Old English. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisite: course 141B. Intensive study of Old English literature in original language. Texts and topics may include Beowulf, Vercelli Book, books of monsters, medical writing, etc. May be repeated for credit with topic or instructor change. P/NP or letter grading.

141R. Early Medieval Literature: Research Component. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Major poetry and prose of early medieval Britain, including epic, romance, saints’ lives, and travel literature. Substantial research component included. May be repeated for credit with topic or instructor change. P/NP or letter grading.

142. Later Medieval Literature. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Reading and historical explication of major writers of later medieval Britain (e.g., Gawan-poet, Langland, Gower, Margery Kempe, Malory, miracle and morality plays, prose, and lyrics). P/NP or letter grading.

142R. Later Medieval Literature: Research Component. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Major writers of later medieval Britain (e.g., Gawan-poet, Langland, Gower, Margery Kempe, Malory, miracle and morality plays, prose, and lyrics). Substantial research component included. May be repeated for credit with topic or instructor change. P/NP or letter grading.

143. Drama to 1576. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. English drama from its Latin and medieval origins to late 16th century. May include works by Langland, Gower, Robin Hood, Arthur, and Merlin. May be repeated for credit with topic or instructor change. P/NP or letter grading.

144. Medieval Romance and Literatures of Court. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Investigation of medieval court culture, exploring concepts of nobility, governance, love, loyalty, and power in range of genres: romance, courtly epic, lyric, de-

150C. Topics in Shakespeare. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Introduction to or advancement of Shakespeare's works through broad or specific topics set by instructor. May be repeated for credit with topic or instructor change. P/NP or letter grading.

151. Milton. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Study of major works of Milton, with emphasis on Paradise Lost. P/NP or letter grading.

152. Literatures of English Renaissance and Early Modern Period. (Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Study of major works in their cultural context. May be repeated for credit with topic or instructor change. P/NP or letter grading.

153. Theatrical Renaissance: Early Modern Texts and Performances. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Topics may include professional and amateur theatre in court, cities, churches, and countryside of varied sorts of texts—maskes, religious drama, secular drama, carivari—alongside examination of texts, performers, and performance spaces. May be repeated for credit with topic or instructor change. P/NP or letter grading.

154. Renaissance Worlds. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Variable topics, including travel literature, exploration and expansion, transnational and transoceanic texts, science and cosmography, conceptual worlds of myth and philosophy, as expressed in literature and other arts. May be repeated for credit with topic or instructor change. P/NP or letter grading.

155. Renaissance Subjects. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Literary representations of personhood in early modern period, with attention to issues such as personal voice, relations of privacy/community, bodies/souls, selves/others, as impacted by quotients such as gender, sexuality, race, and ethnicity. Credit and no credit in period from 1550 to 1700. May be repeated for credit with topic or instructor change. P/NP or letter grading.

156. Devotion and Dissent. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Examination of religious thought and practice associated with Reformation and Counter-Reformation enterprises in early modern period and in Britain since 1640. May be repeated for credit with topic or instructor change. P/NP or letter grading.

157. Translation and Innovation in English Renaissance. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Study of major works of English Renaissance literature and culture in relation to literatures of antiquity and continental Renaissance. Topics may include epic tradition, forerunners of Protestantism, humanism, and aesthetics of Renaissance. May be repeated for credit with topic or instructor change. P/NP or letter grading.

158. Translation and Innovation in English Renaissance and Early Modern Period. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Study of major works of English Renaissance literature and culture in relation to literatures of antiquity and continental Renaissance. Topics may include epic tradition, forerunners of Protestantism, humanism, and aesthetics of Renaissance. May be repeated for credit with topic or instructor change. P/NP or letter grading.

159. Topics in English Literature. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Examination of literatures from or about this time period. Consult Schedule of Classes for subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

159R. Topics in Literature, circa 1500 to 1700: Research Component. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Study of specific topic from this time period and conventions of literary research. Substantial research component included. Consult Schedule of Classes for subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

160A. Literature of Restoration and Earlier 18th Century. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Study of the works of Restoration and earlier 18th-century thought. P/NP or letter grading.

160B. Literature of Later 18th Century. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Study of major works as literary documents and as products of later 18th-century thought. P/NP or letter grading.

161A. Poetry in English to 1850. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Consideration of poetry genres and throughout period. Topics may include: satirical verse, forms including Pindaric ode, mock-epic, and verse-epistle, questions of literary reception and influence, the development of literature, and gendering of authorship. May be repeated for credit with topic or instructor change. P/NP or letter grading.

161B. Drama in English to 1850. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Survey of drama in English until 1850. May be repeated for credit with topic or instructor change. P/NP or letter grading.

161C. Novel in English to 1850. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Survey of major novelists until 1850. May be repeated for credit with topic or instructor change. P/NP or letter grading.

162A. Earlier Romantic Literature. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Intensive study of writings by Blake, Wordsworth, Coleridge, and Austen, with collateral readings from such authors as Godwin, Burke, Paine, Radcliffe, Edgeworth, Baillie, C. Smith, Burns, Southey, D. Wordsworth, Lamb, DeQuincey, and Scott. P/NP or letter grading.


163A. Romanticism and Revolution. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Exploration of relationships among and between different revolutionary currents—political, economic, and aesthetic—in British Romantic period, considering developments of literary texts that situate them in revolutionary context out of which they emerged, and to which they contributed in turn. Recovery of sense of how literary and extra-literary texts and dramatic revolution symbiotically interacted. P/NP or letter grading.

163B. Transatlantic Romanticism. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Study of literary and cultural interactions between the United States and Britain during 19th century. May be repeated for credit with topic or instructor change. P/NP or letter grading.

164A. Earlier 19th-Century Poetry. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Study of developments in English poetic genres from time of Romantic Wars to middle decades of 19th century. Readings enable students to understand legacies of 18th-century and Romantic writing and emergence of new forms such as dramatic monologue and novel-inverse. P/NP or letter grading.

164B. 19th-Century Critical Prose. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Study of critical thought from 1800 to 1850 in relation to development of cultural and literary criticism, social thought, and political writing. P/NP or letter grading.

164C. 19th-Century Novel. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Study of development of novel from 1800 to 1900, with focus on evolution of genre in relation to cultural, social, and political context. May be repeated for credit with instructor permission. P/NP or letter grading.

165A. Imperial Culture, 1700 to 1850. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Exploration of themes of British imperialism in 18th and 19th centuries. Discussion of relationship between literary and extra-literary texts and shifting patterns and paradigms of imperial rule, as metaphorized in cultural practices and aesthetics of empire. May be repeated for credit. P/NP or letter grading.

165B. Gender, Sexuality, and Body, 1700 to 1850. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Exploration of themes of gender and sexuality across period, and gender and authorship, and the literature of embodiment. May be repeated for credit with topic or instructor change. P/NP or letter grading.

165C. Protestant Dissent and English Literature, 1640 to 1682. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Examination of question of gender in literature of period known for its invention of sex/gender system. Topics may include varying representations of gender and sexuality across period, gender and authorship, and literature of embodiment. May be repeated for credit with topic or instructor change. P/NP or letter grading.

166. English Composition 3 or 3H. Religious doctrines, political ideologies, cultural practices, and aesthetics of Protestant dissent, with some attention to transnational radi- calism, but main topic is British dissent. Adaptations of such theological systems as Lutheranism, Calvinism, Anabaptism, Unitarianism, and Methodism in Scotland, England, and Wales from English Civil War and Glorious Revolution to Restoration. Topics include representative theology and political theory (Luther, Calvin, Locke, Priestley, Paine, Wollstonecraft) and 19th-century Romantic literature as transatlantic phenomenon. May not be repeated for credit. P/NP or letter grading.

167. Vindication of the Rights of Woman. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Coverage of six novels of Jane Austen, as well as literary works that most influenced her: Mary Wollstonecraft's Vindication of the Rights of Woman, Hazlitt's Essay, and Maria Edgeworth's Belinda. P/NP or letter grading.

168. Global 19th Century. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Study of development of novel from 1800 to 1900, with focus on evolution of genre in relation to cultural, social, and political context. May be repeated for credit with instructor permission. P/NP or letter grading.
170A. American Literature, 1865 to 1900. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, and 10C, or 11 and 87. Historical survey of American literature from end of Civil War to beginning of 20th century, including novelists such as Howells, James, Twain, Norris, Dickinson, Crane, Chesnutt, Gilman, and others working in American fiction (both novels and short stories) from its beginning to end of World War II. P/NP or letter grading.

170B. American Literature, 1900 to 1945. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, and 10C, or 11 and 87. Historical survey of American literature from turn of century to end of World War II. P/NP or letter grading.

170C. American Literature since 1945. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, and 10C, or 11 and 87. Historical survey of American literature since end of World War II. P/NP or letter grading.

171A. Later 19th-Century Poetry. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, and 10C, or 11 and 87. Examination of primarily North American literature from hemispheric rather than nation-based perspective while posing such crucial theoretical issues as emergence of U.S. Empire or relationship between North America and global south, including Africa, Latin America, and Caribbean. May be repeated for credit with topic or instructor change. P/NP or letter grading.

171B. 20th-Century British Poetry. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, 10C. Survey of major British poets from 1900 to present. P/NP or letter grading.

171C. 20th-Century British Fiction. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, 10C. Discussion, one hour (when scheduled). P/NP or letter grading.

172A. Drama, 1850 to 1945. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, 10C. Study of American drama from its beginning to present day. May be repeated for credit with topic or instructor change. P/NP or letter grading.

172B. Drama, 1945 to Present. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, 10C. Study of American drama from its beginning to present day. May be repeated for credit with topic or instructor change. P/NP or letter grading.

173A. American Poetry, 1900 to 1945. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, and 10C, or 11 and 87. Study of American poetry from beginning of 20th century to end of World War II. P/NP or letter grading.

173B. American Poetry since 1945. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, and 10C, or 11 and 87. Study of American poetry since end of World War II. P/NP or letter grading.

174A. American Fiction, 1900 to 1945. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, and 10C, or 11 and 87. Study of American novels and short stories from beginning of 20th century to end of World War II. P/NP or letter grading.

174B. American Fiction since 1945. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, and 10C, or 11 and 87. Study of American novels and short stories since end of World War II. P/NP or letter grading.

174C. Contemporary American Fiction. (5) Lecture, four hours; discussion, one hour (when scheduled). Study of American novels and short stories, mostly by living authors, with emphasis on emergent issues and aesthetic forms. May be repeated for credit with topic or instructor change. P/NP or letter grading.

175. American Nonfictional Prose. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, and 10C, or 11 and 87. Study of American nonfictional prose (essays, autobiographies, travel narratives, and other) Particular genre and/or historical period may vary with instructor. May be repeated for credit with topic or instructor change. P/NP or letter grading.

176. Hemispheric American Literature. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, and 10C, or 11 and 87.

177. Interdisciplinary Studies of American Culture. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, and 10C, or 11 and 87. Interdisciplinary study of American literature in its relationships to other disciplines, including art, architecture, film, history, music, politics, and various social sciences, with emphasis on application of literary methodology to historical survey of American culture. May be repeated for credit with topic or instructor change. P/NP or letter grading.

178. Topics in Literature, circa 1750 to Present. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, and 10C, or 11 and 87. Interdisciplinary study of American literature in its relationships to other disciplines, including art, architecture, film, history, music, politics, and various social sciences, with emphasis on application of literary methodology to historical survey of American culture. May be repeated for credit with topic or instructor change. P/NP or letter grading.

179R. Topics in Literature, circa 1850 to Present: Research Component. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, and 10C, or 11 and 87. Study of American literature in its relationships to other disciplines, including art, architecture, film, history, music, politics, and various social sciences, with emphasis on application of literary methodology to historical survey of American culture. May be repeated for credit with topic or instructor change. P/NP or letter grading.

180. Topics in Literature and Language. (5) Seminar, three or four hours. Enforced requisites: courses 10A, 10B, and 10C, or 11 and 87. Consult Schedule of Classes for subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

180R. Senior Research Seminar. (5) Seminar, three hours. Enforced requisites: courses 10A, 10B, 10C. Strongly recommended for students who plan to enroll in capstone seminars. Study of range of approaches to literary and cultural research. Enforced requisites: courses 10A, 10B, 10C. Consult Schedule of Classes for subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

181A. Topics in Genre Studies. (5) Seminar, three or four hours. Enforced requisites: courses 10A, 10B, and 10C, or 11 and 87. Consult Schedule of Classes for subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

181B. Topics in Interdisciplinary Studies. (5) Seminar, three or four hours. Enforced requisites: courses 10A, 10B, 10C. Consult Schedule of Classes for subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

181C. Topics in Critical Theory. (5) Seminar, three or four hours. Enforced requisites: courses 10A, 10B, 10C. Consult Schedule of Classes for subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

181D. Topics in Imperial, Transnational, and Postcolonial Studies. (5) Seminar, three or four hours. Enforced requisites: courses 10A, 10B, 10C. Consult Schedule of Classes for subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.
182A. Topics in Medieval Literature. (5) Seminar, three or four hours. Enforced requisites: courses 10A, 10B, 10C. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

182B. Topics in Renaissance and Early Modern Literature. (5) Seminar, three or four hours. Enforced requisites: courses 10A, 10B, 10C. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

182C. Topics in 18th-Century Literature. (5) Seminar, three or four hours. Enforced requisites: courses 10A, 10B, 10C, and 11 or 17. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

182D. Topics in Romantic Literature. (5) Seminar, three or four hours. Enforced requisites: courses 10A, 10B, 10C. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

183A. Topics in Colonial American Literature. (5) Seminar, three or four hours. Enforced requisites: courses 10A, 10B, 10C, and 11 or 17. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

183B. Topics in 19th-Century American Literature. (5) Seminar, three or four hours. Enforced requisites: courses 10A, 10B, 10C, and 11 or 17. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

183C. Topics in 20th- and 21st-Century American Literature. (5) Seminar, three or four hours. Enforced requisites: courses 10A, 10B, 10C, and 11 or 17. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

184. Capstone Seminar: English. (5) Seminar, three hours. Requisites: courses 10A, 10B, 10C, and 11 and 87. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May be repeated for letter grading.


188SC. Individual Studies for USIE Facilitators. (5) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study in regularly scheduled meetings with faculty mentor to discuss their own work in progress and critical readings related to honors projects. Led by one supervising faculty member. May be repeated for credit. P/NP grading.

190H. Honors Research Colloquia in English. (1) Seminar, one hour. Enforced corequisite: course 198A or 198B. Designed to bring together students under the direction of supervising faculty who are completing an honors course. May be repeated for credit. May be counted as Honors credit. P/NP or letter grading.

190HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study in regularly scheduled meetings with faculty mentor to discuss their own work in progress and critical readings related to honors projects. Led by one supervising faculty member. May be repeated for credit. P/NP grading.

191A. Topics in African American Literature. (5) (Same as African American Studies M179A.) Seminar, three or four hours. Enforced requisite: course 198A or 198B. Enforced corequisite: course 198A or 198B. Designed to bring together students under the direction of supervising faculty who are completing an honors course. May be repeated for credit. May be counted as Honors credit. P/NP or letter grading.

191B. Topics in Chicana/Chicana and/or Latina/Latina Literatures and Cultures. (5) (Same as Chicana/Chicana Studies M139.) Seminar, three or four hours. Enforced requisite: English Composition 3. Variable specializations course in Chicana/Chicana and/or Latina/Latina literature. Topics include labor and literature; Chicana/Chicana visions of Los Angeles; immigration, migration, and exile; autobiography and historical change; Chicana/Chicana journalism; literary texts in New Mexico. May be repeated for credit with topic or instructor change. P/NP or letter grading.

199. Directed Research or Senior Project in English. (1) Individual contract. May be repeated for credit. Individual contract required. P/NP or letter grading.

199A. Honors Research in English. (5) Seminar, three hours. Enforced requisite: course 198A or 198B. Designed to bring together students under the direction of supervising faculty who are completing an honors course. May be repeated for credit. Individual contract required. P/NP or letter grading.

195CE. Community and Corporate Internships in English. (4) Tutorial, to be arranged; fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship in corporate, community, or non-profit setting coordinated through Center for Community Learning. Students complete weekly written assignments, attend bi-weekly meetings with graduate student coordinator, and write final research paper. Faculty mentor and graduate student coordinator construct series of reading assignments that examine issues related to internship site. May not be applied toward major or minor requirements. May be repeated for credit with consent of Center for Community Learning. Individual contract with supervising faculty member required. P/NP or letter grading.

197. Individual Studies in English. (2 to 5) Tutorial, four hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned research, writing, and oral presentation to be arranged through Center for Community Learning. Students complete weekly written assignments, attend bi-weekly meetings with graduate student coordinator, and write final research paper. Faculty mentor and graduate student coordinator construct series of reading assignments that examine issues related to internship site. May not be applied toward major or minor requirements. May be repeated for credit with consent of Center for Community Learning. Individual contract with supervising faculty member required. P/NP or letter grading.

199A-199B. Honors Research in English. (5-5) Tutorial, to be arranged; Research course 191H. Limited to juniors/seniors. Designed for seniors. Development and completion of honors thesis under direct supervision of faculty member. May be repeated for credit. Individual contract required. P/NP or letter grading.

199B. Directed Research or Senior Project in English. (2 to 8) Tutorial, to be arranged. Limited to juniors/ seniors. Supervised individual literary research and creative projects under guidance of faculty mentor. Cul-

English / 447
Miniature paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200. Graduate Proseminar. (4) Seminar, three hours. Introduction to profession of literary studies. Covers wide array of texts including state of discipline and various scholarly organizations and conference presentations; critical and methodological approaches to literary studies; writing and publishing for scholarly and general audiences; trends and values; developing professional skills; understanding academic job market and humanities careers. S/U or letter grading.

201. History of Literary Criticism and Aesthetic Interpretation. (4) Formerly numbered 201A.) Seminar, three hours. Examination of major texts in literary criticism and aesthetic interpretation from classical to contemporary period with focus and topics to be set by individual instructor. S/U or letter grading.

202. Narrative Theory. (4) Seminar, three hours. Introduction to concepts and theories of narrative. These may include linguistic, sociological, cognitive, and computational approaches to narrative such as plot, narrator, character, and style across different media. S/U or letter grading.

203. Digital Theories and Methods. (4) Seminar, three hours. Theories and practices of using computational tools and methods, including digital archives, for analysis of literary texts across media. S/U or letter grading.

204C. Studies in Oral Traditional Genres. (4) (Same as Scandinavian M273.) Seminar, three hours. Exploration of scholarly and literary attempts to study, define, analyze, promote, and/or appropriate oral traditions, from Homer and ancient Greece to origins of vernacular literatures, European romantic (rediscovery of oral traditions), 20th-century heuristics of oral composition, and modern-day electronic media and popular verbal genres, such as joking and rapping. S/U or letter grading.

210. History of English Language. (4) Lecture, four hours. Detailed study of history, characteristics, and changing forms of English from its origin until about 1900. S/U or letter grading.

211. Old English. (4) Lecture, four hours. Study of Old English grammar, lexicon, phonology, and pronunciation to enable students to read literature silently and aloud. Reading of as much of more interesting Old English prose and poetry as can be read in one term. S/U or letter grading.

212. Middle English. (4) Lecture, four hours. Requisite: course 211. Detailed study of linguistic aspects of Middle English and of representative examples of better prose and poetry. S/U or letter grading.

215. Paleography of Latin and Vernacular Manuscripts, 900 to 1500. (4) (Same as Classics M218, French M210, and History M218.) Lecture, three hours; discussion, two hours. Introduction to history of Latin and vernacular manuscript book from 900 to 1500 to (1) train students to make informed judgments with regard to place and date of origin, (2) provide training in accurate reading and transcription of later medieval scripts, and (3) examine manuscript book as witness to changing society that produced it. Focus on relationships among scripts and vernacular manuscripts with regard to their respective presentation of written texts. S/U or letter grading.


230. Workshop: Creative Writing. (2 to 4) Lecture, two to four hours. Preparation: submission of writing samples in specified genre (poetry, fiction, or drama).

May be repeated but may not satisfy more than one of nine courses required for first qualifying examination or any of five courses required for second qualifying examination. S/U or letter grading.

242. Language and Literature. (4) Seminar, three hours. Application of linguistics to literary analysis. Individual seminars dealing with one historical period (medieval and Renaissance, neoclassical, or 19th century and modern), specific authors, or contributions of specific groups of linguists to literary analysis. S/U or letter grading.

244. Old and Medieval English Literature. (4) Seminar, four hours. Studies in poetry and prose of Old and Medieval English literature; limits of investigation set by individual instructor. May be repeated for credit. S/U or letter grading.

245. Chaucer. (4) Lecture, four hours. May be repeated for credit. S/U or letter grading.

246. Renaissance Literature. (4) Seminar, four hours. Studies in poetry and prose of Renaissance English literature; exclusive of Shakespeare; limits of investigation set by individual instructor. May be repeated for credit. S/U or letter grading.

247. Shakespeare. (4) Lecture, three hours. May be repeated for credit. S/U or letter grading.


250. Restoration and 18th-Century Literature. (4) Seminar, three hours. Studies in English poetry and prose, 1660 to 1800; limits of investigation set by individual instructor. May be repeated for credit. S/U or letter grading.

251. Romantic Writers. (4) Seminar, three hours. May be repeated for credit. S/U or letter grading.

252. Victorian Literature. (4) Lecture, three hours. Studies in English poetry and prose of Victorian period; limits of investigation set by individual instructor. May be repeated for credit. S/U or letter grading.

253. 20th- and 21st-Centuries Literature in English. (4) Seminar, three hours. Studies in 20th- and 21st-century literature, English. Focus and topics to be set by individual instructor. May be repeated for credit. S/U or letter grading.


255. Topics in Novel. (4) Seminar, three hours. May be repeated for credit. S/U or letter grading.

256. Studies in Genre. (4) Seminar, three hours. Formal approach to study of one genre and its changes across time. May be repeated for credit. S/U or letter grading.


259. Studies in Criticism. (4) Lecture, three hours. May be repeated for credit. S/U or letter grading.


2560A. Topics in Asian American Literature. (4) (Same as Asian American Studies M2560A) Seminar, three hours. Graduate seminar that examines and critically evaluates writings of Asian Americans. May be repeated for credit. S/U or letter grading.

261. Studies in Chicana/Chicano Literature. (4) (Same as Chicana/o and Central American Studies M261B) Seminar, three hours. Intensive research and study of major themes, authors, and issues in Chicano/a literature and Chicana/o cultural analysis of political, aesthetic, economic, and cultural context that emerges in Chicana/Chicano discourse; limits of investigation set by individual instructor. May be repeated for credit. S/U or letter grading.

262. Studies in Afro-American Literature. (4) (Same as African American Studies M200E) Lecture, four hours. Intensive research and study of major themes, issues, and writers in Afro-American literature. Discussions and research on aesthetic, cultural, and social backgrounds of Afro-American writing. May be repeated for credit. S/U or letter grading.

265. Postcolonial Literatures. (4) Seminar, three hours. Study of aesthetic, historical, and social backgrounds to literatures of former British colonies that became independent after 1947. General issues related to war imperialism, colonialism, and postcolonialism have helped to shape and have been shaped by literature in English. May be repeated for credit. S/U or letter grading.

266. Cultural World Views of Native America. (4) (Same as American Indian Studies M207B) Seminar, three hours. Exploration of written literary texts from oral cultures and other expressive cultural forms — dance, art, song, religious and medicinal ritual— in selected historic and contemporary societies; as these traditional and tribal contexts have been transformed into temporar y literary texts (fiction, poetry, essay, and drama). Survey, from secondary sources, of interdisciplinary methodological approaches taken from literary analysis, structural anthropology, folklore, linguistics, and ethnomusicology. May be repeated for credit with instructor and/or topic change. Letter grading.

270. Issues and Developments in Critical Theory. (4) (Formerly numbered 202A) Seminar, three hours. Analysis of pressing social, cultural, and political issues and current trends in critical theory. Topics may include continental philosophy, memory studies, feminist and queer studies, urban studies, environmental humanities, critical race studies, and postcolonialism. S/U or letter grading.

290. Science Communications and Environmental Media. (4) (Same as Environment M242) Seminar, three hours. Designed for graduate students in food, energy, and water systems (FEWS) training grant program to survey fields of science communications and environmental narrative from nonfiction to new media (multimedia journalism, documentary, social media, television, etc.), and to develop collaborative projects communicating student research to diverse public audiences. Course is part of National Science Foundation (NSF) graduate traineeship in integrated urban solutions for food, energy, and water systems (INFEWS). Enrollment for non-INFEWS students in STEM graduate education and related sustainability majors/topics by consent of instructor. S/U or letter grading.

299. Interdisciplinary American Studies. (6) (Same as History M299) Discussion, four hours. Readings, discussion, and papers on common theme, taught by faculty members from different departments. Topics vary according to participating faculty. May be repeated for credit with consent of instructor. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprenticeship under active guidance of research faculty. May be repeated for credit with consent of apprentices. S/U or letter grading.


495A. Supervised Teaching Preparation. (4) Seminar, three hours. Required of all applicants for teaching assistantships in English. Introduction to teaching of lit-
Entrepreneurship

Overview

The Entrepreneurship minor introduces undergraduate students to the field of entrepreneurship. Entrepreneurship encompasses a wide range of business activities, from the generation of new ideas for products and services, to the systematic evaluation and development of those ideas, to the process of building a company to pursue them. Faculty members teaching in the minor are drawn from academic departments across campus, applied fields in the professional schools, and industry.

Through a carefully developed core curriculum and an integrative capstone experience, students in the minor obtain both breadth and depth in their understanding of the concepts, frameworks, and practical implications of entrepreneurship in an interdisciplinary and collaborative educational environment.

Undergraduate Minor

Entrepreneurship Minor

Admission

To enter the Entrepreneurship minor, students must (1) have an overall grade-point average of 3.0 or better and (2) submit an application supporting their interest in pursuing the minor. Applications are accepted in fall, winter, and spring quarters. To help plan the course schedule and internship/field experience, students are expected to work closely with the academic advisor. Applications are available on the minor website.

The Minor

Required Lower-Division Course (4 or 5 units): Communication 1 or any Writing II course.

Required Upper-Division Courses (32 or 33 units): Management 159, 160, 161, 169, 199 (4 units minimum), and three elective courses selected from Ancient Near East M105, Communication 109, M117, 133, 156, Dance C184, Digital Humanities 101, 150, Economics 106E, 173AX, 173BX, Environment 163, Ethnomusicology 105, Management 162, 163, 164, 165, 167, 168, Sociology 172. At least two of the three elective courses must be selected from the management courses listed above.

Policies

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 3.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

ENVIRONMENT AND SUSTAINABILITY,
INSTITUTE OF THE
CENTER FOR INTERDISCIPLINARY INSTRUCTION
COLLEGE OF LETTERS AND SCIENCE

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Ann E. Carlson, JD (Shirley Shapiro Professor of Environmental Law)
Yoram Cohen, PhD
Charles J. Corbett, PhD
Magali A. Delmas, PhD
Elizabeth M. DeLoughrey, PhD
Rajit Gadh, PhD
Thomas W. Gillespie, PhD
Alexander D. Hall, PhD
Susanna B. Hecht, PhD
Ursula K. Heise, PhD (Marcia H. Howard Term Professor of Literary Studies)
David K. Jacobs, PhD
Jennifer A. Jay, PhD
Dennis P. Lettenmaier, PhD
Glen M. MacDonald, PhD (Professor of California and the American West)
Shailly Mahendra, PhD
Timothy Malloy, JD (Frank G. Wells Endowed Professor of Environmental Law)
James C. McWilliams, PhD (Louis B. Slichter Professor of Geophysics and Planetary Physics)
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Stephanie S. Pincetl, PhD
Marilyn N. Raphael, PhD
Michael L. Ross, PhD
Lawren Sack, PhD
H. Bradley Shaffer, PhD
Monica L. Smith, PhD (Navin and Pratima Doshi Professor of Indian Studies)
Victoria L. Sork, PhD
Michael K. Stenstrom, PhD
Irwin H. Suffet, PhD
Aradhna K. Tripathi, PhD
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Yilang Zhu, PhD

Professors Emeriti
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Malcolm S. Gordon, PhD
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Philip W. Rundel, PhD
Thomas B. Smith, PhD
Keith D. Stolzenbach, PhD
Richard P. Turco, PhD
Blaire Van Valkenburgh, PhD
Richard R. Vance, PhD
Arthur M. Winer, PhD

Associate Professors
Alan I. Barreca, PhD
Deepak Rajagopal, PhD
Morgan W. Tingley, PhD

Assistant Professors
Robert A. Eagle, PhD
Alvar Escriva-Bou, PhD
The Bachelor of Science (BS) degree in Environmental Science is designed for students with focused disciplinary depth in an environmental science areas, provides students with disciplinary breadth in several areas important to environmental science. The second component, the Environmental Science major, provides students with disciplinary breadth in several areas important to environmental science. The second component, the Environmental Science major, requires completion of lower-division requirements grounded in basic natural sciences, a five-course upper-division environmental science requirement reflecting the disciplinary breadth of environmental science, three social sciences/humanities courses, participation in a sustainability-focused speaker series, and completion of an environmental science practicum. The second component is a minor or concentration in one of seven environmental science areas, each associated with a particular department. With assistance from IoES staff, students must formally apply to and be accepted by the associated department to receive the minor.

Capstone Major
The Environmental Science major is a designated capstone major. In collaboration with a local agency or nonprofit institution, students work individually and in groups to complete projects that require them to integrate many of the skills, principles, theories, and concepts they have learned throughout the curriculum and apply them to real systems. Students are expected to contribute meaningfully to the analysis and solution of particular environmental science issues involving multiple disciplines and stakeholders with different perspectives. Those completing the major should possess critical thinking skills, problem-solving abilities, and familiarity with essential computational, data collection, and analysis skills, as well as demonstrate effective oral and written communication skills. Graduates should also be able to identify key ethical issues and analyze the consequences of various professional dilemmas, as well as work productively as part of a team.

Learning Outcomes
The Environmental Science major has the following learning outcomes:

- Ability to apply theories or concepts from coursework to analysis of issues in the field
- Ability to make meaningful contribution to analysis and solution of particular issues involving multiple disciplines and stakeholders with different perspectives
- Critical thinking skills, problem-solving abilities, and familiarity with computational and data collection and analysis procedures essential to the field
- Ability to identify ethical issues raised by a particular issue
- Ability to analyze the consequences of various professional dilemmas
- Ability to work productively with others as part of a team
- Effective oral and written communication skills

Entry to the Major
Transfer Students
Transfer applicants to the Environmental Science major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two general chemistry courses with laboratory for majors, two general biology courses with laboratory for majors, two calculus courses, and two calculus-based physics courses.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements
Preparation for the Major
Required: Chemistry 14A, 14B, and 14BL (or 20A, 20B, and 20L), Environment 10, Geography 7, Life Sciences 7A, 7B, Mathematics 3A
and 3B (or 31A or 31AL, and 31B, or Life Sciences 30A and 30B), Physics 5A and 5C (or 1A and 1B), Statistics 12 or 13 (or Life Sciences 40).

For the atmospheric and oceanic sciences minor, Chemistry and Biochemistry 14C (or 30A) or Mathematics 3C (or 32A) or Physics 1C (or 5B) is also required.

For the conservation biology minor, Chemistry and Biochemistry 14C (or 30A) or Life Sciences 7C and 23L is also required.

For the Earth and environmental science minor, Chemistry and Biochemistry 14C (or 30A) or Mathematics 3C (or 32A) or Physics 1C (or 5B), Earth, Planetary, and Space Sciences 1, and one course from 5, 13, 15, or 61 are also required.

For the environmental engineering minor, Mathematics 3C (or 32A) is also required.

For the environmental health concentration, Chemistry and Biochemistry 14C (or 30A) is also required.

For the environmental systems and society minor, one course from Chemistry and Biochemistry 14C (or 30A), Earth, Planetary, and Space Sciences 1, Life Sciences 7C (and 23L), Mathematics 3C (or 32A), and Physics 5B (or 1C) is also required.

For the geography/environmental studies minor, one course from Chemistry and Biochemistry 14C (or 30A), Earth, Planetary, and Space Sciences 1, Life Sciences 7C (and 23L), Mathematics 3C (or 32A), and Physics 5B (or 1C), plus Geography 5 and one course from 1, 2, 3, 4, or 6 are also required. Students should take these courses before enrolling in upper-division courses.

The Major

The major consists of four requirements: physical and life science, social science and humanities, practicum/sustainability talks, and minor or concentration, as follows:

Physical and Life Sciences Requirements
*Required:* Environment 175 and four additional courses from the following physical and life sciences areas. No more than two courses may be from any one department. Atmospheric and Oceanic Sciences 101, 102, 103, 104, 105S, 107, 112, 121, 123, 130, 141, Civil Engineering 153, 154, 156, Earth, Planetary, and Space Sciences 101, C111, 119, 139, 150, 153, Ecology and Evolutionary Biology 100, 109, 116, 136, 151A, 154, Environment 157, Environmental Health Sciences 100, C125, C152D, Geography 101, M102, M103, 107, M110, 116, 117, M118, 120, M126, 133.

Social Sciences and Humanities Requirements
*Required:* Environment 140 and two courses from Anthropology 132, 133, Atmospheric and Oceanic Sciences 121, 123, English 118E, Environment M125, M133, M147, 150, M153, 155, 157, C159, M161, 162, 163, M164, 166, 167, Geography M127, 130, 138, M142, 160, 171C, Philosophy 125, Public Affairs M160, Society and Genetics 141, Urban Planning 121.

Practicum/Sustainability Talks Requirements
*Required:* Environment 180A, 180B, 180C, 185A.

Minor and Concentration Requirements
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Successful completion of a minor is indicated on the transcript and diploma.

For the atmospheric and oceanic sciences minor, seven 4-unit courses, including (1) three from Atmospheric and Oceanic Sciences M100, 101, 102, 103, 104, M105, M106, 107, C110, C111, 112, CM114A, C115, M120, 121, 123, 130, 135, 141, C144, 145, 150, 155, M160, C170, 180 and (2) four additional courses, two of which must be upper-division, from any of the above atmospheric and oceanic sciences courses beyond the minimum four required or from Atmospheric and Oceanic Sciences 1, 2, 3, 186 (must be taken twice). Chemistry 103, 110A, 110B, 113A, C113B, 114, Earth, Planetary, and Space Sciences 15, Ecology and Evolutionary Biology 109, C119A, 122, 123A or 123B, 147, 148, Mathematics 115A, 115B, 132, 135, 136, 146, 170A, 170B, Physics 110A, 110B, 112, M122, 131, 132. Other relevant courses from related disciplines may be substituted with prior approval of the department. At least five courses approved for the minor must be upper-division. One course may be taken on a Passed/Not Passed basis.

For the conservation biology minor, Ecology and Evolutionary Biology 100, 116, and four to six courses from 100L, 101, 103, 105, 109, 109L, 111, 112, 113A, 113AL, 114A, 114B, C119A, C119B, 122, M127, 129, M131, 140, 142, 143, 144, 144L, C146, 149, 151A, 152, 153, 154, 155, 156, 162, 162L, 168, C174, 176, 180A, 180B, 183, 184, any courses associated with the Field Biology Quarter or the Marine Biology Quarter or approved equivalent. Geography M103, 106, 107, 116, 117, M118, M126, M131, 133 (a maximum of two Geography courses may be applied to the minor) are required.

For the Earth and environmental science minor, five courses from Earth, Planetary, and Space Sciences 101, 112, C113, 139, 150, 153 are required.

For the environmental engineering minor, Civil Engineering 110 and five courses from Civil Engineering 110, 150, 151, 152, 154, 155, 156A, 156B, 157A, 157B, 157C, 157L, C159, C164, M165, M166, Mechanical and Aerospace Engineering 103, 105A are required. Credit for both Chemical Engineering 102A and Mechanical and Aerospace Engineering 105A is not allowed.

For the environmental health concentration, Epidemiology 100, two courses from Environmental Health Sciences 100, C135, C185A, C185B, and three courses from Chemistry and Biochemistry 153A, Environmental Health Sciences C125, C140, C152D, C157, C164, 203 are required.

For the environmental systems and society minor, seven courses from Environment M111, M125, M126, M131, M133, 134, 140, M147, 150, M153, 155, 157, C159, M161, 162, 163, M164, 166, M167, 175 are required.

For the geography/environmental studies minor, three courses from Geography M102, M103, M109, M118, M125, M126, 127, 130, M131, 133, 136, 138, 139B, 139C, and any two additional upper-division geography courses (except those from the preceding list and courses 194 through 199) are required.

Honors Program

The honors program provides exceptional students an opportunity for advanced research and study, under the guidance of a faculty member, that leads to the completion of an honors thesis or research project. To qualify for graduation with honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.5 or better in upper-division coursework in the major and an overall GPA of 3.0 or better, (3) complete at least 8 units of Environment 198 taken over at least two terms, and (4) produce a completed satisfactory honors thesis. The honors thesis or research project is in addition to the requirement of the completed practicum in environmental science project. Contact the student affairs officer for more information.

Policies

Preparation for the Major

Each course applied toward requirements for preparation for the major must be passed with a grade of C– or better. Students receiving a grade below C– in two courses, either in separate courses or repetitions of the same course, are subject to dismissal from the major.

The Major

Each course applied toward requirements for the major, except Environment 185A, must be taken for a letter grade. Students must maintain an overall grade-point average of 2.0 (C) or better in all courses applied toward the major.

Undergraduate Minor

Environmental Systems and Society Minor

The Environmental Systems and Society minor is designed for students who wish to augment their major program of study with courses addressing the relationships between environmental science and associated social and political issues. The minor seeks to impart a deeper understanding of environmental systems related to air, land, and water resources, providing a basis for sound professional decision making.

Admission

To enter the minor, students must be in good academic standing (2.0 grade-point average) and file a petition at the Institute of the Environment and Sustainability, 300 La Kretz Hall, 310-226-3193.
The Minor

Required Lower-Division Courses (8 units): At least two courses from Astronomy 3, Atmospheric and Oceanic Sciences 1, 2, 3, Earth, Planetary, and Space Sciences 1, 15, 16, 20, Ecology and Evolutionary Biology 10, 25, Environmental M1A, M1B, 10, 12, 25, M30, M30SL, Geography 1, 2, 5.

Required Upper-Division Courses (20 units): At least five courses from Environmental M111, M125, M126, M131, M133, 134, 140, M147, 150, M153, 155, 157, C159, M161, 162, 163, M164, 166, M167, 175.

Policies

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor, and at least 16 units applied toward the minor must be taken in residence at UCLA. Transfer or substitution of credit for any of the above is subject to institute approval; consult with an academic adviser at the institute before enrolling in any courses for the minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Majors

Doctor of Environmental Science and Engineering

The Environmental Science and Engineering (DEnv) professional doctorate program was founded in 1973 by Nobel laureate Dr. Willard Libby, who perceived a need to train environmental scientists, engineers, and policymakers in a more interdisciplinary manner than is afforded by traditional PhD programs. The program is designed with an appropriate balance of breadth and specific skills, based on a strong master’s-level foundation in a science or engineering discipline. The curriculum consists of formal coursework across a full spectrum of relevant physical, biological, social, and engineering disciplines, as well as interdisciplinary research training and an off-campus residency where students complete their dissertation embedded in an agency, business, or non-profit organization. UCLA remains unique in the country in awarding the Doctor of Environmental Science and Engineering degree.

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Environment and Sustainability MS, PhD

The Environment and Sustainability PhD program was launched in 2018. The program equips students with diverse perspectives to develop profound new ideas, knowledge and answers to the most important concerns facing people and the planet. The program provides a deep understanding of how fundamental principles of environmental science and sustainability can be applied to research and address key environmental challenges that require skills in multiple disciplines—preparing students for a range of careers in academia, as well as public and private sectors. To promote interdisciplinary field of environmental humanities. Examination of how different culture forms (e.g., fiction, journalism, poetry, visual art) represent environmental issues. Topics may include biodiversity, wilderness, food, urban ecologies, postcolonial ecologies, environmental justice, and climate change. P/NP or letter grading.

M30SL. Environmental Literature and Culture (Seminar). (5) (Same as English M30SL). Lecture, three hours; discussion, one hour; fieldwork, two hours. Enforced requisite: satisfaction of Entry-Level Writing requirement. Introduction to core themes, questions, and methods within interdisciplinary field of environmental humanities. Examination of how different culture forms (e.g., fiction, journalism, poetry, visual art) represent environmental issues. Topics may include biodiversity, wilderness, food, urban ecologies, postcolonial ecologies, environmental justice, and climate change. Service learning component includes meaningful work with off-campus agencies selected by instructor. P/NP or letter grading.

99. Student Research Program. (1 to 2) (Formerly numbered M127L.) Lecture, three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

M102. Soils and Environment. (4) (Formerly numbered M127L.) (Same as Earth and Evolutionary Biology M127 and Geography M102L.) Lecture, three hours; discussion, one hour; field trips. General treatment of soils and environmental implications: soil development, morphology, and worldwide distribution of soil orders; physical, chemical, hydrologic, and biological properties; water use, erosion, and pollution; management of soils as related to plant growth and distribution. P/NP or letter grading.

M102L. Soils and Environment: Field. (1) (Formerly numbered M127L.) (Same as Earth and Evolutionary Biology M127L and Geography M102LL.) Laboratory, one hour; field excursions. Corequisite: course
134. Environmental Economics with Data Analysis. (4) Lecture, three hours. Requisite: one course from Economics 41, Life Sciences 42, Political Science 6, Statistics 10A, or 10B. Introduction to statistical analysis course approved by instructor. Examination of challenges of balancing environmental protection with wants and needs of people in economy. Focus on how to design efficient public policies that meet environmental goals, their impact on labor markets, trade-offs presented by different alternatives. Focus on methodology of LCA to compute various market inputs and environmental releases from all activities associated with lifecycle of products. Focus on policy implications of LCA in informing policy and regulation, evolution of environmental regulation, different types of regulatory approaches, regulatory process, and alternative approaches to environmental decision making. Includes California Environmental Quality Act (CEQA), Proposition 65, California’s long-standing leadership role in air pollution control, and state’s pioneering efforts in regulating greenhouse gas emissions. P/NP or letter grading.

140. Foundations of Environmental Policy and Regulation. (4) Lecture, three hours. Introduction to environmental policy and regulation in U.S. Provides basic knowledge and skills needed to work as professional environmental problem solver. Includes environmental harms that are subject to regulation, role of science in informing policy and regulation, evolution of environmental regulation, different types of regulatory approaches, regulatory process, and alternative approaches to environmental decision making. Includes California Environmental Quality Act (CEQA), Proposition 65, California’s long-standing leadership role in air pollution control, and state’s pioneering efforts in regulating greenhouse gas emissions. P/NP or letter grading.

154. Environmental Journalism, Science Communication, and New Media. (4) Lecture, three hours. Introduction to environmental journalism, science communications, and new media, including weekly guest lectures by prominent successful practitioners in wide variety of media. Focus on technologies, methods, genres, and theories of communicating environmental challenges, solving, and engaging public in newspapers, blogs, movies, books, you tube, blogs, and social media. Discussion of possibilities and limitations of different media and importance of communications for environmental science, policy, and individual decision making. Production by students of environmental communications in variety of media. P/NP or letter grading.

M125. Environmentalism: Past, Present, and Future. (4) (Formerly numbered M132.) (Same as Geography M125 and Environmental Sociology 116.) Lecture, three hours; discussion, one hour. Exploration of history and origin of major environmental ideas, movements or countermovements they spawned, and new and changing nature of modern environmentalism. Introduction to early ideas of environment, how rise of modern sciences reshaped environmental thought, and how this was later transformed by 19th-century ideas and rise of American conservation movements. Review of politics of American environmental thought and contemporary environmental questions as they relate to broader set of questions about nature of development, building back in both historic and global debate. Exploration of issues in broad context, including global climate change, risks of pandemics, deforestation, and environmental justice impacts of war. Letter grading.

M126. Environmental Change. (4) (Formerly numbered M130.) (Same as Geography M126.) Lecture, three hours; reading period, one hour. Designated for juniors/seniors. Examination of natural forces producing environmental changes over past two million years. How present landscape reflects past conditions. Effects of environmental change on people. Increasing importance of human activity in environmental modification. Focus on impact of natural and anthropogenic changes on forests. P/NP or letter grading.

M131. Human Impact on Biophysical Environment. (4) (Formerly numbered M109.) (Same as Geography M131.) Lecture, three hours; reading period, one hour. Designated for juniors/seniors. Examination of history, mechanisms, and consequences of interactions between humans and environment. Exploration in depth of three case studies: Ecocyclone, desalination (including green energy generation and water treatment) and four major subjects (soil, biodiversity, water, and landforms). P/NP or letter grading.

M133. Environmental Sociology. (4) (Same as Sociology 115 and Sociology M115.) Lecture, three hours; discussion, one hour. Relationship between society and environment. Analysis in detail of interrelations between social factors (such as class, race, gender, and religion) and environmental and factorials (such as pollution, waste disposal, sustainability, and global warming). P/NP or letter grading.

135. Introduction to Sustainable Architecture and Community Planning. (4) (Same as Architecture and Urban Design CM153.) Lecture, three hours. Relationship of built environment to natural environment through whole systems approach, with focus on sustainable design and planning of communities. Emphasis on energy efficiency, renewable energy, and appropriate use of resources, including materials, water, and land. Letter grading.

155. Energy and Society in Time of Climate Change: Moving Toward Just Transition. (4) Lecture, three hours. Introduction to energy systems and their regulatory infrastructure, with focus on energy efficiency, renewable energy, and appropriate use of resources, including materials, water, and land. Letter grading.

156. Environmental Politics and Governance. (4) (Same as Urban Planning M160.) Lecture, three hours. Environmental planning is more than simply finding problems and fixing them. Each policy must be negotiated comprehensively within complex systems of governance. Institutions and policies matter deeply. Overview of how environmental governance works in practice and how it might be improved. Letter grading.

157. Energy, Environment, and Development. (4) Lecture, three hours. Requisites: Life Sciences 3A and 3B (or 31A and 31B), Physics 1A and 1B (or 6A and 6B). Introduction to basic energy concepts and examination of role of various energy sources, energy conversion technologies, and their impact on modern life. Analysis of implications of current patterns of energy production and consumption for future economic and environmental well-being. Integration of concepts and methods from physics, engineering, environmental science, economics, and public policy. Basic quantitative skills provided to analyze and critique technical, economic, and policy changes. Address challenge of balancing economic growth and environmental sustainability. P/NP or letter grading.

C159. Life-Cycle Assessment. (4) Lecture, three hours. Requisites: Life Sciences 30A and 30B, or Mathematics 3A and 3B (or 31A and 31B). Public discourse about current patterns of production and consumption of energy, goods and services more broadly, suggest such patterns are environmentally and economically unsustainable. Introduction to basic concept of life-cycle assessment (LCA), including analytical frameworks and quantitative techniques for systematically and holistically evaluating environmental impacts presented by different products. Focus on methodology of LCA to compute various market inputs and environmental releases from all activities associated with lifecycle of products. Focus on policy implications of LCA in informing policy and regulation, evolution of environmental regulation, different types of regulatory approaches, regulatory process, and alternative approaches to environmental decision making. Includes California Environmental Quality Act (CEQA), Proposition 65, California’s long-standing leadership role in air pollution control, and state’s pioneering efforts in regulating greenhouse gas emissions. P/NP or letter grading.

160. Topics in Environmental Economics and Policy. (4) Seminar, three hours. Requisite: Statistics 12 or 13. Examination of major environmental economics and policy, with focus on testing policy-relevant environmental hypotheses using economics research approach. Invited scholars present research aimed at yielding policy-relevant results on various topics such as climate change, pollution, and transportation. P/NP or letter grading.

M161. Global Environment and World Politics. (4) (Same as Political Science M122B.) Lecture, three or four hours; discussion, one hour. Focus on key entrepreneurial and financial concepts, with emphasis on applications that are vital for implementing environmental solutions in public, private, and nonprofit settings. Topics include basic elements of finance, project evaluation, financial planning, and marketing. Development of entrepreneurial skills to recognize opportunity and transfer ideas into viable projects that are better for environment and that benefit people and communities. Case studies used to equip students with tools necessary to successfully execute environmental goals and objectives. P/NP or letter grading.

162. Entrepreneurship and Finance for Environmental Scientists. (4) Lecture, three hours; discussion, one hour. Focus on key entrepreneurial and financial concepts, with emphasis on applications that are vital for implementing environmental solutions in public, private, and nonprofit settings. Topics include basic elements of finance, project evaluation, financial planning, and marketing. Development of entrepreneurial skills to recognize opportunity and transfer ideas into viable projects that are better for environment and that benefit people and communities. Case studies used to equip students with tools necessary to successfully execute environmental goals and objectives. P/NP or letter grading.
240. Food, Energy, and Water Systems Management Seminar. (1) Seminar, one hour. Designed for students in science, technology, engineering, and mathematics (STEM) field interested in nexus of food, energy, and water systems (FEWS) management and sustainability. Discussion of issues of science, technology, policy, economics, and law with experts in industry, academia, and government. Career development and professional presentation skills. Course is part of National Science Foundation (NSF) graduate traineeship in integrated urban solutions for food, energy, and water systems (INFEWS). Enrollment for INFEWS students in STEM graduate education and related sustainability majors/topics by consent of instructor. S/U or letter grading.

241. Food, Energy, and Water Systems Management in Urban Systems Field Laboratory. (4) Fieldwork, four hours. Designed for students in science, technology, engineering, and mathematics (STEM) field interested in nexus of food, energy, and water systems (FEWS) management and sustainability. Weekly visits to facility related to FEWS, and discussion of issues of science, technology, policy, economics, and law in written report. Course is part of National Science Foundation (NSF) graduate traineeship in integrated urban solutions for food, energy, and water systems (INFEWS). Enrollment for non-INFEWS students in STEM graduate education and related sustainability majors/topics by consent of instructor. S/U or letter grading.

250. Tools for Sustainability Assessment. (4) Lecture, three hours. Recommended preparation: introduction to sustainability in engineering, ecology, economic, policy, and management, or public policy analysis. Public discourse about the impacts of current patterns of production and consumption of energy and various goods and services suggests such patterns are unsustainable. What is meant by sustainability and how is it quantified? Focus on concepts and tools to assess the sustainability of energy and various goods and services such as food, water, and natural resources. Discussion of usefulness and limitations of various metrics as guide for public and private decision making. S/U or letter grading.

259. Life-Cycle Assessment. (4) Lecture, three hours. Requisites: Life Sciences 30A and 30B, or Mathematics 3A and 3B (or 31A and 31B). Public discourse about current patterns of production and consumption of energy, and goods and services more broadly, suggests such patterns are environmentally and economically unsustainable. Introduction to basic concept of life-cycle assessment (LCA), including analytical frameworks and quantitative techniques for systematic and holistic evaluating environmental trade-offs presented by different alternatives. Focus on methodology of LCA to compute various material inputs and environmental releases from all activities associated with a system or technology. Techniques include raw material extraction, processing, end use, and disposal) of products or services. Discussion of strengths and limitations of LCA as tool for decision making. Students perform life-cycle analysis of one technology, product, or service of their choice. Concurrently scheduled with course C159. S/U or letter grading.

260. Information, Technology, Business, and Society. (4) Seminar, three hours. Interdisciplinary research seminar to bring social science methods to address environmental problems. Topics include selection and framing of research questions, developing measurements, designing appropriate methods (e.g., surveys, experiments, using available data), analyzing data, and writing up research proposals. S/U or letter grading.

277. Leaders in Sustainability. (4) Lecture, three hours. Course for students participating in Leaders in Sustainability Program, including those from engineering, law, management, public affairs, public health, and social sciences, and others. Creation of environment for academically based discussions on sustainability-related theories, capitalizing on wide mix of disciplines represented among participating students. Sessions feature UCLA faculty members, external speakers, and leadership skills to help students learn more about how to best put their interests in sustainability to use. Letter grading.

290. Seminar in Environment and Sustainability. (2) Seminar, nine minutes. Seminars sponsored by Institute of the Environment and Sustainability and other units. Planning and execution of presentations on topics of choice. Emphasis on development of communication skills. May be repeated for credit. S/U grading.

297A-297B. Advanced Topics in Environment and Sustainability. (4–2) Seminar, four hours (course 297A) and two hours (course 297B). Advanced study and analysis of variable current topics in environment and sustainability. Consult Schedule of Classes for instructors. May be repeated for credit. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship with active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

400. Environmental Science and Engineering Problems Course. (8) Seminar, eight hours. Primarily designed for environmental science and engineering doctoral students. Multidisciplinary technical and socioeconomic analysis and prognosis of significant current environmental problems. May be repeated for credit. S/U grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate advisor, department chair, and host campus unit. May be repeated for credit. S/U grading.


599. Doctoral Dissertation Research. (2 to 12) Tutorial, to be arranged. Limited to students who have advanced to doctoral candidacy. May not be applied toward any degree course requirements. May be repeated for credit. S/U or letter grading.

ENVIRONMENTAL HEALTH SCIENCES

Jonathan and Karin Fielding School of Public Health

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Rachael M. Jones, MPH, PhD
Jian Li, PhD
Timothy Malloy, JD (Frank G. Wells Endowed Professor of Environmental Law)
André E. Nel, MBChB, PhD
Shane S. Que Hee, PhD
Beate R. Ritz, MD, PhD
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(Audrienne H. Moseley Professor of Biological Nursing Science)
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Daniel Z. Uslan, MD

Adjunct Associate Professor

Kevin Y. Njabo, PhD

Adjunct Assistant Professors

Hamid Arabzadeh, CIH
Angelo J. Bellomo, MS
Tao Huai, PhD

Overview

The Department of Environmental Health Sciences focuses its research and educational activities on the protection of human health from biological, chemical, mechanical, and physical hazards in the environment. Its graduates are scientists, professionals, and leaders capable of identifying and measuring stressors of environmental concern; evaluating the health, environmental, and all other impacts of such stressors; developing means for their effective management; and evaluating alternative policies directed at improving and protecting health and the environment. Such training is accomplished through several degree programs that offer specialized study in selected academic areas of environmental health sciences such as air pollution, environmental chemistry, environ-
mental policy, toxicology, built environment and health, climate and health, global environmental health, water quality, occupational health, and industrial hygiene. Graduates of the department pursue careers in the private or public sector as researchers, educators, managers, policymakers, and/or practitioners.

The department offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Environmental Health Sciences and, through the Fielding School of Public Health, the Master of Public Health (MPH) degree with a specialization in environmental health sciences (see Public Health Schoolwide Programs). The department also offers an area of focus on industrial hygiene for its MS and MPH degrees. A concurrent degree program (Environmental Health Sciences MPH/Master of Urban Planning) is also offered. The interdepartmental Molecular Toxicology program offers a PhD degree.

Upper-Division Courses

100. Introduction to Environmental Health. (4) Lecture, three hours; discussion, one hour. Preparation: one course each in chemistry and biology. Limited to nonmajors. Not open for credit to students with credit for course 120. Introduction to environmental health, including coverage of sanitary principles and chronic and acute health effects of environmental contaminants. P/NP or letter grading.

101. Fundamentals of Chemistry for Environmental Health. (3) Lecture, three hours; discussion, one hour. Guided tutorial on fundamental chemical concepts that are important for public health students that either do not have strong chemistry background or who have not recently taken chemistry class and want to refresh their knowledge. Discussion of examples relevant to environmental health more broadly in each topic area and units to illustrate why understanding fundamental chemical concepts are important. Inter-active study with focus on core chemical concepts. Recommended to be taken before or concurrently with introductory courses. P/NP or letter grading.

120. Environment and Health. (5) Lecture, three hours; discussion, one hour. Limited to Public Health majors. Not open for credit to students with credit for course 100. Examination of scientific principles and methods of field, as well as translation of science to environmental health practice. Topics include environmental stressors and their health effects, regulations and policy equity, and ethical considerations. Acquisition of skills important for public health professionals, such as application of scientific information to real-world problems and ability to communicate effectively with different stakeholders. Letter grading.

125. Atmospheric Transport and Transformations of Airborne Chemicals. (4) Lecture, four hours. Preparation: one year of calculus, one course each in physics, organic chemistry, and physical chemistry. Designed for scientific and public health students. Role of regional or long-range transport, and atmospheric lifetimes and fates of airborne chemicals in phenomena such as photochemical smog, acid deposition, stratospheric ozone depletion, accumulation of greenhouse gases, and regional and global distribution of volatile toxic compounds. Concurrently scheduled with course C225. P/NP or letter grading.

C135. Environmental Policy for Science and Engineering. (4) Lecture, four hours. Limited to senior undergraduate and graduate students. Examination of theoretical underpinnings of several major types of regulatory policy, as well as practical issues involved in implementing and enforcing each. Exploration of selection and impact of regulatory forms from variety of disciplines and viewpoints. Focus on traditional command and control regulation (including self-executing performance standards and permit-based regulation), market-based regulation (such as emissions trading), remediation, and emerging regulatory approaches such as management-based regulation and alternatives assessment. Issues of compliance and enforcement. Concurrently scheduled with course C235. P/NP or letter grading.

C140. Fundamentals of Toxicology. (4) Lecture, four hours; preparation: one course each in biology, organic chemistry, and biochemistry. Essential aspects of toxicology, with emphasis on human species. Absorption, distribution, excretion, biotransformation, as well as basic toxicologic processes and organisms. Concurrently scheduled with course C240. Letter grading.

C152D. Properties and Measurement of Airborne Particles. (4) Lecture, four hours. Preparation: one year each of chemistry, physics, and calculus. Basic theory and application of aerosol science to environmental health, including properties, behavior, sampling, and measurement of aerosols and quantitative problems. Concurrently scheduled with course C252D. P/NP or letter grading.

C157. Risk Assessment and Standard Setting. (4) Seminar, four hours. Requisite: course C140. Designed to provide students with opportunity to review scientific basis for association of selected occupational and environmental exposures with disease. Special emphasis on critical evaluations of literature. Attention specifically to interface of science and regulatory standards. Concurrently scheduled with course C257. P/NP or letter grading.


M166. Environmental Microbiology. (4) (Same as Civil Engineering M166). Lecture, four hours; discussion, two hours; outside study, six hours. Recommended requisites: Civil Engineering 153. Microbial cell and its metabolic capabilities, microbial genetics and its potential, growth of microbes and kinetics of growth, microbial ecology and diversity, microbiology of wastewater treatment, probing of microbes, public health microbiology, pathogen control. Letter grading.

M166L. Environmental Microbiology Laboratory. (2) (Same as Civil Engineering M166L). Lecture, one hour; laboratory, two hours; outside study, six hours. Required requisites: course M166 (may be taken concurrently). General laboratory practice within environmental microbiology, sampling of environmental samples, classical and modern molecular techniques for isolation of microbes from environmental samples, techniques for determination of microbial activity in environmental samples, laboratory setups for studying environmental biotechnology. Letter grading.

C185A. Foundations of Environmental Health Sciences. (4) Lecture, four hours. Preparation: one year of undergraduate biology and chemistry. Introduction to field of environmental health sciences designed for students pursuing concentration in environmental health or Public Health minors. Examination of series of topics relevant to science of environmental and occupational health (e.g., chemistry, ecology, microbiology, and toxicology) by introducing scientific basis from ecological perspective and describing how topics relate to health on a biochemical and molecular basis. Emphasis on scientific aspects of field, with focus on critique of primary literature and quantitative approaches for examination of topics to provide skills that are critical to perform research. Concurrently scheduled with course C185B. P/NP or letter grading.

C185B. Foundations of Environmental Health Sciences for Public Health Professionals. (2) Lecture/ seminar, two hours. Preparation: 4 units each of undergraduate chemistry and biology. Future environmental health and public health professionals need to understand vocabulary and systems issues related to local, regional, and global environmental factors affecting public health. Development of content knowledge and thought processes to effectively analyze environmental health problems and development, implementation, and leading of actions to address these problems. Supplements content presented in Public Health 200A and 200B and Environment 100. Concurrently scheduled with course C200B. Letter grading.

C185C. Foundations of Environmental Health Sciences. (8) Lecture, four hours; group project, two hours. Enforced requisites: courses C185A and C185B. Multidisciplinary aspects of environmental health sciences in context of public health for environmental health majors. Concurrently scheduled with course C200C. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental read-
ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

197. Directed Research in Environmental Health Sciences. (1 to 4) Independent study of a specific topic in the field of environmental health sciences in order to gain more in-depth knowledge of a subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research in Environmental Health Sciences. (1 to 4) Enabling students pursuing MS, MPH, and PhD degrees or honors students to pursue specific research projects. May be repeated for credit. Individual contract required. Letter grading.

**Graduate Courses**

C200A. Foundations of Environmental Health Sciences. (4) Lecture, four hours. Preparation: one year of undergraduate biology and chemistry. Introduction to field of environmental health sciences designed for undergraduate biology and chemistry. Introduction to scientific literacy and quantitative approaches for examination of environmental and occupational health (e.g., climate change, ecology, microbiology, and toxicology) by introducing scientific basis from ecological perspective and describing how topics relate to health on a biochemical and molecular level. Emphasis on scientific aspects of biomedical and biological agents during period of maturation and biological agents during period of maturation (from fertilization to adulthood) causing pathophysiological perturbations in homeostasis at any stage during life. Letter grading.

201. Seminar: Environmental Health Contaminants. (2) Seminar, two hours. Discussion of various topics in ecotoxicology. Topics vary from term to term and include aspects of environmental chemistry and ecology. May be repeated for credit. S/U grading.

204. Seminar: Exposure Assessment. (2) Seminar, two hours. Discussion of various topics in exposure assessment. Topics vary from term to term and include aspects of current research and ongoing work of environmental health sciences doctoral students. May be repeated for credit. S/U grading.

205. Environmental Health Sciences Doctoral Seminar. (2) Seminar, two hours. Limited to environmental health sciences doctoral students. Presentation of current research of environmental health sciences doctoral students. May be repeated for credit. S/U grading.

206. Seminar: Applied Coastal Ecology. (2) Seminar, two hours. Discussion of various topics in applied coastal ecology. Topics vary from term to term and include wetland ecology, restoration ecology, and ecology and management of coastal watersheds. May be repeated for credit. S/U or letter grading.

207. Introduction to Geographic Information Systems. (4) Lecture, two hours; laboratory, two hours. Introduction to geographic information systems (GIS), including use of digitizing, geocoding, and data analysis. S/U or letter grading.

208. Built Environment and Health. (4) Lecture, three hours; discussion, one hour. Limited to public health and urban planning graduate students. Interdisciplinary course in built and natural environment and breaking down silos. U.S. and other developed, as well as developing countries and cities are facing increasingly lethal and costly epidemics of acute and chronic diseases related to land use and built environment decisions. While hazards presented by air and water pollution are well recognized for acute, infectious, and toxicological illnesses, there is increasing recognition of health hazards presented by community designs that fail to recognize human health. Land use and built environment decisions impact every age group and social and racial minority. Impacts range from very acute (motor vehicle trauma) to long term (obesity, cancer, heart disease). Decisions have as their bases economic, financial, insurance, housing, and other factors. Analysis of each factor and related disease. S/U or letter grading.

209. Practical Applications in Environmental Health Sciences. (2) Lecture, two hours. Enforced requisites: courses C200A, C200B. Description of many leading environmental and occupational health problems that environmental health professionals must face today, conducted as series of lectures, assignments, hands-on field exercises, and group projects, to help students develop skills to integrate concepts across disciplines and develop field of environmental health. May satisfy some requirements needed to qualify for Registered Environmental Health Specialist (REHS) certification. S/U or letter grading.


211. Seminar: Practical Aspects of Biosafety and Biosecurity. (2) Seminar/discussion, two hours. Preparation: one year of introductory biology. Recommended requisite: Microbiology 101 or 102. Designed for environmental health sciences graduate students and students in UCLA Biosafety Training Program. Interactive seminar with focus on critical concepts in and practical issues of biosafety and biosecurity, risk assessment, and risk management that are needed for individuals wishing to serve as interns in UCLA biosafety program and/or become biosafety professionals. S/U or letter grading.

215. Fundamentals of Health Impact Assessment. (4) Seminar and hours. Enables students to understand the health impact assessment (HIA) practice, its rationale and underlying principles, and opportunities to develop and apply HIA skills in work with public agencies and community organizations. Focus on problem solving around case-study HIA and student experiences working on HIA-related projects. S/U or letter grading.

216. Planetary Health: Consequences of Environmental Change for Humans. Three hours. Planetary health is emerging interdisciplinary field that explores connections between environmental change and public health. Human-caused impacts on natural systems have subsequent effects on human health include changes in land use, food systems, biodiversity, air pollution, and water availability. Our ability to understand planetary health requires synthesizing information from diverse academic disciplines across spatial and temporal scales, including atmospheric and climate science, ecology, epidemiology, and policy. Students from environmental health sciences will learn how to interpret studies from scientific literature that discuss various aspects of planetary health, from drivers of environmental change to human health outcomes, integrated information across multiple fields, and communicate planetary health research through oral presentation and written report. S/U or letter grading.

M217. Graduate Seminar in Environmental Economice and Policy. (4) Same as Public Policy M217. Seminar, four hours. Preparation: undergraduate-level statistics, basic undergraduate microeconomics. Introduction to applied scholarship in environmental economics and policy. Focus on how to become more proficient consumers and producers of social science research that explores questions of environmental policy and sustainability broadly construed. Topics include health and disease impacts of climate change, adaptation to climate change, efficient and equitable design of environmental policies (e.g., cap and trade, carbon taxes). Development of detailed empirical research proposal and short presentation. Letter grading.

218. Science Communication: Art and Practice of Science Storytelling. (4) Lecture, three hours. Students from environmental health sciences focus on communicating with diverse stakeholders through visual communication. Study of science of science communication and importance of narrative and storytelling to producing engaging science communication. Applying theoretical concepts to their own interdisciplinary interests, students develop two pieces of science communication, video and photo/image/infographic project. Through learning fundamentals of good public communication, students also advance their peer communication. S/U or letter grading.

219. Environmental Health Disparities. (4) Seminar, three hours. Designed for advanced graduate students who have completed foundational coursework in environmental health sciences. Exploration of disproportionate health burden experienced by low-income communities and communities of color in U.S. due to environmental hazards. Study of social, economic, and political forces that create inequitable burdens of environmental pollution. Covers theoretical frameworks and analytic tools for understanding cumulative impacts of environmental and social inequities. Case studies and policy debates used to explore challenges and opportunities for addressing environmental racism and advancing environmental justice. S/U or letter grading.

220. Overview of Environmental Health Microbiology. (2) Lecture, two hours. Preparation: one course in biology. Introduction to environmental public health microbiology. Focus on human-disease-causing microorganisms, including toxins, fungi, protozoa or protozoans, prions, and algae. Consideration of infectious diseases and toxins produced by these microbes. Address how infectious agents interact with human immune system. Overview of this wide variety of microbial topics. S/U or letter grading.

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221. Climate Change, Equity, and Health. (4) Lecture, two hours; discussion, two hours. Basic foundation in physical mechanisms of, responses to, and health implications of human-induced climate change. Exploration of variety of epidemiologic, risk assessment, and statistical methods used to understand impacts of climate change on health across diverse demographic groups; including efforts to estimate current and future occurrence of disease due to climate change, as well as avoidable and attributable risk. Elaboration of public health implications, positive and negative, of adaptation and adjustment to climate change, including discussions of ethical, political, and economic aspects of these efforts. Emphasis on how adverse effects of climate change are borne disproportionately by vulnerable people and groups. Students are responsible for leading class discussions and preparing poster on their choice of topic related to climate change and health. S/U or letter grading.

C225. Atmospheric Transport and Transformations of Airborne Chemicals. (4) Lecture, four hours. Limited to seniors. Unlance, and disease and disability prevention from different sources of potential hazards are covered. The course will cover the chemical characterization of airborne particulate and gaseous contaminants, their environmental fate and transport, and their interaction with biological receptors. Topics include deposition, stratospheric ozone depletion, accumulation of greenhouse gases, and control of volatile organic compounds. Concurrently scheduled with course C125. S/U or letter grading.

230A-230B-230C. Interdisciplinary Occupational Health Practice. (2–2–2) Seminar, one hour; fieldwork, one hour; laboratory, one hour. Global nature of occupational health practice featured and explored in these varied-activity courses, including material related to recognition, prevention, surveillance, and management of work-related health problems that occupational health and safety researchers and professionals encounter in various work environments. Lectures, seminars, field exercises, workshops, clinical case conferences, and group assignments are designed to help students develop skills necessary to integrate and communicate relevant approaches to occupational hazard detection and control, work-related injury and illness surveillance, and disease and disability prevention from different disciplines in field of occupational health and safety. S/U grading.

C235. Environmental Policy for Science and Engineering. (4) Lecture, four hours. Limited to senior undergraduate and graduate students. Examination of theoretical underpinnings of several major types of regulatory policy, as well as practical issues involved in implementation of current occupational health and safety programs. Selection and impact of regulatory forms from variety of disciplines and viewpoints. Focus on traditional command and control regulation (including self-executing enforceable standards) and market-based regulation (such as emissions trading), remediation, and emerging regulatory approaches such as management-based regulation and alternatives assessment. Issues of coherence and enforcement. Concurrently scheduled with course C135. Letter grading.

C240. Fundamentals of Toxicology. (4) Lecture, four hours. Preparation: one course each in biology, organic chemistry, and physics. Examination of basic aspects of toxicology, with emphasis on human subjects. Absorption, distribution, excretion, biotransformation, as well as basic toxicologic processes and organ systems. Concurrently scheduled with course C140. Letter grading.

M241. Advanced Concepts in Gene-Environment Interactions. (4) (Same as Molecular Toxicology M247.) Lecture, three hours; discussion, one hour. Comprehensive and current examination of the interaction between environmental and genetic factors in disease susceptibility. Focus on molecular and cellular mechanisms of gene-environment interaction. Discussion of primary components of field, including role of metabolic pathways to toxicological response and importance of environmental influences in human disease. Exploration of selected hot topics infield, such as importance of epigenetics and of microbiome. S/U or letter grading.

C252D. Properties and Measurement of Airborne Particles. (4) Lecture, four hours. Preparation: one year each of chemistry, physics, and calculus. Basic theoretical background in exposure science to environmental health, including properties, behavior, sampling, and measurement of aerosols and quantitative problems. Concurrently scheduled with course C125D. S/U or letter grading.

252E. Identification and Measurement of Gases and Vapors. (4) Lecture, three hours; discussion, one hour; outside study, two hours. Preparation: one year each of chemistry, physics, and calculus. Theoretical and practical aspects of the various techniques for sampling and measurement of gases and vapors. Letter grading.

252F. Industrial Hygiene Measurements Laboratory. (3) Laboratory, three hours, Corequisites: courses C252D, 252E. Limited to industrial hygiene majors. Laboratory methods for sampling, measurement, and analysis of gases, vapors, and aerosols found in occupational environment. S/U or letter grading.

252G. Industrial and Environmental Hygiene Assessment. (4) Lecture, one hour; discussion, two hours; laboratory, two hours; outside study, four hours. Preparation: courses C200A, C200B, C252D, 252E. Environmental and industrial hygiene sampling techniques and assessment via walk-through surveys, lectures, discussions, actual field measurements, laboratory calibrations, and analyses and reports, with emphasis on chemical, physical, and ergonomic hazards. Letter grading.

253. Physical Agents in Work Environment. (2 to 4) Lecture, two hours; laboratory, two hours. Preparation: one year of physics, physics courses, measurement methods, health effects, and control methods for radiation (ionizing and nonionizing), noise, and thermal stress in workplace environment. S/U or letter grading.

255. Control of Airborne Contaminants in Industry. (4) Lecture, two hours; laboratory, two hours. Preparations: one year of physics. Requisite: course C252D. Principles and applications of controls to industrial hygiene problems, including general and local exhaust ventilation, air cleaning equipment, and respiratory protection. S/U or letter grading.

256. Biological and Health Surveillance Monitoring in Occupational/Environmental Health. (4) Lecture, three hours; discussion, one hour; assignments, three hours. Principles and applications of biological monitoring and health surveillance to assess occupational and environmental exposures to toxic and/or hazardous organic and inorganic chemicals and physical factors. Letter grading.


258. Identification and Analysis of Hazardous Wastes. (4) Lecture, three hours; discussion, one hour; laboratory, one hour; one field trip. Requisite: course C252E. Designed to define, identify, label, and quantify hazardous wastes and how workers should be protected. Provides critical understanding of all analyte classes relevant to health and environmental degradation and regulation and practice of handling hazardous wastes. Letter grading.

259A. Occupational Safety and Ergonomics. (4) Lecture, four hours. Overview of most frequent and severe occupational injuries and illnesses, their distribution, causes, analysis methods, and control approaches, including low back pain, falls, machine exposures, upper extremity musculoskeletal disorders, fleet safety, and selected ergonomics topics. Letter grading.

259B. Workplace Safety. (2) Lecture, two hours. Introduction to broad range of topics in workplace safety through lectures, discussions, classificiation, metrics, control philosophy, and control methods. Specific topics include traditional safety risks, such as falls hazards, machinery safety, and fire hazards. Introduction to concepts of safety culture and philosophy. Review and presentation of peer-reviewed articles on topics relevant to course material. Letter grading.

M260. Occupational Epidemiology. (4) (Same as Epidemiology M261.) Lecture, three hours. Requisites: Epidemiology 100; for Epidemiology majors, Epidemiology 200A, 200B, 200C. Methodological considerations, approaches, and limitations in epidemiological investigations of occupational and environmental groups and environments. S/U or letter grading.


C264. Fate and Transport of Organic Chemicals in Aquatic Environment. (4) Lecture, four hours. Preparation: bachelor’s degree in science, engineering, geophysics, chemistry, biology, or public health. Evaluation of advanced studies in topics regarding nanomaterial organic pollutants are distributed in aquatic environments. Study of mass transport mechanisms moving organic chemicals between phases, biological degradation, and accumulation, and chemical reactions. Effect of humic substances on these processes. Concurrently scheduled with course C164. S/U or letter grading.

M270. Work and Health, (4) (Same as Community Health Sciences M278.) Lecture, three hours; practicum, one hour. Recommended preparation: graduate-level methods/statistics course, basic epide- miologic methods and philosophy. Review and presentation of peer-reviewed articles on topics relevant to course material. Letter grading.

280. Nanomaterial-Related Emerging Technologies: Exposure and Health Effects. (4) Seminar, three hours; activity, one hour. Students gain understanding of exposure and health effects of nanomaterials and related technologies, and of approaches to control exposure risks to workers and public. Students develop foundation for advanced studies in topics regarding nanomaterial-related emerging technologies. Topics include nano- and advanced materials and their development; electronic products containing toxic substances and nanomaterials, and their regulated products, their liability and regulatory compliance; exposure issues related to these materials and products throughout life cycle, including occupational and environmental perspectives; and potential health effects in humans from exposure intakes to post-exposure effects. S/U or letter grading.


375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.
400. Field Studies in Environmental Health Sciences. (4) Fieldwork, to be arranged. Field observation and studies in selected community environmental health problems. Students must file field placement and program training documentation on form available from Student Affairs Office. May not be applied toward MS minimum course requirement; 4 units may be applied toward 62-unit minimum total required for MPH degree. Letter grading.

401. Environmental Measurements. (4) Lecture, two hours; laboratory, four hours. Requisites: courses C200A, C200B, Chemistry 20A, 30AL. Instrumental methods for laboratory and field applications to assess quantity of environmental pollutants in air, food, and water, and to assess degree of exposure to such contaminants as noise and radiation. Letter grading.

410A. Instrumental Methods in Environmental Sciences. (4) Lecture, four hours; discussion, two hours; other, two hours. Preparation: one year each of physics, chemistry, and biology. Theory and principles of instrumental methods through lectures and group discussions. Letter grading.

410B. Instrumental Methods Laboratory in Environmental Health Sciences. (4) Lecture, one hour; discussion, one hour; laboratory, four hours; other, two hours. Preparation: one year each of physics, chemistry, and mathematics. Requisites: courses C200A, C200B. Laboratory techniques and instrumentation used in preparation and analysis of biological, environmental, and occupational samples. Letter grading.

411. Environmental Health Sciences Seminar. (2) Seminar, two hours. Required of graduate environmental health sciences students for one term each year. Current topics in environmental health in science, policy, and leadership. Letter grading.

414A. Research Methods and Effective Communication in Environmental Health Sciences. (2) Lecture, two hours. Prepares doctoral students in environmental health sciences and related fields for skills needed to undertake dissertation. Skills including performing literature searches, designing research study, proposing specific aims, forming testable hypotheses, completing Institutional Review Board (IRB) application, choosing data collection methods, data management, analysis, and interpretation; and writing research proposal. Students complete pilot research proposal for submission for funding. S/U or letter grading.

414B. Research Methods and Effective Communication in Environmental Health Sciences. (2) Lecture, two hours. Prepares doctoral students in environmental health sciences and related fields for skills needed to undertake dissertation. Skills including performing literature searches, designing research study, proposing specific aims, forming testable hypotheses, completing Institutional Review Board (IRB) application, choosing data collection methods, data management, analysis, and interpretation; and writing scientific paper and presenting research results. Students complete manuscript for submission to peer-reviewed journal. S/U or letter grading.

450. Case Studies in Regulatory Decision-Making: How Government Agencies Are Influenced to Delay Abatement of Local Health Threats. (2) Seminar, two hours. Requisites: course C200A or Public Health 200A or equivalent. Examination of process in which regulatory decisions are made. Review of several case studies in which industrial operations resulted in discharge of toxic chemicals to air, soils, or surface waters, and threatened health of adjoining community; this is common scenario for which California’s health-protective regulatory process was designed. Through review of response of state and local agencies in these cases, examine extent to which private interests can influence regulatory decisions, rendering process ineffective in abating health threats, especially in some of California’s most vulnerable communities. As practitioners in public health, consider how framing of complex regulatory decision in public health terms can be vital to gaining support of policymakers and public. S/U or letter grading.

454. Health Hazards of Industrial Processes. (4) Lecture, two hours; field trips, four hours. Requisites: course 255. Industrial processes and operations and occupational health hazards that arise from them. Letter grading.

461. Water Quality and Health. (4) Lecture, three hours; discussion, one hour. Requisites: courses C200A, C200B, 401. Introduction to water quality, with coverage of hydrology, water chemistry, and various chemical contaminants that may affect human health. Various treatment methods and health implications. S/U or letter grading.

471. Improving Worker Health: Social Movements, Policy Debates, and Public Health. (4) Same as Community Health Sciences CM470 and Urban Planning M470.) Lecture, three hours; fieldwork, two hours. Examination of intersection between work, health, and environment, analysis of social causes of health disparities, investigation of historical trends and social movements, interpretation of current policy debates, and development of innovative interventions. S/U or letter grading.

495. Teacher Preparation in Environmental Health Sciences. (2) Seminar, two hours. Preparation: 18 units of cognate courses in area of specialization. May not be applied toward master’s degree minimum total course requirement. May be repeated for credit. S/U grading.

596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. Limited to graduate students. Individual studies under direct faculty supervision. Only 4 units may be applied toward MPH and MS minimum total course requirement. May be repeated for credit. S/U or letter grading.

597. Preparation for Master’s Comprehensive or Doctoral Qualifying Examinations. (2 to 8) Tutorial, to be arranged. Limited to graduate students. May not be applied toward any degree course requirements. May be repeated for credit. S/U grading.

598. Master’s Thesis Research. (2 to 10) Tutorial, four hours. Only 4 units may be applied toward MPH and MS minimum total course requirement; may be applied toward minimum graduate course requirement. May be repeated for credit. S/U grading.

599. Doctoral Dissertation Research. (2 to 10) Tutorial, four hours. May not be applied toward any degree course requirements. May be repeated for credit. S/U grading.

Epidemiology

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Paul T. Hsu, MPH, PhD

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Overview

Epidemiology is the study of the distribution and determinants of disease in human populations. Epidemiologists study variations of disease incidence in relation to factors such as age, sex, race, environmental factors, lifestyle, demographic variables, occupational and social characteristics, place of residence, susceptibility, exposure to specific agents, or other pertinent characteristics. All of concern are the temporal and special distribution of disease, examination of trends, and intervals between exposure to causative factors and onset of disease. The scope of the field extends from study of the patterns of disease to the causes of disease with the goal of the control or prevention of disease. What distinguishes epidemiology from other clinical sciences is the focus on health problems in populations rather than in individuals, with the focus on public health.

Epidemiology is a young field with constantly expanding boundaries. The range of activities includes identifying determinants of population health, investigation and control of disease outbreaks, study of environmental and industrial hazards, evaluation of preventive or curative programs or treatments, and evaluation of the effectiveness and efficiency of intervention or control strategies. Many tools of epidemiology are shared with other fields such as microbiology, immunology, medicine, statistics, demography, and medical geography.

There is a growing core of epidemiologic methodology that includes the principles of study design and conduct, and statistical methods. Epidemiologic tools have become relevant for the expanding boundaries. The range of activities is to understand how systems operate and how to intervene on them. Examination of how to characterize human-centered problems that arise, and how to handle complexity as core design and development challenge. Examination of different traditions of studying and modeling (representing) systems, both conceptually and quantitatively, to address questions that arise in public health. Consideration of utility and limitations of these methods for providing insight to stakeholders who are addressing population health problem. S/U or letter grading.

Upper-Division Courses

100. Principles of Epidemiology. (4) Lecture, four hours; discussion, two hours. Preparation: one full biological sciences course. Limited to nonmajors. Not open for credit to students with credit for course 120. Introductory course to provide qualified undergraduate students with broad and comprehensive overview of concepts of epidemiology including evaluation of public health problems in terms of magnitude, person, time, and place; critiquing epidemiologic studies; and accessing key sources of data for epidemiologic assessment; using of epidemiologic methods and calculating basic epidemiologic measures for operational purposes; and communicating basic principles of epidemiology such as definitions of populations, sources of bias, causation, mortality, risk, and protective factors, and basics of study design. Letter grading.

120. Epidemiology in Public Health. (5) Lecture, four hours; discussion, two hours. Requisite: Public Health 50B. Limited to Public Health majors. Not open for credit to students with credit for course 100. Introduction to main principles of epidemiology, including foundational concepts and terminology, and exploration of key historical developments of field. Survey of major study designs and statistical techniques with emphasis on application of epidemiologic concepts in public health. Letter grading.

CM175. Terrorism, Counterterrorism, and Weapons of Mass Destruction: Practical Approach. (5) (Same as Honors College M175.) Seminar, three hours. Terrorism, its origins, and ways of addressing terrorism at local, national, and global levels. Guest speakers from variety of UCLA departments and from Los Angeles. Concurrently scheduled with course C275. P/NP or letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced prerequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced prerequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

197. Individual Studies in Epidemiology. (2 to 4) Tutorial, four hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Asigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200A. Methods I: Basic Concepts and Study Designs. (6) Lecture, three hours; discussion, one hour. Introduction of basic concepts and methods in epidemiology with emphasis on measuring disease occurrence, study design, and assessing causal relationships. Letter grading.

200B. Methods II: Prediction and Validity. (6) Lecture, six hours; discussion, four hours. Enforced prerequisites: course 200A and Biostatistics 100A, or Public Health 200A and 200B. Corequisites: Biostatistics 100B. Introduction to basic concepts, principles, and methods of chronic and infectious disease epidemiology. Letter grading.


M203. Topics in Theoretical Epidemiology. (4) (Formerly numbered 203.) (Same as Health Policy M201.) Lecture, three hours. Emphasis on methods that help to understand how systems operate and how to intervene on them. Exploration of how to characterize human-centered problems that arise, and how to handle complexity as core design and development challenge. Examination of different traditions of studying and modeling (representing) systems, both conceptually and quantitatively, to address questions that arise in public health. Consideration of utility and limitations of these methods for providing insight to stakeholders who are addressing population health problem. S/U or letter grading.

202. Methods for Analyzing Non-Randomized and Non-Experimental Studies. (4) Lecture, three hours. Requisites: course 200C or 401, or Biostatistics 200A or 200B or 406, and course M403 or 407A or Biostatistics 203A. Provides students with necessary tools to evaluate effectiveness of public health interventions. Study designs include non-randomized, quasi-experiments, and natural experiments. Covers both theoretical concepts as well as practical tools that encompass methods borrowed from related fields including social epidemiology, health policy, economics, and evaluation research. These methods include instrumental variable, difference-in-difference, synthetic control, regression discontinuity, and propensity score matching. S/U or letter grading.

205. Methods for Analyzing Non-Randomized and Non-Experimental Studies. (4) Lecture, three hours. Requisites: course 200C or 401, or Biostatistics 200A or 200B or 406, and course M403 or 407A or Biostatistics 203A. Provides students with necessary tools to evaluate effectiveness of public health interventions. Study designs include non-randomized, quasi-experiments, and natural experiments. Covers both theoretical concepts as well as practical tools that encompass methods borrowed from related fields including social epidemiology, health policy, economics, and evaluation research. These methods include instrumental variable, difference-in-difference, synthetic control, regression discontinuity, and propensity score matching. S/U or letter grading.

206. Systems Science Modeling and Simulation in Epidemiology. (4) Lecture, three hours. Requisites: course 200C or 401, or Biostatistics 200A or 200B or 406, and course M403 or 407A or Biostatistics 203A. Theoretical and practical introduction to modeling and simulation methods for conducting comparative, cost-effectiveness, and forecasting research. These methods include population-level (e.g., Markov state-transition models and system dynamics) and individual-level (e.g., microsimulation and agent-based modeling) simulations. These methods are employed in fields that sometimes refer to as systems epidemiology or computational epidemiology. Multidisciplinary fields that use tools and techniques from computer sciences, econometrics, operations research, engineering, and biology to better understand disease mechanisms or evaluate intervention effectiveness. S/U or letter grading.

Mission

The objectives of the Department of Epidemiology fall into three broad categories—research, teaching, and community service.

Graduate Major

Epidemiology MS, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.
207. Reproducibility in Epidemiologic Research. (4) Lecture, three hours. Requisites: courses 200A, 401 (or Biostatistics 100B or 200A and 200B), M403. Introduction to reproducibility in epidemiologic research. Students are exposed to tools for adopting practices to enhance reproducibility in their own research. Letter grading.

M211. Statistical Methods for Epidemiology. (4) (Same as Biostatistics 200B.) Lecture, four hours. Preparation: two terms of statistics (such as Biostatistics 100A, 100B). Requisites: courses 200B, 200C. Concepts and methods tailored for analysis of epidemiologic data on tabular and graphical techniques. Expansion of topics introduced in courses 200B and 200C and introduction of new topics, including principles of epidemiologic analysis, trend analysis, smoothing and sensitivity analysis. S/U or letter grading.


215. Systematic Review and Meta-Analysis. (2) Lecture, two hours. Preparation: courses 100 or 200A, and Biostatistics 100A, or Public Health 200A and 200B. Offers critical understanding of systematic reviews and meta-analysis of clinical trials and observational studies. Students learn how to conduct systematic literature search, assess quality of selected studies, identify sources of heterogeneity, conduct meta-analysis, and understand standards of reporting on meta-analyses. Offers practical training in meta-analyses and meta-regression using STATA software. Letter grading.

M216. Applied Sampling. (4) (Same as Statistics CM248.) Lecture, three hours; discussion, one hour. Designed for upper-division and graduate students in social or life sciences and those who plan to major in Statistics. Topics include methods of sampling from finite populations, sources of sampling and estimation bias, and methods of generating efficient and precise estimates of population characteristics. Practical applications as sampling methods via lectures and hands-on laboratory exercises. S/U or letter grading.

217. Social Networks and Public Health. (4) Lecture, four hours. Requisites: course 200B or 200A, or Public Health 200A and 200B. Principles of social network research, social network analysis, and social network intervention, especially in relation to public health and health behavior. Coding examples are provided in R (mainly R graph and ggraph2 packages). Discussion of landmarks social network papers relevant to public health. S/U or letter grading.

M218. Questionnaire Design and Administration. (4) (Same as Community Health Sciences M218.) Lecture, four hours. Requisites: courses 200B and 200C, or Community Health Sciences 211A and 211B. Design, testing, field use, and administration of data collection instruments, with particular emphasis on questions and scales. Letter grading.

219. Strategies for Increasing Sensitivity and Validity of Epidemiologic Studies. (2) Lecture, two hours. Requisite: course 100 or Public Health 200A. Discussion of strategies for increasing sensitivity and validity of epidemiologic studies. Covers issues that led to methodologic articles authored by instructor; nature of articles themselves; subsequent studies that have used suggested approaches; and any modification of methods that have been proposed. Students are expected to have basic training on epidemiological study designs and methods. S/U or letter grading.

220. Principles of Infectious Disease Epidemiology. (4) Lecture, three hours. Requisite: course 100 or 200A, or Public Health 200A and 200B. Ascertainment of infection, transmission, and epidemiological parameters rather than clinical and pathological aspects. Specific diseases discussed in depth to illustrate epidemiologic principles. S/U or letter grading.

221. Emerging Infectious Diseases. (4) Lecture, three hours. Requisite: course 220 or consent of instructor. Emerging infectious diseases (EIDs) are infections that have outpaced our capacity to describe those whose incidence or geographic range is rapidly increasing or threatens to increase in future. Overview of important emerging and re-emerging infectious diseases globally. Addresses factors associated with disease emergence/re-emergence, research methods, preparedness, disease surveillance, outbreak investigation, and response to EIDs with global perspective. Letter grading.

M226. Global Health Measures for Biological Emergencies. (4) (Same as Ecology and Evolutionary Biology M226.) Lecture, four hours. Requisite: course 200B. Mitigation of bioterrorism falls outside traditional public health programs and public health graduate education. Because of seriousness of such threats, it is important that individuals trained in public health understand problems and responses. Letter grading.


M230. Epidemiology of Sexually Transmitted Diseases. (4) Lecture, four hours. Requisite: course 100 or 200A, or Public Health 200A and 200B. Sexually transmitted diseases; medical/biological aspects, epidemiology and control in developed and developing countries. S/U or letter grading.

231. Principles of Control of Infectious Diseases. (4) Lecture, three hours. Comprehensive study of tools for control of infectious diseases and application of these tools in public health programs to achieve epidemiologic impact on disease reduction, elimination, or eradication. S/U or letter grading.

232. Methods in Research of Marginalized and Hidden Populations. (2) Lecture, two hours. Requisite: course 100 or 200A, or Public Health 200A and 200B. Introduction to range of different methodologies used to collect data and conduct analysis on reproductive epidemiology topics, including methods that produce quantitative data, qualitative data, or both; and using data for population health assessments. Letter grading.

240. Cardiovascular Epidemiology. (2) Lecture, two hours. Topics include definition, pathogenesis, descriptive epidemiology, magnitude of risk factors, strategies for prevention, lipoprotein metabolism, and epidemiology of diabetes, hypertension, and chronic lung disease. Letter grading.

241. Epidemiology of Obesity and Diabetes. (4) Lecture, three hours. Requisite: course 100 or 200A or Public Health 200A and 200B. An overview of the epidemiology of obesity and diabetes. Students are exposed to most important research in this area. Focus includes global and regional epidemic of obesity and diabetes, risk factors and complications, classifications and assessments, prevention and management, as well as methodological issues related to study design and measurements for conducting obesity and diabetes research, especially in large-scale observational studies and case-control studies. Students' creative thinking and improves their skills for scientific writing and oral communications through individual and team assignments. S/U or letter grading.


245. Lifestyle Intervention for Noncommunicable Chronic Diseases. (2) Lecture, two hours. Requisites: course 100 or 200A. Designed to teach students how to apply principles of trial design and data analysis to lifestyle interventions for purposes of preventing onset and progression of diseases focus on noncommunicable chronic diseases (i.e., obesity, diabetes, hypertension, coronary heart disease, or cancer), but concepts and methods can be applied to acute and infectious diseases as well. S/U or letter grading.


247. Life Course Epidemiology. (4) Lecture, three hours. Requisites: course 100 or 200A, or Public Health 200A and 200B, and Biostatistics 100A, or Public Health 200A and 200B; and Biostatistics 100B, or equivalent, or consent of instructor. Introduction to concepts and methods for studying life course determinants of health and disease. Consideration of how exposures at one stage of human lifespan influence health outcomes at multiple life stages. Analytical approaches to research on life course determinants of health and disease. S/U or letter grading.

249. Genetic Epidemiology I. (4) Lecture, two hours. Preparation: at least one course in epidemiology, biostatistics, and genetics. Basic concepts in emerging field of genetic epidemiology, with principal focus on genetic epidemiology of complex traits and genetic contributions to disease, identifying genes, and characterizing their main effects and interactions with environmental factors. S/U or letter grading.

M254. Nutritional Epidemiology. (Same as Community Health Sciences M251.) Lecture, two hours; discussion/laboratory exercise, one hour. Preparation: introductory biostatistics and epidemiology courses. Review of all aspects of contemporary nutrition sciences that require application of epidemiologic principles and methods, ranging from food-borne outbreak investigation to evidence-based regulatory assessments of health claims for foods. Experience in applying epidemiology to basic concepts and methodology of molecular epidemiology of cancer and review of current molecular epidemiologic research of cancer in recent medical and epidemiologic literature. Letter grading.

M260. Environmental Epidemiology. (2 or 4) Lecture, three hours. Requisite: course 100 or 200A, or Public Health 200A and 200B. Environmental epidemiologic methods applied to evaluation of human health consequences of environmental hazards. Topics include air pollution, pesticides, drinking water contaminants, use of GIS. Review of recently completed environmental studies published in peer-reviewed literature. S/U or letter grading.

265. Epidemiologic Methods in Occupational and Environmental Health. (4) Lecture, three hours. Introduction to epidemiologic methods applied to evaluation of human consequences of occupational and environmental hazards, including study design, exposure assessment, and statistical techniques commonly encountered in research focused on assessing adverse health effects resulting from occupational and environmental exposures. Includes classical case-control, cohort, meta-analysis, risk assessment, and policy development. Illustrated by case studies, with focus on techniques to critically evaluate and interpret current literature. Letter grading.

266. Global Health and Tropical Medicine. (4) Lecture, four hours. Introduction to tropical diseases and global health. How humanitarian health issues, material- and health-challenged humans, World Health Organizations, and political/medical constraints all are related with respect to health on worldwide scale. Letter grading.

267. Methodologic Issues in Reproductive Epidemiology. (2) Problems, examination hours. General discussion of methodologic issues important to epidemiologic studies of reproductive outcomes, including fertility, low birth weight, prematurity, birth defects, pregnancy loss, and maternal death. Approaches to study design and exposure assessment and identification of potential sources of bias illustrated through review of recent studies published in literature and with particular focus on approaches and environmental exposures and birth cohorts. S/U or letter grading.

268. Introduction to Pharmacoepidemiology. (2) Lecture, two hours. Requisites: course 100A or 200A, or Public Health 200B. Pharmacoepidemiology is application of epidemiologic knowledge, reasoning, and methods to study of effects and uses of drugs. Survey of contemporary roles of pharmacoepidemiology in drug development and public health, with historical background of its evolution and projections of future prospects. S/U or letter grading.

269. Substance Use Epidemiology. (4) Lecture, three hours. Requisites: course 200A, and Biostatistics 100A or 100B or equivalent. Introduction to epidemiology of substance use and substance use disorders within public health paradigm. Review of drug policy in U.S., description of occurrence of substance use and related problems, examination of intersection of substance use and mental health disorders, and examination of role of epidemiology in informing and evaluating interventions targeting substance use disorders, including substance abuse, pharmacologic and non-pharmacologic treatments. S/U or letter grading.

270. Behavioral Epidemiology. (4) Lecture, four hours. Requisites: course 100A, or Public Health 200A and 200B. Introduction to range of different methodologic and analytical approaches used in behavioral sciences and their application to behaviors studied in epidemiologic research. How to collect, analyze, and interpret data on behaviors that can be associated with disease outcomes, including methods to collect survey data (i.e., design of questionnaires, interviewing techniques, use of technology to collect data) and methods to collect and analyze qualitative data (e.g., ethnographic interviews, focus groups, systematic observations). Overview information on epidemiology of key behavioral factors affecting human health, including sexual risk behaviors, substance use, physical activity, and healthcare utilization. S/U or letter grading.

271. Psychiatric Epidemiology. (4) Lecture, three hours. Requisites: Biostatistics 100B, Public Health 200A, and 200B. Psychiatry epidemiology examines occurrence and distribution of mental disorders and probable causes and factors that influence their manifestation, trajectory, and outcome. Provides students with knowledge and skills necessary to conceptualize mental health-related research questions, properly assess mental health symptoms and diagnostic classifications in their research (e.g., prevalence, incidence, and outcome), and analyze data to advance field of psychiatric epidemiology. Preparatory work includes better understanding of how to establish mental health and substance use treatment guidelines. With respect to measurement, emphasis is given to issues of reliability and validity in studying such disorders—where considering factors such as gender, sexuality, race/ethnicity, age, poverty, education, culture, social support, social capital, etc. S/U or letter grading.

272. Social Epidemiology. (4) (Same as Community Health Sciences M272.) Lecture, two hours; discussion, one hour. Requisite: course 100 or Public Health 200A and 200B. Relationship between sociocultural, political, and psychosocial factors in etiology, occurrence, and outcome of morbidity and mortality. Emphasis on lifestyles and other socioenvironmental factors associated with general susceptibility to disease and subsequent mortality. Letter grading.

273. Responsible Conduct of Research in Global Health. (4) (Same as Public Health 273.) Lecture, two hours. Requisite: Community Health Sciences 200. Introduction to fundamental principles of public health ethics, current ethical procedures, guidelines, and requirements, and ethical issues facing public health professionals working in developing countries. History of public health issues, unique ethical issues of research in developing countries, analysis of ethical implications of informed consent, responsibility to study community, mechanisms of study approval, role of funders, and role and responsibilities of review boards. S/U or letter grading.

274. Advanced Epidemiologic Methods for Global Health. (2) Lecture, two hours. Requisites: courses 200A, 200B, and Biostatistics 100B, or Public Health 200A and 200B. Study provides global health researchers with methods that enable access to and utilization of existing data; new methods for collection of new data; and advanced methods for statistical analyses focusing on existing sources of data, surveys, data sharing, and advanced statistical and epidemiologic methods in global health. S/U or letter grading.

275. Terrorism, Counterterrorism, and Weapons of Mass Destruction: Practical Approach. (5) Seminar, three hours. Terrorism, its origins, and ways of addressing terrorism at local, national, and global levels. Guest speakers from various of UCLA departments and from Los Angeles. Concurrently scheduled with course OM 175S. S/U or letter grading.

291. Seminar: Special Topics in Epidemiology. (2) Seminar, two hours. Requisite: course 100 or 200A, or Public Health 200A and 200B. Review of current epidemiologic research contained in recent medical literature. May be repeated for credit. S/U or letter grading.


294. Epidemiology and Policy of Occupational and Environmental Health Issues. (2) Seminar, two hours. Requisites: courses 100A, 200A, and 200B. Discussion of basic concepts of cancer epidemiology and review of current epidemiologic research in cancer in recent medical and epidemiologic literature. May be repeated for credit. S/U or letter grading.

295. Epidemiology—Cancer. (2) Seminar, two hours. Requisites: course 100 or 200A, or Public Health 200A and 200B. (Same as Biostatistics M295.) Lecture, basic concepts of cancer epidemiology and review of current epidemiologic research in cancer in recent medical and epidemiologic literature. May be repeated for credit. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or lecturer; letter of recommendation; active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

400. Field Studies in Epidemiology. (4) Fieldwork, to be arranged. Field observation and studies in selected community organizations for health promotion or medical care. Students must file field placement and program training documentation on form available from Student Affairs Office. May not be applied toward MS minimum course requirement; 4 units may be applied toward 44-unit minimum total required for MPH degree on letter grading.


403. Computer Management and Analysis of Health Data Using SAS. (4) (Same as Biostatistics M403B) Lecture, two hours; laboratory, two hours. Introduction to practical issues in management and analysis of health data using SAS programming language. Emphasis on use of SAS/STAT and SAS/GRAPH, data management, input and output, and output manipulation. R provides another data-driven language. May be repeated for credit. S/U or letter grading.

404. Advanced SAS Techniques for Management and Analysis of Epidemiologic Data. (2) Lecture, three hours. Requisite: course M403 or 410. Hands-on experience with SAS 9.2/9.3, with focus on using SAS code to implement PROC steps efficiently to manage and analyze data, data mining, and tabulate epidemiologic data from data collection systems. Common issues and solutions in data management, including data manipulation, data transformation, data definitions, unique subject identifiers, and nonstandard data formats. S/U or letter grading.

407. Epidemiologic Research Using R. (4) (Formerly numbered 407A.) Lecture, three hours. Requisite: course 100 or 200A, or Public Health 200A and 200B, or consent of instructor. Designed to broadly offer R coding experience, with emphasis on data management, visualization, and analysis. Topics include data manipulation, data visualization, data transformation, and output generation. R coding experience, with emphasis on data management and analysis of big data. Topics covered include supervised and unsupervised learning methods, feature engineering, and model evaluation approaches using both quantitative and text-based data health data. S/U or letter grading.

408. Applied Epidemiologic Research Using R. (2) Lecture, two hours. Requisite: course 407A. Designed to broadly offer R coding experience, with emphasis on data management, data description using tables and figures, and data analysis. Introduction of various concepts with data to facilitate interactive learning each week through guided R project, and weekly R data analysis, in which students present their research and data analysis progress using real data. Each student performs secondary data analysis and participates in class discussions and hands-on data management, data visualization, and analysis. Topics include data manipulation, data visualization, data transformation, and output generation.


412. Public Health Surveillance. (2) Lecture, two hours. Requisites: course 100 or 200A, and Biostatistics 100A, or Public Health 200A and 200B. Overview of public health surveillance methodology, including (1) design, implementation, and evaluation of surveillance systems, (2) analysis and interpretation of surveillance data, and (3) application of epidemic surveillance methods to specific health-related outcomes. S/U or letter grading.

413. Methods of Scientific Communication. (2) Lecture, two hours. Requisite: course 200 or 200A. Principles of scientific writing and communication. Approaches to developing effective written, oral, and visual presentations of epidemiologic research findings.
Communication issues arising in conduct of research, including informed consent process. S/U or letter grading.

420. Field Trials of Health Interventions in Low-Resource Settings. (4) Lecture, four hours. Requisite: course 100 or 200A, or Public Health 200A and 200B. Introduction to practical concepts and issues in conducting epidemiologic field research in developing countries, including formulating research questions, study site selection, ethical considerations, and logistics of data and specimen collection. S/U or letter grading.

495. Teacher Preparation in Epidemiology. (2) Seminar, two hours. Preparation: 18 units of cognate courses in area of specialization. May not be applied toward master’s degree minimum total course requirement. May be repeated for credit. S/U grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate advisor and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. No more than 8 units may be applied toward master’s degree minimum total course requirement; may not be applied toward minimum graduate course requirement. S/U grading.

506. Directed Individual Study or Research. (2 to 6) Tutorial, to be arranged. Limited to graduate students. Individual guided studies under direct faculty supervision. Only 4 units may be applied toward MPP and MS minimum total course requirement. May be repeated for credit. S/U or letter grading.

507. Preparation for Master’s Comprehensive or Doctoral Qualifying Examinations. (2 to 12) Tutorial, to be arranged. Limited to graduate students. May not be applied toward any degree course requirements. May be repeated for credit. S/U grading.

508. Master’s Thesis Research. (2 to 8) Tutorial, to be arranged. Only 4 units may be applied toward MPH and MS minimum total course requirement; may not be applied toward minimum graduate course requirement. May be repeated for credit. S/U grading.

509. Doctoral Dissertation Research. (2 to 12) Tutorial, to be arranged. May not be applied toward any degree course requirements. May be repeated for credit. S/U grading.

Ethnomusicology
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Roger W.H. Savage, DPhil, Chair

Faculty Roster

Professors
Cheryl L. Keyes, PhD
Mark L. Kligman, PhD (Mickey Katz Endowed Professor of Jewish Music)
Steven J. Loza, PhD
Anna F. Morcom, PhD (Mohindar Brar Sambhi Endowed Professor of Indian Music)
Helen M. Rees, PhD
Roger W.H. Savage, DPhil
Timothy D. Taylor, PhD

Professors Emeriti
Tara C. Browner, PhD
Jacqueline Cogdell DjeDje, PhD
Charlotte A. Heth, PhD

William R. Hutchinson, PhD
Daniel M. Neuman, PhD (Mohindar Brar Sambhi Endowed Professor Emeritus of Indian Music)
James W. Newton, Jr.
James W. Porter, MA
Timothy Rice, PhD
Hiromi Lorraine Sakata, PhD
Anthony Seeger, PhD

Associate Professors
Münir N. Beken, PhD
Katherine In-Young Lee, PhD

Lecturers
Francis Kofi Akotuaah
Marc T. Bolin, PhD
David M. Bragger
Jésus A. Guzmán
Pejman Hadadi, BA
Gamin Kang, DMA
Behzad Nadimi
Soheil Nadimi, BA
Rahul D. Neuman
Robert F. Reigle, PhD
Diane L. White-Clayton, PhD

Adjunct Professors
Amy R. Catlin-Jairazbhoy, PhD
Abhiman Kaushal
Chi Li, BA
Maureen A. Russell, MLS, MA, CPhil

Adjunct Associate Professor
I Nyoman Wenten, PhD

Adjunct Assistant Professor
Supeena Insee Adler, PhD

Overview

Ethnomusicology involves the study of all kinds of music from all over the world, using a variety of disciplinary perspectives. The Department of Ethnomusicology, the largest and first of its kind in a U.S. university, offers courses that cover the music of virtually every region of the world and of many ethnic groups in the U.S., as well as courses on popular music and film music. Most courses combine an interest in music as an art form with questions about how musical art and practice relate to other aspects of culture, society, politics, and economics. Courses are also given on the philosophy and aesthetics of music. In addition to lecture courses, the department offers performance ensemble courses in several world and American music traditions. At the undergraduate level, most of the performance courses are open to nonmajors, and many academic courses target nonmajors; prior knowledge of music is not expected or required. The Ethnomusicology Department is aligned with the departments of Music and Musicology and aspires to promote productive collaboration between performance and scholarship, a cross-cultural global understanding of the art of music, and preparatory training for a broad range of careers in music after students graduate.

Undergraduate Major

Ethnomusicology BA

The undergraduate major in Ethnomusicology emphasizes general world music, performance/composition, public ethnomusicology, and scholarly research. Admission requires an audition/interview. The major provides students with a wide-ranging liberal arts education in music. At its core, this includes (1) comprehensive knowledge of music cultures of the world; (2) understanding of the interrelationship of music, society, and culture; (3) grounding in the basics of Western music theory and musicianship; and (4) the experience of playing in one or several musical ensembles from various traditions around the world.

Beyond the core and emphasis requirements, students in the world music concentration may, through elective courses, prepare for a variety of career goals, including the study of ethnomusicology in graduate school, composing and performing music, working in the music industry, serving society in the nonprofit sector, or becoming a K through 12 music teacher.

Capstone Major

The Ethnomusicology major is a designated capstone major. The capstone project is individualized to each student and requires a creative process either through music performance/composition, a research project, or an internship with a self-reflective journal detailing the process. Through that process, students are expected to demonstrate a broad knowledge base and competency in performance, writing, and/or composition and ability to apply knowledge and experience to the specific requirements of the capstone; conceive and successfully complete a project that is expressive of their specific interests and acquired expertise; and display, through written documentation or live presentation, the requisite communication and, in some cases, teamwork required by work in this field.

Learning Outcomes

The Ethnomusicology major has the following learning outcomes:

• Demonstrated broad knowledge and competency in performance, writing, and/or composition

• Demonstrated ability to apply knowledge and experience to capstone requirements

• Conception and successful completion of a project that is individually expressive of the student’s specific interests and acquired expertise

• Written document or live presentation that displays requisite communication and teamwork required by work in the field

Entry to the Major

Admission

Applicants are reviewed individually, based on a questionnaire, grade-point average, two letters of recommendation, test scores, a personal statement of purpose, and an on-campus
interview/audition. Applicants who are unable to travel to UCLA have the option of a Skype interview/audition.

Requirements

Preparation for the Major

Required: Ethnomusicology M6A, M6B, M6C, with grades of C– or better; 20A, 20B, 20C, with grades of C or better; Music 20A, 20B, 20C, with grades of C or better; and 12 units of ethnomusicology world music performance organizations (courses 91A through 91Z), private instruction in music (course 92), and/or world music specializations (courses 68A through 68Z).

The Major

Required: Ethnomusicology 175 or 181, 183; 12 units from courses 161A through 161Z, 162, and 0/168 through 168Z; a minimum of eight upper-division ethnomusicology courses (32 to 36 units); and a capstone project in either (1) performance/composition, (2) public ethnomusicology, (3) scholarly research, or (4) other potential emphasis concepts in consultation with a faculty adviser.

Performance/Composition Capstone: Students must fulfill the capstone final project requirement (4 units) through a public recital (performance). Students must enroll in Ethnomusicology 199 (2 units) and pass a recital permission jury. Instrumental and vocal performers must present a portion of their recital performance, and composers must present excerpts from their recital scores in front of two faculty members. Students also enroll in Ethnomusicology 186 (2 units) during the term in which they perform their recital or their composition(s) are performed.

Public Ethnomusicology Capstone: Students must fulfill the capstone internship requirement, which consists of 8 units of Ethnomusicology 195B, in an institution approved by the faculty sponsor. Students must write a final research paper (at least 10 pages) at the completion of each internship.

Scholarly Research Capstone: Students must write a capstone thesis (25 to 30 pages) and enroll in Ethnomusicology 199 (2 units minimum) for at least one term while writing the thesis.

Independent Capstone: In consultation with a faculty adviser, students can propose capstone projects in other potential emphasis concepts such as technologies, film scoring, interactive arts, dance, and more. Students must enroll in Ethnomusicology 199 (2 units minimum).

Policies

Preparation for the Major

All entering first years are required to take the Music Theory Assessment Examination either during New Student Sessions or during zero week of fall quarter. The examination score is used to determine eligibility and placement in first-year music core courses (Ethnomusicology M6A, M6B, M6C, and Music 20A, 20B, 20C). Examination results may require enrollment in Music 3 as a requisite to both Ethnomusicology M6A and Music 20A. Entering transfer students with fewer than 15 units of prior music theory must take the Music Theory Assessment Examination.

Undergraduate Minors

Ethnomusicology Minor

The Ethnomusicology minor is designed for students who wish to augment their major program with a group of related courses that provide a systematic introduction to the study of world music and performance.

Admission

To enter the minor, students must have an overall grade-point average of 2.0 or better and be in good academic standing, have completed one lower-division course with a grade of C or better, and have successfully completed at least two (2) quarters of the same lower-division ensemble course (Ethnomusicology 91A through 91Z).

Optional Focus in Iranian Music: Students must select 91L as the lower-division ensemble course.

The Minor

Required Lower-Division Courses (9-10 units): Ethnomusicology 5 or M25, and one course from 7, 15, 30, M35, 40, 45, M50A, M50B, 60, M73, M110A, or M110B.

Required Upper-Division Courses (22 units): Ethnomusicology 101; three courses (6 units) from the same performance ensemble course numbered from 161A to 161Z; and three upper-division elective courses from the department. No more than one course from 195A to 199 may be applied to the minor.

Optional Focus in Iranian Music: Ethnomusicology C141, 142, 143, and three courses (6 units) of 161L.

Policies

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Major

Ethnomusicology MA, CPhil, PhD

The department offers MA and PhD degrees in Ethnomusicology, with a specialization in systematic musicology or music and anthropology. Both degree programs train students for future university teaching careers, as well as careers in library science and archiving, the music industry, public service, and music technology. The department provides fellowships, teaching assistantships, and research assistantships for qualified students.

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Ethnomusicology

Lower-Division Courses

5. Music Around World. (8) Lecture, four hours; discussion, one hour; outside study, 10 hours. Overview of world’s musical traditions by selecting one or two case studies from each of nine musical world regions: Pacific, East Asia, Southeast Asia, South Asia, Middle East, Africa, Europe, Latin America, and U.S. and Canada. P/NP or letter grading.

M6A-M6B-M6C. Introduction to Musician’ship. (2–2–2) (Same as Music M6A-M6B-M6C and Musicology M6A-M6B-M6C.) Laboratory, four hours. Preparation: placement examination. Course M6A is enforced requisite to M6B, which is enforced requisite to M6C. Students must receive grade of C– or better to proceed to next course in sequence. Introduction to musicianship through in-depth exploration of basic common musical elements and training in aural recognition, sight singing, dictation, and keyboard skills. Focus on topics such as tonal and modal harmony, rhythm, improvisation, composition, notation, and ear training to prepare students for later theory courses, participation in music ensembles, advanced study in music, and professional careers. Letter grading.

7. Introduction to Music and Culture of Iran. (4) Lecture, four hours. Examination of Persian music in historical, social, linguistic, and cultural contexts. Discuss-
22. Global Popular Music II: From Cassetttes to Digital and Online Media. (4) Lecture, four hours. Explo-
morpiculations of world of global pop beyond beyond traditions established in early to mid-20th century. Examination of dramatic de-
centralization of media that took place with advent of cassette technology and explosion of new forms of popular music that is listened to on recordings as music of the world. Exploration of how major pop genres are appropriated and localized in contexts both intended and unintended by their pro-
ducers at new intensities of speed and scale and fur-
ther and further distance from urban, industrial, and poltical centers of power. Exploration of how this loosening of central control releases quagmires of ex-
ploration, piracy, and creativity in world of popular and recorded music in countries across world in Internet and social media. P/NP or letter grading.

M25. Global Pop. (5) (Same as Global Jazz Studies M25S.) Lecture, four hours; discussion, one hour. De-
velopment of world music or world beat, including its meaning and importance to contemporary culture as well as its history and impact. P/NP or letter grading.

30. Music and Media. (5) Lecture, four hours; discus-
sion, one hour. Exploration of ways music is mediated to audiences through its many forms in present, including changes in performance styles, scholarly studies, reception, and contemporary fan culture. P/ NP or letter grading.

66F. World Music Specializations. (2-5) Activity, three hours; outside practice, three hours. Perfor-
mance of specialization in traditional vocal music, instrumen-
tial music, and dance. May be repeated for credit without limitation. P/NP or letter grading. 68A. Music of China: Ensemble. 68B. Music of India: En-
semble.

68B-68G. World Music Specializations. (1 each) Activity, two hours; outside practice, one hour. Perfor-
mance of specialization in traditional vocal music, instrumen-

M73. Music and Religion in Popular Culture. (5) (Same as Musicology M73.) Lecture, four hours; dis-
cussion, one hour. Survey of popular music in religious traditions since the 1970s. Growth of music in Jewish denominations, including Orthodox, Reform, and Con-
servative, and Christian contemporary music, from emerging rock to cross-over and its role in main-
stream. Credit for both courses M73 and M173 not al-
lowed. P/NP or letter grading.

M80. Jewish American Experience through Music. (5) (Same as Jewish Studies M80 and Musicology M80.) Lecture, four hours; discussion, one hour. In 
synagogue and on stage, and from LP recordings to YouTube, Jews in America have varied musical experi-
cences. Music of synagogue, celebrations at home, in community, and theater are all interesting develop-
ments of Jewish music. New Opportunities in enter-
tainment industry brought new possibilities for Jews in popular music, rock, and film scores. Exploration of various examples of Jews responding and adapting to their American context and becoming American through music. Exploration of different music genres and their influence on Jewish community, and theater are all interesting developments of Jewish music. New Opportunities in enter-
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Java; 91J. Music of Korea. 91K. Music of Mexico; 91L. Music of Peru; 91N. Music of Near East; 91Z. Open Ensemble.

91P. World Music Performance Organizations: African American music is medium performed a cappella or with instrumental accompaniment. May be repeated for credit without limitation. P/NP or letter grading.

92. Private Instruction in Music (2). Studio, one hour. Limited to Ethnomusicology majors. Private or semiprivate music instruction with distinguished community-based musician, that must be arranged by students and approved by course instructor. May be repeated for credit without limitation. Letter grading.

99. Student Research Project. (1-2) (Supervised research) Seminar, three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

C100. Audiovisual Archiving in 21st Century. (4) Seminar, three hours. Designed for Ethnomusicology majors. Examination of history, present state, and future of audiovisual archives, with specific focus on ethics, copyright, contracts, fieldwork, preservation, and access and issues related to technology, space, budgets, and staffing. Concurrently scheduled with course C200. P/NP or letter grading.

101. Introduction to Ethnomusicology. (4) Lecture, four hours. Introduction to history of field ethnomusicology, basic fieldwork and methods, and current issues in research. Introduction also of career opportunities for ethnomusicology graduates. Letter grading.

M103. Creating Musical Community. (4) (Same as Global Music Studies M103, Music M103, and Musicology M103.) Seminar, four hours; discussion, one hour. Limited to school of music majors. Faculty and students make music together in different modes. Students learn to define it, and bring to concert performance. Students critically engage musical literacies and notion of social contract that forms basis of musical notation. Drawing from American musical folk game traditions, highlights complex history of this country and way in which entire body is used as resource when instruments are unavailable. Letter grading.

105. Music Business. (4) Lecture, four hours; outside study, eight hours. Designed for junior/senior Ethnomusicology majors in public ethnomusicology emphasis. How music industry functions and how products are created, marketed, and consumed. Basic information on production of recordings and legal issues faced by musicians, students, and scholars who use music in their work. P/NP or letter grading.


106B. Contemporary North American Indian Music. (4) Lecture, three hours; discussion, one hour. Contemporary Native North American musical expression, including popular styles (folk, country, rock), intertribal Indian musical genres (powwow), syncretic religious music, and traditional/historic Pan-Indian music. P/NP or letter grading.

M108A-108B. Music of Latin America. (5-5) Lecture, four hours; discussion, one hour. Course M108A is not requisite to 108B. Survey of traditional and contemporary musical culture. P/NP or letter grading. M108A. Mexico, Central America, and Caribbean Isles. (Same as Chicana/o and Central American Studies M108A.)

M108B. Latin South America. (5-5) Lecture, four hours; discussion, one hour. Course M108B is not requisite to 108A. Survey of traditional and contemporary musical culture. P/NP or letter grading. M108B. Mesoamerican and Andean traditions. (Same as Chicana/o and Central American Studies M108B.)

109. Women in Jazz. (4) (Same as African American Studies M109, Gender Studies M109, and Global Jazz Studies M109.) Lecture, four hours; discussion, one hour. Sociocultural history of women in jazz and allied music industries, including survey of women vocalists, instrumentalists, composers/arrangers, and producers and their impact on development of jazz. P/NP or letter grading.

M110A-M110B. African American Musical Heritage. (5-5) (Formerly numbered S110A and S110B) (Same as American Indian Studies M110A/M110B and Global Jazz Studies M110A-M110B.) Lecture, four hours; discussion, one hour. P/NP or letter grading. M110A. Sociocultural history and survey of African American music, covering Africa and its impact on American music of 17th through 19th centuries; minstrelsy and its impact on representation of blacks in film, television, and theater; religious music, including hymns, spirituals, and gospel; black music of Caribbean and Central and South America; and music of black Los Angeles. M110B. Sociocultural history and survey of African American music from pre-1947 jazz styles, rhythm ‘n blues, soul, funk, disco, hip-hop, and symbiotic relationship between recording industry and effects of cultural politics on black popular music productions.

M111. Ellingtonia. (4) (Same as African American Studies M111 and Global Jazz Studies M111.) Lecture, three hours. Music of Duke Ellington, his life, and far-reaching influence of his efforts. Ellington’s music, known as Ellingtonia, is one of largest and perhaps most important bodies of music ever produced in U.S. Covers many contributions of other artists who worked with Ellington, such as composer Billy Strayhorn and musicians Johnny Hodges, Cootie Williams, and Mercer Ellington. P/NP or letter grading.

113. Music of Brazil. (4) Lecture, three hours. History of ethnic and art music in Brazil, with some reference to Portuguese and indigenous traditions. P/NP or letter grading. M115. Musical Aesthetics in Los Angeles. (4) (Same as Chicana/o and Central American Studies M115.) Lecture, three hours. Confronting aesthetics from classical perspective of art as intuition, examination on cross-cultural basis of diverse musical contexts within vast metropolitan multicultural of Los Angeles, with focus on various musical networks and specific experiences of Chicano/Latino, African American, Asian American, and Native American music. Includes rock culture, Western, urban, music tradition, and commercial music industry. P/NP or letter grading.

M116. Chicano/Latino Music in U.S. (5) (Same as Chicano/a and Central American Studies M116.) Lecture, four hours; discussion, one hour. Historical and analytical examination of musical expression of Latino peoples who have inhabited present geographical boundaries of U.S. P/NP or letter grading.

117. American Popular Music. (4) Lecture, four hours; discussion, one hour. Survey of history and characteristics of American popular music and its relationship to American culture, with emphasis on 20th-century popular music and its major composers, including comparison between traditional pre-1950 popular music and trends in post-1950 popular music. P/NP or letter grading.

118. Development of Rock. (5) Lecture, four hours. Examination of historical and stylistic development of rock from 1950s to present, with attention to its sociocultural and political impact on American society and beyond. P/NP or letter grading.

M119. Culture and History of Pop. (5) (Same as African American Studies M119 and Global Jazz Studies M119.) Lecture, four hours; discussion, one hour. Introduction to development of rap music and hip-hop culture, with emphasis on cultural/visual/social, philosophical, political, and cultural issues of gender representation, and influences on cinema and popular culture. P/NP or letter grading.

CM120. Bibliography and Research Methods in Rap Music/HiHop Studies. (4) (Formerly numbered C120.) (Same as African American Studies CM120.) Seminar, three hours. Requires course M119. Describes issues for junior/senior year students on hip-hop in preparation for capstone projects such as honors or senior thesis. In-depth examination of intellectual history of rap music/hip-hop studies scholars. Exploration of research on hip-hop music and history of rap music scholarship and allied traditions (including bankheadt and graffiti). Exploration of broad range of research methods and bibliographic centers specific to hip-hop studies. Concurrently scheduled with course CM220. Letter grading.

121. Tibetan Pop Music: Tibet, Exile, China, and World. (4) Lecture, four hours. Pop music is key part of contemporary Tibet, emerging in Tibet and exile, and even earlier if mass-disseminated socialist songs of Tibet as compulsory, state-produced popular music is considered. Exploration of multifaceted world scholarly articles, journalistic pieces, music videos, webinars, and online resources while foregrounding larger issues that emerge through cultural analysis. P/NP or letter grading.

122. Global Dynamics of K-Pop. (4) Lecture, four hours. Focused study on K-pop—South Korea’s most significant cultural export—paid to global influences that have shaped Korean popular music in earlier decades and in turn, unprecedented global reach of K-pop in recent history. Study is divided into three units: globalisation, transnational flows in K-pop, and critical takes on K-pop. Each unit features distinctive case studies, and lectures draw out some of broader linkages between contemporary music and global current events as they relate to music in Cold War geopolitical formations and legacies, modern South Korean state and economy, and spread of Korean popular culture. Study draws on wide array of scholarly articles, journalistic pieces, music videos, webinars, and online resources while foregrounding larger issues that emerge through cultural analysis. P/NP or letter grading.

128. Exploration in Rhythms. (2) (Same as Global Jazz Studies M128.) Lecture, two hours; outside study, four hours. Preparation: ability to read melodic or rhythm notation. Investigation and exploration of historical and rhythmical roots of 20th-century classical, jazz, world, and popular music. Concepts explored include meter, pulse, rhythmic cycles, hemonicas, and polyrhythms. P/NP or Letter grading.

M130. Culture of Jazz Aesthetics. (4) (Same as Anthropology M130 and Global Jazz Studies M130.) Lecture, three hours. Recommended requisite: coursework 20A or 20B or 20C or Anthropology 3 or Aesthetics of jazz from point of view of musicians who shaped jazz as art form in 20th century. Listening to and interacting with professional jazz musicians who answer questions and give musical demonstrations. Analytical resources and historical knowledge of musicians and ethnomusicologists who have contributed to jazz as cultural tradition. P/NP or letter grading.

M131. Development of Latin Jazz. (4) (Same as Global Jazz Studies M131 and Music M131.) Lecture, four hours; discussion, one hour. Survey of historical and stylistic development of musical style referred to today as Latin jazz. P/NP or letter grading.

133. European Musics: Politics, Identities, Nationalisms. (5) Seminar, four hours; outside study, 12 hours. Lectures. Ethnomusicology, Music History, and European Studies majors. European folk, popular, and classical music as practice that shapes ideas about national, ethnic, class, and race; the nature and effects of political domination and resistance. Letter grading.

M134. Introduction to Armenian Music. (4) (Same as Armenian Music M134 and Music M134.) Lecture, three hours. Some amount of formal music study and experience as vocalist or instrumentalist desirable but not
135. Indo-Persian Musical Cultures: Mapping Musical Connections. (4) Lecture, four hours. Study of connections between musical cultures of Indian subcontinent, Middle East, and Iran. Explores music in social, political, religious, and economic contexts, as well as its influence on music of other regions. Prerequisite: two years of courses 91A through 91Z or 92.


159. Music on China’s Periphery. (4) Lecture, four hours; outside study, eight hours. Designed for under-graduate Ethnomusicology, Music History, and World Music and Culture majors. Study of musics from China’s border regions and neighboring countries: technical musical characteristics and important contemporary developments in traditional and modern styles from Mongolia, Uighurs of Xinjiang, Tibet, Tibet-Burman peoples, Hmong, and indigenous peoples of Taiwan. Prerequisites: courses C250, C255, or letter grading.

160. Survey of World Music: Asia. (4) Lecture, three hours. Survey of major genres of traditional Asian music, including Guagaku, Buddhist chant, Bihu music, Koto music, Shamisen music, and music used in various theatrical forms. Prerequisites: courses C250, C255, or letter grade in course C259. Letter grading.

161A-161Z. Advanced World Music Performance Organizations. (2–6) Activity, three hours; outside practice, three hours. Designed for Ethnomusicology majors. Advanced study of traditional vocal and instrumental music, and groups that make use of credit with limitations. Letter grading.


161F. Advanced World Music Performance Organizations: African American Music Ensemble. (2) Activity, three hours; outside practice, three hours. Performance of diverse range of vocal repertoire including spirituals, gospel, freedom/Rights songs, and other works by African-American composers, including arrangers, hymn arrangements, and various forms of contemporary choral music. Tracing development of this music from 1600s to present, African American choral music is medium performed a capella or with instrumental accompaniment. May be repeated for credit without limitation. Letter grading.

162. Advanced Private Instruction in Music. (2) Studio, one hour; outside practice, five hours. Preparation: two years of courses 91A through 91Z or 92. Limited to Ethnomusicology majors. Private lesson for students with credit for advanced study, and final examination. Prerequisites: courses C250 and C259 or approved by instructor. May be repeated for credit without limitation. Letter grading.

163. Theory, Practice, and Improvisation in Iranian Music. (4) Seminar, three hours. Required: courses 5 or M25, and 8. Designed for students from wide background of experience, outlooks, and training to many facets of art and craft of improvisation in Iranian music. Examination of how organization of rhythm (collection of melodic figures preserved through oral tradition that provides basis of improvisation), and master and disciple teaching and tutoring, shape improvisational and performance practices in Iranian traditional music. Compositional music is number of related musical cultures: Arabic maqam, Turkish makam, and number of ragas from North Indian tradition. Includes in part workshop format in which stu-
dents are encouraged to bring their own musical instruments, or for vocalist to join in, exploring radif. Students read about theoretical issues of radif, and learn how to compose, and improvise important parts of radif. P/NP or letter grading.

164. World Music Composition. (4) Lecture, three hours; laboratory, three hours; outside study, six hours. Requisite: courses 20A, 20B, 20C. Limited to Ethnomusicology majors. Examination in composition using variety of Western and non-Western musical systems. Final project required. Letter grading.

C165. Selected Topics in Composition. (4) Lecture, four hours; outside study, eight hours. Evaluation of important styles, themes, and approaches to enable students to develop greater compositional technique and understanding. Ways composers of jazz, European classical, and other musical genres have successfully approached use of extended compositional forms. Examination of way in which world music traditions have interfaced with jazz and other types of music to create new musical languages. Use of concepts, structural paradigms, and inspiration from literature, visual arts, and other sources to develop student compositions. May be repeated once for credit. Concurrently scheduled with course C270. Letter grading.


171. Music and Diverse Worlds of Gender and Sexuality. (5) Lecture, four hours; discussion, one hour. Exploration of diverse worlds of gender, sexuality, and music across multiple global locations. Introduction to theoretical approaches to study of gender and sexuality by theorists such as Judith Butler, Kimberlé Crenshaw, Jack Halberstam, bell hooks, and Sherry Ortner. Exploration of gender critically as highly plural, fluid, and interconnected with social organizations. As embodied arts existing in often liminal and highly charged performative spaces and intertwined with pleasure, music and dance frequently foreground issues surrounding gender, sexuality, and race. While the performative spaces for performing of hegemonic gender identities they can reveal contradictions of normative gender identities (albeit not always intentionally or consciously), and they are also central part of many gender and sexual minority subcultures. Study of gender, performing arts, and power as inseparable, and as manifested in multiple forms of intersectionality, notably including race, class, and age. Letter grading.

M173. Selected Topics in Music and Religion in Popular Culture. (5) [Same as Musicology M173.] Seminar, one hour; prerequisite: consent but not enrollment, in course M173 lecture. Exploration of connections of music, religion, and popular culture among American Jews and Christians. Credit for both courses Musicology M173 and Religion and Culture Religion M173 may not be applied toward a degree.


M176. Music and Capitalism in West. (4) [Same as Music Industry M176.] Lecture, four hours. Follows history of western capitalism and how it has shaped music-making and listening to present time. P/NP or letter grading.

177. Music, Internet, and Social Media. (4) Lecture, four hours. Innovations in media and technology accompany and contribute to fundamental changes in societal music making. Such changes are often spoken of as revolutions, notably, recent digital or Internet revolution. Exploration of impact of Internet-based social media on ways in which people make and consume music. May not be repeated. Letter grading.


181. Anthropology of Music. (4) Lecture, four hours. Designed for Ethnomusicology, Music History, and Anthropology majors. Cross-cultural examination of music in context of social behavior and how musical patterns reflect patterns exhibited in other cultural systems, including economic, political, religious, and social structures. P/NP or letter grading.

CM182. Music Industry. (4) [Same as Music CM182, Musicology CM185, and Music Industry M182.] Lecture, four hours; discussion, one hour; outside study, seven hours. Limited to Ethnomusicology, Music, and Musicology majors. Examination of influence of music industry on way music is created, performed, listened to, evaluated, and used today. Historical approach taken, beginning with music published in 18th century and continuing through development of audio recordings to MTV and the Internet. Concurrently scheduled with course CM288. Letter grading.


C184. Public Ethnomusicology. (4) Lecture, four hours; outside study, eight hours. Designed for Ethnomusicology majors. How music industry functions and how products are created, marketed, and consumed. Techniques of pure research, basic and theoretical in nature, contrasted with those of applied research, practical and policy-oriented in approach. Concurrently scheduled with course C286. Letter grading.

185. Information Literacy and Research Skills. (1) Tutorial, one hour. Limited to Ethnomusicology majors. Designed to assist students with becoming information literate. How to locate, identify, and critically evaluate and use print and electronic information effectively and ethically. P/NP grading.

186. Senior Recital or Project. (2) Tutorial, one hour. Limited to seniors. Final project for students who, with approval from their faculty advisers, perform one-hour recital or have their compositions performed in one-hour recital. Organization and arrangement of rehearsed recital and preparation of program for performance. Grades are assigned in term recital is performed or composition is completed and performed. P/NP grading.

188. Special Courses in Ethnomusicology. (4) Lecture, four hours; outside study, eight hours. Selected topics in ethnomusicology. Consult Schedule of Classes for topics and instructors. May be repeated for credit. P/NP or letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 685 course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture courses to allow in-depth study in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

193. Journal Club Seminars: Ethnomusicology. (2) Seminar, two hours; outside study, four hours. Limited to undergraduate students. Reading and discussion of writings on subjects in ethnomusicology. May be repeated for credit. P/NP grading.

195A. Community or Corporate Internships in Ethnomusicology. (2 to 4) Tutorial, six to 12 hours. Limited to juniors/seniors with minimum cumulative 3.0 grade-point average. Internship in supervised setting in community agency or private business. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for a maximum of 8 units. Individual contract with supervising faculty member required. P/NP or letter grading.

195B. Community or Corporate Internships in Public Ethnomusicology. (2 to 4) Tutorial, six to 12 hours. Limited to seniors in recognized emphasis. Internship in supervised setting in community agency or business. Students meet on regular basis with instructor and provide weekly reports of their experiences. May be repeated for a maximum of 8 units. Individual contract with supervising faculty member required. P/NP or letter grading.

196. World Music Teaching Practicum. (4) Seminar, two hours; fieldwork, three hours; outside study, seven hours. Limited to junior/senior Ethnomusicology majors. Integration of academic work and hands-on training. Participation in theoretical discussions of world music education and application of these theories in classroom and social studies classrooms. P/NP or letter grading.

197. Individual Studies in Ethnomusicology. (2 to 4) Tutorial, one hour; outside study, five to 11 hours. Preparation: 3.0 grade-point average. Limited to seniors. Individual intensive study in ethnomusicology, with scheduled meetings to be arranged between faculty member and student. Tangible evidence of mastery of subject matter resulting in final research project required. May be repeated for a maximum of 8 units. Individual contract required. P/NP or letter grading.

197S. Individual Studies in Systematic Musicology. (2 to 4) Tutorial, one hour; outside study, five to 11 hours. Preparation: 3.0 grade-point average. Limited to seniors. Individual intensive study in systematic musicology, with scheduled meetings to be arranged between faculty member and student. Tangible evidence of mastery of subject matter resulting in final research project required. May be repeated for a maximum of 8 units. Individual contract required. P/NP or letter grading.
196. Directed Research or Senior Project in Ethnomusicology. Requires consultation with the advisor. Limited to junior/senior Ethnomusicology majors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for maximum of 8 units. Individual contract required. Letter grading.

Graduate Courses

C200. Audiovisual Archiving in 21st Century. (4) Seminar, three hours. Designed for Ethnomusicology majors. Examination of history, present state, and future of audiovisual archives, with specific focus on ethics, copyright, contracts, fieldwork, preservation, and access and issues related to technology, space, budgets, and staffing. Concurrently scheduled with course C100. S/U or letter grading.

201. History of Ethnomusicology. (4) Seminar, three hours; outside study, nine hours. Limited to graduate ethnomusicology students. Basic literature and schools of thought in field of ethnomusicology from late 19th to letter grading, and in

202. Current Issues in Ethnomusicology. (4) Seminar, three hours; outside study, nine hours. Limited to graduate ethnomusicology students. Current issues, basic literature, and schools of thought in field of ethnomusicology. Letter grading.


205. Seminar: Information Technology and Research Skills. (4) Seminar, three hours. Limited to graduate ethnomusicology students. Lecture, demonstration, and practice. Basic skills for research on and about music that is essential to student careers as ethnomusicologists, specifically information technology skills, acoustics, and representational tools for nonlinguistic acoustic phenomena. Basic understanding of acoustics, ability to represent sounds in various graphic forms appropriate to them, and ability to locate and organize information sources related to field of ethnomusicology. Letter grading.

206. Integrating Theory with Ethnography. (4) Seminar, three hours. Designed to show how theory and primary research cannot exist without each other, and how various authors have integrated theoretical writings with ethnographic data. Reading of several recent ethnographies, mostly about music and possibly historical studies, in tandem with theoretical writings that inform arguments of these books. Letter grading.


215A-215B. Ethnomusicological Perspectives and Paradigms I, II. (4-4) Seminar, three hours; outside study, nine hours. Limited to graduate ethnomusicology students. Basic literature and schools of thought in field of ethnomusicology and related social scientific fields. Limited to 21st century. Late 19th century to 1880s. 215B, 1960s to Present.

216A-216B. Ethnomusicological Methods I, II. (4-4) Seminar, three hours; outside study, nine hours. Limited to graduate ethnomusicology students. Letter grading. Preparation: course 216A. Basic theoretical and methodological approaches to conducting research and writing it up in ethnomusicology. Introduction to basic ethnomusicology fieldwork techniques and practices in ethnomusicology. Letter grading.


C221. Tibetan Music: China, Nepal, Tibet, Nepal, China, and World. (4) Lecture, four hours. Pop music is key part of contemporary Tibetan, emerging in 1980s in Tibet and exile, and even earlier if mass-disseminated socialist songs of Tibet and the produced popular music is considered. Exploration of multifaceted world of pop music in and of Tibet and Tibet within China of Mao Zedong and socialism, and that of market socialists from Deng Xiaoping to Xi Jinping. Exploration of ways in which Tibetan pop music is voice for Tibetans in Tibet, numerically small minority in China, and in small exile population. Focus on Tibetan pop music exposes students to plethora of issues relevant to mics of small, minority, and stateless people, and of myriad political dimensions of pop music—turbulent, crude, subtle, social, and economic. Concurrently scheduled with course CM120. Letter grading.


230. European Musics: Politics, Identities, Nationalisms. (4) Seminar, three hours; outside study, nine hours. Designed for graduate students. European classical, popular, folk, and traditional musics, with particular attention to way in which music mirrors, negotiates, and contests ideas about and practices of national and other forms of identity, ideas developed in other domains of discourse and practice such as philosophy, history, literature, art, and folklore. Examination of ways music professionals, ordinary people, and politicians have used music to affect political processes involved in contesting and creating identity. Conceptions of political minority, cultural identification, and social cultural differences between and among these identity formations. Historical period coverage primarily from 19th and 20th centuries, with examples from all over European continent. Letter grading.

233A-233B-233C. European Traditional and Popular Music. (0–0–4) Discussion, one hour. Review of literature on European traditional and popular music, with special attention to modern issues and processes. May be repeated for credit. In Progress (233A, 233B) and letter (233C) grading.

C236B. Music of Africa. (4) Lecture, four hours; outside study, eight hours. Introduction to music of various African cultures and regions. Through readings, lectures, viewing of music films, and in-class discussion, students gain greater understanding of diverse musical traditions found on African continent and become more cognizant of contributions that people of Africa have made to world music. Concurrently scheduled with course C236B. Letter grading.

237. Seminar: African Music. (4) Seminar, three hours. Requires: course 136A or 136B. Analysis of literature and schools of thought in African music scholarship from late 19th century to present, including some analysis of musical, historical, social, and cultural aspects of indigenous and contemporary art forms. S/U or letter grading.


241. Music of Turkey and Iran. (4) Seminar, three hours. Limited to graduate ethnomusicology students. Comparative study of music of Iran and other related areas, including Turkey, with particular reference to their historical and cultural background, sources on music theory and aesthetics, instruments, style, technique, improvisation, and contemporary practice. Concurrent participation in Near East performance ensemble (course 91N or 161N) required. Concurrently scheduled with course C141. S/U or letter grading.

C244. Music and Sociopolitical Change in South Asia. (4) Seminar, three hours; outside study, nine hours. Requires: course 146 or 147. Study of history, theory, and practice of south and South Indian classical music. Emphasis on music history and traditional theory and analysis of present-day forms, styles, techniques, and musical instruments. Concurrent participation in Indian performance group (course 91F) required. S/U or letter grading.

C250. Music and Politics in East Asia. (4) Lecture, four hours. Designed for ethnomusicology, history, and political science fields. Letter grading. Political imperatives have long had direct and often explicit impact on music sound and context in East Asia. Examination of interaction of ideology and musical practice in medieval Korea and in contemporary Korea, Japan, Taiwan, and China. Concurrently scheduled with course C150. Letter grading.

251. Music of Indonesia. (4) Lecture, three hours; outside study, nine hours. Requires: course 20C. Emphasis on music history and music of Java, Bali, and other Indonesian islands. Concurrent participation in one Indonesian performance group (course 91B or 91H) required. S/U or letter grading.


C255. Intangible Cultural Heritage Worldwide. (4) Lecture, three hours. Designed for ethnomusicology, music history, and world arts and cultures graduate students. Through critical reading of publications by scholars, officials, and culture-bearers involved in intangible cultural heritage, examination of history of heritage conservation; concepts of tangible and intangible heritage; pioneering roles of Japan, South Korea, and UNESCO in making intangible cultural heritage focal of sustainable cultural policy worldwide; tensions among international ideals, nation-state nationalisms, regionalism, ethnicity, and indigeneity in creating intangible cultural heritage policy. Concurrent participation in one cultural heritage institution; role of intangible cultural heritage policies and practices in other countries; areas of professional connections, and professional organizations in cultural preservation scheduled with course C255. Letter grading.

C256A. Music in China. (4) Lecture, four hours. Requires: course 20C. Limited to Ethnomusicology majors. Survey of traditional, popular, and Western-influenced musics currently widespread in China, including musical analysis of different genres; examination of
271. Seminar: Acoustics of Music. (6) Seminar, three hours. Requisite: course 170. Selected topics in acoustics, including laboratory methodologies and practical applications. Topics include Western and non-Western instruments, tuning systems, psycho-acoustics, and methods of spectral analysis. May be repeated once for credit. S/U or letter grading.

273. Seminar: Psychology of Music. (6) Seminar, three hours. Instruction in psychological investigation of music, including recent findings in brain research, musical perception, learning, cognition, memory, therapy, affect, meaning, and measurement. May be repeated once for credit. S/U or letter grading.

275. Seminar: Aesthetics of Music. (6) Seminar, three hours. Specific topics in Western and non-Western aesthetic thought, including value, meaning (semiotics), historical development of theoretical perspectives on music, and related topics. May be repeated once for credit. S/U or letter grading.

279. Seminar: Systemic Musicology. (4) Seminar, three hours. Requisite: course 170. Exploration of specific topics in general field of systematic musicology covering disciplines such as anthropology, acoustics, aesthetics, music perception, philosophy, organology, sociology, and experimental approaches. May be repeated for credit. S/U or letter grading.

280. Teacher Training and Music Appreciation. (4) Seminar, three hours. Preparation: two ethnomusicology courses or concurrent enrollment in course 20A, 20B, or 20C. Designed for ethnomusicology and musicology students. Intensive discussion of techniques used in ethnomusicological analysis, including transcription and notation, with emphasis on analysis of musical performance and music events. S/U or letter grading.


285. Seminar: Comparative Music Theory. (6) Seminar, three hours. Comparative study of codified music theories of select cultures—Western and non-Western—considered in themselves and as expressions of their societies. Theory considered as science of music; its place between cultural values and artistic and critical theories. S/U or letter grading.

C296. Public Ethnomusicology. (4) Lecture, four hours; outside study, eight hours. Designed for Ethnomusicology majors. How music industry functions and how products are created, marketed, and consumed. Techniques of pure research, basic and theoretical in nature; current pedagogical philosophies and texts used in ethnomusicology courses or concurrent enrollment in course CM288. Lecture, four hours; discussion, one hour; outside study, eight hours. Limited to Ethnomusicology Department. Required of all new ethnomusicology majors. Examination of influence of music industry on way music is created, performed, listened to, evaluated, and used today. Historical approach taken, beginning with music published in 18th century and continuing through development of audio recordings to MTV and popular music today. Concurrently scheduled with course CM182. Letter grading.

CM285. Music Industry. (4) (Same as Music CM282 and Musicology CM288) Lecture, four hours; discussion, one hour; outside study, eight hours. Designed for Ethnomusicology, Music, and Musicology majors. Examination of influence of music industry on way music is created, performed, listened to, evaluated, and used today. Historical approach taken, beginning with music published in 18th century and continuing through development of audio recordings to MTV and popular music today. Concurrently scheduled with course CM182. Letter grading.

289. Research Design and Grant Writing in Ethnomusicology. (4) Seminar, three hours; outside study, nine hours. Design of dissertation research proposal, organizing and applying for dissertation fieldwork grants, and presenting and preparing advanced academic proposals with sophisticated methods and professional writing skills. S/U or letter grading.


291. Ethnomusicology Colloquium Series. (1) Research group meeting, one hour. Limited to graduate ethnomusicology students. Introduction to new trends and issues in discipline of ethnomusicology in effort to strengthen and stimulate intellectual community within department. Topics vary from term to term and consist of presentations by guest lecturers, faculty members, and students. May be repeated for credit. S/U grading.

292A-292Z. Seminars: Special Topics in Ethnomusicology. (4 each) Seminar, four hours. Designed for graduate students. Utilization of special interests and expertise of regular and visiting faculty; topics of current interest presently offered in ethnomusicology program. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495A. Teaching Apprentice Practicum. (2) Eight weekly two-hour seminar sessions, plus intensive training session during Fall Quarter registration week. Preparation: appointment as teaching apprentice in Ethnomusicology Department. Required of all new teaching apprentices. Special course dealing with problems and practices of teaching ethnomusicology and systematic musicology at college level. May not be applied toward degree requirements. S/U grading.

495B. Teaching with Technology. (2) Seminar, three hours; outside study, three hours. Limited to graduate ethnomusicology students. Training in presentation, brochures, web design, and digitization software, and its application in classroom and in preparation of electronic teaching portfolio. S/U grading.

596. Directed Individual Studies. (2, 4, or 6) Tutorial, to be arranged. Only 4 units may be applied toward MA minimum course requirements. S/U or letter grading.

597. Preparation for Master’s Comprehensive Examination or PhD Qualifying Examinations. (2 or 4) Tutorial, to be arranged. May be repeated for credit. S/U grading.

598. Guidance of MA Thesis. (4, 8, or 12) Tutorial, to be arranged. May be repeated for credit. S/U grading.

599. Guidance of PhD Dissertation. (4, 8, or 12) Tutorial, to be arranged. May be repeated for credit. S/U grading.
European Languages and Transcultural Studies

Overview

The Department of European Languages and Transcultural Studies (ELTS) provides advanced training in the cultural and linguistic traditions of Europe, emphasizing the transcultural relations between countries, while also framing these relations in a much broader global historical context that transcends Europe as a geographic space. This approach to culture and society promises to improve the understanding of history and the challenges of 21st-century globalization. Concentrating on the shared European roots is key, as is the goal of complicating the very idea of Europe by underscoring the transcultural and global qualities of this space, especially in terms of colonial and imperial legacies. Today, Europe is a geopolitical space in which thinking about diversity, human rights, and religious tolerance remains important. The ELTS major and minors include advanced training in the study of culture, literature, film and media, and a focus on the new applied humanities (digital, environmental, medical, urban) in order to consider how these have altered our relationship to cultural analysis and production. The department also encourages study abroad, internship opportunities, and organize professionalization seminars.

Undergraduate Study

The department provides advanced training in the cultural and linguistic traditions of Europe, emphasizes the transcultural relations between these countries, while also framing these in a much broader global historical context that transcends Europe as a geographic space. The department trains students to think critically, to develop written and research skills, and to understand the power of language to pursue advanced research in a challenging intellectual and globalized existence. Students are prepared for graduate school and careers in education, international law and business, the arts, media and journalism, international health organizations, advertising, management consulting, diplomacy, and publishing.

The various Bachelor of Arts (BA) degrees offered in ELTS share common foundational courses across language traditions and offer students the opportunity to specialize in individual language tracks. The BA in ELTS includes language training, but allows students to design an individualized curriculum structured around ELTS offerings; whereas the BA in ELTS with individual language tracks provides students with a background in Europe and also in the various fields of French, Germanic, and Italian. In French, Germanic (Dutch, German, Yiddish), and Italian, this includes the study of culture, literature, and society, enhancing the understanding of the many facets of European civilization. In Scandinavian and Nordic Studies (Denmark, Finland, Norway, and Sweden), students explore how this region forms a geographic bridge between the American and European continents and a political bridge between Western and Eastern Europe. Together, the degrees offer undergraduate students a broad, interdisciplinary understanding of Europe, with a robust knowledge of the cultures and histories of this region from a global, interdisciplinary, and transcultural perspective.

Students considering a major or minor in the department should consult with the departmental undergraduate advisor as soon as possible in their university career in order to select courses to fulfill major or minor requirements. The approved list of courses for each category of major or minor requirements is available in the department office, 212 Royce Hall, and on the department website.

Undergraduate Policies

No credit is allowed for completing a less advanced course after successful completion of a more advanced course in Danish, Dutch, Finnish, French, German, Italian, Norwegian, Swedish, and Yiddish grammar and/or composition.

Graduate Study

The graduate programs offer the Master of Arts (MA) degree and the Doctor of Philosophy (PhD) degree in French and Francophone Studies, Germanic Languages, and Italian; and an MA only in Scandinavian. Admission to graduate programs is prioritized for PhD degree applicants. They comprise advanced training in the various fields, as well as in literary criticism, cultural analysis, film studies, the applied humanities, and theory.

Undergraduate Majors

European Languages and Transcultural Studies BA

Learning Outcomes

The European Languages and Transcultural Studies major has the following learning outcomes:

- Demonstrated advanced proficiency in one or more language offered in the department
- Demonstrated proficiency in one of the areas of the experimental humanities (digital, environmental, medical, and urban)
- Demonstrated deep understanding of European culture and history, including in a global context
- Ability to interrogate, analyze, and discuss literary and filmic production
- Evidence of strong oral and writing skills
Entry to the Major

Transfer Students
Transfer applicants to the European Language and Transcultural Studies major with 90 or more units must complete the following introductory courses prior to admission to UCLA: completion of intermediate level of Danish, Dutch, Finnish, French, German, Italian, Norwegian, Swedish, or Yiddish, and any one course on European literature, culture, film, or media.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major
Required: one course from French 6, German 6, Italian 6, Scandinavian 6, or equivalent; one European Literature, Language, Culture, or Film and Media course selected from French 12, 14, 14W, 16, 41, 60, German 50B, 56, 59, Italian 42A, 42B, 42C, 46, 50A, 50B, Scandinavian 40, 40W, 50, 50W, or 60W; one Experimental Humanities (Digital, Environmental, Medical, and Urban) course selected from Digital: Comparative Literature 1E, Digital Humanities 30, Environmental: English M30, Medical: Ancient Near East 14W, Ecology and Evolutionary Biology 17, History 3D, Honors Collegium 1, 26, Molecular Cell and Developmental Biology 60, Study of Religion 55, Urban: German 61A.

The Major
Required: One course selected from three of the following four areas:
- European Film and Media: French 141, 142, German 103, 104, 157, Italian 121, or Scandinavian 161 through 167.

During their senior year, students must also take European Language and Transcultural Studies 187 in which they complete a capstone senior thesis.

Policies

The Major
Student may apply no more than two courses or 8 units from other departments. Approval for outside courses must be petitioned with the undergraduate adviser of the department. Students may apply no more than 4 units of European Languages and Transcultural Studies 195, 197, and 199 as a substitution for one elective course. Each major course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the major.

European Languages and Transcultural Studies with French and Francophone BA

Learning Outcomes
The European Languages and Transcultural Studies with French and Francophone major has the following learning outcomes:
- Demonstrated advanced proficiency in French
- Demonstrated proficiency in one of the areas of the experimental humanities (digital, environmental, medical, and urban)
- Demonstrated deep understanding of European culture and history, including in a global context, with a particular expertise in French
- Ability to interrogate, analyze, and discuss literary and filmic production
- Evidence of strong oral and writing skills

Entry to the Major

Transfer Students
Transfer applicants to the European Languages and Transcultural Studies with French and Francophone major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of French and any one course on European literature, culture, film, or media.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major
Required: French 6, or equivalent; one European Literature, Language, Culture, or Film and Media course selected from French 12, 14, 14W, 16, 41, 60, German 50B, 56, 59, Italian 42A, 42B, 42C, 46, 50A, 50B, Scandinavian 40, 40W, 50, 50W, or 60W; one Experimental Humanities (Digital, Environmental, Medical, and Urban) course selected from Digital: Comparative Literature 1E, Digital Humanities 30, Environmental: English M30, Medical: Ancient Near East 14W, Ecology and Evolutionary Biology 17, History 3D, Honors Collegium 1, 26, Molecular Cell and Developmental Biology 60, Study of Religion 55, Urban: German 61A.

The Major
Required: advanced language course, three area courses, five elective courses, and a capstone senior thesis.

Advanced Language requirement: French 100 or 101.
One course selected from three of the following four areas (total of three courses):
- European Film and Media: French 141, 142, German 103, 104, 157, Italian 121, or Scandinavian 161 through 167.
- Experimental Humanities: Community Engagement and Social Change 100XP, 172XP, Comparative Literature 180, 180SL, Classics 148, Digital Humanities 101 through 151, English 118E, M118F, European Languages and Transcultural Studies C101XP, Food Studies M176XP, Italian 124, or Public Affairs M176XP.

Required Elective Courses: Three courses selected from French 100 through 169, and any two courses selected from European Languages and Transcultural Studies 100 through 180, 191, Italian 102 through 169, German 104 through 175, Italian 100 through M158, or Scandinavian C131 through C185.

In addition to the advanced language requirement, students are required to complete a minimum of three upper-division courses in the target language from the required and elective sequences.

During their senior year, students must also take European Language and Transcultural Studies 187 in which they complete a capstone senior thesis.

Policies

The Major
Student may apply no more than two courses or 8 units from other departments. Approval for outside courses must be petitioned with the undergraduate adviser of the department. Students may apply no more than 4 units of European Languages and Transcultural Studies 195, 197, and 199 as a substitution for one elective course. Each major course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the major.
European Languages and Transcultural Studies with German BA

Learning Outcomes
The European Languages and Transcultural Studies with German major has the following learning outcomes:

- Demonstrated advanced proficiency in German
- Demonstrated proficiency in one of the areas of the experimental humanities (digital, environmental, medical, and urban)
- Demonstrated deep understanding of European culture and history, including in a global context, with a particular expertise in German
- Ability to interrogate, analyze, and discuss literary and filmic production
- Evidence of strong oral and writing skills

Entry to the Major

Transfer Students
Transfer applicants to the European Languages and Transcultural Studies with German major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of German, and any one course in European literature, culture, film, or media.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: German 6, or equivalent; one European Literature, Language, Culture, or Film and Media course selected from French 12, 14, 14W, 16, 41, 60, German 50B, 56, 59, Italian 42A, 42B, 42C, 46, 50A, 50B, Scandinavian 40, 40W, 50, 50W, or 60W; one Experimental Humanities (Digital, Environmental, Medical, and Urban) course selected from Digital: Comparative Literature 1E, Digital Humanities 30, Environmental: English M30, Medical: Ancient Near East 14W, Ecology and Evolutionary Biology 17, History 3D, Honors Collegium 1, 26, Molecular Cell and Developmental Biology 60, Study of Religion 55, Urban: German 61A.

Students who have completed one year of college-level German language courses should enroll in course 4. Students who are in doubt as to their level of language proficiency or who are native speakers should consult with the language program supervisor.

The Major

Required: advanced language course, three area courses, five elective courses, and a capstone senior thesis.

Advanced language requirement: German 152 or 153

One course selected from three of the following four areas (total of three courses):


- European Film and Media: French 141, 142, German 103, 104, 157, Italian 121, or Scandinavian 161 through 167.

- Experimental Humanities: Community Engagement and Social Change 100XP, 172XP, Comparative Literature 180, 180SL, Classics 148, Digital Humanities 101 through 151, English 118E, M118F, European Languages and Transcultural Studies C101XP, Food Studies M176XP, Italian 124, or Public Affairs M176XP.

Required Elective Courses: Three courses selected from German 104 through 175, and any two courses selected from European Languages and Transcultural Studies 100 through 180, 191, French 100 through 169, German 104 through 175, Italian 100 through M158, or Scandinavian C131 through C185.

In addition to the advanced language requirement, students are required to complete a minimum of three upper-division courses in the target language from the required and elective sequences.

During their senior year, students must also take European Language and Transcultural Studies 187 in which they complete a capstone senior thesis.

Policies

The Major
Student may apply no more than two courses or 8 units from other departments. Approval for outside courses must be petitioned with the undergraduate adviser of the department. Students may apply no more than 4 units of European Languages and Transcultural Studies 195, 197, and 199 as a substitution for one elective course. Each major course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the major.

European Languages and Transcultural Studies with Italian BA

Learning Outcomes
The European Languages and Transcultural Studies with Italian major has the following learning outcomes:

- Demonstrated advanced proficiency in Italian
- Demonstrated proficiency in one of the areas of the experimental humanities (digital, environmental, medical, and urban)
- Demonstrated deep understanding of European culture and history, including in a global context, with a particular expertise in Italy
- Ability to interrogate, analyze, and discuss literary and filmic production
- Evidence of strong oral and writing skills

Entry to the Major

Transfer Students
Transfer applicants to the European Languages and Transcultural Studies with Italian major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of Italian, and any one course on European literature, culture, film, or media.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Italian 6, or equivalent; one European Literature, Language, Culture, or Film and Media course selected from French 12, 14, 14W, 16, 41, 60, German 50B, 56, 59, Italian 42A, 42B, 42C, 46, 50A, 50B, Scandinavian 40, 40W, 50, 50W, or 60W; one Experimental Humanities (Digital, Environmental, Medical, and Urban) course selected from Digital: Comparative Literature 1E, Digital Humanities 30, Environmental: English M30, Medical: Ancient Near East 14W, Ecology and Evolutionary Biology 17, History 3D, Honors Collegium 1, 26, Molecular Cell and Developmental Biology 60, Study of Religion 55, Urban: German 61A.

The Major

Required: advanced language course, three area courses, five elective courses, and a capstone senior thesis.

Advanced language requirement: Italian 100.

One course selected from three of the following four areas (total of three courses):


- European Film and Media: French 141, 142, German 103, 104, 157, Italian 121, or Scandinavian 161 through 167.

- Experimental Humanities: Community Engagement and Social Change 100XP, 172XP, Comparative Literature 180, 180SL, Classics 148, Digital Humanities 101 through 151, English 118E, M118F, European Languages and Trans-
Required Elective Courses: Three courses selected from Italian 102A through 158, and any two courses selected from European Languages and Transcultural Studies 100 through 180, 191, French 100 through 169, German 104 through 175, Italian 102A through 158, or Scandinavian C131 through C185.

In addition to the advanced language requirement, students are required to complete a minimum of three upper-division courses in the target language from the required and elective sequences.

During their senior year, students must also take European Language and Transcultural Studies 187 in which they complete a capstone senior thesis.

Policies

The Major
Student may apply no more than two courses or 8 units from other departments. Approval for outside courses must be petitioned with the undergraduate adviser of the department. Students may apply no more than 4 units of European Languages and Transcultural Studies 100 through 180, 191, French 100 through 169, German 104 through 175, Italian 102A through 158, or Scandinavian C131 through C185. Outside courses must be petitioned with the undergraduate advisor of the department. Students may apply no more than 4 units of European Languages and Transcultural Studies for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major
Required: Scandinavian 6, or equivalent; one European Literature, Language, Culture, or Film and Media course selected from French 12, 14, 14W, 16, 41, 60, German 50B, 56, 59, Italian 42A, 42B, 42C, 46, 50A, 50B, Scandinavian 40, 40W, 50, 50W, or 60W; one Experimental Humanities (Digital, Environmental, Medical, and Urban) course selected from Digital: Comparative Literature 1E, Digital Humanities 30, Environmental: English M30, Medical: Ancient Near East 14W, Ecology and Evolutionary Biology 17, History 3D, Honors Collegium 1, 26, Molecular Cell and Developmental Biology 60, Study of Religion 55, Urban: German 61A.

The Major
Required: One course selected from each of the following four areas (total of three courses):

- European Film and Media: French 141, 142, German 103, 104, Italian 121, or Scandinavian 161 through 167.
- Experimental Humanities: Community Engagement and Social Change 100XP, 172XP, Comparative Literature 180, 180SL, Classics 148, Digital Humanities 101 through 151, English 118E, M118F, European Languages and Transcultural Studies C101XP, Food Studies M176XP, Italian 124, or Public Affairs M176XP.

Required Elective Courses: Four courses selected from Scandinavian C131 through C185, and any two courses selected from European Languages and Transcultural Studies 100 through 180, 191, French 100 through 169, German 104 through 175, Italian 100 through 158, or Scandinavian C131 through C185.

During their senior year, students must also take European Language and Transcultural Studies 187 in which they complete a capstone senior thesis.

Policies

The Major
Student may apply no more than two courses or 8 units from other departments. Approval for outside courses must be petitioned with the undergraduate adviser of the department. Students may apply no more than 4 units of European Languages and Transcultural Studies 195, 197, and 199 as a substitution for one elective course. Each major course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the major.

Students who are interested in Danish, Finnish, and Norwegian language instruction may enroll in these courses at other UC campuses through distance learning, and may petition to apply these courses to the major requirements.

Nordic Studies BA

Capstone Major
The Nordic Studies major is a designated capstone major. Under the guidance of faculty members, students are required to devise, research, and complete either a substantial research paper, film/video, or a website that reflects significant engagement with a challenging question in the realm of Nordic studies. Through their capstone work, all students are expected to demonstrate their skills in articulating a clear and sophisticated research question, devising a realizable set of research goals, deploy their advanced knowledge of a Nordic language to access target language research materials and incorporate them into the research corpus, devise an appropriate modality for the final project, present a concise engaging public presentation of their research and respond to questions, and archive their project in an appropriate form.

Learning Outcomes

The Nordic Studies major has the following learning outcomes:

- Demonstrated command of the linguistic and cultural diversity of the Nordic region
- Demonstrated command of the economics, politics, environment, and cultures of the Nordic region
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Demonstrated understanding of the role of the Nordic region in global context, and the impact of global phenomena on the region
- Identification, evaluation, and analysis of appropriate primary sources
- Working knowledge of scholarly discourse from broad range of disciplines
- Conception and execution of a project that identifies and engages with a specialized topic
- Engagement with peers through presentation, discussion, and critique of student work

Requirements

The Major
Required: Nine courses from the following five tracks, with at least one course in four of the tracks:

1. early Nordic literatures and cultures—Scandinavian C131, C133A, 134, C137, 138
3. literary periods—Scandinavian C155, 156, 157
4. Scandinavian cinema—Scandinavian 161, C163A, C166A, C166C
5. cultural studies—Scandina-
vian C171, 173A, C174A, 174B, C180; and one senior capstone course (Scandinavian 199) under the direction of a faculty member.

As an option, four upper-division courses in a related field may be taken if approved in advance by the undergraduate adviser. In general, the courses must include significant content related to the Nordic region.

**Undergraduate Minors**

**European Languages and Transcultural Studies Minor**

**Admission**
To enter the minor, students must have an overall grade-point average of 2.0 or better.

**The Minor**

Required Lower-Division Courses (8 units): One course selected from French 6, German 6, Italian 6, Scandinavian 6, or equivalent; and one European Literature, Language, Culture, or Film and Media course selected from French 12, 14, 14W, 16, 41, 60, German 50B, 56, 59, Italian 42A, 42B, 42C, 46, 50A, 50B, Scandinavian 40, 40W, 50, 50W, or 60W.

Required Upper-Division Courses (20 units): Three upper-division courses in European literature, culture, film, or media selected from three of the following four areas:


- **Experimental Humanities:** Community Engagement and Social Change 100XP, 172XP, Comparative Literature 180, 180SL, Classics 148, Digital Humanities 101 through 151, English 118E, M118F, European Languages and Transcultural Studies C101XP, Food Studies M176XP, Italian 124, or Public Affairs M176XP.

- **Upper-Division Electives:** Two elective courses (minimum 8 units) selected from European Languages and Transcultural Studies 100 through 180, 191, French 100 through 169, German 104 through 175, Italian 100 through 1518, or Scandinavian C131 through C185.

**Policies**
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

**European Languages and Transcultural Studies with German Minor**

**Admission**
To enter the minor, students must have an overall grade-point average of 2.0 or better.

**The Minor**

Required Lower-Division Courses (8 units): German 6 or equivalent; and one European Literature, Language, Culture, or Film and Media course selected from French 12, 14, 14W, 16, 41, 60, German 50B, 56, 59, Italian 42A, 42B, 42C, 46, 50A, 50B, Scandinavian 40, 40W, 50, 50W, or 60W.

Required Upper-Division Courses (20 units): Three upper-division courses in European literature, culture, film, or media selected from three of the following four areas:


- **European Film and Media:** French 141, 142, German 103, 104, Italian 121, or Scandinavian 161 through 167.

- **Experimental Humanities:** Community Engagement and Social Change 100XP, 172XP, Comparative Literature 180, 180SL, Classics 148, Digital Humanities 101 through 151, English 118E, M118F, European Languages and Transcultural Studies C101XP, Food Studies M176XP, Italian 124, or Public Affairs M176XP.

- **Upper-Division Electives:** Two upper-division elective courses (minimum 8 units) selected from German.

One upper-division required course must be taught in German.

**Policies**
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.
European Languages and Transcultural Studies with Italian Minor

Admission
To enter the minor, students must have an overall grade-point average of 2.0 or better.

The Minor

Required Lower-Division Courses (8 units): Italian 6 or equivalent; and one European Literature, Language, Culture, or Film and Media course selected from French 12, 14, 14W, 16, 41, 60, German 50B, 56, 59, Italian 42A, 42B, 42C, 46, 50A, 50B, Scandinavian 40, 40W, 50, 50W, or 60W.

Required Upper-Division Courses (20 units): Three upper-division courses in European literature, culture, film, or media selected from three of the following four areas:


European Film and Media: French 141, 142, German 103, 104, Italian 121, or Scandinavian 161 through 167.

Experimental Humanities: Community Engagement and Social Change 100XP, 172XP, Comparative Literature 180, 180SL, Classics 148, Digital Humanities 101 through 151, English 118E, M118F, European Languages and Transcultural Studies C101XP, Food Studies M176XP, Italian 124, or Public Affairs M176XP.

Upper-Division Electives: Two upper-division elective courses (minimum 8 units) selected from Italian.

One upper-division required course must be taught in Italian.

Policies
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Scandinavian Minor

Admission
To enter the Scandinavian minor, students must have an overall grade-point average of 2.0 or better.

The Minor

Required Courses (28 units): Any seven Scandinavian courses, two of which may be lower-division courses selected from Scandinavian 1 through 50.

Policies
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor.

Successful completion of the minor is indicated on the transcript and diploma.

Graduate Majors

French and Francophone

Studies MA, CPhil, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Scandinavian MA

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Dutch

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

103A-103B. Elementary Dutch. (4–4) Lecture, four hours; language laboratory. Course 103A is requisite to 103B. Introduction to standard language of Netherlands and one of three standard languages of Belgium. Practice in grammar, listening, speaking, reading, and writing. P/NP or letter grading.


104A-104B. Accelerated Dutch. (6–6) Lecture, four hours; discussion, one hour; laboratory, two hours. Covers material in courses 103A, 103B, 103C in two terms rather than three. Letter grading.

113. Modern Dutch and Flemish Literature in Translation. (4) Lecture, three hours. Readings and analysis of works by selected authors of Netherlands and northern (Flemish) Belgium such as Boon, Claus, Coupens, Hermans, Mulisch, Mulatturi, and Reve and selected poets such as Campert, Gezelle, Gorter, Kloos, Lucebert, Nijhoff, Van Ostaijen, and Vroman. Letter grading.

131. Introduction to Modern Dutch Literature. (4) Discussion, three hours. Requisite: course 103B or 120. Selected works of literature of Netherlands and northern (Flemish) Belgium from mid-1850s to present, including novels by such writers as Multatuli, Couperus, Hermans, Multisch, and Reve by such groups as symbolist Beweging Van Tachtig and post-War Beweging van Vlijt. P/NP or letter grading.

Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

597. Preparation for PhD Qualifying Examinations. (3) Tutorial, three hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culuminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

596. Directed Individual Study or Research in Dutch. (4) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

199. Directed Research or Senior Project in Dutch. (4) Tutorial, three hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culuminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Preparation for PhD Qualifying Examinations. (4) Tutorial, three hours. Limited to faculty member who directs study or research (course section to be identified by two-letter code using initials of sponsoring instructor—see department for ID number). May be repeated once. S/U grading.

140. European Crime Novel. (4) Lecture, three hours. Focus on Italian crime novel, but in larger context of European crime fiction. Readings include some of most important and interesting contemporary authors of Italian detective novels, Cucinotta, De Giovanni, Pastor—-to see what crime fiction can say about nation in age of globalization, and about Italy in European Union. P/NP or letter grading.

150. European Folk and Fairy Tales. (4) Lecture, three hours. Study of characteristics, history, and scholarship of folktale/fairytale genre in European contexts. Comparison, analysis, and interpretation of tales. Instruction and texts in English. P/NP or letter grading.

141. Valkyries and Dragonslayers: Völsung/Nibelung Tradition. (4) Lecture, three hours. Study of medieval Norse and German traditions of Völsung and Nibelungen families (especially of modern versions in various media (e.g., Wagner's Ring Cycle, Fritz Lang's Nibelungen films), in their historic and cultural contexts. Instruction and texts in English. P/NP or letter grading.

167. European Identities in Classic Hollywood and Los Angeles, 1924-1950. (4) (Formerly numbered Scandinavian 167.) Lecture, three hours. Exploration of myriad European identities within classic Hollywood system and within and of Los Angeles as site of cultural production. In-depth analyses and historiizing of impact of European émigrés and exiles on American cinema, especially development of film noir as literary medium. European identities including film artists from France (Maurice Chevalier, René Clair, Jean Renoir), Germany and Austria (Fritz Lang, Ernst Lubitsch, Robert Siodmak, Billy Wilder), Italy (Frank Capra), and Sweden (Ingrid Bergman, Greta Garbo, Warner Oland, Victor Sjöström). Includes compelling urban humanities component. Investigation of history of Los Angeles as growing urban megalopolis emerges as site of transnational cultural production, particularly in Hollywood. Interaction with and of global mass media culture. Examination of how films and secondary scholarship further reveal how inextricably Europeans in Los Angeles—including artistic and intellectual exiles from Nazi-occupied Europe in 1930s and 1940s—shape this key 20th-century art form. P/NP or letter grading.

Upper-Division Courses

C101XP. Between Los Angeles and Europe: New Approaches to Transatlantic European Studies. (4) Lecture, three hours; community-engaged projects, three hours. Exploration of migration history between Los Angeles and Europe with view to German-speaking world. Overview of transatlantic cultural, literary, and historical studies back to colonial era. Targeted investigation of complex transatlantic relations between Angelenos and German immigrants during 20th century, including World War II. Students apply newly acquired cultural, historical, and political knowledge to current transatlantic conversations. Offers innovative, scholarly, and praxis-oriented approaches to transatlantic European studies through integration of lesson into community-engaged projects. Illumination of limits of monolingual or state-centric configurations of disciplinary knowledge in addition to exemplifying interdisciplinary transatlantic studies of Europe, in general, and Germany, in particular. Concurrently scheduled with course C201XP. P/NP or letter grading.

103. Topics in Medical Humanities. (4) Lecture, three hours. Exploration of selected topics in interdisciplinary field of medical humanities, which seeks to examine how arts, humanities, and social sciences can be brought into medical humanities and medical education. May be repeated for credit. Individual contract required. Honors content noted on transcript. Letter grading.

112. Medieval Foundations of European Civilization. (4) (Formerly numbered French 112.) Lecture, three hours. Introduction to tracing of genealogy of some of most important medieval concepts and institutions, such as empire and state, religion, university, architecture and visual arts, identity, class, race, and sexuality, foundational for European civilization. Exploration of birth of modern nations from their medieval foundation. Examination of cultural production: how and why certain values were created and then passed on. P/NP or letter grading.

122. Approaches to Transatlantic European Studies. (4) Lecture, three hours; community-engaged projects, three hours. Examination of migration history between Los Angeles and Europe with view to German-speaking world. Overview of transatlantic cultural, literary, and historical studies back to colonial era. Targeted investigation of complex transatlantic relations between Angelenos and German immigrants during 20th century, including World War II. Students apply newly acquired cultural, historical, and political knowledge to current transatlantic conversations. Offers innovative, scholarly, and praxis-oriented approaches to transatlantic European studies through integration of lesson into community-engaged projects. Illumination of limits of monolingual or state-centric configurations of disciplinary knowledge in addition to exemplifying interdisciplinary transatlantic studies of Europe, in general, and Germany, in particular. Concurrently scheduled with course C201XP. P/NP or letter grading.

187. Capstone Seminar. (4) Seminar, three hours. Required of all European Languages and Transcultural Studies majors. Students engage in analysis, critique, interpretation, historical research, and contextualization with eye to culminating project. Letter grading.

199. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189H. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with faculty member who directs study (see department for ID number). S/U grading.

191. Variable Topics Research Seminar. (4) Seminar, three hours. Research seminars on topics to be announced each term. Topics may cover writers, genres, cultural movements, or theoretical practices. Reading, discussion, and development of culminating project. May be repeated for credit. P/NP or letter grading.

Graduate Courses

200. Graduate Methodology and Professionalization Seminar. (4) Seminar, three hours. Covers wide array of topics related to methodologies, concepts, and theories of transcultural and transnational literary and cultural studies in European context. Taught in English. S/U or letter grading.

C201XP. Between Los Angeles and Europe: New Approaches to Transatlantic European Studies. (4) Lecture, three hours; community-engaged projects, three hours. Examination of migration history between Los Angeles and Europe with view to German-speaking world. Overview of transatlantic cultural, literary, and historical studies back to colonial era. Targeted investigation of complex transatlantic relations between Angelenos and German immigrants during 20th century, including World War II. Students apply newly acquired cultural, historical, and political knowledge to current transatlantic conversations. Offers innovative, scholarly, and praxis-oriented approaches to transatlantic European studies through integration of lesson into community-engaged projects. Illumination of limits of monolingual or state-centric configurations of disciplinary knowledge in addition to exemplifying interdisciplinary, multilingual, and transnational studies of Europe, in general, and Germany, in particular. Concurrently scheduled with course C101XP. P/NP or letter grading.

202. Studies in History of Ideas. (4) Seminar, three hours. Exploration of key concept or idea in European thought, examined transhistorically and/or transnationally. Taught in English. May be repeated for credit. S/U or letter grading.

203. Topics in Medical Humanities. (4) Seminar, three hours. Exploration of selected topic in interdisciplinary field of medical humanities, which seeks to examine how arts, humanities, and social sciences can be brought into productive dialog with medical discourse, education, and praxis. Taught in English. May be repeated for credit. S/U or letter grading.

204. Studies in Transnational Literature. (4) Seminar, three hours. Introduction to principles of literary translation and techniques of literary analysis; practice of translation (to and from English);
readings and research in translation studies, philology, linguistics, cultural studies, media, and technology. Taught in English. May be repeated for credit. S/U or letter grading.


108. Professional Issues in Translation. (4) Lecture. Three hours. Focus on topics such as legal, medical, and financial translation.

89HC. Honors Contracts. (1) Lecture, one hour. Enforced requisite: course 104. Topic change. P/N or letter grading.


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112. Study of major literary movements and writers of the 19th century in France. (5) Lecture, three hours; discussion, one hour. May be repeated for credit with topic change. P/N or letter grading.

113. Studies in 19th-Century French Culture and Literature. (4) Lecture. Three hours. Taught in French. Study of major literary movements and writers of the 19th century in France. (5) Lecture, three hours; discussion, one hour. May be repeated for credit with topic change. P/N or letter grading.

114. Survey of French Literature: Medieval and Renaissance Literature. (5) Lecture, three hours. Requires: course 12. Topics include: medieval French literature, including the works of Chrétien de Troyes and Yvain; and Renaissance and Baroque literature, including the works of Ronsard, du Bellay, and Racine.


existentialism, new novel, theater, and poetry. May be repeated for credit with topic change. P/NP or letter grading.

121. Studies in Francophone Cultures and Literatures. (4) Lecture, three hours. Enforced requisite: course 12 or 100. Taught in French. Study of contemporary France and Francophone world (Africa, Asia, Caribbean, Quebec, and Francophone Africa, immigra- tives, and colonialism and postcolonial studies. May be repeated for credit with topic change. P/NP or letter grading.

130. Contemporary French and Francophone Cultures. (4) Lecture, three hours. Enforced requisite: course 12 or 100.Taught in French. Study of contemporary France and Francophone world (Africa, Asia, Caribbean, Quebec, government, institutions, and cultural, eco- nomic, and political issues. May be repeated for credit with topic change. Letter grading.


135. Eco-Citizenship: Encounters with Eco-Citizens. (4) Lecture, three hours. Enforced requisite: course 6. Taught in French. Not open to students with credit for course 223. Exploration of what eco-citizen is, what it means to be eco-citizen, if we are eco-citizens, and why. Answers to these questions by studying sustain- able cities. Study of sustainable cities that act as eco-laboratories. Using reading, videos, and podcasts, students make observations and draw some conclusions regarding concept of eco-citizenship. Study of some theories on eco-citizenship developed by French thinkers. Exploration of how French citizens aspire to be eco-citizens. Students meet with them formally and informally through readings, videos, and virtual meetings. Examination of several exper- iments put in place by these cities, and assessment of whether these are successes or failures. Comparison and contrast of actions to protect environment developed in Los Angeles and at UCLA. P/NP or letter grading.


137. French and Francophone Intellectual History. (4) Lecture, three hours. Requisite: course 12 or 100. Taught in French. Exploration of themes that address particular aspects of French literature, civilization, or ideas. May be repeated for credit with topic change. P/NP or letter grading.

138. Contemporary French Theory. (4) Lecture, three hours. Requisite: course 12 or 100. Taught in French. Study of theories such as sociology and structuralism, city, revolu- tion of faculty member. May be repeated for credit. Individual contract required. P/NP or letter grading.

141A. Variable Topics Research Seminars in Transla- tion. (4) Seminar, three hours. Topics to be announced each term. Topics include major writers, genres, cultural movements, or theoret- ical practices. Reading, discussion, and development of culminating project. May be repeated for credit with consent of major adviser. P/NP or letter grading.

141B. Variable Topics Research Seminars: French. (4) Seminar, three hours. Taught in French. Research seminars on topics to be announced each term. Topics include major writers, genres, cultural movements, or theoretical practices. Reading, discussion, and development of culminating project. May be repeated for credit with consent of major adviser. P/NP or letter grading.


147. Paris: Study of French Capital. (4) Lecture, three hours. Taught in French. Textual and visual exploration of historical and imagi- nary (re)constructions of Paris, beginning with its earliest history and gradual forma- tion of city of Nantes in western France to discover rich culture. Study of French government’s repressive measures against Breton culture, and especially Breton language. Examination of Nantes’s dark past, i.e. 18th-century slave trade. Study of how people today made it their mis-
postwar modernization, Algerian War, May 68, and beyond. Theorists include Barthes, de Certeau, Bourdieu, Daudin, Lyotard, Ross, Rey Chow, Virilio. S/U or letter grading.

203. Contemporary Francophone Literature. (4) Lecture, three hours. Study of Francophone African, Caribbean, Vietnamese, or Quebec literatures and cultures, with specific attention to issues of cultural contact, language, colonialism, anticolonialism, nationalism, resistance and disidence, and postcolonial theory. S/U or letter grading.


207. Studies in History of Ideas. (4) Seminar, three hours. Particular problems in French literature and ideas. May be repeated for credit. S/U or letter grading.

208. Studies in Literary Criticism. (4) Seminar, three hours. Readings in literary criticism, theory, and literature from the period of French literature. May be repeated for credit. S/U or letter grading.

209. Studies in Literary Genre. (4) Seminar, three hours. Advanced research and study of literary genres such as poetry, drama, fiction, autobiography, or performance and of theory of these genres. S/U or letter grading.

M210. Paleography of Latin and Vernacular Manuscripts, 900 to 1500. (4) Same as Classics M218, English M215, and History M218. Lecture, three hours; discussion, two hours. Introduction to history of Latin and vernacular manuscript book from 900 to 1500 to (1) train students to make informed judgments with regard to place and date of origin, (2) provide training in accurate reading and transcription of later medieval scripts, and (3) examine manuscript book as witness to changing society that produced it. Focus on relationships between Latin manuscripts and vernacular manuscripts with regard to their respective presentation of written texts. S/U or letter grading.


215. Studies in Middle Ages. (4) Seminar, three hours. Examination of nature of cross-cultural, crosslinguistic, and cross-confessional exchange in medieval and early modern periods and France’s role in it. S/U or letter grading.


220. 20th Century. (4) Lecture, three hours. Overview, both historical and analytical, of 20th-century French literature set in context of several key critical topics that interrogate canonical interpretation. Letter grading.

269. Research Methods and Writing. (2) Seminar, two hours. Advanced study of current topics in literary and cultural analysis and in critical theory. Discussion of current research and literature in research specialty of faculty member teaching course. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Teaching French at College Level. (4) Seminar, three hours. Taught in English. Survey of current intellectual importance, taught by faculty and/or division students under guidance of faculty mentor. Students must be in good academic standing and enroll in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP or grading.

536. Figures Who Changed World: Cosmopolitanism. Exploration of different historical and philosophical thought that focus on cosmopolitanism. May be repeated for credit. S/U or letter grading.

570. Research for and Development of MA Thesis. (2 to 4) Tutorial, to be arranged. May be repeated for credit. S/U grading.


German

Lower-Division Courses

1. Elementary German. (4) Lecture, five hours. P/NP or letter grading.

2. Elementary German. (4) Lecture, five hours. Enforced requisite: course 1, P/NP or letter grading.

3. Elementary German. (4) Lecture, five hours. Enforced requisite: course 2, P/NP or letter grading.

4. Intermediate German. (4) Lecture, five hours; laboratory, one hour. Enforced requisite: course 3, P/NP or letter grading.

5. Intermediate German. (4) Lecture, four hours; laboratory, one hour. Enforced requisite: course 4, P/NP or letter grading.

6. Intermediate German. (4) Lecture, four hours; laboratory, one hour. Enforced requisite: course 5, P/NP or letter grading.

7. Elementary German: Intensive. (12) Lecture, 15 hours; laboratory, five hours. Intensive basic course in German equivalent to courses 1, 2, and 3, P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1 Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

505. Great Works of German Literature in Translation: Romanticism to Present. (5) Lecture, three hours; discussion, one hour. Study and analysis of selected masterworks in English translation, including authors such as E.T.A. Hoffmann, Heine, Fontane, Rilke, Kafka, Brecht, Thomas Mann, Hesse, Grass, Böll, and Christa Wolf. May not be applied toward completion of major in German. P/NP or letter grading.

56. Figures Who Changed World: Cosmopolitanism Within a Global Context. (5) Lecture, three hours; discussion, one hour. Introduction to strains of German philosophy and political thought that focus on cosmopolitanism. Exploration of different historical and philosophical engagements with cosmopolitan projects. P/NP or letter grading.

59. Holocaust in Film and Literature. (5) Lecture/ screenings, five hours; discussion, one hour. History of Holocaust and its present memory through examination of challenges and processes of memory to imagine its horror through media of literature and film. P/NP or letter grading.

61A. Modern Metropolis: Berlin. (5) Lecture, three hours; discussion, one hour. Cultural, political, architectural, and urban history of one of most vibrant and significant cities in world. Exploration of city over 800 years, using innovative mapping tools to understand how Berlin evolved from fortified mercantile town into global city. S/U or P/NP grading.

88. Lower-Division Seminar. (4) Seminar, three hours. Course of variable content limited to topics of current interest and offered whenever staff member is available. P/NP or letter grading.

99. Honors Seminars. (1 Seminar, three hours. Limited to 20 students. May be repeated for credit. S/U or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors consent noted on transcript. Letter grading.

90. Student Research Project. (1 to 2) Tutorial supervised research or other work requiring 10 hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP or grading.

Upper-Division Courses

102. War, Politics, Art. (5) Lecture, three hours; discussion, one hour. Taught in English. Analysis of interrelationship between politics, social conditions, and art with respect to works of II and III German history to be used as model for principal questions of society and philosophical thinking. P/NP or letter grading.

103. German Film in Cultural Context: Early German Film. (4) Lecture, two hours; discussion, one hour. Taught in English. Survey of German film between 1919 and 1945. Analysis of technological and stylistic development of film from silent Expressionist films to Nazi propaganda and entertainment films. Film discussions enhanced by interactive media. Letter grading.

104. German Film in Cultural Context: 1945 to Present. (4) Lecture, three hours. Taught in English. Survey of German film since 1945 in its thematic and stylistic diversity. How did German filmmakers grapple with aftermath of World War II and Holocaust, economic recovery, Cold War and division of Germany, reification, and growth of minority communities? May be repeated twice for credit with topic change. Letter grading.

109. Jewish Question and German Thought. (4) Lecture, three hours. Taught in English. Analysis of works that represent process of Jewish assimilation, disenfranchisement, and extermination, including authors such as Mendelsohn, Heine, Kafka, Paul Celan, Nelly Sachs, Anne Frank, and others. Letter grading.

110. Special Topics in Modern Literature and Culture. (4) Lecture, three hours. Taught in English. Content varies with instructor and may include works by authors such as Thomas Mann, Rilke, Kafka, Brecht, Christa Wolf, and others. May be repeated for credit. Letter grading.

112. Feminist Issues in German Literature and Culture. (4) Lecture, three hours. Taught in English. Survey of major issues and genres in cultural context, including legends, proverbs, and cultural enactments such as carnival. Letter grading.
114. Fairy Tales and Fantastic. (5) Lecture, three hours; discussion, one hour. Taught in English. History and reception of folklore collections in Europe, with particular attention to German and French fairy tales. Interpretation of selected tales and their transformations and appropriation in literature, film, advertising, and pedagogy. P/NP or letter grading.

115. 19th-Century German Philosophy. (4) Lecture, three hours. Taught in English. German philosophy, which may generally be characterized as philosophy that takes activity rather than passive subsistence to be fundamental nature of all things, is one of Germany’s greatest gifts to humanity. Exploration of first half of 20th-century history of German philosophy—period from Kant to Nietzsche, including Hegel, Kierkegaard, and Marx. Letter grading.

116. 20th-Century German Philosophy. (4) Lecture, three hours; discussion, one hour. Taught in English. German philosophy, which may generally be characterized as philosophy that takes activity rather than passive subsistence to be fundamental nature of all things, is one of Germany’s greatest gifts to humanity. Exploration of second half of 20th-century history of German philosophy—period from Nietzsche through Habermas, Derrida, Foucault, Adorno, and Frankfurt School theorists. Letter grading.

117. German Exile Culture in Los Angeles. (4) Lecture, three hours. Taught in English. Cultural and historical exploration of creative contributions of German writers and other artists during and after World War II. General questions of cultural migration and cultural transfer to be thematized. P/NP or letter grading.

118SL. Between Memory and History: Interviewing Holocaust Survivors. (4) Seminar, two hours; fieldwork, two hours. Strongly recommended requisites: prior European and Holocaust history courses. Examination of historical value of eyewitness testimony of Holocaust through unique service opportunities that bring students together with survivors. Question of testimony approached from number of perspectives, including legal, historical, and ethical, to examine vexed relationship between history and memory. Examination of survivor testimony through classic memoirs in field, such as Primo Levi’s The Drowned and the Saved and Ruth Kluger’s Still Alive. Through collaboration with Jewish Family Services, 1939 Club, and Los Angeles Museum of Holocaust, students meet and work with Holocaust survivors and undertake collaborative research and oral histories. Students also research and curate series of interactive tours through Museum of Holocaust. Letter grading.

140. Language and Linguistics. (4) Lecture, three hours. Enforced requisite or corequisite: course 6. Lecture on German proficiency required. Theories and methods of linguistics, with emphasis on structure of modern standard German, its phonology, morphology, syntax, semantics, and pragmatics. Other topics include diachronic, spatial, and social variation of German (i.e., its historical development, dialectology, and sociolinguistics dimensions). Letter grading.

141. Current Topics in Germanic Linguistics. (4) Lecture, three hours. Enforced requisite: course 152. Taught in English with German proficiency required. In-depth investigation of one topic in field of Germanic linguistics, such as phonetics and phonology, morphology and syntax, semantics and pragmatics, and sociolinguistics. Social and spatial variation of German (i.e., its historical development, dialectology, and sociolinguistics dimensions). Letter grading.

142. Linguistic Theory and Grammatical Description. (4) Lecture, three hours. Enforced requisite: course 140 or Linguistics 20. Taught in English with German proficiency required. Problems in structure of Dutch and German, especially derived from theoretical frameworks such as sign-oriented linguistics, functional linguistics, discourse grammar, and cognitive linguistics. Discussion of formal linguistic approaches. Concurrently scheduled with course C238. Letter grading.

152. Conversation and Composition on Contempory German Culture and Society I. (4) Lecture, three hours. Requisite: course 6. Taught in German. Structured exposure to German texts ranging from newspapers articles to literature, with emphasis on speaking and writing proficiency. Presentation software featured. P/NP or letter grading.

153. Conversation and Composition on Contempory German Culture and Society II. (4) Lecture, three hours. Requisite: course 6. Taught in German. Structured exposure to German texts ranging from newspapers articles to literature, with emphasis on speaking and writing proficiency. Presentation software featured. P/NP or letter grading.


155. Advanced German Language through Cultural History and Current Affairs. (4) Lecture, three hours. Requisites: courses 152, 153. Taught in German. Advanced German language course that juxtaposes cultural history with current affairs to teach complex speaking and writing skills of interpretation, analysis, and critique. Readings include works from Karl Marx, Heidegger, Freidrich, and current authors. Students create their own interactive media presentations. Letter grading.

157. Contemporary German Cinema: Advanced Conversation and Composition. (4) Lecture, three hours. Taught in German. Development of advanced speaking skills and thorough grounding in essay writing in German by considering issues of style, structure, and grammar, and vocabulary. Introduction to contemporary German cinema to expose students to slice of German (and European) culture and history, with focus on notion of boundary. Examination of different types of boundaries and borders (e.g., physical, psychological, cultural) within countries; boundaries created by various political ideologies; socially created boundaries of class, race, and gender; boundary between memory and experience. Ways in which people cross them, and their reasons for these transgressions. Analysis of movies to better understand various cinematic techniques. P/NP or letter grading.

159. German Cultural Studies. (4) Lecture, three hours. Taught in German. Examination of most important terms and resources of literary analysis to help students develop and improve skills in close and critical reading of literary texts, develop basic research techniques in German and European cultures, and specifically with classics of literary and cultural analysis, and find pleasure in pursuit of literary and cultural study. Letter grading.

193. German Cultural Studies. (4) Lecture, three hours. Taught in German; some theoretical readings in English. Exploration of German culture in different historical contexts. Examination of various cultural spaces, practices, and standpoints as staged in literary and nonliterary texts, with emphasis on construction of sex, gender, and identity and cultural debates that dominated media and public discussions in Germany and Europe for several weeks. Discussion of several literary texts by Turkish German and other minority writers. Examination of hip-hop minority music and culture as voices in political debates. Exploration of contemporary controversies around Islam in Germany. Reading of theoretical pieces that examine relationships between immigration, globalization, culture, and identity. P/NP or letter grading.

187. Undergraduate Seminar. (4) Seminar, three hours. Required of all German majors who are candidates for general secondary instructional credential. Content varies by instructor and may include advanced work in folklore, film, and German studies. Letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE topics, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: course 188SA. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SA. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities. Credit for credit for credit. May be repeated for credit. Letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Designed as adjunct to upper-division lecture course. Individually directed study with course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. Credit for credit. May be repeated for credit. An honor contract. May be repeated for credit. Letter grading.

191A. Variable Topics Research Seminars: German. (4) Seminar, three hours. Requisite: course 6. Taught in German. Research seminars on topics to be announced each term. Topics include major writers, genres, cultural movements, or theoretical practices. May be repeated for credit with consent of major adviser. P/NP or letter grading.
191C. Capstone Seminar. (2) Seminar, three hours. Limited to senior German majors. Collaborative discussion of and reflection on courses already taken for major, drawn out into synthesizing larger themes and eliminating in detail or other final project. Must be taken in conjunction with one course numbered 140 or higher. Letter grading.

197. Individual Studies in German. (2 to 4) Tutorial, three hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research or Senior Project in German. (4) Tutorial, three hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

201C. Theories of Literary Interpretation. (4) Lecture, three hours. Advanced analysis and discussion of various models of literary representation and school of thought such as hermeneutics, psychoanalytic criticism, social historical approaches, semiotics, structuralism, and poststructuralism. Topics vary with instructor. Letter grading.

202A. Middle High German. (4) Lecture, three hours. Introduction to Middle High German language, with particular emphasis on developing facility in reading. Study of grammar, syntax, and vocabulary combined with introduction to poetic forms and cultural context. Letter grading.

202B. Readings in Middle High German Literature. (4) Lecture, three hours. Introduction to medieval German literature and literary history and to use of contemporary theory in study of medieval texts. Continued practice in reading Middle High German, although most texts to be read in modern translation. Letter grading.

204. Early Modern German Literature. (4) Lecture, three hours. Selected readings from 1500 to 1700, with introduction to development of German as modern literary language and to literary genres and cultural models. Impact of Thirty Years War on German literary production and reception in German baroque. Letter grading.

207. Weimar Classicism. (4) Lecture, three hours. Reading and interpretation of major works of German classicism by later authors and cultural theorists. Letter grading.

208. Romanticism. (4) Lecture, three hours. Analysis of selected authors and theories of German Romanticism such as Friedrich Schlegel, Novalis, and Hoffman, with attention to relationship between Romanticism and other periods. Letter grading.

209C. 19th-Century Narrative Prose. (4) Lecture, three hours. Analysis of prose works from 1815 to 1918, focusing on specific issues in narrative technique, Germanic languages, and the history of language. Letter grading.


210B. 20th-Century Novel to 1945. (4) Lecture, three hours. Prose works in first half of 20th century as they express war experience, crisis of consciousness, and cultural conflicts between wars, as well as innovations in narrative technique. Letter grading.

211. Postwar Literature. (4) Lecture, three hours. Study of major themes in German-speaking author writing since World War II. Examination of issues such as identity crises, nationalism and divided Germany, gender expectations, and social-political attitudes. Letter grading.

212. Contemporary Literature and Culture. (4) Lecture, three hours. Analysis of current cultural issues and their relation to literary production and interpretation. Topics may include areas such as feminism, postcolonialism, postmodernism, and contemporary theory. Letter grading.

213. Topics in Literature and Film. (4) Lecture, three hours. Focus on two different models of cultural representation, examination of topics in German literature and film and their place in development of modern Europe. S/U or letter grading.

223. Old High German. (4) Lecture, discussion, three hours. Introduction to earliest phases of German literature, with extensive readings in major documents of that period (750 to 1050). Emphasis on grammatical interpretation of these documents and identification of dialects used in their composition. S/U or letter grading.


235. Linguistic Theory and Grammatical Description. (4) Lecture, three hours. Enforced requisite: course 140 or Linguistics 20. Taught in English with German proficiency required. Problems in structure of Dutch and German, considered from theoretical frameworks such as sign-oriented linguistics, functional linguistics, discourse grammar, and cognitive linguistics. Discussion of formal linguistic approaches. Concurrency schedule: Course 142. Graduate students meet as group one additional hour each week and write research papers of greater length and depth. Letter grading.

251. Seminar: Germanic Linguistics. (4) Seminar, three hours. Current problems in the field of comparative, cognate, or typological linguistics, such as specific issues in generative grammar, sociolinguistics and dialectology, or language contact. Letter grading.

252. Seminar: Historical and Comparative Germanic Linguistics. (4) Seminar, three hours. Topics selected from field of historical Germanic phonology and syntax according to needs and preparation of students enrolled, e.g., West Germanic problem and classification of Germanic languages, development of Germanic verbal and nominal morphology, proto-Germanic syntax). S/U or letter grading.


254. Seminar: Enlightenment. (4) Seminar, three hours. Selected topics in cultural, literary, and philosophical history. May include current critiques of Enlightenment thought. Letter grading.

257. Seminar: Age of Goethe. (4) Seminar, three hours. Selected topics in literature and culture between 1775 and 1802, with special emphasis on works of Goethe and Schiller as it relates to philosophical texts such as Hegel’s Phänomenologie des Geistes or as it relates to historical events such as French and American Revolutions. Letter grading.


261. Seminar: Contemporary Literature. (4) Seminar, three hours. In-depth analysis of one particular issue in post-1945 German literature and culture. Letter grading.

263. Seminar: Literary Theory. (4) Seminar, three hours. Special focus on particular theoretical school or interpretative paradigm. Content varies with instructor. Letter grading.


265. German Philosophy. (4) Seminar, three hours. German philosophical tradition is one of most influential, difficult, and problematic Western world has known. Beginning with Kant’s critique of pure reason and continuing through Hegel, Marx, Nietzsche, and Heidegger to Arendt and thinkers of Frankfurt school. German philosophers have explored, more deeply and rigorously than any other Western thinkers, nature and limits (if any) of human mental activity. Results have been basic to social, political, and aesthetic theory as well as to philosophy itself. Exploration of thought of one member of that tradition by concentrating yearly on one exemplary text. Letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel must be recommended as associate, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be used for credit. S/U grading.

495. Approaches to Foreign Language Pedagogy. (4) Seminar, one hour. Discussion, two hours. Issues include development of current theories of second-language acquisition, effects of these theories on language teaching, psycholinguistics, sociolinguistics, assessment techniques, use of multimedia in foreign language pedagogy, and design of syllabi for basic foreign language courses. S/U grading.

596. Directed Individual Study or Research. (4) Tutorial, three hours. To be arranged with faculty member who directs study or research. Required research paper must be filed with department chair. S/U grading.

597. Preparation for MA Comprehensive Examination or PhD Qualifying Examinations. (4) Tutorial, three hours. To be arranged with faculty member who directs examination preparation. S/U grading.


599. Research for and Preparation of PhD Dissertation. (4 to 12) Tutorial, three hours. To be arranged with faculty member who directs study may be repeated. S/U grading.
Italian

**Lower-Division Courses**

1. **Elementary Italian—Beginning.** (4) Lecture, five hours. P/NP or letter grading.
6. **Intermediate Italian.** (4) Lecture, three hours. Enforced requisite: course 5. Advanced grammar and composition course with readings from select literary works. P/NP or letter grading.
7. **Intensive Italian.** (12) Lecture, 20 hours. Intensive language program equivalent to first year of college Italian (courses 1, 2, 3) and designed to develop basic language skills. Offered in summer only. P/NP or letter grading.
8. **19. Fiat Lux Freshman Seminars.** (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

**Upper-Division Courses**

9. **Honors Seminars.** (1 Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth than those presented in lectures, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.
10. **99C. Honors Contracts.** (1 Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth than those presented in readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.
11. **99. Student Research Program.** (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

** methodology and comparison in art of adding different forms of public spectacle, including theater, opera, and film. Works by Goldoni, Gozzi, Mascagni, Verga, Puccini, Pirandello, Calvino, Ortese, Zavattini, de Sica, and Tavani Brothers. Emphasis on development of ideas of spectacle.**

89. **honors Seminars.** (1 Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth than those presented in lectures, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.
102A-102B. **102C. Italian Cultural Experience in the Modern World.** (4) Lecture, three hours. Development of writing techniques and proficiency in composition and style, with emphasis on editing for grammar and style. P/NP or letter grading.
102A-102B. **Italian Cultural Experience in the Modern World.** (4) Lecture, four hours; discussion, one hour. Examination of issues of cultural hegemony, political and religious freedom, and doctrinal conflict through Italy’s early modern literary and artistic production. Texts may include Dante’s Divine Comedy, Boccaccio’s Decameron, Saint Catherine’s letters, Machiavelli’s The Prince, and Galileo’s scientific writings. Artworks may include those of Raphael, Mantegna, Botticelli, Palla, and Vicino, 116B. Power and Imagination in Renaissance. Study of artistic world of Leonardo, Raphael, Michelangelo, Titian, and literary masterpieces of Italian renaissance. Emphasis on Tasso, in world molded by powerful political forces, such as Roman Papacy and Medicis, Gonzaga, and D’Este courts.
120. **Modern and Contemporary Literature.** (4 Lecture, three hours. Comparative study of specific literary works and their adaptation into film and of different techniques in two media and forms of expression. Study of Italian literature works, screenplays, and works on literary and film theory. P/NP or letter grading.
122. **Italian Theater.** (4) Lecture, three hours. Study of works that deal with politics, culture, and politics. Rotating topics include sex and politics, ideology of films, contemporary Italian history, and contemporary movements such as Futurism and neorealism. P/NP or letter grading.
125. **Italian through Opera.** (4 Lecture, three hours. Enforced requisite: course 10. Taught in Italian. Introduction to masterworks of Italian opera tradition—La Bohème, La Traviata—offer culturally authentic contexts to learn about operas, their characters, plots, settings, and themes. Exploration of various historical, political, and cultural issues raised in each opera. P/NP or letter grading.
140. **Italian Novella from Boccaccio to Basile in Translation.** (4 Lecture, three hours. Analysis of development of Italian novella in its structure, historical context, and folk material. Special emphasis on how Italian novella influenced other European literatures. P/NP or letter grading.
150. **Modern Fiction in Translation.** (4 Lecture, three hours. Analysis of contemporary Italian fiction, for its historical context and folk material. Special emphasis on how Italian fiction influenced other European literatures. P/NP or letter grading.
152. Italy between Europe and Africa. (4) Lecture, three hours. Knowledge of Italian or background in Italian studies not required. Analysis and critical discussion of works by Italian, northern European, and African writers (including travelers and migrants) who from 18th century to present have been or experienced Italian peninsula and islands as bridge between Europe and Africa, or mix of both. Readings include works by Italian and African authors about Italy, and Italian authors about Africa and southern Italy. P/NP or letter grading.

M158. Women, Gender, and Sexuality in Italian Culture. (4) Lecture, three hours; discussion, one hour. Analysis of gender roles, images of femininity and masculinity, patriarchy, myths of Madonna and Latin lover, condition of women in Italian history, politics, literature, film, and other media. Majors required to read texts in Italian. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as function of non-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191. Variable Topics Research Seminars: Italian Studies. (4) Seminar. Three hours. Research seminar with focus on themes and issues outside uniquely Italian literature topics covered in regular departmental undergraduate courses. Reading, discussion, and development of culminating project. May be repeated for credit. P/NP or letter grading.

195. Community or Corporate Internships in Italian. (4) Tutorial, three hours. Limited to juniors/seniors. Internship in supervised setting in community agency or business. Students meet on regular basis with instructor. May be taken independently for credit. S/U or letter grading.

199A. Directed Research in Italian. (2 to 4) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199B. Directed Capstone Research in Italian and Italian and Special Fields. (4) Tutorial, to be arranged. Requisites: courses 100 and at least four required courses from the senior seminar and Italian and Special Fields majors. Supervised individual research under guidance of faculty mentor. Capstone tutorial in which interdisciplinary paper (20 to 25 pages) is to be written in either Italian or English that requires students to synthesize their knowledge of Italian or Italian and one special field of study. Individual contract required. Letter grading.

Graduate Courses


210. Studies in Early Italian Literature. (4) Lecture, three hours. Topics include focus on themes and issues of early texts, such as la Scienza e l’arte, and early poetry of Zezio and Dante, the S/Sti Novi. S/U or letter grading.

214A-214F. Studies in Medieval Literature. (4 each) Lecture, three hours; seminar, one hour. Designed for graduate students. Seminar focusing on themes and issues of medieval literature, with coverage of authors such as St. Francis of Assisi or Jacopone da Todi. S/U or letter grading.


218A-218D. Studies in 18th-Century Literature. (4 each) Lecture, three hours. S/U or letter grading. 218A. Vicino. 218B. Allieri. 218C. Goldoni. 218D. Lecture, three hours. S/U or letter grading. 218B. Variable Topics. Variable-content seminar on themes and issues of 18th-century literature, with coverage of authors such as Voltaire, Diderot, and Diderot.

219A-219D. Studies in 19th-Century Literature. (4 each) Lecture, three hours. S/U or letter grading. 219A. Foscolo. 219B. Leopardi. 219C. Manzoni. 219D. Variable Topics. Variable-content seminar on themes and issues of 19th-century literature, with coverage of authors such as Carducci, Tommaso, and Nievo.


221A-221E. Studies in 20th-Century Literature. (4–4–4) Lecture, three hours. S/U or letter grading. 221A. Variable Topics. Variable-content seminar on themes and issues of 20th-century literature, with coverage of movements and individual authors such as D’Annunzio, Verica, and Pirandello.

225A-225B. Seminars: Dante. (4 each) Lecture, three hours. S/U or letter grading. 225A. La Divina Commedia. 225B. Dante’s Other Works. 225C. Petrarca’s Canzone. 225D. Boccaccio’s Decameron. 225E. Boccaccio’s Other Works. 225F. Variable Topics. Variable-content seminar on themes and issues of medieval literature, with coverage of authors such as St. Francis of Assisi or Jacopone da Todi.

221A-218D. Studies in 18th-Century Literature. (4 each) Lecture, three hours. S/U or letter grading. 218A. Variable Topics. Variable-content seminar on themes and issues of 18th-century literature, with coverage of authors such as Vico, Leopardi, and Noveo.

221A-218D. Studies in 18th-Century Literature. (4 each) Lecture, three hours. S/U or letter grading. 218A. Variable Topics. Variable-content seminar on themes and issues of 18th-century literature, with coverage of authors such as Vico, Leopardi, and Noveo.

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221A-218D. Studies in 18th-Century Literature. (4 each) Lecture, three hours. S/U or letter grading. 218A. Variable Topics. Variable-content seminar on themes and issues of 18th-century literature, with coverage of authors such as Vico, Leopardi, and Noveo.
375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel membership as teaching assistant, associate, or fellow. Preparation: apprentice personnel membership as teaching assistant, associate, or fellow. Seminar, to be arranged. Study methods in preparation for teaching Italian at college level, with emphasis on teaching proficiency-oriented instruction. May not be applied toward MA course requirements. Corequisites: course 495A; study methods of course 495A; study of contemporary issues in Italian language pedagogy. 495C. Effective uses of technology in foreign language classroom. Project-based seminar in which students develop materials for classroom instruction as well as an electronic teaching portfolio.

501. Cooperative Program. (2 to 8) Preparation: consent of UCLA graduate adviser and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.

596. Directed Individual Studies. (2 to 12) May be repeated for credit. S/U grading.

597. Preparation for MA Comprehensive Examination or PhD Qualifying Examinations. (2 to 12) S/U grading.

599. PhD Research and Writing. (2 to 12) May be repeated. S/U grading.

Scandinavian Lower-Division Courses

1. Elementary Swedish. (4) Discussion, four hours. P/NP or letter grading.


11. Elementary Norwegian. (4) Discussion, four hours. P/NP or letter grading.


19. Flat Lux Freshman Seminars. (1) Seminar, one hour. Development of critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

40. Heroic Journey in Northern Myth, Legend, and Epic. (5) Lecture, two hours; discussion, two hours. Enforced requisite: English Composition 3. Not open for credit to students with credit for course 40W. All readings in English. Exploration of predominant structures of major gods and goddesses, heroes and heroines, narratives and cultures that make up lore collectively referred to as Scandinavian, or Norse, myth. Reading and examination of this lore that is famous worldwide in 1960s and 1970s, especially with their Martin Beck series, and once they had established that Scandinavian writers could be successfully translated into many languages, others fol

50. Introduction to Scandinavian Literatures and Cultures. (5) Lecture, three hours; discussion, one hour. Not open for credit to students with credit for course 50W. Designed for students majoring in and for those wishing to prepare for more advanced and specialized studies in Scandinavian literature and culture. Selected works from literatures of Denmark, Norway, Sweden, Iceland, and Finland, ranging from myth, national epic, saga through modern epic, poem, play, short story, and film, read in English and critically discussed. P/NP or letter grading.

50W. Introduction to Scandinavian Literatures and Cultures. (5) Lecture, three hours; discussion, one hour. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course 50. Designed for students majoring in and for those wishing to prepare for more advanced and specialized studies in Scandinavian literature and culture. Selected works from literatures of Denmark, Norway, Sweden, Iceland, and Finland, ranging from myth, national epic, saga through modern epic, poem, play, short story, and film, read in English and critically discussed. Satisfies Writing II requirement. Letter grading.

60. Introduction to Nordic Cinema. (5) Lecture, three hours; discussion, two hours. Enforced requisite: English Composition 3 or English as a Second Language 36. Not open for credit to students with credit for course 50W. Designed for students majoring in and for those wishing to prepare for more advanced and specialized studies in Nordic countries, with emphasis on construction of other or outsider as conceptual category. Survey of wide range of films to interrogate relationship between various forms of minority discourse and dominant values, institutions, and mechanisms and instruments of social control. Examination of how these cinematic narratives of dominant normativity and diversity reflect cultural anxieties surrounding identity, ideology, collective memory, and power relationships. Screenings supplemented with relevant theoretical texts to give tools necessary to more effectively contextualize and analyze images. Satisfies Writing II requirement. Letter grading.

69. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

C131. Introduction to Viking Age. (4) Lecture, three hours. History, society, and culture of early Scandinavians. All texts in English, including readings in Old Norse sagas and Edda. Concurrently scheduled with course C231. Letter grading.

C132A. Saga. (4) Seminar, three hours. Sagas are largest extant medieval prose literature. Texts in English, with selections from different types of Icelandic sagas, consideration of history and nature that produced these narratives. Concurrently scheduled with course C233A. Letter grading.

133C. Social Network Analysis and Icelandic Family Saga. (4) Seminar, three hours. Exploration of how character interactions can be used as basis for developing social network view of stage on which saga action plays out. Examination of how best to model sagas as dynamic social networks and learn about metrics and analytical approaches from social network analysis (SNA) that deepen understanding of saga actions. SNA provides additional opportunity to explore hypothetical situations and recognize alternative social pathways that may have led to other types of community formations. Study of Icelandic saga toward increasing complexity, developing understanding of characters and character roles, and drawing this as basis of preliminary investigations. P/NP or letter grading.

134. Scandinavian Mythology. (4) Seminar, three hours. Overview of major gods and goddesses, heroes and heroines, narratives and cultures that make up lore collectively referred to as Scandinavian, or Norse, myth. Reading and examination of this lore that is chiefly preserved in two collections traditionally called Poetic (or Elder) Edda and Prose (or Younger) Edda. P/NP or letter grading.

C137. Old Norse Literature and Society. (4) Seminar, three hours. Critical issues in medieval Scandinavian studies. May be repeated for credit. Concurrently scheduled with course C137. Letter grading.


C141A. Theory of Scandinavian Novel. (4) Seminar, three hours. Analysis of functions and structures of Scandinavian novel from its 18th-century beginnings through its rise in 19th century and its 20th-century evolution. Discussion of application of contemporary critical theories to novels not currently scheduled with course C241A. P/NP or letter grading.

141C. Short Story in Scandinavia. (4) Seminar, three hours. Exploration of range of classic short story and novella texts from Scandinavian literary canon, with stories by authors such as Hans Christian Andersen, Jens Peter Jacobsen, Alexander Kielland, Amalie Skram, Sigfrid Obstfelder, Knut Hamsun, Isak Dinesen, and Ruben Palm. Examination of authors' lives and oeuvres, larger Nordic/European literary movements of 19th and 20th centuries, and tropes and conventions of short stories themselves. P/NP or letter grading.

143A. Introduction to Nordic Theater and Drama. (4) Lecture, three hours. Examination of artistic legacy of Henrik Ibsen and August Strindberg in context of emergence of modern Nordic theater and drama as well as important contributions of their contemporaries and successors. Readings include plays, letters, speeches, and memoirs by Ludvig Holberg, Henrik Ibsen, August Strindberg, Pâr Lagerkvist, Kjeld Abell, Eeva-Liisa Manner, Hrafnhildur Hagalín Guðmundsdóttir, and Jonas Hassen Khemiri. P/NP or letter grading.

143A. Scandinavian Detective Fiction. (4) Seminar, three hours. Scandinavian authors have been writing detective fiction for years. Maj Sjöwall and Per Wahlöö were famous worldwide in 1960s and 1970s, especially with their Martin Beck series, and once they had established that Scandinavian writers could be successfully translated into many languages, others fol

145A. Henrik Ibsen. (4) Seminar, three hours. Readings and discussion of selected plays by Henrik Ibsen. May be concurrently scheduled with course C245A. P/NP or letter grading.

145B. Knut Hamsun. (4) Seminar, three hours. Readings and discussion of selected works by Knut Hamsun and other 19th- and 20th-century Scandinavian writers who explored theme of nature as modern age. P/NP or letter grading.

147A. Hans Christian Andersen. (4) Lecture, two hours; discussion, one hour. Study of works of Hans Christian Andersen, Danish novelist, dramatist, and writer of tales, including consideration of his literary background and influence of his works on the development of their structure, style, and meaning. P/NP or letter grading.

147B. Sören Kierkegaard. (4) Seminar, three hours. Readings and discussion of selected works by Sören Kierkegaard and other existentialist writers. May be concurrently scheduled with course C247B. P/NP or letter grading.

147C. Karen Blixen. (4) Lecture, three hours. Investi- gation of work, writings, and legacy of Danish au- thor Karen Blixen, also known in the English-speaking world as Isak Dinesen. Focus on literary and philo- sophical paradoxes personified and articulated by enigmatic, controversial, and widely acclaimed Di- nesen. Using memoirs, short fiction, and essays by Di- nesen, interrogation of aesthetic theory, historiography and biography, feminist theory, postmodern and trans- colonial theory, secondary readings may include texts by Bhabha, Gilbert and Gubar, JanMohamed, Kierkegaard, Nietzsche, Ngugi, Said, and Thurn. P/NP or letter grading.

154. Romanticism. (4) Seminar, three hours. Explora- tion of Romanticism and development of Romanticism. Reading and discussion of different approaches to Romanticism and analysis of works of prominent Scandinavian writers from Romantic period to under- stand Scandinavian Romanticism in larger European context, including work from both English and German Romantic writers and artists. P/NP or letter grading.

155. Modern Breakthrough. (4) (Formerly numbered 155.) Seminar, three hours. Readings and discussions of selected works of realism, naturalism, and sym- bolism in late 19th-century Scandinavian literature and art. Concurrently offered with course C255. P/NP or letter grading.

156. Scandinavian Literature of 20th Century. (4) Seminar, three hours. Readings and discussion of selected works of modern Scandinavian literature from beginning of century to present. P/NP or letter grading.

157. Contemporary Nordic Literature. (4) Seminar, three hours. Reading and analysis of selected texts by major 20th-century Swedish authors. P/NP or letter grading.

161. Introduction to Nordic Cinema. (4) Seminar, three hours. Designed for students in general and for those preparing for more advanced studies in Scandinavian literature and culture. Viewing and discussion of films by Ingmar Bergman and other Scandinavians. P/NP or letter grading.

C163A. Introduction to Danish Cinema. (4) Seminar, three hours. Introduction to history of cinema in Denmark, as well as to some fundamental concepts in study of film. Deliberately broad and historically focused overview of development of Danish cinema in particular, rather than focus on films of particular directors or topics. Theoretical readings from important critics, including Kracauer, Bazin, Metz, and Chatman, along with selected film vocabularies, as well as critical theoretical approaches to film studies. Concurrently scheduled with course C263A. P/NP or letter grading.

C163B. Introduction to Swedish Cinema. (4) Lecture, three hours. Introduction to and exploration of history of Swedish cinema and why Scandinavian filmmakers, including the great directors such as Ingmar Bergman, Bille August, Jan Troell, and Jan Svěrák, are among the Swedish filmmakers who have distinguished themselves through their work. P/NP or letter grading.

C163C. Introduction to Norwegian Cinema. (4) Seminar, three hours. Introduction to and exploration of Norwegian cinema. Study of Norwegian film industry, transnational European cinema, and its impact on Norwegian cinema. Concurrently scheduled with course C263C. P/NP or letter grading.

165B. Vikings on Film. (4) Seminar, three hours. Exploration of representations of Vikings in medium of film, considering Viking films within their historic and cultural contexts. How does representation of Vikings on film correspond to historical reality of Vikings? How do we see development of Viking age over time that is reflected in films from different periods? How do representations of Vikings in films produced in Scandinavia differ from their representations in films from other cultures? How do we see changing ideas about gender, ethnicity, disability, sexual preference, and other aspects of identity reflected in Viking films? Development of critical thinking and close textual analysis skills. All readings and films in English or with English subtitles. P/NP or letter grading.

C166A. Ingmar Bergman. (4) Seminar, three hours. Exploration of Ingmar Bergman’s development as film artist. Reading, analysis, and discussion of films from his early Swedish short films, early postwar films, mid-1940s and late 1970s. Contextualization of work of this personal filmmaker within multiple frameworks: Danish national film industry, transnational European cinema, and issues of auteur filmmaking. Writings by key Dreyer scholars such as David Bordwell, Ray Carney, Paul Schrader, Mark Sandberg, and others, as well as Dreyer’s own writings on cinema. All films have English subtitles. Concurrently scheduled with course C266A. P/NP or letter grading.

C166C. Carl Dreyer. (4) Seminar, three hours. Carl Theodor Dreyer (1889 to 1968) is not only one of the greatest masters of Nordic cinema, but of world cinema as well. Focus on films that Dreyer made during near half century between 1918 and 1964. Contextualization of silent and sound-era films. Historical and personal aspects of film- makers within multiple frameworks: Danish national film industry, transnational European cinema, and issues of auteur filmmaking. Writings by key Dreyer scholars such as David Bordwell, Ray Carney, Paul Schrader, Mark Sandberg, and others, as well as Dreyer’s own writings on cinema. All films have English subtitles or English translation. Concurrently scheduled with course C266C. P/NP or letter grading.

C171. Introduction to Scandinavian Folklore. (4) Seminar, three hours. Introduction to fairy tales and legends of Scandinavian tradition as well as to inter- pretive methodologies. Answer to question why do people tell stories that they tell? Concurrently scheduled with course C271. Letter grading.

172A. Nordic Folk and Fairy Tales. (4) Seminar, three hours. Exploration of Nordic version of classic tale- types such as Dragon Slayer, Cinderella, Hansel and Gretel, and King Lindorm in historic and cultural con- texts. Reading of important works of Nordic and inter- national folklore scholarship, representing historical- geographic, structuralist, psychological, feminist, dis- ability-theory, and queer-theory approaches, and develop- ment of critical thinking and close textual analysis skills, and understanding and appreciation of genre that continues to provide popular culture. Readings in English translation. P/NP or letter grading.

173A. Popular Culture in Scandinavia. (4) Seminar, three hours. Examination of popular culture in Scandi- navia through study of contemporary Scandinavian lit- erature, music, and art. Investigation of how issues such as globalization, immigration, and nation- alism are portrayed in popular culture in Denmark, Norway, Sweden, Finland, and Iceland. Discussion of how these issues are portrayed in popular culture in Scandinavia through study of cultural expression and how it is possible—taking literature, film, and art as point of departure—to analyze cultural, historical, and political expression in given piece of art. P/NP or letter grading.

C174A. Minority Cultures in Scandinavia. (4) Seminar, three hours. Discussion of selected aspects of Scandinavian society based on readings of contem- porary literature as well as historical and/or sociolog- ical readings. May be repeated for credit. Concurrently scheduled with courses C265A or C266A. P/NP or letter grading.

174B. Queer Scandinavia. (4) Seminar, three hours. Queer theories in Scandinavian literature, mainly from 19th to 21st centuries. Scandinavian literature had a more progressive view on homosexuality than most other countries, and Scandinavian writers portrayed homosexuality in explicit and radical ways as early as turn of 19th century. Introduction to key theo- retical works within field of gay and lesbian studies and queer studies, as well as presentation of historical view of how homosexuality has been perceived in Scandinavia over time. P/NP or letter grading.

C180. Literature and Scandinavian Society. (4) Seminar, three hours. Discussion of selected aspects of Scandinavian society based on readings of contem- porary literature as well as historical and/or sociolog- ical readings. May be repeated for credit. P/NP or letter grading.


188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor required. May not be repeated. Letter grading.


188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor required. May not be repeated. Letter grading.
mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated.

Letter grading.

188SC. Individual Studies for USI Facilitators. (2) Tutorial, to be arranged. Preparation: course 188SB. Limited to junior/senior USI facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USI 885 course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with a course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

197. Individual Studies in Scandinavian. (2 to 4) Tutorial, three hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged by faculty member and student. S/U or letter grading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research in Scandinavian. (4) Tutorial, three hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

C231. Introduction to Viking Age. (4) Lecture, three hours. History, society, and culture of early Scandinavians. All texts in English, including readings in Old Norse sagas and Eddas. Concurrently scheduled with course C131. Graduate students do additional readings and write more extensive research papers. Letter grading.

C233A. Saga. (4) Seminar, three hours. Sagas are largest extant medieval prose literature. Texts in English, with selections from different types of Icelandic sagas. Consideration of history and society that produced these narratives. Concurrently scheduled with course C133A. Graduate students do additional readings and write more extensive research papers. Letter grading.

C233B. Advanced Old Norse Prose. (4) Lecture, three hours. Requisite: course 132B. Readings of major saga texts. Also, secondary sources that bear on specific issues in Old Norse literature and medieval Scandinavian history. S/U or letter grading.


C237. Old Norse Literature and Society. (4) Seminar, three hours. Critical issues in medieval Scandinavian studies. May be repeated for credit. Concurrently scheduled with course C137. Graduate students do additional readings and write more extensive research papers. Letter grading.

C241A. Theory of Scandinavian Novel. (4) Seminar, three hours. Preparation: advanced knowledge of one Scandinavian language. Analysis of predominant sub-genre in Scandinavian novel from its 18th-century beginnings through its rise in 19th century and its 20th-century evolution. Discussion of application of contemporary critical theories to novels. May be concurrently scheduled with course C141A. Graduate students may meet as group one additional hour each week and write research papers of greater length and depth. S/U or letter grading.

C245A. Henrik Ibsen. (4) Seminar, three hours. Preparation: advanced knowledge of one modern Scandinavian language. Readings and discussion of selected plays by Henrik Ibsen. May be concurrently scheduled with course C145A. Graduate students may meet as group one additional hour each week and write research papers of greater length and depth. S/U or letter grading.

C245B. Knut Hamsun. (4) Seminar, three hours. Preparation: advanced knowledge of one Scandinavian language. Readings and discussion of selected works by Knut Hamsun and other 19th- and 20th-century Scandinavian writers who explored theme of nature against social backdrop. Concurrently scheduled with course C145B. Graduate students may meet as group one additional hour each week and write research papers of greater length and depth. S/U or letter grading.

C246A. August Strindberg. (4) Seminar, three hours. Preparation: advanced knowledge of one Scandinavian language. August Strindberg’s portrayals of marital conflict reflected and shaped literary representation of women’s place in society, as well as its literary transformations, placed into Scandinavian, European, and feminist context. May be concurrently scheduled with course C146A. Graduate students may meet as group one additional hour each week and write research papers of greater length and depth. S/U or letter grading.

C247B. Søren Kierkegaard. (4) Seminar, three hours. Preparation: advanced knowledge of one modern Scandinavian language. Readings and discussion of selected works of Søren Kierkegaard and other existentialist writers. May be concurrently scheduled with course C147B. S/U or letter grading.


C263A. Introduction to Danish Cinema. (4) Seminar, three hours. Introduction to history of cinema in Denmark, as well as to some fundamental concepts in study of film. Deliberately broad and historically centered approach to development of cinema in Denmark rather than focus on films of particular directors or topics. Theoretical readings from important critics, including Mieczyslaw Lapp, Gertrud Grunwald, and Chatman, along with several directed exercises, to develop vocabulary and critical method for discussing films in general and Danish cinema in particular. Other readings include selections from Hjort, Sandberg, Tangherlini, and other Scandinavian sources. Concurrently scheduled with course C163A. S/U or letter grading.

C263B. Introduction to Swedish Cinema. (4) Lecture, three hours. Introduction to and exploration of history of Swedish cinema from silent era to present. Film-makers include auteurs in international canon, such as Victor Sjöström, Mauritz Stiller, and Ingmar Bergman, as well as other key Swedish filmmakers such as Gustaf Molander, Sjöberg, Maj Zetterling, Viigf Skarsgård, Jan Troell, Lukas Moodysson, and Josef Fares. Development of Scandinavian high art cinema and popular genres such as romantic romanticism, melodrama, sex, crime, and horror. All films have English subtitles. Concurrently scheduled with course C163B. S/U or letter grading.

C269C. Introduction to Norwegian Cinema. (4) Seminar, three hours. Introduction to and exploration of history of Norwegian cinema from silent era to present. Filmmakers include Tancered Ibsen, Arne Skouen, Edith Carlmar, Nils Gaup, Erik Skjoldborg, Bert Hamre, Khalid Hussain, and Petter Næss. Parallel focus on popular genres such as war films, noir, tór, romantic comedies, and documentaries. Concurrently scheduled with course C169C. S/U or letter grading.

C285. Seminar: Scandinavian Literature. (4) Seminar, three hours. Preparation: reading knowledge of one Scandinavian language. Selected topics in Scandinavian prose, poetry, and drama. May be repeated for credit with consent of instructor and graduate advisor. May be concurrently scheduled with course C185. S/U or letter grading.

C266A. Ingmar Bergman. (4) Seminar, three hours. Exploration of career of Ingmar Bergman as film artist through various periods, spanning mid-1940s and late 1970s. Contextualization of work of this most personal of filmmakers within multiple frameworks of post-war Swedish film, national art cinema movement, and issues of auteur filmmaking. Course readings and viewing of 10 Bergman films. All films have English subtitles. Concurrently scheduled with course C166A. S/U or letter grading.

C266C. Carl Theodor Dreyer. (4) Seminar, three hours. Carl Theodor Dreyer (1889 to 1968) is not only one of great masters of Nordic cinema, but of world cinema as well. Focus on films that Dreyer made during near half-century between 1919 and 1964. Contextualization of silent and sound works of this most personal of filmmakers within multiple frameworks: Danish national film industry, transnational European cinema, and issues of auteur filmmaking. Writing by key Dreyer scholars such as David Bordwell, Ray Carney, Paul Schrader, Mark Sandberg, and others, as well as Dreyer’s own writings on cinema. All films have English subtitles and are subtitled. Concurrently scheduled with course C166C. S/U or letter grading.

C271. Introduction to Scandinavian Folklore. (4) Seminar, three hours. Preparation: advanced knowledge of one modern Scandinavian language. Introduction to dietary, customary, and political traditions as well as to interpretive methodologies that strive to answer question why do people tell stories that they tell? Concurrently scheduled with course C171. Letter grading.

C271. Study of Oral Tradition: History and Methods. (4) (Same as English M205A.) Seminar, three hours. Exploration of scholarly and literary attempts to study, define, analyze, promote, and preserve oral traditions, from Homer and ancient Greece to origins of vernacular literatures, European romantic (rediscovery of oral tradition, 20th-century heuristic models of oral composition, and modernist cinema and popular genres, such as jokes and rapping. S/U or letter grading.

C273. Studies in Old Regional Genres. (4) (Same as English M205C.) Seminar, three hours. Exploration of emergence of immigrant cultures in Nordic region. Beginning in 1960s, large numbers of people from Turkey, Italy, and Pakistan began immigrating to Nordic countries, followed in subsequent decades by immigrants and refugees from Vietnam, India, Iran, Iraq, Afghanistan, Cambodia, and countries throughout Africa. Cultural landscape previously marked by relatively high degree of cultural homogeneity now characterized by broad cultural diversity. Examination of emergence of new voices in Nordic cultural landscape in wide range of cultural expressions, including literature, film, and visual and performing arts. Exploration of emergence of new forms of Nordic languages, such as well-documented phenomenon of Rinkney Swedish. Concurrently scheduled with course C174A. S/U or letter grading.

C280. Literature and Scandinavian Society. (4) Seminar, three hours. Designed for graduate students. Discussion of selected works from 19th century based on readings of contemporary literature as well as historical and/or sociological material. May be repeated for credit (as determined by graduate advisor) with topic of change. May be concurrently scheduled with course C180. Graduate students may meet for extra seminar hours and write research papers of greater length and depth. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Practice in personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guid-
ance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

596. Directed Individual Study or Research. (2 to 6) Tutorial, to be arranged with faculty member who directs the study or research. Limited to graduate Scandinavian students. Twelve units may be applied toward total course requirement, but only 4 units may be applied toward minimum graduate course requirement. May be repeated twice. S/U or letter grading.

597. Preparation for MA Comprehensive Examination or PhD Qualifying Examinations. (4 to 8) Tutorial, to be arranged with faculty member who directs the study or research. May be repeated once. Three units may be applied toward MA minimum course requirements. S/U grading.

599. Research for and Preparation of PhD Dissertation. (4) Tutorial, to be arranged with faculty member who directs the study or research. May be repeated. S/U or letter grading.

Yiddish

Lower-Division Courses

10. From Old World to New: Becoming Modern as Reflected in Yiddish Cinema and Literature. (5) Lecture, three hours; discussion, one hour. Use of media of Yiddish cinema (classic films and documentaries) as primary focal points to examine ways in which one heritage culture (Ukrainian, Yiddish, Russian) adapted to forces of modernity (urbanization, immigration, radical social movements, assimilation, and destructive organized anti-Semitism) from late-19th to present. Exploration of transformational themes in depth through viewing of selected films, readings, research and weekly papers, and in-class discussions. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

Honor content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to 20 students. Individual honors contract required. Honor content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101A. Elementary Yiddish. (4) Lecture, four hours. Introduction to grammar; instruction in listening, speaking, reading, and writing skills. P/NP or letter grading.


102B-102C. Intermediate Yiddish. (4-4) Lecture, three hours. Requisite: course 102A. Course 102B is requisite to 102C. Grammatical exercises, reading and linguistic analysis of texts, conversation. P/NP or letter grading.


121C. Special Topics in Yiddish Literature in English Translation. (4) Lecture, three hours. Varying topics of importance and relevance to Yiddish literary study. Reading and analysis of wide range of 19th- and 20th-century literature. P/NP or letter grading.

130. Introduction to Yiddish Culture and Language through Film. (4) Lecture, three hours. Introduction to Yiddish language and culture, with focus on classic Yiddish films and documentaries as integral tools for accessing culture associated with this heritage language. Viewing and discussion to gain deeper understanding and appreciation of complexity and scope of Yiddish culture and in particular of annihilated Yiddish civilization of 20th century. These films represent the accessible way available to hear Yiddish spoken in fluent, natural manner. P/NP or letter grading.


131C. Special Topics in Yiddish Literature. (4) Lecture, three hours. Requisite: course 131A or 131B. Varying topics of importance and relevance to Yiddish literary study. Reading and analysis of wide range of 19th- and 20th-century literature. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honor content noted on transcript. Letter grading.

197. Individual Studies in Yiddish. (2 to 4) Tutorial, to be arranged. Limited to juniors/seniors. Individual intensive study or more specialized investigation of topics in Yiddish, with scheduled meetings to be arranged between faculty member and student. Asigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

595. Directed Individual Study or Research in Yiddish. (4) Tutorial, to be arranged with faculty member who directs study or research (course section to be identified by two-letter code using initials of sponsoring instructor—see department for ID number). May be repeated once. S/U grading.

597. Preparation for PhD Qualifying Examinations. (4) Tutorial, to be arranged with faculty member who directs study (see department for ID number). S/U grading.

Family Medicine

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.
Upper-Division Course

199. Directed Research in Family Medicine. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

FIAT LUX

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Scott H. Chandler, PhD (Integrative Biology and Physiology)
Juliana K. Gondek, MM (Music)
Jennifer A. Jay, PhD (Civil and Environmental Engineering, Environment and Sustainability)
Kathleen L. Komar, PhD (Comparative Literature)

Overview
The Fiat Lux curriculum provides an intellectual space for faculty and students to explore new and interdisciplinary areas of topics within an intimate seminar setting.

The Fiat Lux Seminar Program is a unique educational initiative that allows faculty to broadly explore any topic and subject area while also connecting with first-year students. The Fiat Lux subject area and Fiat Lux 19 provide faculty with an intellectual space to explore new or interdisciplinary areas and topics that may be beyond their home academic department. Under the course number 19, Fiat Lux seminars may be offered in all academic departments.

Fiat Lux

Lower-Division Course

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

FILM, TELEVISION, AND DIGITAL MEDIA

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Film, Television, and Digital Media
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Department e-mail
C. Fabian Wagemister, MFA, Chair

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George J. Huang, MFA
Erkki I. Huhtamo, PhD
Gina Kim, MFA
Deborah Nadoomlan Landis, PhD (David C. Copley Professor of Costume Design)
Purnima Manekkar, PhD
Denise R. Mann, PhD
William C. McDonald, MFA
Kathleen A. McHugh, PhD
Sean A. Metzger, PhD
Phyllis A. Nagy, BFA
Chon A. Noriega, PhD
Kriss S. Ravetto-Biagioli, PhD
Teri E. Schwartz, MA
Charles E. Sheetz, MFA
Amy Villarejo, PhD
C. Fabian Wagemister, MFA

Professors Emeriti
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Janet L. Bergstrom, PhD
Nicholas K. Browne, EdD
John T. Caldwell, PhD
Gyula Gazdag, MFA
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Stephen D. Mamber, PhD
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Nancy Richardson, MFA
Robert Rosen, MA
Bekky J. Smith, MA
Vivian Sobchack, PhD
Howard Suber, PhD

Associate Professors
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Kristy M. Guevara-Flanagan, MFA
Arno O. Lunde, PhD
Ellen C. Scott, PhD
Jasmine N. Trice, PhD
Shawn G. VanCour, PhD

Assistant Professors
Rory M. Kelly, MFA
Veronica A. Paredes, PhD

Lecturers SOE
Harold L. Ackerman, MA, Emeritus
Mark McCarty, MA, Emeritus

Lecturers
William J. Barminski
Jill L. Goldsmith, JD, MFA
Hans-Martin Liebing, MFA
David M. Maquilling, BFA
Eric Marin, MA
Thomas A. Nunan III, BA
Mark E. Rosman, BA
John W. Yoon, MFA
Kris T. Young, MFA

Adjunct Professor
Liza Johnson, MFA

Overview
The Department of Film, Television, and Digital Media is dedicated to advancing the art and craft of media making and research in an increasingly complex and technology driven world. The department believes that innovative filmmaking and a critical understanding of media culture are necessary catalysts for social change. The department seeks to cultivate a diverse body of students, empowering them to engage with different modes of thinking and creating and to contribute to social change through the collaborative arenas of media creation and intellectual inquiry.

For current or specific information about the programs and faculty members, see the department website.

Undergraduate Major

Film and Television BA

The undergraduate Film and Television major encourages development of a personal vision that incorporates creative, practical, intellectual, and aesthetic values. Within the context of a liberal arts education, the program provides a broad background in the field and in the diversity of film and television practice, including courses in history and theory, critical thinking, animation, screening, and the fundamentals of film, video, and television production.

Capstone Major

The Film and Television major is a designated capstone major. Undergraduate students are required to complete one departmentally sponsored internship course as well as coursework related to the senior thesis concentration area. All courses, including capstone senior thesis projects, involve work shopping individual projects. Group participation in the creation and production of each student’s project is core to the curriculum. Specific student learning objectives vary based on concentration area.

Learning Outcomes

The Film and Television major has the following learning outcomes:

- Production of scholarly and artistic work in the areas of history, criticism, and theory of film, television, and digital media
- Mastery of fundamentals of preproduction, production, and postproduction of film, television, and digital media
Entry to the Major

Admission
Students are admitted for fall quarter only. Admission is highly competitive, and only a limited number of students can be accepted each year. In addition to the UC Application for Admission and Scholarships, first-year and transfer applicants must submit a School of Theater, Film, and Television supplemental application. For information about the supplemental application, see the major website.

Transfer Students
Transfer applicants to the Film and Television major with 90 or more units must meet UCLA transfer requirements and, before arriving at UCLA, must complete the School of Theater, Film, and Television general education requirements by either (1) taking college courses that satisfy the school general education requirements or (2) completing the Intersegmental General Education Transfer Curriculum (IGETC) or (3) achieving UC reciprocity through completion of general education requirements at another UC campus while a student there.

In addition to the UC Application for Admission and Scholarships, transfer applicants must submit a School of Theater, Film, and Television supplemental application. For information about the supplemental application, see the major website.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Film and Television 4, 6A, 10A, 33, 51, 84A, and one course from Theater 10, 15, 20, 28A, 28B, 28C, or 30.

The Major

Required: Film and Television 101A, 106B or 106C, 134, 150, 154, 155, 163; one cinema and media studies elective from 107, 108, 109, M111, 112, 113, 114, M117, or 122N; one capstone departmentally sponsored internship (course 195); and a senior concentration (20 units) of advanced film coursework selected from among any one or more of the following areas of study, including at least two courses from within one area:

- Screenwriting: Film and Television 135A, 135B, 135C.
- Producing: Film and Television 146, C147, 183A, 183B, 183C, 184B.

Animation: Film and Television C181A, C181B, C181C.
Digital Media: Film and Television C142, C144, C145, C148.

Policies

The Major
Courses taken to satisfy the senior concentration may not also be applied toward other course requirements in the major.

Students should be mindful of the exigencies inherent in filmmaking and be prepared to meet the additional demands of time and costs.

Students are required to perform assignments on each other’s projects. In addition, the department reserves the right to hold for its own purposes examples of any work done in classes and to retain for distribution such examples as may be selected.

Graduate Majors

Film and Television MA, CPhil, PhD

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Film and Television MFA

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Film and Television

Lower-Division Courses

1A-1B-1C. Freshman Symposium. (1–1–1) Labora-
tory, three hours. Course 1A is enforced requisite to 1B, which is enforced requisite to 1C. Limited to Film and Television majors. Structured forum in which freshmen meet on regular basis to discuss curricular issues, meet with faculty members from department, and have exposure to array of guest speakers from media industries. Letter grading.

4. Introduction to Art and Technique of Filmmaking. (6) Lecture, four hours; discussion, one hour. Students acquire understanding of practical and aesthetic challenges undertaken by artists and professionals in making of motion pictures and television. Examination of film as both art and industry; storytelling, sound and visual design, casting and performance, editing, finance, advertising, and distribution. Exploration of American and world cinema from filmmaker’s perspective. Honing of analytical skills and development of critical vocabulary for study of filmmaking as technical, artistic, and cultural phenomenon. P/NP or letter grading.

6A. History of American Motion Picture. (6) Lecture/ screenings, six hours; discussion, one hour. Historical and critical survey, with examples, of American motion picture both as developing art form and as medium of mass communication. Letter grading.

10A. American Television History. (5) Lecture/ screenings, four hours; discussion, one hour. Critical survey of American television history from its inception to present. Examination of interrelationships between program forms, industrial paradigms, social trends, and culture. Starting with television’s hybrid origins in radio, theater, and film, contextualization, viewing, and discussion of key television shows, as well as Hollywood films that comment on radio and television.
Consideration of television programs and series in terms of sociocultural issues (consumerism, lifestyle, gender, race, national identity) and industrial practice (programming, policy, regulation, business). Letter grading.


16. Media Parks: Cinematic and Television History of Theme Parks. (2 to 6) Seminar, nine hours. Intensive examination and discussion of history and evolution of entertainment (film images and, television, and video games) and theme parks, in conjunction with site visits and screenings of related media. Offered in summer only. P/NP or letter grading.

17. Film and Television Seminar. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at U.C.L.A. P/NP grading.

18. Writing for Television: Big Ideas for Small Screen. (2 to 6) Seminar, nine hours. Intensive introduction to television pilot form, covering style and content and how to analyze television shows and industry process of television development. Students develop beat sheet and outline for first act of original pilot episode, write teaser of original pilot episode, and create series treatment. Offered in summer only. P/NP or letter grading.

M50. Introduction to Visual Culture. (5) Same as English M50. Lecture, three hours; discussion, one hour; laboratory, two hours. Enforced prerequisite: satisfaction of Entry-Level Writing requirement. Study of how visual media, including advertising, still and moving images, and narrative films, influence contemporary aesthetics, politics, and knowledge. P/NP or letter grading.

51. Digital Media Studies. (5) Lecture, three hours; laboratory, two hours. Study of history and development of digital media, and authoring skills of digital media, art, and culture. P/NP or Letter grading.

72. Production Practice in Film, Television, and Digital Media. (2 to 4) Lecture, three hours; discussion, three hours. Enforced prerequisite: course 101A. Limited to Film and Television majors. Enforced requisite to 102C. Limited to Film and Television majors. Structured forum in which seniors meet on regular basis to discuss curricular issues, meet with faculty members, and have exposure to array of guest speakers from within film industry. Letter grading.

101A. Junior Symposium. (1) Laboratory, three hours. Course 101A is enforced requisite to 101B, which is enforced requisite to 101C. Limited to Film and Television majors. Structured forum in which juniors meet on regular basis to discuss curricular issues, meet with faculty members, and have exposure to array of guest speakers from within film and television industry. Letter grading.

102B-102C. Senior Symposium. (1–1–1) Laboratory, three hours. Enforced prerequisite: course 101A. Course 102A is enforced requisite to 102B, which is enforced requisite to 102C. Limited to Film and Television majors. Structured forum in which seniors meet on regular basis to discuss curricular issues, meet with faculty members, and have exposure to array of guest speakers from within film and television industry. Letter grading.

104. Film and Television Symposium. (1 or 2) Laboratory, three hours. Study of specific film genre (e.g., documentary). Advanced study of principles of digital cinematography, with emphasis on electronic exposure control, lighting, and selection of film, camera, and lenses. Concurrently scheduled with course C416. Letter grading.

120A. Disney Feature: Then and Now. (5) Lecture, three hours; discussion, three hours. Study and analysis of conventional and unconventional developments in motion pictures. P/NP or letter grading.

120B. History of European Motion Picture. (6) Lecture/screenings, six hours; discussion, one hour. Historical and critical survey, with examples, of European motion picture both as developing art form and as medium of mass communication. Letter grading.


120D. Film Editing: Overview of History, Technique, and Practice. (4) Lecture, three hours. Exploration of film editing techniques, how they have evolved, and continue to evolve. Examination of history of editing, as well as current editing trends, terminology, and workflow. P/NP or letter grading.

122A. Intermediate Cinematography. (4) Lecture, two hours; laboratory, four hours. Enforced prerequisite: completion of intermediate course in principles of cinematography, with emphasis on electronic exposure control, lighting, and selection of film, camera, and lenses. Concurrently scheduled with course C416. Letter grading.

122B. Digital Cinematography. (4) Lecture, three hours. Exploration of film editing techniques, how they have evolved, and continue to evolve. Examination of history of editing, as well as current editing trends, terminology, and workflow. P/NP or letter grading.

122C. Digital Cinematography. (4) Lecture, three hours. Exploration of film editing techniques, how they have evolved, and continue to evolve. Examination of history of editing, as well as current editing trends, terminology, and workflow. P/NP or letter grading.

122D. Film and Television Directing. (4) Lecture, three hours. Exploration of film editing techniques, how they have evolved, and continue to evolve. Examination of history of editing, as well as current editing trends, terminology, and workflow. P/NP or letter grading.

122E. Film Editing: Overview of History, Technique, and Practice. (4) Lecture, three hours. Exploration of film editing techniques, how they have evolved, and continue to evolve. Examination of history of editing, as well as current editing trends, terminology, and workflow. P/NP or letter grading.


132. Intermediate Animation Production. (5) Lecture, three hours. Exploration of film editing techniques, how they have evolved, and continue to evolve. Examination of history of editing, as well as current editing trends, terminology, and workflow. P/NP or letter grading.

133. Intermediate Animation Production. (5) Lecture, three hours. Exploration of film editing techniques, how they have evolved, and continue to evolve. Examination of history of editing, as well as current editing trends, terminology, and workflow. P/NP or letter grading.

135. History of Animation. (5) Lecture, three hours. Exploration of film editing techniques, how they have evolved, and continue to evolve. Examination of history of editing, as well as current editing trends, terminology, and workflow. P/NP or letter grading.

138. History of Animation. (5) Lecture, three hours. Exploration of film editing techniques, how they have evolved, and continue to evolve. Examination of history of editing, as well as current editing trends, terminology, and workflow. P/NP or letter grading.
M124. Sex, Race, and Difference in Transnational Film. (6) (Same as Gender Studies M124.) Lecture, three hours; discussion, one hour. Drawing on feminist media studies, training of students in a literacy so they acquire necessary skills to critically interrogate film as medium of communication and to appreciate how film provides lens to examine some of most critical issues of our time. Development of understanding of transnationality to examine how circulations of capital, labor, and commodities transcend, render problematic, and sometimes reinforce national borders. Examination of role of film in both exemplifying and representing these conditions of transnationality. How films enable understanding of historical and contemporary relationships between mobility, coercion, and migration; colonialism; Orientalism; gender politics, and sexuality; cultural identity and diaspora; transnational conceptions of sexual desire and embodiment; immigration and religious difference; and criminalization of racial difference. P/NP or letter grading.

126. Acting for Film and Television. (4) Studio, six hours. Projects in acting for television, video, and film. May be repeated twice for credit. P/NP or letter grading.

128. Media and Ethnicity. (4) Lecture, three hours. Utilizing an interdisciplinary approach, exploration of impact and uses of media on contemporary American ethnic communities. Role and techniques of media influence besides community utilization and production. P/NP or letter grading.

CM129. Contemporary Topics in Theater, Film, and Television. (2) (Same as Theater CM129.) Lecture, two hours; screenings, two hours. Limited to junior/senior and graduate theater/film and television students. Examination of creative process in theater, film, and television, with consideration of writing, direction, production, and performance. Overview of individual contributions to the field; role of effort; examination of distinctiveness and interrelations among these arts. Individual units participate of leading members of theater, film, and television professions. May be repeated twice for credit. Concurrently scheduled with course CM229. P/NP or letter grading.

131. Introduction to Television Writing. (6 or 8) Lecture, three hours. Introduction to television pilot format, covering style and content, as well as principles behind network needs and how pilots are chosen across broadcast, cable, and digital platforms. Students write series outline and first act of original pilot. Offered in summer only. Letter grading.

132. Television Writing Workshop. (6) Laboratory, three hours. Students write first 10 pages of pilot for original one-hour drama or dramedy, or half-hour comedy series. Examination of topics such as pitching; television writing format and structure; current trends in writing; how to develop characters and stories; and how to take idea from concept through logline, beat sheet, and outline to final professional first draft. Letter grading.


133B. Intermediate Television Writing One-Hour Drama/Half-Hour Dramedy Series. (6 or 8) Lecture, three hours. Recommended requisite: course 131. Examination of one-hour drama and dramedy formats, covering style, content, and structural analysis. Review of principles behind network needs and how pilots are chosen across broadcast, cable and digital platforms. Students write series outline and first draft of original pilot series. Open to works in progress and rewriters. Offered summer only. Letter grading.


135A-135B-135C. Advanced Screenwriting Workshops. (6–6–8) Laboratory, three hours. Requisite: course 134. Course 135A is requisite to 135B, which is requisite to 135C. Course 135A limited to Film and Television majors and designed for seniors. Courses in film and television writing. First act of original screenplay to be developed in course 135A, followed by second act in course 135B, and third act in course 135C. May be repeated twice for credit. Concurrently scheduled with course 135A. P/NP or letter grading.

140. Interactive Expression. (4) Lecture, six hours. Introduction to history and practice of interactive media, with emphasis on uniqueness of computer-mediated expression. Letter grading.

141. Digital Imagery and Visualization. (4) Lecture, three hours; laboratory, three hours. Introductory hands-on investigation of techniques of digital still imaging and aesthetics of digital image, in context of exam- ination of creative process. Orientation to digital tools and visualization of role of film in both exemplifying and representing national borders. Examination of creative expression in theater, film, and television, with consideration of writing, direction, production, and performance. Overview of individual contributions to the field; role of effort; examination of distinctiveness and interrelations among these arts. Individual units participate of leading members of theater, film, and television professions. May be repeated twice for credit. Concurrently scheduled with course C242. Letter grading.


144. Interactive Multimedia Authoring. (4) Lecture, three hours; laboratory, three hours. Introduction to expressive and aesthetic potential of interactive digital media and its theoretical issues. Exploration of method- ologies and tools for media integration, interface design, and interactive audiovisual construction. Students conceive, produce, and master individual interactive multimedia projects. May be repeated once for credit. Concurrently scheduled with course C244. Letter grading.


146. Art and Practice of Motion Picture Producing. (4) Lecture, three hours. Exploration of role of producer as both artist and business person. Compari- tive analysis of screenplays and business plans. Em- phasis on assembly of creative team and analysis of industrial context, both independent and studio. Screenings viewed outside of class and on reserve at Powell Library. Letter grading.

147. Production Management: Physical Production for Creatives. (4) Lecture, three hours; laboratory, one hour. Analysis of procedure, problems, and budget- ing in planning feature-length script for film and tele- vision production, with emphasis on role of producer and creative organizational techniques of producing. Concurrently scheduled with course C247. Letter grading.

148. Advanced Digital Media Workgroup. (4) Laboratory, two hours; discussion, four hours. Designed for students with previous laboratory course experience to provide opportunity to create larger-scale digital media works with advanced software tools and tech- niques in small process-oriented, creative workshop environment. May be repeated twice for credit. Con-currently scheduled with course C248. Letter grading.

150. Cinematography. (4) Lecture, three hours; laboratory, three hours. Requisite: course 101A. Corequire- site: course 154. Limited to Film and Television ma- jors. Introduction to motion imaging photography for thorough understanding of fundamental tools and principles of cinematography to create images that support and enhance story of film, achieve compre- hension of principles of motion imaging photography through lectures, discussions, and screenings, de- velop skills of cinematographer by shooting exercises during laboratory period, and acquire appreciation of art of cinematography. Language and skills of image construction provided, as well as image analysis and deconstruction. Letter grading.

151. Introduction to Experimental Filmmaking. (4) Lecture, three hours; laboratory, to be arranged. Limited to Film and Television majors. Introduction to princi- ples and practices of film and television sound re- cording, including supervised exercises. P/NP or letter grading.

152. Film and Television Sound Recording. (4) Lecture, three hours; laboratory, to be arranged. Limited to Film and Television majors. Introduction to princi- ples and practices of film and television sound re- cording, including supervised exercises. P/NP or letter grading.

152C. Digital Audio Postproduction. (4) Lecture, three hours; laboratory, three hours. Enforced requi- sites: courses 101A, 185. Limited to Film and Televi- sion majors. Through discussion, demonstrations, and laboratory assignments, exploration of digital audio tools and procedures available to today’s filmmakers. Coverage of many technical, equipment, and software step-by-step, with emphasis on creative process. Concurrently scheduled with course C452C. Letter grading.

153. Motion Picture Lighting. (4) Lecture, three hours; laboratory, three hours. Enforced requi- sites: courses 101A, 185, 52, 101A, 185. Limited to Film and Television majors. Introduction to principles and tools of lighting used in visual storytelling through lectures, discussions, and screenings. Creative lighting techniques covering topics such as people, environment, spatial relation- ships, movement, color, special effects, and conti- nity. Letter grading.

154. Film Editing. (4) Lecture, three hours; laboratory, two hours. Requisite: course 101A. Concurrently scheduled with course 150. Limited to Film and Television majors. Introduction to artistic and technical problems of film editing, with practical experience in editing of image and synchronous sound. Letter grading.

154B. Advanced Film Editing. (4) Lecture, three hours; laboratory, one hour. Preparation: submission of rough cut of existing project or proposal to edit work of an- other director. Enforced requisites: courses 154, 185. Limited to Film and Television majors in postprodu- ction phase with advanced knowledge of organization and operation of postproduction process. Students may also propose to edit significant scene given to them by instructor. Concurrently scheduled with course C454B. Letter grading.

155. Introduction to Digital Media and Tools. (4) Lecture, six hours; laboratory, one hour. Enforced requi- site: course 101A. Introduction to digital tools and major applications. Instruction and exercises in basic concepts and software of virtual production environments and digital postproduction tools. Letter grading.

157. Lighting for Film and Television. (4) Lecture, two hours; laboratory, six hours. Requisite: course 52. Limited to Film and Television majors. Lectures, supervised exercises on stage or in exterior, screenings of scenes, and discussions aimed at learning to master lighting to create appropriate mood or atmosphere of premeditated scene recorded on film or through elec- tronic system. May be repeated twice for credit. Con-currently scheduled with course C417. Letter grading.

158B. Digital Workflow. (2 to 4) Lecture, three hours; laboratory, two hours. Requisites: course 52, 185. Limited to departmental majors. Through discussions, demonstrations, outside speakers, and laboratory as- signments, demystification of ever-changing world of digital workflow. Students plan, schedule, and budget their overall workflow in preproduction. May be re- peated once for credit. Concurrently scheduled with course C454C. Letter grading.

158C. Digital Workflow. (2 to 4) Lecture, three hours; laboratory, three hours. Enforced requisite: course 101A. Limited to Film and Television majors. Investigation of expressive potential of image within and beyond narrative from directorial perspective. Experimental techniques and concepts that stimulate visual creativity and positioning image as fundamental element of cinematic expression. Letter grading.
164. Directing Actors. (4) Laboratory, four hours. Experiences in analysis of script and character for purpose of directing actors. Emphasis on eliciting best possible performance from actors. May be repeated twice for credit. P/NP or letter grading.

C168. Creative Location Film Production. (8) Lecture, four hours; discussion, four hours; laboratory, to be arranged. Limited to directing or producer's program students. Problems of location, production, direction, and lighting in various media. Prerequisite: concurrent study with course C468. Letter grading.

175A-175B. Undergraduate Film Production. (12-4 to 8) Limited to Film and Television majors. 175A. Lecture, four hours; laboratory, eight hours. Prerequisite: course C175A. Completion of postproduction (editing, creation of sound tracks) for short film begun in course C175A. P/NP or letter grading.

M177. Film and Television Acting Workshop. (2) (Same as Theatre M178.) Laboratory, four hours. Workshop in providing techniques to students to hear, perform, and evaluate scenes. Limited to juniors and seniors. Prerequisite: concurrent study with course C467. P/NP or letter grading.

178. Film and Television Production Laboratory. (2 to 8) Laboratory, to be arranged. Supervised laboratory experience in various aspects of film and television production. May be repeated for credit. P/NP or letter grading.

179. Digital Film and Television Production. (2-8) Laboratory, six hours. Supervised laboratory experiences in the various aspects of film and television production. Offered in summer only. Letter grading.

180. Animation Fundamentals. (5) Lecture, six hours; laboratory, six hours. Fundamentals of animation through exercises and preparation of short animated film. Students create 10-second film in one of traditional techniques (non-computer), with music and/or sound effects. Offered in summer only. Letter grading.

180B. Writing for Animation. (4) Lecture, two hours; laboratory, six hours. Analysis and practice of effective visual storytelling through creation of three production storyboards. Offered only by arrangement. Letter grading.

180C. Stop Motion Fundamentals Workshop. (2 to 4) Lecture, six hours; laboratory, six hours. Exercises designed to teach technical skills, processes, and principles of motion and timing. Use of range of materials, building animation performance in split-second increments arranged to give illusion of movement. Exploration of early history of stop motion. Collaborative creation of stop-motion film with each student directing and animating portion of film. Offered in summer only. Letter grading.


C181B. Writing for Animation. (4 or 8) Lecture, six hours; studio, to be arranged. Prerequisite: concurrent study with course C481A. Research and practice in creative writing and planning for animated film. May be repeated for maximum of 16 units. Concurrently scheduled with course C481B. P/NP or letter grading.

C181C. Animation Workshop. (4 or 8) Studio, six hours. Preparation for first class meetings. Required for course C481A. Organization and integration of various creative arts used in animation to form complete study of selected topic. May be repeated for maximum of 16 units. Concurrently scheduled with course C481C. P/NP or letter grading.

182. Power, Identity, and Justice. (4) Lecture, three hours. Examination of how politics, economics, labor, and identity intersect and affect representation, employment, and industry cultures, especially of groups long underserved in mainstream film, television, and media industry. Offered in summer only. P/NP or letter grading.

C184A. Producing I: Film and Television Development. (4) Lecture, three hours. Open to nonmajors. Critical analysis of contemporary entertainment industries and practical approach to understanding and implementing development of feature film and television scripts. Through scholarly and trade journal readings, in-class discussions, script analysis, and select guest speakers, exposure to various entities that comprise the production development process. Basic introduction to story and exploration of proper technique for evaluating screenplays and teleplays through writing of coverage. May be repeated independently for credit. P/NP grading.

185B. Producing II: Entertainment Economics. (4) Lecture, three hours. Open to nonmajors. Critical understanding of strategies and operating principles that drive flow of revenue in entertainment industry. Exploration of theoretical frameworks and development of critical perspective, while studying industrial processes through which movie and television properties are financed and exploited throughout all revenue streams. May be repeated independently for credit. Letter grading.

186B. Overview of Contemporary Television Industries. (4) Lecture, three hours; laboratory, three hours; fieldwork, to four hours. Examination of evocative economic structures and business practices in contemporary Hollywood television industry, with emphasis on operations of networks and cable companies, series development, and network branding from 1947 to present. Letter grading.

187B. Domestic and Global Entertainment Industry Careers and Strategies. (4) Lecture, three hours. Exploration of select film and television career paths and strategies in U.S. and major international markets. Informatory approach to typical paths and strategies of producers, screenwriters, directors, and creative executives in U.S. and abroad. Students take part in moderated discussions with domestic and international industry professionals and read both academic literature and trade publications addressing current state of domestic and global media industries. Through readings and discussions, students gain understanding of rapidly changing global entertainment landscape, and current and future employment trends and project development strategies. P/NP or letter grading.

187C. Scripted and Unscripted Series Development for Domestic and Global Streaming Services. (4) Lecture, three hours. Designed to enhance students' understanding of processes involved in domestic and international fiction and nonfiction development of programming for streaming services. Students are acquainted with common business and creative practices, while expanding their critical and practical understanding of quickly evolving and transforming global streaming landscape. Examination of creative development processes and strategies for scripted and unscripted series for streaming services in U.S., and similarities and differences in business as well as creative approaches in major international territories. Examination of latest trends in fiction and nonfiction development, including strategies to work with international coproduction partners and developing projects using pre-viz and virtual production techniques. Covers streaming markets in North America, Europe, Asia, and Central and South America. P/NP or letter grading.

188A. Special Courses in Film, Television, and Digital Media. (4) Lecture, three hours; discussion, one hour. Special topics in film, television, and digital media for undergraduate students taught on experimental or temporary basis. May be repeated for credit. P/NP or letter grading.

188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. May not be repeated. Letter grading.

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200. Seminar: Research, Methods, and Readings. (6) Seminar, three hours; laboratories, four to six hours (additional screenings and/or video laboratory work as required). Designed for graduate students. Examination and study of research methods, techniques, and resources in film and television research, including development of computer skills for preparation of bibliographies, online database searching and retrieval and, when appropriate, use of computer/ videodisc technology. Letter grading.

201A. Seminar: Media Industries and Cultures of Production—Foundations. (6) Seminar, three hours; film screenings, three hours. Critical survey of various scholarly traditions and methods (ethnographic, sociological, cultural, etc.) that have been used to study film and television production practices as cultural, social, and industrial phenomena, as basis for individual student research projects. Letter grading.

201B. Seminar: Media Industries and Cultures of Production—Transmedia. (6) Seminar, three hours; film screenings, three hours. Examination of contemporary production studies research and transmedia practices, including innovations in marketing, licensing, distribution, industrial organization, creative new work, technologies, and evolving relations between fans and producers in digital economy. Letter grading.


203. Seminar: Film and Other Arts. (6) Seminar, three hours; film screenings, four to six hours. Designed for graduate students. Studies in interrelationships between film and other performing arts, or literature, with emphasis on ways these other arts have influenced film. May be repeated twice for credit. S/U or letter grading.

204. Seminar: Visual Analysis. (6) Seminar, three hours; film screenings, two to four hours. Study of visual analysis (or textual analysis), using DVD access, or other electronic media, to learn what makes a film great and distinct art form. Exploration of role of visual style in narrative fiction filmmaking to attempt to understand some ways it can operate. Letter grading.

205. Seminar: Videographic Scholarship. (6) Seminar, three hours; film screenings, four to six hours. Designed for graduate students. Examination of function and methods of videographic scholarship/history as branch of field of media studies by examining variety of methodologies, debates, and historical moments. Consideration of different forms of theoretical and applied video (e.g., provocative, contradictory, and contested ways that history and practice has been imagined and applied to field of media studies. S/U or letter grading.

210B. Seminar: Media Industries and Cultures of scholarship traditions and methods (ethnographic, so

210. Seminar: Television and Society. (6) Seminar, three hours; film screenings, three hours. Exploration of role of television in supervised setting in business related to television, and digital media industries. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for credit. Individual supervision, faculty member required. P/NP or letter grading.

195. Corporate Internships in Film, Television, and Digital Media. (2 or 4) Tutorial, one hour; fieldwork, eight to 10 hours. Limited to juniors/seniors. Corporate internship in supervised setting in business related to film, television, and digital media industries. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for credit. Individual supervision, faculty member required. P/NP or letter grading.

199. Directed Research or Senior Project in Film, Television, and Digital Media. (2 to 8) Tutorial, three hours. Limited to senior Film and Television majors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be taken for maximum of 8 units. Individual contract required. P/NP or letter grading.

211A. Seminar: Television and Society. (6) Seminar, three hours; film screenings, two to four hours. Discussion of silent film from its beginning in 1895 to transition to sound cinema in 1927 to 1930. Film screenings viewed in terms of genre, national cinema, formal developments, and directors. Readings on film historical and theoretical issues. Letter grading.

211B. Seminar: Critical Film Theory. (6) Seminar, three hours; film screenings, four to six hours. Designed for graduate students. Study of critical film theory and media. Broad historical overview of intellectual history of field, combining foundational works with more recent publications that address similar theoretical questions. Includes foundational writings in cultural and critical theory with key works in cinema and media studies that deploy these theories to analyze screen texts, cultures, institutions, and industries. S/U or letter grading.

216. Film, Costume, and Character. (6) Seminar, three hours; film screenings, three hours. Exploration of integration of costume design into filmmaking process. Examination of work of costume designers and character experts from written page to life. Discussion of practice of costume design. Analysis of films from various genres. Letter grading.

217A. Seminar: American Television History. (6) Seminar, three hours; film screenings, four hours. Critical survey of U.S. television industry from its inception to present. Examination of programming and changes within industry by considering range of technological, economic, aesthetic, social, and cultural dimensions. Letter grading.

217B. Seminar: Selected Topics in Television History. (6) Seminar, three hours; screenings, three hours. Examination of key issues in television history of topic or area (historical period, industry, programming, genre, or social formation) in domestic or international television. Letter grading.

218A. Seminar: Film and Other Arts. (6) Seminar, three hours; film screenings, four to six hours. Analysis of interaction of and influence of film by various disciplines. Example of influential film. May be repeated twice for credit. S/U or letter grading.

219. Seminar: Film and Society. (6) Seminar, three hours; film screenings, four to six hours. Designed for graduate students. Study of ways film affects and is affected by social behavior, belief, and value systems; considered in relation to role of media in society. May be repeated once for credit. S/U or letter grading.

220. Seminar: Television and Society. (6) Seminar, four hours; screenings/discussion, three hours. Designed for graduate students. Study of ways television forms affect and are affected by social behavior, belief,
and value systems; study of technological and economic aspects of medium. May be repeated once for credit. S/U or letter grading.

221. Seminar: Film Authors. (6) Seminar, three hours; film screenings, four to six hours. Designed for graduate students. Intensive examination of works of outstanding creators of films. May be repeated twice for credit. S/U or letter grading.

222. Seminar: Film Genres. (6) Seminar, three hours; film screenings, four to six hours. Designed for graduate students. Studies of patterns, styles, and themes of such genres as Western, gangster, war, science fiction, comedy, etc. May be repeated twice for credit. S/U or letter grading.

223. Seminar: Visual Perception. (6) Seminar, three hours; film screenings, three hours. Aesthetic, psychological, physiological, and phenomenological approaches to vision as they relate to ways in which viewers experience and see film, television, and digital media. Letter grading.

224. Computer Applications for Film Study. (6) Lecture, three hours; film screenings, three hours. Survey of computer applications relevant to film study, principally computer-videodisc systems and image capture technology. S/U or letter grading.

225. Seminar: Videogame Theory. (6) Seminar, three hours; laboratory, three hours. Videogame theory, with exploration of design of games, rather than looking at history, industrial practice, social effects, or any other of many interesting questions that games also raise. Acknowledgment of roots in film, television, and media studies and investigation of emerging videogame field. S/U or letter grading.

CM229. Contemporary Topics in Theater, Film, and Television. (2) (Same as Theater CM229.) Lecture, two hours; screenings, two hours. Limited to junior/senior and graduate students. Enforced requisite: course CM229. Lecture. Writing assignment focusing on the development of contemporary performance art. May be repeated twice for credit. S/U or letter grading.

C242. Digital Imagery and Visualization. (4) Lecture, three hours; laboratory, three hours; introductory hands-on experience with techniques of digital still imagery and aesthetic of digital image, in context of examining dynamics of cultural constructions and visual codes. Students conceive and produce several digital images through manipulation of artist key, and be repeated once for credit. Concurrently scheduled with course C142. Letter grading.

C243. Moving Digital Image. (4) Lecture, three hours; laboratory, three hours. Investigation of different ways of creating and manipulating linear moving images (digital video) on desktop computers, exploring both creative and theoretical aspects of this production environment. Students conceive and produce number of short projects. Concurrently scheduled with course C143. Letter grading.

C244. Interactive Multimedia Authoring. (4) Lecture, three hours; laboratory, three hours. Introduction to expressive and aesthetic potential of interactive digital media and its theoretical issues. Exploration of methodologies and tools for media integration, interface design, and interactive audiovisual construction. Students conceive, produce, and master individual interactive multimedia projects. May be repeated once for credit. Concurrently scheduled with course C144. Letter grading.


246. Seminar: Issues in Electronic Culture. (6) Seminar, three hours; laboratory, three hours. Critical studies seminar with major hands-on laboratory component that explores technological implications and sociopolitical consequences of emerging digital technologies. Studying digital culture and aesthetics, students do laboratory projects using visualization, image manipulation tools, and Internet authoring tools. Letter grading.


C248. Advanced Digital Media Workgroup. (4) Laboratory, three hours; screenings, discussion, three hours. Designed for students with previous laboratory course experience to provide opportunity to create larger-scale digital media work with advanced software tools and techniques in small process-oriented, creative workshop environment. May be repeated twice for credit. Concurrently scheduled with course C148. Letter grading.

270. Seminar: Film Criticism. (6) Seminar, three hours; film screenings, four to six hours. Designed for graduate students. Film and television productions, critical and aesthetic impacts, and analysis and evaluation in relation to central works of motion picture criticism. May be repeated once for credit. S/U or letter grading.

271. Seminar: Television Criticism. (6) Seminar, four hours; screenings/discussion, three hours. Designed for graduate students. Analysis of major forms of television production and criticism it has elicited. May be repeated once for credit. S/U or letter grading.

272. Seminar: Contemporary Film and Television Criticism. (6) Seminar, three hours; film and television screenings, four to six hours. Limited to Film and Television PhD candidates. Study and practice of analytic and critical response, with emphasis on contemporary film and television. S/U or letter grading.

274. Seminar: Research Design. (6) Seminar, three hours. Designed for second-year Film and Television PhD students. Examination of general principles that govern formulation of major research projects and preparation of prospectus for PhD dissertation. S/U or letter grading.

274A. Research Design 1: Initial Research Design. (6) Seminar, three hours. Introduction to contemporary film and television research, and of dissertation prospectus including development of fields of study, situating one’s work in relation to fields of audio/visual material. Students help prepare students for course and key assignment at end of term. Students must complete the written research prospectus in a single course. Letter grading.

274B. Research Design 2: Bibliography. (6) Seminar, three hours. Development of research questions and bibliography, development of writing prospectus, and research topics in primary and secondary areas. Letter grading.


282A. TV Development 1. (4) Seminar, three hours. Basic tactics and application to scriptwriting, and contemporary industry production and business practices. Development of original show concepts and pitch for review and feedback by class, instructor, and guest. Letter grading.

282B. TV Development 2. (4) Seminar, three hours. Approaches to analysis of television pilot and contemporary industry production and business practices. Continued development of original show concepts and series proposals for review and feedback by class, instructor, and guest. Letter grading.

283A. Fundamentals of Writing for Television. (4) Lecture, three hours. Comprehensive overview of today’s television landscape for writers, with emphasis on new structures and formats ushered in by on-demand, digital television. Letter grading.

283B. Writing Half-Hour Comedy Pilot and Series Bible. (6) Seminar, three hours. Enforced requisite: course 430. Examination of basics of half-hour pilot format, style, and content, and learning of principles behind network needs and choices in choosing pilots. Workshop in which to discuss ideas and issues with class and instructor. Weekly progress on original half-hour pilot and series bible required. Letter grading.

284. Running Television Comedy Room. (4) Seminar, three hours. Enforced requisite: course 283B. Practical knowledge about skills necessary to be writer/executive producer of half-hour comedy show. Focus on community building, collaboration, and leadership skills needed to successfully function in writers’ room, as well as breaking stories, writing, and rewriting television scripts. Letter grading.

284A. Writing One-Hour Drama Speculative Episode. (4) Seminar, two hours; discussion, three hours. Writing and analysis of television drama shows and contemporary industry production and business practices. Students write speculative (spec) episode for existing one-hour drama series. Letter grading.

284B. Writing One-Hour Drama Pilot and Series Bible. (6) Seminar, three hours. Enforced requisite: course 430. Examination of basics of drama pilot format, style, and content, and learning of principles behind network needs and choosing pilots. Workshop in which to discuss ideas and issues with class and instructor. Weekly progress on original drama pilot and series bible required. Letter grading.

284C. Watching Television Drama Production III. (4) Seminars, three hours. Enforced requisite: course 284B. Practical knowledge about skills necessary to be writer/executive producer of one-hour drama show. Focus on community building, collaboration, and leadership skills needed to successfully function in writers’ room, as well as breaking stories, writing, and rewriting television scripts. Letter grading.

287A. Introduction to Art and Business of Producing I. (4) Seminar, three hours. Testing of first-year producers programs students to producer’s role in navigating unique dynamic between art and commerce in entertainment industry. Overview of development, production, and distribution of feature films for worldwide theatrical market, including identifying material, attracting elements, and understanding basics of studio and independent financing and distribution. S/U or letter grading.

287B. Introduction to Art and Business of Producing II. (4) Seminar, three hours. Enforced requisite: course 287A. Builds on principles taught in course 287A and presents continuation of study of development, production, and distribution of feature films for worldwide theatrical market, including identifying material, attracting talent elements, and understanding basics of studio and independent financing and distribution. Minimum of two unproduced screenplays to be presented for review by class and instructor to begin identifying potential thesis projects. S/U or letter grading.

287C. Writing Intensive. (6) Seminar, three hours. Enforced requisite: course 287A. Further development of writing and directing skills. Students will develop a feature film proposal and an original script and apply for fundings. Letter grading.

287D. Introduction to Art and Business of Producing III. (4) Seminar, three hours. Enforced requisite: courses 287A, 287B. Builds on principles taught in courses 287A and 287B. Seminar and production workshops created by students and instructor with goal of isolating and identifying primary and secondary thesis projects. Discussions of script analysis and creating set of viable development notes for primary projects.
Completion of written outline for original projects and pitching of primary projects to panel of industry executives for further feedback. S/U or letter grading.

282A-288B. Feature Film Development I, II, III, (4-4-4) Lecture, three hours. Course 282A is not requisite to 288B. Practical hands-on approach to understanding and implementing producer’s role in development of feature film screenplay and negotiating particulars of production process. Through in-class discussions, script analysis, story notes, and select guest speakers, exposure to various entities that comprise feature film development process. S/U or letter grading. With introduction to story and exploration of proper technique for evaluating screenplays through writing of coverage. 288B. Deeper evaluation of screenplay through writing of story notes.


289B. Strategy. (4) Lecture, three hours. Course 289A is not requisite to 289B. Examination of business realities of industry, with focus on techniques for analyzing behavior, predicting future, overcoming obstacles to achieve results as producer, writer, or director. Assignments designed to assist students in articulating their goals and help them effectively transition from classroom to their careers in entertainment industry. S/U or letter grading.

289C. Independent Spirit: Creative Strategies for Financing and Distributing Independent Features. (4) Lecture, three hours. Course 289B is not requisite to 289C. Key insights into financing and distribution of independent or specialty films. Topics include film finance, production, marketing, distribution, agents, and new technology, with emphasis on applying this knowledge to individual student projects. S/U or letter grading.

290A. Thesis Workshop 1. (4) Seminar, three hours. Forum for roundtable strategy sessions and mock story meetings with instructor, students, and various industry guests. Development of one story idea for thesis project. S/U or letter grading.

290B. Thesis Workshop 2. (4) Seminar, three hours. Forum for roundtable strategy sessions and mock story meetings. Students must make concrete weekly progress on thesis project and adapt strategy based on feedback received. Development of marketing and business strategy of the story idea set up in course 290A. S/U or letter grading.

290C. It’s a Wrap: Preparation for Your Entertainment Career. (4) Seminar, three hours. Final stages of thesis preparation for evaluation. Guidance provided by instructors on how to effectively present selected project. Requirements include industry-related book reports, script analysis, pitching selected concept, weekly research to understand marketplace, accumulation and updating of data, and justification for potential buyers comprised of industry professionals. S/U or letter grading.

291A. Studios versus Independents: Navigation Process. (4) Lecture, three hours. Tools necessary for producer to navigate entertainment industry. Topics discussed through lectures and guest speakers include impact of difficulty to navigate relationship between art and commerce in craft of filmmaking, rapid advance of new media, agreements of building financial capital for emerging producing entities, and what future may hold for truly independent filmmaker. S/U or letter grading.

291B. Feature Film Marketing. (4) Lecture, three hours. Course 291A is not requisite to 291B. Examination of numerous groups that are responsible for specific marketing components and make up marketingdepartment, in-theater marketing, publicity, promotions, research, and media. Mechanics and levels of intuition required to make sure movies are seen by public. S/U or letter grading.

291C. Feature Film Distribution and Exhibition. (4) Lecture, three hours. Course 291B is not requisite to 291C. Investigation of philosophy, structure, and major players that comprise entertainment industry, with emphasis on film distribution and exhibition. Through lectures, readings, and guest speakers, exploration of interrelated arenas of production, marketing, business affairs, media, and impact of international on distribution and exhibition of studio releases. S/U or letter grading.

292A. Overview of Network Television Management. (4) Lecture, three hours. Designed to expand basic understanding of network and cable television business. Exploration of role of showrunner, executives from networks and production companies, packaging agents, and studios responsible for developing and creating programming. S/U or letter grading.


292C. Running Shows: Producing for Broadcast and Cable. (4) Lecture, three hours. Course 292B is not requisite to 292C. Exploration of role of writers-producers and other key roles in developing and producing shows. Designed to train writers who typically enter field as staff writers and to develop concrete tools of producers. Training of next generation of nonwriting network and studio executives whose job it is to assist writers-producers in highly collaborative process of creating, developing, producing, and scheduling television programming. S/U or letter grading.

294A. Contracts and Negotiation. (4) Lecture, three hours. Survey of range of contracts involved in studio productions, including literary submission and option agreements, writer agreements, employment agreements, writer collaboration agreements, coproduction agreements, music rights license, etc. Actual studio agreements referenced to illuminate potent consequences of each transaction. Negotiation strategy exercises. S/U or letter grading.

294B. Entertainment Law, Business Practices, and Negotiation Strategies. (4) Lecture, three hours. Course 294A is not requisite to 294B. Introduction to feature-length motion picture business and law from perspective of independent and studio producer. Students establish working knowledge of entertainment law and business practices through basic understanding of intellectual property and business considerations in connection with development, production and distribution, material terms of fundamental rights and talent agreements, and negotiation strategy. S/U or letter grading.

294C. International Financing and Distribution. (4) Lecture, three hours. Course 294B is not requisite to 294C. Legal-based course dealing with international tourism and cable television projects to marketplace. Case-study analysis and updating of data, and justification for potential buyers comprised of industry professionals. S/U or letter grading.

295A. Art of Pitching. (4) Lecture, three hours. Cultivation of skills needed for students to present themselves and their project goals with clarity and precision to industry professionals. Oral presentations designed to enhance student ability to deliver convincing arguments on range of topics. S/U or letter grading.

295B. Advanced Film and Television Producing Workshop for Producers, Writers, and Directors. (4) Lecture, three hours. Course 295A is not requisite to 295B. Designed to help producers, as well as screenwriters and directors, focus on networking opportunities and to develop strategies to bring their feature and television projects to marketplace. Case-study documents (drafts of screenplays, daily, etc.) from current or recently produced projects provided. S/U or letter grading.

295C. Advanced Producing: Role of Successful Producer. (4) Lecture, three hours. Designed to provide producers with comprehensive understanding of business acumen involved in purchasing scripts for studio and independent production companies. Through script analysis and in-class discussions, students encouraged to examine not just story elements, but marketing assets inherent in pieces of material. S/U or letter grading.

296A. Role of Talent Agencies. (4) Lecture, three hours. Introductory overview of various departments at agencies, including motion picture literary, talent, story, music, and television, and examination of various interactions among each. Exercises encourage producers, writers, and directors to learn how to work effectively with individuals at talent agencies. S/U or letter grading.

296B. Who Represents Me? (4) Lecture, three hours. Course 296A is not requisite to 296B. In-depth analysis of different forms of representation offered by agents, managers, business managers, and lawyers and detail of legal rights and responsibilities of each. Exercises require students to represent rights holders in series of potential projects. S/U or letter grading.

297A. Digital Media Producing 1. (4) Seminar, three hours. Overview of changing world of storytelling through development of new digital and new media. Conceptualization and pitch of innovative, original digital media concepts with interactive or participatory story elements and feedback by instructor. S/U or letter grading.


297C. Digital Media Producing 3. (4) Seminar, three hours. Overview of changing world of storytelling through development of new digital and new media. Development of short teaser trailer or website using digital and web-based resources to promote student original digital media project proposal. S/U or letter grading.

298A. Special Studies in Film and Television. (2 to 6) Seminar, three hours; film screenings, three hours. Designed for graduate students. Seminar study of problems in film and television, organized on topic basis. May be repeated once for credit. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, three hours. Preparation: apprentice personnel employment as teaching assistant, associate, or teaching assistant. Guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated once for credit. S/U grading.

400. Film Image Design Laboratory. (4) Lecture, two hours; laboratory, six hours. Limited to graduate film and television students. Conception and design of nonnarrative film imagery. One-minute experiments in relation of meaning to technique, including manipulation of optics, photochemistry, elements of electronic processes, and display of time and motion. May be repeated once for credit. S/U or letter grading.

400B. Introduction to Cinematography II. (2) Lecture, three hours; laboratory, three hours. Continuation of study of cinematography with emphasis on lighting. Instructor meets individually with teams of director/cinematographer to prepare for shooting six-minute projects. Letter grading.

401. Film Analysis for Filmmakers. (4) Lecture, screenings, five hours. Limited to graduate film and television students. Drawing heavily from array of historical examples, examination of many expressive screenplay forms--from modernist film to avant-garde art forms. Unifying theory and practice, presentation of approach to viewing great films of past that empowers filmmakers to use sound and images to tell original story in present. Focus on exercises in making and considering in classes of writing, design, cinematography, editing, sound, and performance to enable filmmakers to discover their own personal style for telling stories on screen. Letter grading.

C403A-C403B-C403C. Advanced Documentary Workshops. (4 to 8 each) Lecture/discussion/laboratory, 16 hours. Letter grading. Requisites: courses 409, 410A, 410B, 410C, 433. Limited to graduate film and television students. Production of advanced individual documentary film or video projects. Students conceptualize, research, write, shoot, and edit their own projects (on location), and edit projects to completion. May be repeated once for credit. Concurrently scheduled with courses C162A-C166B-C186C. S/U or letter grading.

404. Emerging Techniques and Technologies in Cinematography. 16 hours. Preparation: course 410B. Required of all production majors shooting fiction. Letter grading. Emphasis on emerging technologies and tools. Requisites: course 410B. Designed to keep students abreast of ever-changing technologies and skills of cinematography. Emphasis on developing concepts and familiarization with emerging technology and equipment. Focus may change to reflect changes in current technology. May be repeated twice for credit. Letter grading.

404A-404B. Advanced Abstract/Experimental Media Workshops. (8–8) Lecture/discussion/laboratory, 12 hours; fieldwork, to be arranged. Requisites: courses 405, 409, 410A, 410B, 410C, 433. Limited to 10 students per section. Production of 20-minute abstract or experimental film, video, or multimedia project. Students plan, design, and shoot their projects in first term and work as a crew for each other in rotating assignments. Students must complete postproduction of their projects. S/U or letter grading.

404C. Advanced Abstract/Experimental Media Workshop. (8) Lecture/discussion/laboratory, 12 hours; fieldwork, to be arranged. Requisites: courses 404A, 404B. Completion of all stages of production and postproduction on projects started in courses 404A and 404B. Letter grading.

405. Digital Image and Manipulation on Set and Post. (8–8) Lecture, two hours; laboratory, two hours; fieldwork, to be arranged. Requisite: course 410B. Students achieve greater understanding and command of tools and techniques of color correction and matte photography (both on set and in post production) through lectures, discussions, workshops, and hands-on practices. Emphasis on precision and skill set in art of digital image manipulation in cinematography. May be repeated once for credit. Letter grading.

407. Video Documentary Workshop. (8) Laboratory, 12 hours. Limited to graduate film and television students. Exploration of documentary video, including screening variety of international works and produce short documentary projects. Letter grading.

408A-408B. Avid Editing. (4–4) Studio, four hours; laboratory, to be arranged. Individual instruction in Avid nonlinear editing system. S/U or letter grading.

408A. Avid Editing 1; 408B. Avid Editing 2.

409. Directing Actors for Camera Workshop. (4) Workshop, six hours; laboratory, to be arranged; laboratory preparation, two to four hours. Limited to MFA production program students. Team-taught with five weeks of instruction given by director actor/camera techniques, and six weeks to offer basic strategies to elicit good performances from actors. Emphasis on problems faced when directing actors for film. S/U or letter grading.

410A. Symposium. (2) Seminar, three hours. Limited to and required of first-year MFA production program students. Exploration of principal concepts of film and television production within the context of preproduction, production, and postproduction, providing forum for synthesis of knowledge gained in various first-year technical craft courses. Exploration of strategies for learning production within academic environment. May be repeated for credit. Letter grading.

410B. Cinematography. (2) Seminar, three hours. Limited to and required of first-year MFA production program students. Production workshop designed to give hands-on experience in all aspects of film production (tools and practicum of medium) as each student writes/directs edits six-minute film. May be repeated for credit. Letter grading.

410C. Postproduction. (2) Seminar, three hours. Limited to and required of first-year MFA production program students. Production workshop designed to give hands-on experience in all aspects of film production (tools and practicum of medium) as each student writes/directs edits six-minute film. May be repeated for credit. Letter grading.

410D. Postproduction Sound. (2) Seminar, three hours. Requisites: courses 405, 409. Limited to and required of first-year MFA production program students. Technical and aesthetic aspects of postproduction sound recording, editing, and mixing for film and television. Application of principles of sound design to student films while using UCLA’s John Candy Room and Scoring Stage for Automatic Dialogue Replacement (ADR). Use of Pro Tools LE for recording, editing, and mixing, and selection and use of microphones and mixing consoles, and incorporation of Final Cut Pro and Pro Tools to mix environments. Students record ADR and Foley, design, and mix soundtracks with use of edited dialogue/ADR, Foley, sfx, and music tracks by end of term. Letter grading.

410E. Production. (12) Lecture, three hours; fieldwork, two to four hours; laboratory, four hours; editing, four hours. Emphasis on practical skill development, skills are contextualized, and hands-on experience in all aspects of film production, and postproduction, providing forum for synthesis of knowledge gained in various first-year technical craft courses. Exploration of strategies for learning production within academic environment. May be repeated for credit. Letter grading.

411A. Modes of Making: Experimental. (4) Seminar, three hours; laboratory, one hour. Exploration of multiple and alternative modes of filmmaking and platforms for treating new media. Emphasis on expanding concepts fuel curiosity and open creative pathways, while also developing sense of community and learning to offer and accept feedback that is both supportive and challenging. Letter grading.

411B. Modes of Making: Documentary. (4) Lecture, three hours; laboratory, one hour. Exploration of craft and form of documentary filmmaking through series of synchronous and asynchronous film projects. Viewing, discussion, and reflecting on content and context of each project. Emphasis on hands-on experience with the use of Pro Tools LE for recording, mixing, editing, and mixing, and selection and use of microphones and mixing consoles, and incorporation of Final Cut Pro and Pro Tools to mix environments. Students record ADR and Foley, design, and mix soundtracks with use of edited dialogue/ADR, Foley, sfx, and music tracks by end of term. Letter grading.

411D. Production. (12) Lecture, three hours; fieldwork, four hours; laboratory, four hours; editing, four hours. Emphasis on practical skill development, skills are contextualized, and hands-on experience in all aspects of film production, and postproduction, providing forum for synthesis of knowledge gained in various first-year technical craft courses. Exploration of strategies for learning production within academic environment. May be repeated for credit. Letter grading.

412. Tools and Techniques: Narrative Fiction. (4) Laboratory, four hours. Provides hands-on support and technical knowledge for students in parallel with their crew-based productions in course 411C. Students deepen their skills in key production roles including cinematography, sound, and editing. Meetings are divided among lecture, individual presentations, and laboratory. Letter grading.

413. Themes and Issues. Foundations of Directing. (4) Three hours. Provides interpretive and creative toolkit for subsequent undertakings in filmmaking, media making, and audio-visual storytelling. These source materials are analytic with regard to certain functions of the organic image (shot, line, angle, Benton of the work, duration) and yet deeply rooted in politics and histories of representation that catalyze and inform racial, gendered, sexual, and ethnic lenses and visions. Letter grading.

414. Intermediate Cinematography. (4) Lecture, two hours; laboratory, four hours. Intermediate study of principles of cinematography, with emphasis on exposure, lighting, and selection of film, camera, and lenses. Concurrently scheduled with course C118. Letter grading.

417. Lighting for Film and Television. (4) Lecture, two hours; laboratory, six hours. Limited to graduate film and television students. Lectures, supervised exercises on stages, or in exterior locations that explore complexity of process, emphasizing balance and collaboration between director and cinematographer. Emphasis on its varied technical, production, and creative aspects. Letter grading.

419. Advanced Cinematography. (4) Lecture, two hours; discussion, one hour; laboratory, one hour. Requisites: courses 417, 418. Limited to graduate film and television students. Advanced study of principles of cinematography, with emphasis on exposure, lighting, formats, selection of film, camera, and lenses. S/U or letter grading.


423A. Direction of Actors for Film and Television. (4) Lecture, four hours; laboratory. Preparation: first film project. Limited to graduate film and television students. Lectures, supervised fiction exercises. Emphasis on how to elicit best possible performances from actors. Taught by rotating group of specialist faculty. Topics and skills vary by rotating group of specialist faculty. Letter grading.

423B. Advanced Direction of Actors for Film and Television. (4) Studio laboratory, six hours. Requisites: course 423A. Limited to graduate film and television students. Advanced study and practice of directing on practical skill development, skills are contextualized and motivated by creative and conceptual goals. Letter grading.
actors before camera. Emphasis on developing tech-
niques to immediately enhance communication be-
tween director and actor on set in order to maintain
continuity from shot to shot. S/U or letter grading.

343. Advanced Writing for Short Film and Television
Screenplays. (4) Discussion, three hours. Enforced
requisite: course 430. Advanced problems in writing of original film and television
screenplays. May be repeated for credit. Letter grading.

345. Advanced Writing for Short Film and Television
Screenplays. (4) Discussion, three hours. Requisite:
course 410C. Limited to graduate film and television
students. Conception, development, and writing of
dramatic film script to be produced as advanced or
thesis project. Letter grading.

347. Adaptation for Screen. (8) Seminar, three hours.
Enforced requisite: course 430. Students analyze
techniques of dramatic adaptation and apply them by
writing their own adaptations. Students select and
screen and view their filmed versions in order to
learn various approaches to adaptation. Students
workshop their own screenplays adapted from pre-
selected list of stories. Letter grading.

348. Advanced Screenwriting: Rewrite. (8) Seminar,
three hours. Enforced requisite: courses 430, 434.
Workshop in which students rewrite first draft of origi-
nal screenplay that was written in course 434. Dis-
cussion of problems peculiar to rewrite: how to take
notes and make them one’s own; how to do deep-
read on line-by-line basis of script; overall rewriting
strategies; what is best for situation and script. Read-
ing and at least two rewrite drafts. Particular attention directed to how people talk about scripts
that are not their own; how they avoid giving feedback
based on how they might write something and how
they move toward giving feedback that honors inten-
tion and integrity of script. May be repeated once
for credit. Letter grading.

440. Festival Strategies. (4) Seminar, three hours.
Exploration of film, television, streaming, and specialized festivals. Emphasis on strategies and practical knowl-
edge necessary to navigate local, regional, and global
festivals, whether as producer, director, animator,
screenwriter, or scholar/programmer. Dialog and ex-
change of diverse ideas, perspectives and real-world
experiences among students, faculty, and special indus-
try guests. S/U or letter grading.

451. Advanced Design for Film and Television. (4)
Laboratory, to be arranged. Limited to graduate film
and television students. Advanced study and practice
of techniques and methods of design for motion pic-
tures. Art direction for advanced workshop produc-
tions. May be repeated for maximum of 12 units. S/U
or letter grading.

452B. Postproduction Sound. (2) Laboratory, three
hours. Limited to Production MFA students. Technical
and aesthetic aspects of postproduction sound re-
cording, editing, and postproduction for film and televi-
sion. Letter grading.

C452C. Digital Audio Postproduction. (4) Lecture,
three hours; laboratory, three hours. Limited to Film
and Television majors. Through discussion, demon-
strations, and laboratory assignments, exploration of
digital audio tools and procedures available to today’s
filmmakers. Coverage of many technical, equipment,
and software step-by-steps, with emphasis on cre-
vative process. Concurrently scheduled, with course
C152C. Letter grading.

453. Postproduction Sound Design. (2 to 4) Lecture,
three hours. Designed to give film students insight into
world of postproduction sound recording and to provide knowl-
edge and tools necessary to complete postwork on
their projects. Exploration of all areas of postproduc-
tion sound design from editing to final mixing. How to
effectively use sound design to enhance storytelling
capability of films, evaluate music choices, pick com-
poser, music edit, create sound design to enhance story-
points, discover design opportunities, and select right
mixer to record sound. Concurrency sound design for
automatic Dialogue Replacement and Foley sessions,
and supervise final sound mix. Screening of numerous film
clips to provide examples of postsound choices that
demonstrate effective use of sound design. S/U or
letter grading.

C454B. Advanced Film Editing. (4) Lecture, three hours,
laboratory, one hour. Preparation: submission of rough
cut of existing project or proposal to edit work of an-
other director. Limitations and problems in postproduction
phase with advanced knowledge of organization and operation of postproduction process.
Students may also propose to edit significant scene
given to them by instructor. Concurrently scheduled
with course C154B. Letter grading.

C454C. Digital Workflow. (2 to 4) Lecture, three hours;
laboratory, two hours. Limited to departmental majors.
Through discussions, demonstrations, outside speakers, and laboratory assignments, development of
new styles and techniques to immediately enhance communication between director and actor on set in order to maintain continuity from shot to shot. S/U or letter grading.

459A-459B. Directing for Film and Television. (4–)
Lecture, three hours. Limited to graduate film and television
students. Analysis and exploration, with specific screen-
cases and techniques, of directing cinema, television, or
commercial approaches to drama and comedy television and film. S/U or letter grading.

464A–464B. Advanced Film Directing. (8–8) Studio,
to be arranged. Limited to graduate film and television
students. Special problems in direction of fictional and
documentary films. Letter grading.

465. Narrative Television Workshop. (8) Laboratory,
eight hours. Supervised exercises in television multi-
camera direction; emphasis on creative use of camera
direction, composition and sound, and communication with those in front of and behind camera. Letter grading.

C468. Creative Location Film Production. (8) Lecture,
four hours; discussion, four hours; laboratory, to be
arranged. Limited to graduate film and television
students. Problems of location, production, direc-
ting, and cinematography in various real-life prac-
tical locations. Practical application of solving prob-
lems and communication with limitations of location

469. Contemporary Topics: UCLA Filmmakers. (4)
Seminar, to be arranged. Limited to narrative direc-
tors and producers in the making both out-
side and within traditional studio system, identification of
materials and tools utilized to such purposes, ex-
ploration of story and themes of works within larger political and cultural contexts. Participation and
tangible development of personal storytelling voice rooted in specifics of history, background, and life experience. Designed as series of online master classes with vis-
iting filmmakers, their collaborators, and occasional
guest scholars participating in moderated discus-
sions. Each class concludes with informal discussion
with students. Weekly contextual readings and
screenings. S/U or letter grading.

472. Commercials. (4) Lecture, four hours. Limited to
MFA students. Designed to give students opportunity to
explore one very specific kind of filmmaking. Through exploration of advertising, students gain knowledge about media and sales in American and foreign markets and how to work within
distinct confines of commercial genre. Letter grading.

480. Timing for Animation. (4) Lecture, three hours;
laboratory, three hours. Process of animation timing
throughout 16-frame animated films. Letter grading.

C481A. Introduction to Animation. (5) Lecture, three
hours; laboratory, three hours. Drawing experience not
required. Fundamentals of animation through prepara-
tion of short animation film. Concurrently scheduled
with course C181A. S/U or letter grading.

C481B. Writing for Animation. (4 or 8) Lecture, six
hours; studio, to be arranged. Requisite: course C481A
or consent of instructor. Research and practice
in creative writing and planning for animated film. May
be repeated for maximum of 16 units. Concurrently
scheduled with course C181B. S/U or letter grading.

C481C. Animation Workshop. (4 or 8) Studio, six hours.
Includes practical storyboard at first class meeting. Requi-
site: course C181A. Organization and integration of
various creative arts used in animation to form com-
plete study of selected topic. May be repeated for
maximum of 16 units. Concurrently scheduled with
course C181C. S/U or letter grading.

482A–482B. Advanced Animation Workshops. (4 or 8
each) Lecture, three hours; studio, to be arranged. Requisites: courses C181A, 181B, 181C. Advanced orga-
nization and integration of creative arts used in animation, resulting in production of complete animated film. May be repeated for maximum of 16 units. S/U or letter grading.

483A. Advanced Computer Animation. (4 to 8)
Lecture, six hours; laboratory, four hours. Requisites:
courses C481A, C481C, 489A. Recommended: course
C481B. Course 483A is requisite to 483B, which is requisite to 483C. Creation and production of complete and original advanced computer animated film. Letter grading.

483B. Advanced Computer Animation. (4 to 8)
Lecture, six hours; laboratory, four hours. Requisite:
Course C481A. Creation and production of complete and original advanced computer animated film. Letter grading.

483C. Advanced Computer Animation. (4 to 8)
Lecture, six hours; laboratory, four hours. Requisite:
course C483B. Creation and production of complete and original advanced computer animated film. Letter grading.

484A–484B. Visual Thinking and Organization for
Animation. (4–4) Lecture, six hours; laboratory, four hours. Course 484A is requisite to 484B. Systematic
approach to analyzing and communicating two-di-
Museum and three-dimensional form and applying
traditional compositional approaches to animation.
May be repeated for maximum of 16 units. Letter grading.

485. Legal Issues in Animation. (4) Lecture, three
hours; laboratory, three hours. Examination of legal is-
sues in animation, including copyright, contracts, con-
stitutional issues in animation, competing rights, em-
ployer-employee relationships, and representation in
animation. S/U or letter grading.

486. Directed Individual Study: Preparation to Ad-
vance to Candidacy for MFA in Production. (2 to 4)
Tutorial, four to eight hours. Limited to MFA produc-
tion program students. Specialized development and
organization of proposed thesis project prior to ad-
vancement to candidacy. Should be taken term before
student plans to advance to candidacy. S/U or letter grading.

487. Directed Individual Study: Postproduction Lab-
oratory. (4) Laboratory, eight hours. Limited to MFA produc-
tion program students. Specialized development and
organization of proposed thesis project prior to ad-
vancement to candidacy. Should be taken term before
student plans to advance to candidacy. S/U or letter grading.

488A. Interactive Animation. (4 to 8) Lecture, six hours;
laboratory, to be arranged. Requisites: courses
C481A, C481C, 489A. Organization and integration of
various creative arts used in animation and interactive media to form complete study of interactive animation project. May be repeated for maximum of 16 units. Letter grading.

488B. Advanced Interactive Animation. (4 to 8)
Lecture, six hours; laboratory, to be arranged. Requisite:
course 488A. Organization and integration of various creative arts used in animation and interactive anima-
tion to form completed project of selected interactive
topic. May be repeated for maximum of 16 units. Letter grading.

489A. Computer Animation in Film and Video. (4 to 8)
Lecture, six hours; laboratory, to be arranged. Requisite:
course 489A. Organization and integration of various creative arts used in animation and interactive anima-
tion to form complete project of selected interactive
topic. May be repeated for maximum of 16 units. Letter grading.

498 / Film, Television, and Digital Media
Faculty Committee

Akhil Gupta, PhD (Anthropology)
Joseph F. Nagy, PhD (English)
Janet M. O’Shea, PhD (World Arts and Cultures/Dance)
Amy C. Rowat, PhD (Integrative Biology and Physiology)
Wendelin M. Slusser, MD, MS (Community Health Sciences)

Overview

The Food Studies minor uses food—its production, preparation, sharing, consumption, and disposal—as a lens for understanding individual, sociocultural, and global issues. The study of the role of food in multiple complex aspects of life builds bridges across all areas of the academy, including arts, anthropology, environment and sustainability, folklore and mythology, geography, history, humanities, law, psychology, public health, public policy, and other fields.

Undergraduate Minor

Food Studies Minor

Through interdisciplinary courses and a capstone experience, students in the minor acquire a unique insight of food studies and emerge with a new intellectual framework for understanding this expanding area of study.

The capstone requirement gives students the opportunity either to either put their studies into practice through internship or complete independent research in a food-related area of interest.

Admission

To be eligible for the Food Studies minor, students must be in good academic standing this expanding area of study. Successful completion of the minor is indicated on the transcript and diploma.

Policies

The capstone course is required for completion of the minor. It must be the last course completed for the minor, after all other courses have been completed or concurrently with one remaining course requirement.

No more than two lower-division courses may be applied toward the minor. Students may petition to have courses other than those listed above under the required elective courses be applied toward the minor. Contact the academic counselor for the Food Studies minor for information on how to petition.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor.

Final courses of the minor are indicated on the transcript and diploma.

Food Studies

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

27. Critical Thinking about Food and Science Publications. (5) Lecture, two hours; discussion, one hour. Development of process of further thinking about stories behind conclusions from nutrition studies and food scientific literature. Exercises, discussions, reports, and readings designed to provide practices to become critical thinker in food science and literature. P/NP or letter grading.

35. Visual Representations of Food from Antiquity to Present. (5) Lecture, three hours; discussion, one hour. Examination of food imagery in visual art from antiquity to present. Introductions to many major movements in Western art history, with primary focus on historical and sociological implications that can be derived from close analysis of visual representations of food, kitchens, markets, and agriculture over centuries. Topics of investigation include diets of ancient Romans as evidenced by floor mosaics and wall paintings of Pompeii; religious symbolism of food during Middle Ages; opulence of Renaissance banquets; common food of common folk; significance of still life paintings; what paintings can tell us about trade; turn-of-century tables; food and eroticism; economics, packaging, and advertising; and food presentation and plating as art form. P/NP or letter grading.

M79. Food Politics: Cultural Solutions to political Problems. (5) Same as World Arts and Cultures M79.) Lecture, four hours; discussion one hour. Examination of issues of environmental and public health effects of intensive and extensive agriculture, influence of corporations on government, animal ethics, food deserts and urban gardening, and food insecurity. Focus on representation of such issues in documentaries, public lectures, memoirs, novels, and visual art, as well as on initiatives to address such problems through policy and activism. P/NP or IR grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or
other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in depth, with supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

M132. Food Cultures and Food Politics. (5) Same as English M157. Lecture, four hours; discussion, one hour (when scheduled). Requisite: English Composition 3. Introduction to interdisciplinary field of food studies, with focus on how literary and visual culture addresses political dimensions and food culture. Examines food and its role in society. P/NP or letter grading.

133W. Historical Recipes and Recipe for History. (5) Lecture, two hours; discussion, one hour. Requisite: English Composition 3. Exploration of historical meaning of food in medieval and Early Modern Europe through lens of recipes. How recipes, as historical documents, are related to culture, social interactions, and historical ways of knowing. Introduction to ways that historians attempt to understand and recreate rhythms of daily life through interactive pedagogy and experimental recreation of historical recipes. Students gain working knowledge of food studies as an interdisciplinary field from historical perspective. Research project documenting original research. Satisfies Writing II requirement. P/NP or letter grading.

M136. Eating Society: Science and Politics of Food from Individual to Planetary Health. (4) Same as Society and Genetics M136 and Sociology M136.) Lecture, three hours; discussion, one hour. Questions of food and health are both individual and social. Students gain working knowledge of historical and contemporary relationships between individual eating, medicine, and social organization of food production and processing through set of research frameworks newly emerging in range of social and health sciences. Topics include individual and social ramifications of public health. Understanding how human gut microbes and health are shaped by pasteurization, processing, and food safety practices. One Health approaches that encompass human and animal health, discussing examples such as antibiotic resistance and emerging infectious disease as effects of large-scale agriculture; planetary health frameworks that link individual human metabolic health to issues of sustainable agriculture, for example how pesticides and fertilizers relate to diets and environments. Use of scientific evidence for cultural food systems in face of environmental pollution as issue of reproducibility. Letter grading.

M157. Food: Molecules, Microbes, Environment. (4) (Same as Chemistry M157.) Lecture, three hours; discussion, one hour. Requisite: Chemistry 153A. Recommended requisite: Life Sciences 7A, 7B. Study of science of food. Study of food units physical, biological, environmental, social, and behavioral sciences. Use of scientific evidence to explain properties of food. Covers range of topics that focus on science of cooking, critical role of microbes in transformation of foods, genetic and environmental concerns related to acquisition and processing by modern food system. P/NP or letter grading.

M159. Food and Health in Global Perspective. (4) Lecture, three hours. Study problematizes and adds depth to common-sense understandings of healthy and unhealthy diets by examination of relationship between food and health, from critical and holistic perspective, that accounts for interplay of biology and culture within broader historical, societal, and global contexts. Topics include what is meant by health and well-being, questions of discipline between food practices and evolutionary biology, as well as particular environments of societies, cultural systems, and communities. Applications: how major global foods have come to their dominance and consequences for health; and influences of food production, distribution, and preparation on health. P/NP or letter grading.

M167. Historical Sociology of Urban/Rural Relations and Food Production. (4) (Same as Sociology M137.) Lecture, three hours; discussion, one hour. Historical examination of food supply and food production in relation to urban and rural regions. Topics include food logistics such as storage, transportation, and distribution, as well as human population growth and migration, famine and hunger, and agricultural advances and environmental impacts. May be repeated for credit with topic and/or instructor change. P/NP or letter grading.

170X. Food Studies and Food Justice in Los Angeles. (4) (Formerly numbered M170SL.) Lecture, two hours; fieldwork, two hours. Interdisciplinary food studies introduces students to general understanding of access and equity issues related to food chain in Los Angeles. Exploration of social justice issues faced by residents of lower-income communities. Reading of research from disciplines, including but not limited to public health, environmental justice, and public policy. Service-learning component includes meaningful work off-campus community partners selected by instructor and Center for Community Learning. Letter grading.

M176XP. Making Films about Food. (5) (Formerly numbered M176SL.) Same as Community Engagement and Social Change M176XP. Lecture, three hours. Introduction to documentary video production and distribution. Students work on assignments in pairs and small groups to create 8- to 10-minute video about one of several Los Angeles partner organizations that advocate for healthy, local, sustainable food. Consideration, through video production, of challenges posed by existing farming, ranching, and distribution methods, and strategies these groups are pursuing to create more sustainable food pathways. Students learn to work with collaborative media production teams using video cameras, editing equipment, to provide guidance and instruction as core personnel. May be repeated for credit with topic and/or instructor change. Letter grading.

M177. Superfoods: Cultural and Global Perspectives. (5) (Same as Cultural Studies M177 and International Development Studies M177.) Seminar, four hours. Exploration of superfoods, which are nutrient rich foods considered beneficial for well-being, health, and longevity, as they are high in minerals, vitamins, and antioxidants. While superfoods have been part of cultures’ diets for centuries, in recent decades they have been researched in scientific and medical communities. Students will examine: demand and consume foods that are nutritious, organic, and sustainable. It is important also to address issues such as marketing, misinformation, and hyper about superfoods. SUPERFOODS are increasingly important in context of ongoing global inequalities with regards to food access and production. Study addresses paradox that communities cope simultaneously with malnutrition and obesity, and how farming practices for superfoods and staple crops are related. P/NP or letter grading.

M179. Food Activism in Los Angeles: Narrating Pasts, Imagining Futures. (4) (Same as World Arts and Cultures/Theatrical Arts M179.) Lecture, two hours. Introduction to history and praxis of local movements in Los Angeles and Los Angeles partner organizations that advocate for healthy, local, sustainable food. Consideration, through video production, of challenges posed by existing farming, ranching, and distribution methods, and strategies these groups are pursuing to create more sustainable food pathways. Students learn to work with collaborative media production teams using video cameras, editing equipment, to provide guidance and instruction as core personnel. May be repeated for credit with topic and/or instructor change. Letter grading.

195C. Community and Corporate Internships in Food Studies for Capstone. (4) Tutorial, to be arranged; fieldwork, eight to 10 hours. Limited to juniors/senior. Internship opportunities with corporate, governmental, or nonprofit setting coordinated through Center for Community Learning (CCL). Students complete weekly written assignments, attend biweekly meetings with graduate student coordinator, and write final research paper or letter grade as internship capstone experience requirement for Food Studies minor. Collaboration with faculty mentors on subject matter required. May be repeated for credit with consent of Center for Community Engagement. Letter grading.

195CE. Community and Corporate Internships in Food Studies. (4) Tutorial, to be arranged; fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship opportunities with corporate, governmental, or nonprofit setting coordinated through Center for Community Engagement (CCL). Students complete weekly written assignments, attend biweekly meetings with graduate student instructor, and write final research paper or letter grade as internship capstone experience requirement for Food Studies minor. Collaboration with faculty mentors on subject matter required. May be repeated for credit with consent of Center for Community Engagement. Letter grading.

196. Research Apprenticeship in Food Studies. (4) Tutorial, one hour. Entry-level research apprenticeship for graduate of faculty director of Food Studies minor. Collaboration with faculty mentors on their research in area related to food studies. May be repeated for credit. Individual contract required. Letter grading.


500 / Food Studies
Ancient Near East
Courses
The following courses, offered in the departments of language and literature, do not require reading knowledge of any foreign language.

Graduate Course

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. P/NP or letter grading.

FOREIGN LITERATURE IN TRANSLATION

Overview
The following courses, offered in the departments of language and literature, do not require reading knowledge of any foreign language.

Courses

Ancient Near East (Near Eastern Languages and Cultures)
150A. Heroes, Gods, and Monsters: Literature and Epic in Mesopotamia
150B. Survey of Ancient Near Eastern Literatures in English: Egypt

Arabic (Near Eastern Languages and Cultures)
150. Classical Arabic Literature in English
M151. Modern Arabic Literature in English

Armenian (Near Eastern Languages and Cultures)
150A. Survey of Armenian Literature in English
C152. Modern Armenian Drama as Vehicle for Social Critique
C153. Art, Politics, and Nationalism in Modern Armenian Literature

Asian (Asian Languages and Cultures)
151. Buddhist Literature in Translation

Asian American Studies (Asian American Studies)
M173. Topics in Vietnamese Cinema and/or Literature

Central and East European Studies (Slavic, East European, and Eurasian Languages and Cultures)
91. Culture and Society in Central and Eastern Europe
M120. Women and Literature in Southeastern Europe
125. Intervar Central European Prose
C126. Coldwar Central European Culture
127. Central European Culture after Fall of Communism
130. Balkan Cultures in Film and Literature

Chinese (Asian Languages and Cultures)
70. Introduction to Traditional Chinese Literature
70W. Classics of Chinese Literature
131. World Sinophone Literature: Theories and Texts
C150A. Lyrical Traditions
C150B. Chinese Literature in Translation: Traditional Narrative and Fiction
151. Chinese Literature in Translation: Modern Literature
152. Topics in Contemporary Chinese Literature and Culture
M153. Chinese Immigrant Literature and Film Classics (Classics)
10. Discovering Greeks
20. Discovering Romans
30. Classical Mythology
40W. Reading Greek Literature: Writing-Intensive
41W. Reading Roman Literature: Writing-Intensive
60. Fantastic Journey: Antiquity and Beyond
137. Ancient Lives: Art of Biography
140. Topics in History of Greek Literature
141. Topics in History of Latin Literature
142. Ancient Epic
143A. Ancient Tragedy
143B. Ancient Comedy
144. Topical Studies in Ancient Culture
M145A. Ancient Greek and Roman Philosophy
M145B. Later Ancient Greek Philosophy
M146A. Plato—Earlier Dialogues
M146B. Plato—Later Dialogues
M147. Aristotle
150A. Female in Greek Literature and Culture
150B. Female in Roman Literature and Culture
162. Reception of Ancient Myth
163. Ovid and Consequences

Comparative Literature (Comparative Literature)
All undergraduate courses except course M191P

Czech (Slavic, East European, and Eurasian Languages and Cultures)
155. Survey of Czech Literature from Middle Ages to Present

Dutch (European Languages and Transcultural Studies)
113. Modern Dutch and Flemish Literature in Translation

English (English)
111A. Hebrew Bible in Translation
111B. Christian Biblical Texts in Translation
111C. Topics in Biblical Literature
112A. Oral Tradition
112B. Celtic Mythology
112C. Survey of Medieval Celtic Literature
112D. Celtic Folklore
141B. Introduction to Old English Language and Literature
141C. Topics in Old English

European Languages and Transcultural Studies (European Languages and Transcultural Studies)
20. Copenhagen and Nordic Model of Sustainability
C101XP. Between Los Angeles and Europe: New Approaches to Transatlantic European Studies
112. Medieval Foundations of European Civilization
140. European Crime Novel
150. European Folk and Fairy Tales

151. Valkyries and Dragonslayers: Vösung/Nibelung Tradition

French (European Languages and Transcultural Studies)
14. Introduction to French Culture and Civilization in English
14W. Introduction to French Culture and Civilization in English
16. Society And Self in Early Modern France
160. Francophone Cultures in English
161. French and Francophone Theater in Translation
163. French and Francophone Short Story in Translation
164. French and Francophone Novel in Translation
165. Eco-Citizenship: Encounters with Eco-Citizens in Translation
166. French and Francophone Autobiography in Translation
167. French and Francophone Intellectual History in Translation
170. Nantes: Shape of City in Translation
191A. Variable Topics Research Seminars in Translation

German (European Languages and Transcultural Studies)
50B. Great Works of German Literature in Translation: Romanticism to Present
56. Figures Who Changed World: Cosmopolitanisms within a Global Context
59. Holocaust in Film and Literature
61A. Modern Metropolis: Berlin
102. War, Politics, Art
103. German Film in Cultural Context: Early German Film
104. German Film in Cultural Context, 1945 to Present
109. Jewish Question and German Thought
110. Special Topics in Modern Literature and Culture
112. Feminist Issues in German Literature and Culture
113. German Folklore
114. Fairy Tales and Fantastic
117. German Exile Culture in Los Angeles

Hungarian (Slavic, East European, and Eurasian Languages and Cultures)
121. Survey of Hungarian Literature in Translation

Iranian (Near Eastern Languages and Cultures)
150A. Survey of Persian Literature in English
150B. Survey of Persian Literature in English

Italian (European Languages and Transcultural Studies)
42A. Italy through Ages in English: Saints and Sinners in Early Modern Italy
42B. Italy through Ages in English: Modern and Contemporary Italy
42C. Italy through Ages in English: Food and Literature in Italy
46. Italian Cinema and Culture in English
The Gender Studies curriculum challenges the pervasive theory/practice divide within the academy. In both undergraduate and graduate courses, students are taught a broad range of methodological and analytical skills. Core undergraduate courses contextualize foundational theories and key analytic concepts within the study of different historical periods and social movements. In designating these courses, power, knowledge, and bodies, the department identifies three primary areas in which feminist and queer inquiry has been concentrated over time, enabling students to trace grounding concepts, key controversies, and the emergence of new theoretical paradigms.

The department has long enjoyed recognition for its strengths in areas including women’s history, feminist science studies, and gender and the law. Over the past decade, it has become a leading program for interdisciplinary intersectional feminist scholarship on gender, sexuality, race, class, and nationality; and has built a strong reputation in transnational feminist studies, studies of settler colonialism, neoliberalism, racial violence, cultural politics, migration, social movements, affect, visual culture, and disability, as well as feminist policy studies, critical prison studies, women of color feminism, queer of color critique, and queer theory.

**Undergraduate Major**

**Gender Studies BA**

The major in Gender Studies may be taken alone or in conjunction with another Letters and Science major. In the case of a double major, no more than five courses may be applied toward both majors.

**Capstone Major**

The Gender Studies major is a designated capstone major. Students are required to complete a senior seminar in which they conduct original research while studying readings that consider how disciplinary and interdisciplinary research has been conducted and critiqued. Through their senior seminar work, students produce a significant work that may include an original research paper, a media project, or an in-depth literature review. They are expected to demonstrate working knowledge of the field of gender studies; understand key theoretical approaches in the study of women, gender, and sexuality; have ability to construct well-written analytic essays and present their work orally; and conduct a research project that involves the consultation of scholarly literature and presentation of evidence to support an argument.

**Learning Outcomes**

The Gender Studies major has the following learning outcomes:

- Demonstrated working knowledge of the field of gender studies
- Understanding of key theoretical approaches in the study of women, gender, and sexuality
- Demonstrated ability to construct well-written analytic essays and give an oral presentation

- Conduct a research project that involves the consultation of scholarly literatures and presentation of evidence to support an argument

**Entry to the Major**

**Admission**

To be admitted to the major, students must have completed Gender Studies 10, be in good standing, and formally register with the department. They are encouraged to declare their major as early as possible and to discuss their proposed course of study with the undergraduate adviser.

Students are encouraged to draw on diverse UCLA resources in creating their program of study. They may pursue traditional and/or innovative subjects in fields ranging from the humanities and fine arts to the social and life sciences. In addition to courses on the gender studies approved list, students may petition to have diverse courses accepted, including courses outside the College of Letters and Science, independent studies, or field study courses.

Each course applied toward the major must be taken for a letter grade, and students must have a grade-point average of 2.0 or better in gender studies courses to receive credit for completing the program. Courses in which they receive grades of C– or lower may not be applied toward the required courses in the major.

**Transfer Students**

Transfer applicants to the Gender Studies major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one multidisciplinary gender studies course and departmental lower-division required course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

**Requirements**

**Preparation for the Major**

Required: Gender Studies 10. Students must also complete departmental lower-division requirements, as applicable, for upper-division gender studies courses.

**The Major**

The major is designed to (1) impart core concepts in theory and critical analysis, research design, and methods; and (2) provide students with exposure to a range of feminist and queer scholarship across disciplines. To achieve these goals, the major is divided into three categories.

Required: At least 11 upper-division courses (minimum of 4 units each) as follows: (1) three core courses—Gender Studies 102, 103, 104, (2) seven elective courses; one upper-division tutorial (minimum of 4 units) selected from course 195, 197, or 199 may be applied toward the elective requirement (this limit does not apply to course 198A or 198B), and (3) course 187 (capstone seminar).
Graduate Major
Gender Studies MA, PhD
The graduate program offers Master of Arts (for PhD students only, no terminal master’s degree) and PhD degrees.

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Gender Studies
Lower-Division Courses

10. Introduction to Gender Studies. (5) Lecture, three hours; discussion, one hour. Introduction to key concepts in study of sex and gender. Exploration of topics such as gender socialization, body image, sexualities, masculinities, and women’s subordination. Special emphasis on intersection of gender with other identity markers such as race, nation, ethnicity, sexuality, class, and other differences. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of four units; approval required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101W. Writing Gender. (5) Lecture, three hours. Required: English Composition 3. Survey of discrete period of queer literature from beginning to circa 1850. Works by such writers as Sappho, Plato, Marlowe, Shakespeare and Thomas Gray may be included. May be repeated for credit with topic or instructor change. P/NP or letter grading.

102. Power. (4) Lecture, three hours; discussion, one hour (when scheduled). Enforced requisite: course 10. Consideration of how feminist social movements have identified and challenged dominant epistemologies and ways feminist theorists have conceived and critiqued traditional theories of power. How have women’s and other social movements defined and challenged social, political, and economic subordination? How have feminist theorists addressed subject of power? How do empire, colonialism, liberalism, neoliberalism, and globalization produce distinctive forms of gendered violence, gendered knowledge, and gendered subjectivities? How are gender and sexuality produced and regulated by law, nation, and economy? P/NP or letter grading.

103. Knowledge. (4) Lecture, three hours; discussion, one hour (when scheduled). Enforced requisite: course 10. Exploration of social production of knowledge about gendered subjects and gender systems. Students engage key issues in feminist theory and feminist epistemology. How do feminist scholars identify and frame research questions? How is knowledge about marginalized subjects produced? How has feminism challenged dominant understandings of knowledge, rationality, objectivity, and scientific method? How have social movements sought to challenge traditional modes of knowledge production? P/NP or letter grading.

104. Bodies. (4) Lecture, three hours; discussion, one hour (when scheduled). Enforced requisite: course 10. Exploration of scholarly theories and histories of body, with focus on topics such as sex identity, sexuality, gendered violence, and reproductive politics. How has science, medicine, and culture sought to distinguish male from female in different historical periods and locations? How have meanings of terms sex and gender varied across time and place? How has gendered body been represented in different visual cultures? How have embodied identities been produced in different historical and geographic contexts? What is relationship between embodiment and desire? P/NP or letter grading.

M104C. Diversity in Aging: Roles of Gender and Ethnicity. (4) Same as Chicana/o and Central American Studies M106B, Gerontology M104C, Public Affairs M115, and Social Welfare M104CC. Lecture, four hours. Exploration of complexity of variables related to diversity of aging population and variability in aging process. Examination of gender and ethnicity within context of both physical and social aging, in multidisciplinary perspective utilizing faculty from variety of fields to address issues of diversity. Letter grading.

105. Topics in Women and Medicine. (4) Lecture/discussion, three hours. Examination of medical conditions and lifestyles of female physicians. How have women’s and other social movements defined and frame research questions? How is knowledge produced in different historical and geographic contexts? What is relationship between embodiment and desire? P/NP or letter grading.

M105A. Premodern Queer Literatures and Cultures. (8) Same as English M101A and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M101A. Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Survey of discrete period of queer literature from beginning to circa 1850. Works by such writers as Sappho, Plato, Marlowe, Shakespeare and Thomas Gray may be included. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M105B. Queer Literatures and Cultures, 1850 to 1970. (5) Same as English M101B and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M101B. Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Survey of discrete period of queer literature and culture from circa 1850 to 1970. Works by such authors as Walt Whitman, Radclyffe Hall, Gertrude Stein, Virginia Woolf, Langston Hughes, Tennessee Williams, Henry Blake Fuller, and James Baldwin may be included. May be repeated for credit with topic or instructor change. P/NP or letter grading.

Honors Program
The honors program is open to advanced junior and senior Gender Studies majors with a 3.6 grade-point average in gender studies courses and a minimum 3.4 overall GPA who have no outstanding Incomplete grades, and to majors who demonstrate ability to do honors work by submitting a paper to the department chair for approval.

To qualify for honors at graduation, students must successfully complete three successive terms of honors research (courses 198A, 198B, 198C) with their faculty sponsor and receive a grade of B+ or better on their research paper/project. Course 198A may be applied toward the elective requirement; courses 198B and 198C are in addition to the minimum required courses. More information is available from the Undergraduate Counselor in the department office.

Undergraduate Minor
Gender Studies Minor
The Gender Studies minor augments and enriches study in a traditional field. Students participating in this program are required to complete both a departmental major and the Gender Studies minor.

Admission
To enter the minor, students must have an overall grade-point average of 2.0 or better and formally register with the department under-graduate advisers in 1120 Rolfe Hall. They are encouraged to declare the minor as early as possible.

The Minor
Required Lower-Division Course (5 units): Gender Studies 10. Students must also complete departmental lower-division requisites, as applicable, for upper-division gender studies courses.

Required Upper-Division Courses (24 units): (1) One core course from Gender Studies 102, 103, or 104, (2) 120SL or 187 or an equivalent senior research seminar approved in advance, and (3) four upper-division courses (minimum of 4 units each) from the approved gender studies course list.

Policies
No more than 4 units of courses 195 through 198 may be applied. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Courses in which students receive grades of C– or lower may not be applied toward the core requirements in the minor. Successful completion of the minor is indicated on the transcript and diploma.
M105C. Queer Literatures and Cultures after 1970. (5) (Same as English M101C and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M101C.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Examination of cultural production, specifically literature, produced by queers after Stonewall rebellion in New York in 1969, widely regarded as origins or beginning of modern gay rights movement in U.S. Films and Writings and films by such authors as Andrew Hol- leran, Leslie Feinberg, Achy Obejas, Essex Hemphill, Audre Lorde, and Alison Bechdel may be included. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M105D. Studies in Queer Literatures and Cultures. (5) (Same as English M101D and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M101D.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Variable specialized studies course in queer literatures and cultures. Topics focus on particular problem or issue in terms of its relationship to queer cultures and writings. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M106. Imaginary Women. (5) (Same as History Col- legium M106.) Lecture, four hours; discussion, one hour. Enforced requisite: English Composition 3. Focus on women writers that may include historical, regional, national, or thematic emphasis, with possible topics such as authorship, self-writing, sexuality, gender, and genre. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M107A. Studies in Women’s Writing. (5) (Same as English M107A.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Examination of literary and cultural production through lens of gender and sexuality. Depending on instructor, emphasis may be historical, regional, national, comparative, or thematic and include other intersectional vectors of identity and representation such as race and ethnicity. May be repeated for credit with topic or instructor change. P/NP or letter grading.

108S. Violence against Women. (4) Lecture, three hours. Enforced requisite: course 10. Actual and theoretical analyses regarding various forms of violence against women. Course may include questions of authorship and influence on contemporary social structures and social science research. Letter grading.

M109. Women in Jazz. (4) (Same as African American Studies M109, Ethnomusicology M109, and Global Jazz Studies M109.) Lecture, four hours; discussion, one hour. Sociocultural history of women in jazz and allied musical traditions from 1880s to present. Survey of women vocalists, instrumentalists, composers/arrangers, and producers and their impact on development of jazz. P/NP or letter grading.

M110C. Topics in Feminist Philosophy: Metaphysics and Epistemology. (5) (Same as Philosophy M110C.) Lecture, three hours; discussion, one hour (when scheduled). Enforced requisite: Gender Studies majors: course 10; for other students: one philosophy course. Examination in depth of different theoretical positions on gender and women as they have been applied to study of philosophy. Emphasis on theoretical contributions made by new scholarship on women in philosoph- y, and development of feminist philosophy. May arise in discussion of women’s rights and liberation. Philosophical approach to feminist theories. May be repeated for credit with consent of instructor. P/NP or letter grading.

M111. Women and Film. (6) (Same as Film and Television M111.) Lecture, eight hours; discussion, one hour. Historical issues and critical approaches to women and cinema that may include authorship, Stardom, female genres, and images of women in Hol- lywood cinema, alternative cinema, and independent cinema from silent era to present. Letter grading.

112. Special Topics in Women and Arts. (4) Lecture, three hours. Enforced requisite: course 10. Selected topics re- lating feminist theories to creation of art by women, with consideration of cultural contexts in which they work. Approach to be comparative, cross-cultural, and interdisciplinary. Topic may include works of artists such as Ana Mendieta, Nao Bustamante, Felix-Gonzales Torres, Gilberto and Gregg Araki, P/NP or letter grading.

113. Sex Work. (4) Lecture, three hours. Enforced requisite: course 10. Analysis of variety of contemporary sex work both in U.S. and abroad from feminist per- spective. Examination of how race, class, and gender affect experience and perception of erotic labor, and consideration of critically feminist responses by range of authors to sex work. Topics include brothels, phone sex, strip clubs, sex tourism, military prostitution, and international traffic in persons. Reading of texts by sex workers, as well as articles from current philosophical and policy debates about prostitution. P/NP or letter grading.

M114. Introduction to Lesbian, Gay, Bisexual, Trans- gender, and Queer Studies. (5) (Same as Lesbian, Gay, Bisexual, Transgender, and Queer Studies M114.) Lecture, three hours; discussion, one hour. Introduc- tion to history, politics, culture, and scientific study of lesbians, gay men, bisexuals, transgendered, and queer people; examination of sexuality and gender as categories for investigation; interdisciplinary theories and research on minority sexualities and genders. P/ NP or letter grading.

M115. Topics in Sex of Sexual and Gender Orien- tation. (4) (Same as Lesbian, Gay, Bisexual, Trans- gender, and Queer Studies M115.) Lecture/discussion, three hours. Enforced requisite: course M114. Studies in arts, humanities, social sciences, and/or life sciences on aspects of sexual orientation, gender identity, and sexuality, gay, and/or bisexual issues; variable topics may be offered. Historical, philosophical, analytical, and theoretical approaches, history and political change, life and health experiences, and queer or transgender theories; multiethnic and cross- cultural emphases. May be repeated for credit. Letter grading.


117. Introduction to Queer Latina/Latino Studies. (4) Lecture, three hours. Examination of production of Latinas/Latinos identify and sexuality as representations as thematics within contemporary literature, music, film, and perfor- mance art. Engagement with texts that posit queer anal- ytical approach to study how Latinidad is informed by modes of desire and identification that fall out of dominant notions of Latinidad in popular culture. Critical engagement of limits of knowledge production around Latina/Latino identity to develop new analytic that abides by question of Latinidad rather than posits an- other or solves its political consequences in con- temporary U.S. culture. Study draws upon feminist and queer artists such as Ana Mendieta, Nao Busta- mante, Asco, Tropicana, Caridad, Araceli, Felix-Gonzalez Torres, Gilberto, and Gregg Araki. P/NP or letter grading.

M118. Queering American History. (4) (Same as Les- bian, Gay, Bisexual, Transgender, and Queer Studies M118.) Lecture, four hours. Enforced requisite: one prior lesbian, gay, bisexual, transgender, and queer studies course. History of sexual and gender minori- ties in U.S. Topics include changing norms, romantic literature, homophobia, McCarthyism, post-Stonewall culture, AIDS, transmigration, queer theory, and politics. P/NP or letter grading.

119. Racial Violence and Law. (4) Lecture, three hours. Enforced requisite: course 10. Through feminist, anti-co- lonial, and anti-racist perspectives, examine the role of racial violence and appropriate anti-violence strategies. Ofers theoretical approach for understanding racial vio- lence. Consideration of what is racial violence and ra- cial terror; how feminists should respond to racial vio- lence; connection between historical moments of extraordinary racial violence and our everyday world; how we understand violence at specific sites, e.g., community protests, schools; and in dif- ferent historical contexts; how individuals come to participate in, remain indifferent to, or approve of vio- lence; role of hegemonic masculinity and femininity in their reproduction, and how it is analyzed. Ex- ploration of these broad questions through consider- ation of anti-indigenous/colonial violence, anti-Black and anti-Asian violence, underpinning anti-migrant and anti-refugee movements, tor- ture, terror, and state violence. P/NP or letter grading.

120SL. Feminist Praxis: Community-Based Learn- ing. (4) Seminar, three hours; fieldwork, four hours. Preparation: at least two core courses. Enforced requisite: course 10 and one course from 102, 103, or 104. Service-learning course combining seminar with practical experience working on gender issues and connecting these experiences to methodological and theoretical themes explored in gender studies core courses. Community partners selected in ad- vance by instructor in consultation with Center for Community Learning. Letter grading.

M121. Topics in Gender and Disabilities. (4) (Same as Disability Studies M121.) Lecture, three and one half hours. Limited to juniors/seniors. Ways in which issues of disability are affected by gender, with partic- ular attention to various factors and concerns of women with disabilities. Approach is intersectional, exploring how social categories of class, race, ethnicity, religion, age, sexuality, nationality, and citizen- ship intersect and are affected by gender and disability. Topics may include law (civil rights, nondiscrimin- ation), representation (arts, literature, education, public policy, health). May be repeated for credit with topic and instructor change. Letter grading.

122. Masculinities. (4) Lecture, three hours. Enforced requisite: course 10. Masculinity as theorized by femi- nists and shaped by race, class, age, and nation. Topics include feminism, masculinity, male body, childhood and adolescent socialization, sport, male violence, homophobia, black masculinity, global- ization and masculinity, and men’s movements in 19th and beyond. Special emphasis on social sci- ences approaches and methodologies. P/NP or letter grading.

123. Gender, Race, and Class in Latin American Lit- erature and Film, 1850 to 1950. (4) Seminar, three hours. Enforced requisite: course 10. Latin American historical and discus- sion in English. Comparative survey of cultural expression in Latin America, with emphasis on works produced or set in late-19th and early-20th centuries. Historical and social circumstances in 19th and early 20th century Latin American cultural contexts, with particular concentra- tion on how gender, sexuality, race, and class are ab- sorbed and reflected in literature and film. Within this genealogy, examination of how cultural production sustains or interrogates categories used to construct social, political, and cultural hierarchies. Topics in- clude questions of authorship and authority such as women’s participation in formation of national cul- ture, engagement with artistic movements, and strat- egies of self-figuration. P/NP or letter grading.

M124. Sex, Race, and Difference in Transnational Film. (8) (Same as Film and Television M124.) Lecture, three hours; discussion, four hours. Enforced requisite: one or two feminist media studies courses. Training of students in media literacy so they acquire necessary skills to critically interrogate film as medium of communication and to appreciate how films provide lens to formation of national critical issues of our time. Development of understanding of transnationality to examine how circulations of cap- ital, labor, and commodities transact, render problem- atic, and sometimes reconcile different social formations. Examination of role of film in both exemplifying and repre- senting these conditions of transnationality. How films enable understanding of historical and contemporary relationship between gender, race, and migration; colonialism and settler colonialism; Orientalism, geopolitics, and sexuality; cultural identity and dis- parations; transnational conceptions of sexual desire and
125. Perspectives on Women's Health. (4) Lecture/discussion, three hours. Requisite: course 10. Examination in depth of various ways women provide healthcare in both paid and unpaid capacities and of political, economic, and social factors affecting women as recipients of healthcare. P/NP or letter grading.

M126. Feminist and Queer Theory. (5) Same as English M126 and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M126.) Lecture, four hours; discussion, one hour. Requisite: one of American or public policy. English Composition 3. Recommended: one course from 102, 103, 104, English 120, or 121. Investigation of key concepts and debates in study of gender, sexuality, and kinship, with focus on their interrelated significance for making of culture. Readings to be interdisciplinary, with possible emphasis on impact of changing ideas of gender and sexuality on specific historical cultures. May be repeated for credit with topic or instructor change. P/NP or letter grading.

126. Women in Russian Literature. (5) Same as Russian M127.) Lecture, three hours. Designed for juniors/seniors. Lectures and readings in English. Introduction to alternative tradition of women's writings in Russia and Soviet Union. Emphasis on images of women expressed in this tradition as compared with those found in the works of contemporary male writers. P/NP or letter grading.

M128. Roots of Patriarchy: Ancient Goddesses and Heroines. (4) Same as Honors College M118.) Lecture, four hours. Examination of ancient goddesses and heroines found in Babylonia, Egypt, Near East, Celtic, Scandinavian, Balto-Slavic, Indo-Iranian, and Greco-Roman —using translations of ancient texts, archeological evidence, and feminist methodology in order to discover contributions of ancient patriarchy on modern society. P/NP or letter grading.

129. Women and Gender in Caribbean. (4) Seminar, three hours. Requisite: course 10. Exploration of ways in which gender discourses have been central to making of Caribbean history and to some most enduring experiences in European empire, capitalist development, and coercive labor. Emphasis on women who lived through slavery and indentured servitude and who continue to live under systems of globalized and neoliberal exploitation. How Caribbean women have historically empowered themselves and their communities, working in various ways to survive, radicalize, and transform the world. What ideas about gender and sexuality have shaped emergence of new nations and national cultures in Caribbean, and consideration of some dominant images of women in popular culture in particular in the Caribbean. Examination of complicated ways in which gender, race, class, sexuality, and national identity intersect in different Caribbean contexts. P/NP or letter grading.


131. Feminist Politics in Korea and Diaspora. (4) Lecture, three hours. Requisite: open to all, as mobilized by religious groups, and wide range of ideas, institutions, and practices that are animated by complex politics of gender, sexuality, and religion. Topics include Korean and transnational activism concerning Korean imperialism, antimilitarism, and anticommunism and xenophobia; pro-democracy movements and labor organizing; Catholic and Buddhist solidarity and sanctuary movements; hyperpatriarchy and urban mega-churches; faith-based pacifism and conscientious objection to military conscription. P/NP or letter grading. CM132A. Chicana Feminism. (4) Same as Chicana/o and Central American Studies M132A.) Lecture, four hours. Enforced requisite: course 10 or Chicana/o and Central American Studies 10A. Examination of theories and practices of women who identify as Chicanas feministas. Discussion of writings of Chicana/os who do not identify as feminist but whose practices attend to gender inequities faced by Chicanas both within Chicanx/Chicana community and dominant society. Atension to Anglosexo/xicana/o women. Concurrently scheduled with course CM232A, P/NP or letter grading.


M133A-M133B. History of Women in Europe. (4–4) (Same as History M133A-M133B.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. History of social, political, and cultural roles of women in Western Europe from early Middle Ages to present. P/NP or letter grading. M133A. 800-1500. M133B. 1500 to present.

M133C. History of Prostitution. (4) Same as History M133C.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. History of prostitution from ancient times to present. Topics include tolerance in medieval Europe, impact of syphilis, birth of courtesan, regulation in 19th-century Europe, white slavery scare, and contemporary global sex trade. Readings include novels, primary sources, and testimony by sex workers. P/NP or letter grading.


M135C. Bilingual Writing Workshop. (4) Same as Chicana/o and Central American Studies CM135 and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M135.) Seminar, four hours. Limited to juniors/seniors. Writing sample required; access to course required. Technical instruction, analysis, and theoretical discussion of bilingual creative expression through genre of short fiction. Bilingualism as both politics and aesthetics is central theme. Discussion and analysis of Chicana/o and Central American Studies CM110.) Lecture, Technical instruction, analysis, and theoretical discussion of bilingual creative expression through genre of short fiction. Bilingualism as both politics and aesthetics is central theme. Discussion and analysis of Chicana/o and Central American Studies. Peer critique of weekly writing assignments. Emphasis on narrative techniques such as characterization, plot, conflict, setting, point of view, and dialogue. Magically realism as prevailing Chicanesque/Latinesque style. Some attention to process of manuscript preparation, public reading, and publication. Letter grading.

M136. Music and Gender. (4) Same as Musicology, M136.) Lecture, four hours; discussion, one hour. Analysis of gender ideologies in several musical cultures; representations of gender, body, and sexuality by both male and female musicians; contributions of women to Western music; methods in feminist and gay/lesbian theory and criticism. Letter grading.

M137E. Work Behavior of Women and Men. (4) (Same as Psychology M137E.) Lecture, two and one half hours. Requisite: course 10 or Psychology 10. Designed for seniors. Examination of work behavior of women and men. Topics include antecedents of career choice, job findings, leadership, performance evaluation, discrimination and evaluation bias, job satisfaction, and interdependence of work and family life. P/NP or letter grading.

138. Gender and Popular Culture. (5) Lecture, three hours; screenings, two hours. Limited to juniors/seniors. Conceptual tools and critical skills necessary to analyze and interpret gender and popular culture in the U.S., the public life. Examination of representations of male and female bodies to understand visual vocabulary of gender in popular culture, as well as relationship between visual stereotypes and representations in the transformative potential of pop culture and exploration of capacity and limits of popular culture as agent of social change. Letter grading.


M140C. Class and Gender in Care Work. (4) (Same as American Studies M162, Chicana/o and Central American Studies M162.) Lecture, four hours; discussion, one hour. Examination of how gender, race, class, and citizenship status shape domestic labor in U.S. Examination of domestic worker experiences through film, fiction, and traditional scholarship. Investigation of why domestic work is in high demand, who employs domestic workers, and why immigrants and color make up a large percentage of this workforce. Exploration of how domestic workers navigate pay and working conditions, and how they build community and family networks in shadow of their privileged employers. P/NP or letter grading.

141. Gender, Culture, and Capitalism. (4) Lecture, three hours. Dynamic investigation of culture as terrain of production—and resistance—of and resistance to gender, racialized, classed inequalities through active analysis of advertisements, television serials, Disney fairy tales, and performative forms like fortunetelling. Focus on relationships between gender, culture, and capitalism that allowed national feminist and queer cultural studies to explore gendered processes of production and consumption of culture under capitalism. P/NP or letter grading.

142. Race, Gender, and Punishment. (4) Seminar, three hours. Enforced requisite: course 10. Examination of what crisis scholars have called prison industrial complex. U.S. has largest prison population in world. How and why this? Who is imprisoned? What historical conditions and ideologies gave rise to this massive explosion in prisoner population? Does prison function as regime? How have politicians used imprisonment as response to economic transformations and social disorders that are analogous to or distinct from regimes of racialized punishment in prior historical moments? How do prisons change environments? How have people mobilized to reduce U.S. prison population? Why do some activists argue for reform and others for abolition? Examination of key topics, including policing and racial profiling, immigrant detention, privatization, spatial transformation, gender violence, prison abolition, and political imprisonment. P/NP or letter grading.

CM143XP. Healing, Ritual, and Transformation. (4) (Formerly numbered CM143.) (Same as World Arts CM143X.) Lecture, three and one half hours. Designed for juniors/seniors. Examination of how various cultures think of health and wellness, not only individually but collectively. Exploration of structural inequalities within health care and medical sciences. Students are required to contribute weekly to service learning.
component, working with individuals and organizations in fields of health and wellness including healers, non-profits, and organizations working for social justice. May be concurrently scheduled with CM/243XP. Letter grading.

M144. Women's Movement in Latin America. (4) (Same as Chicana/o and Central American Studies M144 and Labor Studies M144.) Lecture, four hours. Course requirements: feminism in Latin America and Caribbean to examine diverse social movements and locations from which women have launched political and gender struggles. Discussion of forms of resistance to what women's consciousness has been shaped by the legacy of indigenous, environmental struggles, labor movements, Christian-based communities, peasant and rural organizing, and new sources of transnational identities. Examination of intersecting forms of oppression and participation in and challenge to social movements, including suffrage, women's liberation, civil rights, and political responses envisioned by transnational organizing. P/NP or letter grading.

M147D. History of Women in U.S., 1860 to 1980. (4) (Same as History M147D.) Lecture, four hours; discussion, one hour. Limited to juniors/seniors. Exploration of in and out of women's history as represented in the curriculum of key theoretical fields. Historical examination of women's participation in and contribution to making of social and political changes. Includes the study of social movements (e.g., nationalist, socialist, liberal/ right, profeminist), including women from Latin America, Cuba, Algeria, Guinea-Bissau, Mozambique, Nicaragua, and Iran. Analysis of women's participation in social transformations and the centrality of gender interests. P/NP or letter grading.

M145T. Women's Voices: Their Critique of Anthropology of Japan. (4) (Same as Anthropology M145T.) Lecture/discussion, three hours. Recommended preparation: prior gender studies or anthropology courses. Comparative studies of social movements (e.g., nationalist, socialist, liberal/ right, Christian), including women from Latin America, China, India, and the United States. Examination of the centrality of gender interests. P/NP or letter grading.

M154R. Women and Social Movements. (4) (Same as Anthropology M145R.) Lecture, three hours. Recommended preparation: prior gender studies or anthropology courses. Comparative studies of social movements (e.g., nationalist, socialist, liberal/ right, Christian), including women from Latin America, China, India, and the United States. Examination of the centrality of gender interests. P/NP or letter grading.

M154P. Marriage, Family, and Kinship. (4) (Same as Anthropology M145P.) Lecture, three hours. Prerequisite: Anthropology 3. Examination of understandings of kinship and marriage in cultural anthropology course. The anthropology of kinship, focusing on the impact of kinship on interpersonal relationships, gender roles, and sociocultural systems. Readings from popular materials and formal ethnographic accounts. P/NP or letter grading.

M154Q. Selected Topics in Gender Systems. (4) (Same as Anthropology M145Q.) Lecture, three hours. Recommended preparation: prior anthropology or gender studies course. Focus on junior/senior social sciences majors. Comparative study of women's lives and gender systems and cultures from anthropological perspective. Critical review of relevant theoretical issues using ethnography, case study, and pre-requisites. Consult Schedule of Classes for topics and instructors. May be repeated for credit with topic change. P/NP or letter grading.

M154M. Women's and Social Movements. (4) (Same as Anthropology M145M.) Lecture, three hours. Recommended preparation: prior gender studies or anthropology courses. Comparative studies of social movements (e.g., nationalist, socialist, liberal/ right, Christian), including women from Latin America, China, India, and the United States. Examination of the centrality of gender interests. P/NP or letter grading.

M154T. Women's Voices: Their Critique of Anthropology of Japan. (4) (Same as Anthropology M145T.) Lecture, three hours. Preparation: introductory socio-cultural anthropology course. The anthropology of Japan has long viewed Japan as a homogenous whole. Restoration of diversity and contradiction in it by listening to voices of Japanese women in various historical contexts. P/NP or letter grading.

156A. History of Women in the U.S.: Rebel Women of World War II to Women's Lives. Offered in spring only. Limited to juniors/seniors. Introduction to major and minor figures and movements for social change in the U.S., including themes from politics, sports, civil rebellions, and body. Examination of dramatic challenges to gender roles over course of the 20th century through actions of rebelling women who led way for future generations of women's lives. Offered in spring only. P/NP or letter grading.


M158. Women, Gender, and Sexuality in Italian Culture. (4) (Same as Italian M158.) Lecture, three hours; discussion, one hour. Analysis of gender roles, images of femininity and masculinity, patriarchy, myths of Ma- donna and Latin lover, condition of women in Italy society through history, politics, literature, film, and other media. Italian majors required to read texts in Italian. P/NP or letter grading.

160. Sporting Bodies. (4) Lecture, three hours. Recommended requisite: course 10. From Don Imus’ “nappy-headed hos” comment to controversies about transgender athletes or athletes with prosthesis; from covers of magazines to the absence in Dodger’s Stadium playing field of 1,000+ female fans waving national anthem, college men’s teams rating women’s teams in terms of sexual positions, unionization of athletes—discourses of sport draw heavily upon extant ideolo- gies of race, gender, sexuality, and class. Introduction to critical analyses of social categories and how they are represented and reproduced in various sports and media. Critical examination of historical social values and how they are reproduced through sport. P/NP or letter grading.

M161. Sports, Normativity, and Body. (4) (Same as Disability Studies M161.) Lecture, four hours. Since commercialization of professional and amateur sports in 1984, athletes with disabilities have had, and been denied, formal opportunities to compete with able-bodied athletes. Overview of some major topics of discussion concerning intersection of disability, addressing variety of perspectives and themes on disability and sport, such as passing, sports integration, competition versus charity, and more. Recommended: Sources in television, and biographical writings that address sports, body and disability generally, and Special Olympics specifically. P/NP or letter grading.

M162. Sociology of Gender. (5) (Same as Sociology M162.) Lecture, three hours. Enforced prerequisite: course 10 or Sociology 1. Examination of processes by which gender is socially constructed. Topics include distinction between biological
sex and sociological gender, causes and consequences of gender inequality, and recent changes in gender relations in modern industrial societies. P/NP or letter grading.

M163. Gender and Work. (4) (Same as Sociology M163.) Lecture, three hours. Requisite: course 10 or Sociology 1. Exploration of relationship of gender to work, concentrating on the U.S. experience but also including comparative material. Particular emphasis on analysis of causes and consequences of job segregation by gender and of wage inequality. P/NP or letter grading.

M164. Politics of Reproduction and Everyday Life. (4) (Same as Sociology M164.) Lecture, three hours. Requisite: discussion, one hour. Limited to juniors/seniors. Social and human reproduction is global policy issue. Government efforts to influence reproduction are important feature of modern state: political intervention into private life, intimacy, and sexuality. Exploration of politics of reproduction—interaction between politics and life cycle or between public sphere and private lives—and coverage of broad range of issues addressing prevention and promotion of reproduction from historical-comparative approach. Reading, discussion, and development of culminating project. P/NP or letter grading.

M164A. Women, Violence, Globalization: India, Philippines, Singapore, Vietnam. (4) (Same as Asian American Studies M164.) Lecture, four hours. Study of various forms of violence on women in and of themselves in but light of larger systems of oppression, with focus on Filipino, Vietnamese, Singaporean, and South Asian cultures. Letter grading.

M165. Psychology of Gender. (4) (Same as Psychology M165.) Lecture, two hours; discussion, one hour. Sociopsychological literature relevant to understanding contemporary sex differences. Topics include sex-role development and role conflict, physiological and personality differences between men and women and women's responses in abilities and achievement, and impact of gender on social interaction. P/NP or letter grading.

M167. Contested Sexualities. (4) (Same as Lesbian, Gay, Bisexual, Transgender, and Queer Studies M167.) Lecture, three hours; discussion, one hour. Sociological perspectives on formation, control, and resistance of lesbian, gay, bisexual, and transgendered people. Variable topics include identity and community; age, class, gender, and racial diversity; and analysis of contemporary issues affecting contested sexualities. Letter grading.

M168. Feminist Economics in Globalizing World. (4) Lecture, four hours. Preparation: satisfaction of Letters and Science Writing II requirement. Requisite: course 10. Designed for juniors/seniors. Overview of field of feminist economics, with emphasis on development experiences in globalizing world economy. Overview of gender inequalities such as gender division of labor in paid and unpaid work, patterns of employment and unemployment, and wage gaps between men and women in different world economy regions; feminist critiques of economics and of theoretical debates within gender and development field on topics such as structural adjustment, feminization of labor force, and poverty alleviation and the roles played by governments, international policy-making institutions, and civil society organizations to make economic policies and structures gender-equal. P/NP or letter grading.

M169. Common Thread: Garment Workers Past, Present, Future. (4) (Same as Chicana/o and Central American Studies M128C and Labor Studies M108.) Lecture, three hours. Requisite: framework workshops on economics, labor history, and ethnic studies to offer in-depth exploration of lives and experiences of garment industry workers from early 19th century to present. In contrast to traditional narratives, study locates garment workers—majority of whom are immigrant women—at vanguard of U.S. labor movement, showing how they pioneered new forms of worker education and other progressive programs. Study examined leaders in fight for women's, civil, and immigrant rights. Exploration of garment work relationship to American culture, tracing how sweatshop became symbol of worker exploitation, how popular culture and fashion trends impacted lived realities of workers in those shops, and how racial and gendered expectations shaped public perceptions of garment workers. By doing so, study draws on central thread that ties together histories of global trade, industrialization, gender and sexuality, immigration, radicalism, unionization, and American imperialism. P/NP or letter grading.


M170C. History of Women in China, AD 1000 to Present. (4) (Same as History M170C.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Topics include women and family, women in Confucian ideology, women in literati culture, feminist movement, and women and communist revolution. P/NP or letter grading.

171A. Women, Gender, and Law: Jurisprudence of Sexual Equality. (4) Requisite: enforced req. Distinguished topics. Enforced req: course 102 or 103 or 104. Exploration of models of equality described and/or advocated by legal theorists primarily in U.S.—equitable distribution of marital property, familial equality of respect, etc.—using specific problems of women (e.g., sexual harassment, pregnancy leave policy, access to safe and effective reproductive control technologies) for purposes of comparison and critique. Specific focus may vary by instructor (e.g., consideration of sexual equality theories to issues of gender equality and real status of women in U.S. or from perspectives of international human rights). May be repeated for credit with topic or instructor change. P/NP or letter grading.

M172. Afro-American Woman in U.S. (4) (Same as African American Studies M172 and Psychology M172.) Lecture, two and one half hours. Designed for juniors/seniors. Impact of social, psychological, political, and economic forces which impact on interpersonal relationships of Afro-American women as members of large society and as members of their biological and ethnic group. P/NP or letter grading.

M173B. Women in 20th-Century Japan. (4) (Same as History M173B.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Study of women in Japanese women in Japanese and world history through state documents, autobiographical voices, contemporary television, and other sources, including family history, legal and political, and gender studies sources, 1920s to 1990s. May be repeated for credit with topic change. P/NP or letter grading.

M174. Sociology of Family. (4) (Same as Sociology M174.) Lecture, three hours; discussion, one hour. Theory and research dealing with modern family, its structure, and functions, including historical changes, variant family patterns, family as institution, and influence of contemporary society on family. P/NP or letter grading.

M175. Women and Cities. (4) (Same as Urban Planning M175.) Lecture, three hours. Limited to juniors/seniors. Focus on examination of relationship between women and cities and cities: (1) how cities have affected women's opportunities for economic and social equality, (2) women's contributions to development of U.S. cities, and (3) contemporary strategies and efforts to create urban environments that reflect women's needs and interests. P/NP or letter grading.

CM175. Critical Media Literacy and Politics of Gender: Theory and Practice. (4) (Same as Education CM175.) Seminar, three hours. Corequisite: course CM178L. Use of range of pedagogical approaches to theory and practice of critical media literacy that necessarily involves understanding of new technologies and media forms. Students apply and reproduce technological techniques to inform student analysis of media and critical media literacy projects. Concurrently scheduled with course CM278L. Letter grading.

CM178L. Critical Media Literacy and Politics of Gender: Laboratory. (2) (Same as Education CM178L.) Laboratory, two hours. Corequisite: course CM178. Hands-on production experience as integral component of course CM178. Concurrently scheduled with course CM278L. Letter grading.

M180B. Historical Perspectives on Gender and Science. (4) (Same as History M180B.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Historical cases illustrating how gender enters practices and concepts of science. Topics include gendered conceptions of nature, persons of man of science, role of women in scientific revolution, scientific investigations of women and femininity. P/NP or letter grading.

185. Special Topics in Gender Studies. (4) Lecture, three hours. Preparation: one prior gender studies course. Designed for juniors/seniors. Specialized or advanced study in one area within gender studies. May be repeated for credit with topic and/or instructor change. P/NP or letter grading.

M185A. Special Topics in American Indian and Gender Studies. (Same as American Indian Studies M187A.) Lecture, three hours. Variable topics in American Indian and gender studies. May be repeated for credit with topic and/or instructor change. P/NP or letter grading.

M186A. Women and Gender, Prehistory to 1792. (4) (Same as History M186A.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Exploration of models of gender, class, and sexuality from prehistory to 1792. First half deals with period before written history and asks when did gender appear? How and why did patriarchy develop? Topics include evolution of women’s bodies, appearance of gender, women’s contribution to Neolithic revolution, significance of Goddess artifacts, creation myths, and women and sexuality in different religions. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M186B. Global Feminism, 1850 to Present. (4) (Same as History M186B.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Introduction to movements for women’s rights (educational, political, economic, sexual, and reproductive) around world and over one and one half centuries. P/NP or letter grading.

187. Senior Research Seminar: Gender Studies. (4) Seminar, three hours. Preparation: courses 10, 102, 103, 104. Designed for advanced junior/senior Gender Studies majors or minors. In-depth study of major research topic. Conduct preparatory research, then share and critique other student works in progress. Letter grading.

188SA. Individual Study for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. May be repeated for credit with topic or instructor change. Letter grading.

188SB. Individual Study for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. May be repeated for credit with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Study for USIE Facilitators. (2) Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. May be repeated for credit with faculty mentor required. May not be repeated. Letter grading.
189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth, through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

M191D. Topics in Queer Literatures and Cultures. (5) Same as English M191D and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M191D.) Seminar, three or four hours. Enforced requisite: English Composition 3. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M191E. Topics in Gender and Sexuality. (5) (Same as English M191E and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M191E.) Seminar, three or four hours. Enforced requisite: English Composition 3. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

198A. Honors Research in Gender Studies. (4-12) Tutorial, four hours. Limited to junior/senior gender studies program students. Three- term sequence to research and write honors thesis under direct supervision of faculty sponsor and in consultation with faculty co-sponsor. Individual contract required. 198A. Required: course 187. Letter grading. 198B. Enforced requisite: course 198A. In Progress grading (credit to be given only on completion of course 198B). Letter grading. 198C. Enforced requisite: courses 198A, 198B. Letter grading.

199. Directed Research in Gender Studies. (2 or 4) Tutorial, to be arranged. Preparation: at least two upper-division gender studies courses, minimum 3.0 grade-point average. Limited to 103 or 104. Limited to junior/senior Gender Studies majors and minors. Supervised individual research or investigation under guidance of faculty mentor on specific topic within gender studies. Culminating paper or tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. Letter grading.

Graduate Courses

201. Introduction to Interdisciplinary Methods in Gender Studies. (4) Seminar, three hours. Presentation of basic intellectual questions and methodological approaches of gender/sexuality and gender studies, critical feminist traditions, modern and contemporary feminist critique and identity politics. May be repeated for credit with instructor change. Letter grading.

202. Key Theories and Concepts in Gender Studies. (3) Lecture/discussion, three hours. Relationship of theories of gender and sexuality as they inform all fields of human culture, with special attention to race. Focus includes feminist and queer theories of modern and contemporary visual culture and cultural production. May be repeated for credit with instructor change. Letter grading.

203. Epistemologies of Gender. (4) Lecture/discussion, three hours. Focus on epistemological theories, how gender informs the social scientific and humanities disciplines, and the implications of post-structuralist theories for feminist work. May be repeated for credit with instructor change. Letter grading.

204. Research Design and Professional Development. (3) Seminar, three hours. Required of third-year graduate students. Examination of how various cultures think of health and wellness, not only individually but collectively. Exploration of structural inequalities within health care and medical sciences. Students are required to contribute weekly to service learning component, working with individuals and organizations in fields of health and wellness including healers, non-profits, and organizations working for social justice. May be concurrently scheduled with CM143XP Letter grading.

205. Subjects in Gender Studies. (4) Seminar, three hours. Departmental topics course that offers in-depth aspects of field. Limited of investigation set by individual instructor. S/U or letter grading.

210. Topics in Women and Public Policy. (4) Lecture, four hours. Designed for graduate gender studies students. Introduction to background, decision-making processes, and current debates over public policy directly affecting women and girls in more major spheres of public life (e.g., work, family, political system, healthcare, legal regulation). Topics may focus on public health, political science, medicine, workplace studies, etc. May be repeated for credit with topic or instructor change. Letter grading.

215. Topics in Study of Sexuality and Gender. (4) Seminar, three to four hours. Designed for graduate students. Multidisciplinary studies on aspects of sexual orientation, gender identity, queer and trans- gender theory, interdisciplinary research on minority sexualities, and social construction/deconstruction of gender. May be repeated for credit with topic or instructor change. Letter grading.

220. Cultural Studies in Gender, Race, and Sexuality. (4) Seminar, three hours. Designed for graduate students. In-depth study of representations of gender and sexuality in literature, film, and popular culture, with special attention to race. Topics include type of artistic cultural production across national borders, theorizing femmique as diasporic or multicultural formation. Letter grading.

CM232A. Chicana Feminism. (4) (Same as Chicana/o and Central American Studies CM214.) Lecture, four hours. Enforced requisite: course 10 or Chicana/o and Central American Studies 10A. Examination of theories and practices of women who identify as Chicana feminist. Analysis of writings of Chicanas who do not identify as feminist but whose practices attend to gender inequities faced by Chicanas both within Chicana/o/Chicano community and dominant society. At- tendsion to Anglo-European and Third World women. Concurrently scheduled with course CM132A. S/U or letter grading.

CM233B. Gender and Sexuality. (4) (Same as Sociology M236B) Seminar, three hours. Designated for graduate students. Analysis of current American feminist theory relevant to sociologists. Exploration of new critiques of second wave feminism by working class feminists and/or feminists of color, scholars from other countries, and recent so-called antifeminist feminists. Discussion of directions for future feminist sociology. Letter grading.

CM243XP. Healing, Ritual, and Transformation. (4) (Formerly numbered CM243.) (Same as World Arts and Cultures CM240XP) Lecture, four hours. Designed for graduate students. Examination of how various cultures think of health and wellness, not only individually but collectively. Exploration of structural inequalities within health care and medical sciences. Students are required to contribute weekly to service learning component, working with individuals and organizations in fields of health and wellness including healers, non-profits, and organizations working for social justice. May be concurrently scheduled with CM143XP Letter grading.

M252. Selected Topics in Sociology of Gender. (4) (Same as Sociology M252.) Lecture, two hours; discussion, two hours. Designed for graduate students. Seminar on selected topics in sociology of gender. May be repeated for credit with topic and instructor change. S/U or letter grading.

M253A. Seminar: Current Problems in Comparative Education. (4) (Same as Education M253A.) Seminar, three hours. Multidisciplinary course designed to examine topics at the intersection of race, gender, and Central American Studies CM214.) Lecture, four hours. Enforced requisite: course 10 or Chicana/o and Central American Studies 10A. Examination of theories and practices of women who identify as Chicana feminist. Analysis of writings of Chicanas who do not identify as feminist but whose practices attend to gender inequities faced by Chicanas both within Chicana/o/Chicano community and dominant society. At- tendsion to Anglo-European and Third World women. Concurrently scheduled with course CM132A. S/U or letter grading.

Gender Studies / 509
M255. Cross-Cultural Perspectives on Gender. (4) (Same as Sociology M255.) Seminar, three hours. How does gender manifest itself in lives of different groups of women in U.S. and abroad? Are universal analytical categories or unified feminist movements possible or is gender too different cross-culturally? S/U or letter grading.

M259A-M259B. History of Women. (4-4) (Same as History M259A-M259B.) Seminar: three hours. Course M259A is requisite to M259B. History of women’s social and political issues seen in U.S. and comparative context. In Progress (M259A) and letter (M259B) grading.

M261. Gender and Music in Cross-Cultural Perspective. (4) (Same as Ethnomusicology M261.) Seminar, three hours. Designed to foster in-depth understanding of gender in study of music as culture. Topics range from ethnography of gender and sexuality, (de)codification of messages of resistance, and gender representation to gendered politics via musical production. S/U or letter grading.

M262. Gender Systems. (4) (Same as Anthropology M243.) Seminar, three hours. Current theoretical developments in understanding gender systems cross-culturally, with emphasis on relationship between systems of gender, economy, ideological systems, and social inequality. Selection of ethnographic cases from recent literature. S/U or letter grading.

M266. Feminist Theory and Social Sciences Research. (4) (Same as Education M266.) Lecture, four hours. Examination of how diverse feminist theoretical traditions of last quarter century have both challenged and strengthened conventional social sciences theories and their methodologies. Introduction especially to feminist standpoint theory, distinctive critical theory and their methodologies. Introduction to feminist methods of deconstruction and gender representation. Letter grading.

CM270. Alternate Traditions: In Search of Female Voices in Contemporary Literature. (5) (Same as Comparative Literature CM270.) Seminar, four hours. Designed for graduate students. Investigation of narrative texts by contemporary French, German, English, American, Spanish American, African, and Asian women writers from cross-cultural perspective. Common themes, problems, and techniques. Concurrently scheduled with course CM170. S/U or letter grading.

CM278. Critical Media Literacy and Politics of Gender: Theory and Production. (4) (Same as Education CM278.) Seminar, three hours. Corequisite: course CM278L. Use of range of pedagogical approaches to theorize and practice of critical media literacy that is essentially involves understanding of new technologies and media forms. Study of both theory and production techniques to inform student analysis of media and critical media literacy projects. Concurrently scheduled with course CM178L. Letter grading.

CM278L. Critical Media Literacy and Politics of Gender: Laboratory. (2) (Same as Education CM278L.) Laboratory, two hours. Corequisite: course CM278. Hands-on production experience as integral component of course CM278. Concurrently scheduled with course CM178L. Letter grading.

285. Special Topics in Women’s Studies. (4) Lecture/discussion, four hours. Designed for graduate students. Selected topics or special problems. In-depth study of aspects of feminist theory or research methods or gender analysis within disciplinary studies in social sciences, humanities, health sciences, arts, or professional programs. May be repeated for credit with topic or instructor change. Letter grading.

296. Doctoral Roundtable. (2) Research group meeting, two hours. Preparation: satisfactory completion of PhD program or equivalent. Requisites: at least two courses from 201, 202, 203, 210. Limited to program PhD students. Interactive seminar with focus on disciplinary and interdisciplinary issues, feminist scholarship, research presentation, and professional development. May be repeated for credit. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Prerequisite or corequisite: course 495. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Feminist Pedagogy. (2) Seminar, two hours. Preparation: appointment as teaching assistant in department. Introduction to feminist methods of teaching, with emphasis on reciprocity and dialogue and de-emphasis on hierarchy. Required of students while serving as teaching assistants (first time only) undergraduate gender studies courses. May be repeated for credit. S/U or letter grading.

596. Directed Individual Study or Research. (2 to 12) Tutorial, to be arranged. Requisites: courses 201, 202, 203. Directed individual research and study in area related to women’s studies/gender studies, arranged individually by student with instructor. May be repeated for credit. S/U or letter grading.

597. Preparation for MA Comprehensive Examination or PhD Qualifying Examinations. (2 to 12) Tutorial, eight hours. Limited to graduate gender studies students. Reading and preparation for written MA comprehensive examination or PhD qualifying field examinations. May be repeated for a maximum of 12 units. S/U grading.


GEOGRAPHY

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Geography 310-825-1071
Gregory S. Okin, PhD, Chair

Faculty Roster

Professors
John A. Agnew, PhD
Stephen A. Bell, PhD
Kyle C. Cavanaugh, PhD
Jared M. Diamond, PhD
C. Cindy Fan, PhD
Thomas W. Gillespie, PhD
Susanna B. Hecht, PhD
Dennis P. Lettenmaier, PhD
Glen M. MacDonald, PhD (Professor of California and the American West)
Adam D. Moore, PhD
Gregory S. Okin, PhD
Marilyn N. Raphael, PhD
Ananya Roy, PhD (Meyer and Renee Luskin Professor of Inequality and Democracy)
Yongwei Sheng, PhD
Michael E. Shin, PhD
Michael C. Storper, PhD
A. Park Williams, PhD
Yongkang Xue, PhD

Professors Emeriti
Charles F. Bennett, Jr., PhD
Judith A. Carney, PhD
William A.V. Clark, PhD
Michael R. Curry, PhD
J. Nicholas Entarkin, PhD
Helga M. Leitner, PhD
David L. Rigby, PhD
Melissa Savage, PhD
Allen J. Scott, PhD
Eric S. Sheppard, PhD (Alexander von Humboldt Endowed Professor Emeritus of Geography)

Laurence C. Smith, PhD
Werner H. Terjung, PhD
Stanley W. Trimble, PhD
Hartmut S. Walter, PhD

Associate Professors
Lieba B. Faier, PhD
Jamie M. Goodwin-White, PhD
Juan C. Herrera, PhD
Kelly A. Kay, PhD
V. Kelly Turner, PhD

Assistant Professor
Shaina S. Potts, PhD

Overview

Geography is the study of the natural world and how humans have changed it. It examines the physical Earth and life on it, looking at the world’s diverse cultures, economies, and the environmental problems they produce.

Geography addresses many issues about the contemporary world. Some are local, such as documenting the development of ethnic neighborhoods within Los Angeles. Others are regional, such as determining the best locations for nature reserves in California. Many are global, such as the study of greenhouse gases and how they affect climates, culture and resource issues in developing countries, and the impact of information technologies on people in different places.

The work of geographers often takes them out of the classroom into the field to collect information on topics that range from the settlement of new immigrants to the distribution of endangered species, the erosion of shorelines, and the location of high-tech businesses. On other occasions, geographers work in laboratories, using techniques such as computer analysis of satellite photographs to look for changes in river courses and computer modeling of shifts in global vegetation patterns and the distribution of human populations. Research is also conducted in libraries and archives, probing documentary sources on human interaction with the natural world and how that world is imagined.

Career Prospects

Department of Geography graduates have a wide variety of career opportunities because of their combination of geographical/environmental perspectives and technical skills. UCLA geography students have gone on to become university scholars, school teachers, members of governmental and nongovernmental planning, development, and conservation agencies, business executives, lawyers, and specialists in geographical information analysis for government and private business. Because of its so-
phisticated focus on the relationship of the
global to the local, geography is particularly
useful for those who wish to pursue careers
with an international focus.

**Undergraduate Majors**

**Geography BA**

The Geography major allows students to com-
bine a broad background in the field with more
specific interests and career goals. Students
can select classes in several areas of geogra-
phy such as urban, economic, cultural, environ-
mental, physical, or biogeography. They should
consult with the undergraduate adviser to plan
a program suitable to their personal objectives.

**Learning Outcomes**

The Geography major has the following learn-
ing outcomes:

- Comprehensive knowledge of the main
  strands of physical and human geography,
  including familiarity with major theoretical
  perspectives
- Command of various geographical methods
  and techniques such as remote sensing, car-
tography, and field methods
- Skills in collecting and analyzing geographical
data
- Proficiency in written arguments drawing on
  appropriate sources and methods in the geo-
  graphical literature

**Entry to the Major**

**Admission**

To declare the major, students must have com-
pleted two geography courses with a grade-
point average of 2.0 or better.

**Transfer Students**

Transfer applicants to the Geography major
with 90 or more units must complete as many
of the following introductory courses as possi-
ble prior to admission to UCLA: one physical
geography or biogeography course, one cul-
tural geography or economic geography
course, and one statistics course.

Refer to the UCLA transfer admission guide
for up-to-date information regarding transfer
selection for admission.

**Requirements**

**Preparation for the Major**

**Required:** Three courses (15 units) as follows:
Geography 1 or 2, 3 or 4 or 6, and Statistics 12.

**The Major**

**Required:** Eleven upper-division geography
courses (44 units minimum).

**Honors Program**

The departmental honors program is designed
for Geography majors who are interested in com-
pleting a research project that culminates in
an honors thesis.

To qualify for graduation with departmental
honors, students must have a cumulative
grade-point average (GPA) of 3.5 or better in all
upper-division geography courses and a 3.0
overall GPA. They must enroll in Geography
198A and 198B in two consecutive terms and
earn grades of A– or better. They may elect to
work with one or two faculty sponsors. Stu-
dents are awarded highest honors, honors, or
no honors based on an evaluation of the thesis
by the faculty sponsor(s), and meeting GPA re-
quirements. Contact the department advising
office for more information.

**Policies**

**Preparation for the Major**

Each course must be taken for a letter grade.

**The Major**

Each course must be taken for a letter grade.

All geography upper-division courses num-
bered 100 and higher may be applied toward the
major, with a few exceptions. Contact the advis-
ing office for more information.

**Geography/Environmental Studies BA**

The major in Geography/Environmental Studies
develops and deepens students' understand-
ing of environmental issues; it explores prob-
lem-solving approaches from an interactive
people/nature viewpoint and involves analysis
of social, physical, and biotic environmental
systems. The major's uniqueness lies in its em-
phasis on its geographical perspective of hu-
mans impacts on natural systems, as well as of
implications of global change on local and re-
gional human systems.

**Learning Outcomes**

The Geography/Environmental Studies major
has the following learning outcomes:

- Comprehensive knowledge of the main
  strands of physical and human geography,
  including familiarity with major theoretical
  perspectives
- Command of various geographical methods
  and techniques such as remote sensing, car-
tography, and field methods
- Familiarity with a range of geographical
  methods and techniques such as remote sensing,
  cartography, and field methods
- Skills in collecting and analyzing geographical
  data
- Proficiency in written arguments drawing on
  appropriate sources and methods in the geo-
  graphical literature

**Entry to the Major**

**Admission**

To declare the major, students must have com-
pleted two geography courses with a grade-
point average of 2.0 or better.

**Transfer Students**

Transfer applicants to the Geography/Environ-
mental Studies major with 90 or more units
must complete as many of the following intro-
ductory courses as possible prior to admission
to UCLA: one physical geography or biogeog-
raphy course, one cultural geography or eco-

demic geography course, one people and eco-
systems course, and one statistics course.

Geography 7 must be taken at UCLA in order
to fulfill the preparation for the major require-
ment, and, as the enforced requisite for courses
180, 181A, and 182A, Geography 7 must be taken prior to enrolling in these
courses. Students taking this course as a re-
quise only may take it as P/NP grading.

Refer to the UCLA transfer admission guide
for up-to-date information regarding transfer
selection for admission.

**Requirements**

**Preparation for the Major**

**Required:** Geography 1 or 2, 3 or 4 or 6, 5, 7,
and Statistics 12.

**The Major**

**Required:** Eleven upper-division geography
courses, each taken for a letter grade, that
must be distributed as follows: (1) environmen-
tal studies and natural systems core—six

  courses from 101, M102, M103, 106, 107, 108,
  109, M110, 116, 117, M118, 120, M125, M126,
  M127, 130, M131, 133, 135, 136, 138, 139B,
  139C; (2) human systems core—two courses
  from 140, 141, M142, M144, 145, 148, 150,
  151, M153, 158, 159, 160, 161, 162, 169A,
  173A; (3) procedures—two courses from 180,
  181A, 181B, 181C, 182A, 182B, 182C, 184,
  185, M186; and (4) regions—one course from
  174A, 175A, 175B, or 176A.

**Honors Program**

The departmental honors program is designed
for Geography/Environmental Studies majors
who are interested in completing a research
project that culminates in an honors thesis.

To qualify for graduation with departmental
honors, students must have a cumulative
grade-point average (GPA) of 3.5 or better in all
upper-division geography courses and a 3.0
overall GPA. They must enroll in Geography
198A and 198B in two consecutive terms and
earn grades of A– or better. They may elect to
work with one or two faculty sponsors. Stu-
dents are awarded highest honors, honors, or
no honors based on an evaluation of the thesis
by the faculty sponsor(s), and meeting GPA re-
quirements. Contact the department advising
office for more information.

**Policies**

**Preparation for the Major**

Each course must be taken for a letter grade.

Students are strongly advised to complete all
preparation for the major courses before begin-
ing upper-division work in the major.

**The Major**

Each course must be taken for a letter grade.

Geography/Environmental Studies majors are ad-
vised to complete the required courses in the
human systems core before taking courses in the environmental studies and natural systems core.

**Undergraduate Minors**

**Geography Minor**

The Geography minor is designed for students who wish to deepen and/or broaden their major program of study with a distinctive yet flexible program of courses encompassing the relationship between environment and society. The minor allows students to develop a coherent strategy for understanding and explaining the manner in which people and the Earth interact. Students have the opportunity to explore the origins, development, morphology, and processes of landscapes inherited from nature, as well as those institutions and cultural, economic, political, and social patterns associated with the human development, occupancy, organization, perception, and use of these landscapes.

**Admission**

To enter the minor, students must have completed at least one geography course at UCLA with a grade of C or better, have an overall grade-point average of 2.0 or better, and file a petition in the Geography Department Advising Office, 1255 Bunche Hall.

**The Minor**

**Required Lower-Division Courses (10 units):** Two courses from Geography 1, 2, 3, 4, 6.

**Required Upper-Division Courses (20 units):** Any five upper-division geography courses, with a few exceptions. Contact the advising office for more information.

**Policies**

It is recommended that students take the lower-division courses before attempting upper-division courses.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor, and at least three of the five upper-division courses must be taken in residence at UCLA. Transfer credit for any of the above is subject to departmental approval.

Each minor course must be taken for a letter grade. Successful completion of the minor is indicated on the transcript and diploma.

**Geospatial Information Systems and Technologies Minor**

The Geospatial Information Systems and Technologies minor is designed to provide students with a strong background in the use, application, and development of geospatial/environmental research techniques and methods.

**Admission**

To enter the minor, students must have completed Geography 7 with a grade of B or better, have an overall grade-point average of 2.0 or better, and file a petition in the Geography Department Advising Office, 1255 Bunche Hall. For majors in Geography or Geography/Environmental Studies, only two upper-division courses may overlap between the major and this minor.

**The Minor**

**Required Lower-Division Courses (10 units):** Geography 7, Statistics 12.

**Required Upper-Division Courses (24 units minimum):** Geography 180, 181A, 181B, 182A, and any two courses selected from 181C, 182B, 184, M186, and 199 (4 units with approval of the faculty adviser).

**Policies**

Each upper-division course must be completed with a grade of C or better.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor, and at least three of the five upper-division courses must be taken in residence at UCLA. With the exception of Statistics 12, transfer credit is not accepted toward this minor except on rare occasions.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

**Graduate Majors**

**Geography MA, CPhil, PhD**

The department offers the PhD degree in Geography (an MA degree may be earned in the process of completing PhD requirements). Student research projects are conducted in collaboration with a faculty adviser and advisory committee. Graduate students work in most major areas of geography and on projects around the world. Graduate alumni of the department have teaching positions at many leading universities in the U.S. and abroad.

**Requirements**

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

**Master of Applied Geospatial Information Systems and Technologies**

**Requirements**

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**Geography**

**Lower-Division Courses**

1. **Earth's Physical Environment.** (6) Lecture, three hours; laboratory, two hours. Study of Earth's physical environment, with particular reference to nature and distribution of landforms and climate and their significance to people. P/NP or letter grading.

2. **Biodiversity in Changing World.** (6) Lecture, three hours; discussion, two hours. Biogeographic exploration of plant and animal diversity and conservation issues on continents and islands around world. Study of physical, biotic, and human factors responsible for evolution, persistence, and extinction of species and ecological communities. Analysis of effects of human activity. P/NP or letter grading.
Upper-Division Courses

Environmental Studies and Natural Systems

101. Principles of Geomorphology. (Formerly numbered 100.) Lecture, three hours; reading period, one hour. Requisite: course 1. Study of processes that shape world’s landforms, with emphasis on weathering, mass movement, transport, deposition; energy and material transfers; space and time considerations. P/NP or letter grading.

M102. Soils and Environment. (Formerly numbered M127.) Lecture, three hours; discussion, one hour; field trips. General treatment of soils and environmental implications: soil development, morphology, and worldwide distribution of soil orders; physical, chemical, hydrologic, and biological properties; water use, erosion, and pollution; management of soils as related to plant growth and distribution. P/NP or letter grading.

M102L. Soils and Environment. Field. (Formerly numbered M127L.) Lecture, three hours; laboratory, two hours. Exploring soil systems and delivering material in course M102, including excavating, describing, and naming soils in field, soil forming processes, geomorphology, and soils. P/NP or letter grading.

M103. Soil and Water Conservation. (Formerly numbered M101.) Lecture, three hours; discussion, one hour. Requisite: course 1; 2, Environment 10, Life Sciences 7B. Designed for juniors/seniors. Systematic study of processes of and hazards posed by erosion, sedimentation, development, and pollution and techniques needed to conserve soil and maintain environmental quality. Scope includes agriculture, forestry, mining, and other rural uses of land. P/NP or letter grading.

106. World Vegetation. (Formerly numbered 108.) Lecture, three hours; reading period, one hour. Limited to juniors/seniors. Characteristics, distribution, environmental and cultural relationships of world’s principal vegetation patterns. P/NP or letter grading.

107. Forest Ecosystems. (Formerly numbered 111.) Lecture, three hours; field trips. Requisite: courses 1, 2 or Life Sciences 7B, 10. Designed for juniors/seniors. Evaluation of ecological principles as they apply to forests. Emphasis on constraints of physical environment, biotic interactions, disturbances, and long-term environmental change. P/NP or letter grading.


109. Biogeography of Plant and Animal Invasions. (Formerly numbered 116.) Lecture, three hours; reading period, one hour. Requisite: course 1 or 2 or 5. Examination of theories and examples of invasion of new environments by plants and animals, invasion through natural processes or by human activity. P/NP or letter grading.

M110. Ecosystem Ecology. (Formerly numbered M117.) Lecture, three hours; field trips. Requisite: course 1 or Life Sciences 7B. Designed for juniors/seniors. Development of principles of ecosystem structure and function. Implications of linking between ecosystem structure and function. Emphasis on energy and water balances, nutrient cycling, plant-soil-microbe interactions, landscape heterogeneity, and human disturbance to ecosystems. P/NP or letter grading.

116. Climatology. (Formerly numbered 104.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Examination of many relations between climate and world of man. Application of basic energy budget concepts to microclimates of relevance to ecosystems of agriculture, animals, man, and urban places. P/NP or letter grading.

117. Tropical Climatology. (Formerly numbered 102.) Lecture, three hours. Introduction to tropical convection and develop- ment of tropical climate, with special reference to hurricanes, ENSO, and monsoons. Examination of human interaction with tropical climate processes and humanly modified climate. Use of climatological information to foster sound environmental management of climate-related resources in tropics. P/NP or letter grading.

M118. Applied Climatology: Principles of Climate Impact on Natural Environments. (Formerly numbered M106.) Lecture, three hours; discussion, one hour. Designed for juniors/seniors. Exploration of knowledge and tools to solve complex problems in contemporary applied climatology, including current practices, influence of climate on environment, and human influence on changing climates. P/NP or letter grading.

119. Global Climatology and Climate Change. (Formerly numbered 105.) Lecture, three hours. Requisite: course 1. Survey of Earth’s climate system and factors that cause globe’s climate to change. Study of most important properties of Earth’s climate and how these properties structure and connect geophysically and over time. Exploration of physical laws governing climate variations and interconnections to build baseline understanding of natural climate phenomena and impacts of human disturbance. P/NP or letter grading.


M125. Environmentalism: Past, Present, and Future. (Formerly numbered M115.) Same as Environment M125 and Urban Planning M165. Lecture, three hours; discussion, one hour. Exploration of history and origin of major environmental ideas, movements or countermovements they spawned, and new and changing nature of modern environmentalism. Introduction to early ideas of environmentalism, how low of the modern sciences reshaped environmental thought, and how this was later transformed by 19th-century ideas and rise of American conservation movements. Review of political of American environmental thought and contemporary environmental questions as they relate to broader set of questions about nature of development, sustainability, and equity in environmental debate. Exploration of issues in broader context, including global climate change, rise of pandemics, deforestation, and environmental justice impacts of war. Letter grading.

M156. Environmental Change. (Formerly numbered M131.) Same as Environment M126. Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Examination of natural forces producing environmental changes over millions of years. How present landscape reflects past conditions. Effects of environmental change on people. Increasing importance of human activity in environmental modification. Focus on impact of anthropogenic changes on forests. P/NP or letter grading.

M127. Global Environment and Development: Problems and Issues. (Formerly numbered M128.) (Same as Urban Planning CM166.) Lecture, three hours; discussion, one hour. Designed for juniors/seniors. Questions of population, resource use, Third World poverty, and environment. Analysis of global economic restructuring and its connections to...
changing organization of production and resulting environmental impacts. Case studies from Africa, Latin America, Asia, and U.S. P/NP or letter grading.

130. Food and Environment. (4) (Formerly numbered 132.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Thematic orientation to food systems and their role in environmental and cultural transformations. P/NP or letter grading.

M131. Human Impact on Biophysical Environment. (4) (Formerly numbered M130.) (Same as Environment M131.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Examination of history, mechanisms, and consequences of interactions between humans and environment. Exploration in depth of three thematic topics (deforestation, desertification, and greenhouse gas increase and ozone depletion) and four major subjects (soil, biodiversity, water, and landforms). P/NP or letter grading.

133. Humid Tropics. (4) (Formerly numbered 113d.) Lecture, three hours. Requisite: course 2 or 5 or Life Sciences 7B. Designed for juniors/seniors. Examination of humid tropics, with emphasis on rainforests, their ecological principles, and forms of land use. Letter grading.

135. Africa and African Diaspora in Americas. (4) (Formerly numbered 114.) Lecture, three hours. Designed for juniors/seniors. Analysis of cultural-geographic and historical interaction of Africa's role in America, with emphasis on environment, agriculture, food systems, and medicinal crops. P/NP or letter grading.


139B-139C. Problems in Geography, (4-6) (Formerly numbered 159E-159F.) Seminar, three hours; reading period, one hour. Preparation: completion of three courses in one concentration. Limited to seniors. Seminar course in which students carry out intensive research projects developed from courses within one concentration. P/NP or letter grading. 139B. Biogeography. 139C. Culture and Environment in Modern World.

Human Systems

140. Social Geography. (4) (Formerly numbered 147.) Lecture, three hours; discussion, one hour. Study of spatiality and social differences, such as race, class, gender, age, sexuality, location. Critical explorations of identity, social categories, and spatial structures. Importance of space and place in social life. P/NP or letter grading.

141. Cultural Geography of Modern World. (4) (Formerly numbered 133.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors and graduate students. Historical and structural approach to cultural geography of modern world, with particular emphasis on structure and functioning of its core, semi-periphery, and periphery. P/NP or letter grading.

M142. (When Do Leaders Make Differences? (5) (Formerly numbered M153.) (Same as Anthropology M148 and Honors Collegium M152.) Lecture, two hours; discussion, two hours. Examination of leaders who did or did not succeed in effecting change, as background to understanding the conditions under which leaders can make differences. Comparison of political leaders, business chief executive officers, sports coaches, and religious leaders. Letter grading.

M144. Four Cities. (4) (Formerly numbered M146.) (Same as Gender Studies M146.) Lecture, three hours; discussion, one hour. Critical engagement of gender as concept of geographic inquiry. Gender as spatial process, analysis of feminist geographic theory and methods, landscapes of gender, challenges of representing gender. Spaces of femininity, masculinity, and sexuality. P/NP or letter grading.

145. Slavery and Human Trafficking. (4) Lecture, three hours; discussion, one hour. Requisite: one course from 3-A, Anthropology 3, Anthropology 105, or Anthropology 105B. Limited to juniors/seniors. Exploration of how, why, and to what ends human trafficking has been conceptualized as global problem that warrants international response. Examination of feminist, racial, environmental, and religious arguments and their criticism. How do people organize to demand environmental justice? What people can and cannot control, and how people can organize to demand environmental justice?

146. Environmental Justice and Climate Change. (4) Lecture, three hours. Designed for juniors/seniors. Examination of current socio-political and environmental justice. Premise that all people have right to live in clean environment and access resources to sustain health and livelihood. Investigation of under what conditions some people are afforded basic right and how some have fought back. Consideration of how situations of people experiencing effects of pollution or environmental hazards differ from other situations, or lack basic resources, and social relations of production and power that contribute to these outcomes and, how people have organized to demand environmental justice. P/NP or letter grading.


148. Political Geography. (4) (Formerly numbered 140.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Spatial analysis of political activity, spatial constellation of political power, control over space as central component to political struggles. Studies at local, national, state, and global scales. P/NP or letter grading.

149. Border Studies: Globalization, Nation, Identity. (4) (Formerly numbered 134.) Lecture, three hours, discussion, one hour (when scheduled). Analysis of history, function, and forms of contemporary borders. Designed to broaden understanding of and challenge dominant narratives about many physical, political, and conceptual borders that shape our daily lives, from national boundaries to security fences to discover awareness about race and gender. P/NP or letter grading.


M151. Uneven Development Geographies: Prosperity and Impoverishment in Third World. (4) (Formerly numbered 141.) Lecture, three hours; discussion, two hours (when scheduled). Geographical perspective on part of the world: the Third World (global South). How development has shaped livelihood possibilities and practices, by global processes shaping back centuries, and transformative possibilities of Third World agency. World societies seek to transform Third World into their own image through theories and practices of colonialism, development, and globalization. Study of these theories and Third World alternatives to examine how they have shaped livelihood possibilities. Social differences and stagnant livelihood possibilities for Third World majority and minorities that prosper massively, as well as geographical differences (cultural, environmentally, and socially) across geographic spaces of Third World. Designed for juniors/seniors. Study of geographical aspects of transportation, with focus on characteristics and functions of various modes and on complexes of intraurban transport. P/NP or letter grading.

M153. Transportation Geography. (4) (Formerly numbered M149.) (Same as Urban Planning M150.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Study of geographical aspects of transportation, with focus on characteristics and functionalities of various modes and on complexes of intraurban transport. P/NP or letter grading.

158. Population Geography. (4) (Formerly numbered 142.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Study of social and behavioral perspectives influencing people in their patterns of geographic change and mobility, with special emphasis on spatial relationships and selected case studies. P/NP or letter grading.

159. Population in Interacting World. (4) (Formerly numbered 143.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Provides multidisciplinary understanding of and application for human population phenomena and problems in different parts of world and at different geographical scales—from local to global. Particular emphasis on understanding and critically reflecting on (1) contemporary population problems at global, national, and local scale, including dramatic decline and persistence of high levels of fertility in parts of developing world, record low fertility and population aging in highly industrialized countries, increasing levels of international migration, refugee crises, mass rural to urban migration, and creation of in less developed world, (2) policies adopted to address these problems, such as family planning policies to reduce fertility, immigration policies, and so on, and (3) gender dimension of contemporary population problems and policies. P/NP or letter grading.

160. Urban Geography. (4) (Formerly numbered 150.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Analysis of development, functions, spatial patterns, and geographic problems of cities. P/NP or letter grading.

161. Cities and Social Difference. (4) (Formerly numbered 151.) Lecture, three hours; discussion, one hour. City landscapes embody best and worst of U.S. society: diversity and poverty, opportunity and violence. Study of urban spaces, social differences, inequality, and conflicts over uses and meanings of city space. Social urban geography. P/NP or letter grading.

162. Ethnicity in American Cities. (4) (Formerly numbered 144.) Lecture, three hours; reading period, two hours. Limited to juniors/seniors. Designed to encourage and facilitate critical thinking about geographical aspects of ethnicity in contemporary America. Use of comparative perspective to explain changing distribution, social, economic, and political behavior, and adjustment problems ethnic groups face in the process of defining as a group. P/NP or letter grading.

166A. Problems in Geography: Urban and Regional Development Studies. (4) (Formerly numbered 159A.) Seminar, three hours; reading period, one hour. Preparation: completion of three courses in one concentration. Limited to seniors. Seminar course in which students carry out intensive research projects developed from courses within one concentration. P/NP or letter grading.

Regions

171A. North America. (4) (Formerly numbered 180.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Delimitation and analysis of physical and geographic regions of U.S. and Canada. P/NP or letter grading.
171B. California. (4) Formerly numbered 184.) Lecture, three hours; reading period, one hour. Limited to juniors/seniors. Systematic and regional treatment of geographic phenomena, including physical, cultural, and economic aspects and detailed studies of various regions, P/NP or letter grading.

171C. Metropolitan Los Angeles. (4) Formerly numbered 185.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Study of origins, growth processes, internal structure and pattern, interactions, environmental and spatial problems of Los Angeles metropolitan area. P/NP or letter grading.

172A. South America. (4) Formerly numbered 182.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Study of geographic factors, physical and cultural, that are basic to understanding historical development of South America and contemporary economic and cultural geography of individual Spanish-speaking countries. P/NP or letter grading.

172B. Central America. (4) Formerly numbered 181.) Seminar, two and one half hours. Located at center of American continent, Central America is that part of the New World inhabited by New Spain, Mexico, Costa Rica, and Panama. History and European influence; contemporary economic, social, cultural, and political developments. P/NP or letter grading.

174. Global and Cultural Geography. (4) Formerly numbered 140.) Lecture, three hours; laboratory, one hour. Designed for juniors/seniors. Survey of human occupation of Earth's surface, mapping the spatial distribution of human populations, their economic activities, and the impact of human activities upon the planet. P/NP or letter grading.

175A. Japan in World: Culture, Place, and Globalization. (4) Formerly numbered 161.) Lecture, three hours; laboratory, one hour. Focus on the role of Japan in contemporary global politics and international relations and its response to current and future climate change. Students learn to collect field data, and to conduct field vegetation research. Students learn to work as professional research consultants in teams, develop consulting research proposals, consult assessment reports, and present those reports orally and in written form. Field trips to Mojave Desert, Great Basin Desert, pinyon pine woodland, pine-fire forest, alpine treeline, White Mountains, Sierra Nevada, and coastal pine and redwood forests. P/NP or letter grading.


181B. Advanced Geographic Information Systems. (4) Formerly numbered 170.) Lecture, three hours; discussion, one hour. Enforced requisite: course 181A. Introduction to full geographic information systems (GIS) functionality, using ARC/INFO on UNIX workstations. Spatial manipulation, query, and computation of datasets carried out in project-oriented approach. P/NP or letter grading.

181C. Geographic Information Systems Programming and Development. (4) Formerly numbered 173.) Lecture, two hours; laboratory, two hours. Enforced requisite: course 181A. Introduction to fundamental concepts and architecture of programming objects in widely used geographic information systems (GIS), and in programming in GIS environment. Topics include GIS customization, using variety of programming languages. Lectures followed by laboratory exercises. P/NP or letter grading.

182A. Introduction to Remote Sensing. (4) Formerly numbered 165.) Lecture, two hours; laboratory, one hour. Enforced requisite: course 182. Introduction to fast-growing field of environmental monitoring from space. Application of Landsat, radar, Global Positioning System (GPS), and Earth Observing System satellites to land-use change, oceanography, meteorology, and environmental monitoring. Introduction to digital image-processing and imaging geographic information systems (GIS) software. P/NP or letter grading.

182B. Remote Sensing: Digital Image Processing and Analysis. (4) Formerly numbered 172.) Lecture, three hours; laboratory, one hour. Enforced requisite: course 182A. Digital processing methods for manipulating and analyzing image data. Topics include spatial description, geometric and radiometric correction, classification, image enhancement and filtering, and image change detection. Reinforcement of laboratory techniques and procedures presented in lecture with laboratory exercises and student project. P/NP or letter grading.

182C. Advanced Remote Sensing. (5) Formerly numbered 174.) Lecture, three hours; laboratory, two hours. Enforced requisite: course 182A. Remote sensing in visible and infrared wavelength regions to understand basic concepts of radiation propagation and interaction with matter, how digital remote sensing images are acquired, and constraints on available data and data analysis. P/NP or letter grading.

184. Environmental Modeling. (4) Formerly numbered 166.) Lecture, one hour; laboratory, two hours. Presentation of basic concepts related to computer modeling of biogeographic and geographic processes, and other phenomena relevant to changing Earth and its inhabitants. Laboratory exercises include building basic computer models and working with existing models. P/NP or letter grading.

185. Methods in Physical Geography. (5) Formerly numbered 177.) Lecture, three hours; laboratory, three hours. Enforced requisite: course 182A. Examination of field procedures and concepts used in observation, measurement, analysis, and interpretation of physical phenomena pertinent to natural and built environment. Topics vary from year to year and may include soils, geomorphology, and field methods in geographic information science. May be repeated for credit with topic change. P/NP or letter grading.

M186. Introduction to Spatial Statistics. (4) Formerly numbered M171.) (Same as Statistics M171.) Lecture, three hours; laboratory, one hour. Enforced requisite: course 185A. Introduction to methods of measurement and interpretation of geographic distributions and associations. P/NP or letter grading.

187. Research and Writing in Human Geography. (4) Formerly numbered 161.) Seminar, three hours. Limited to seniors. Writing and research are two key aspects of what human geographers do. Students improve writing through proposing and conducting secondary research projects. Students will work with a faculty mentor to exchange ideas and focus on a topic of interest. Students learn process of doing geographic research, including how to ask good research questions, how to search for relevant secondary sources, how to construct argument, how to build literature review, and how to properly cite and incorporate academic sources. Culminating final paper on topic of choice. Week 1: class workshops and other opportunities to exchange work with peers, giving useful feedback and opportunity to learn how to offer feedback and how to incorporate feedback into editing their work. Letter grading.

Special Studies

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE BBS course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designated as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.
191. Variable Topics Research Seminars: Geography. (4) Seminar, three hours. Research seminars on selected topics in geography. Some sections may require prior approval. Consult Schedule of Classes for topics and instructors. May be repeated for credit and may be applied as elective units toward departmental majors and minors. P/NP or letter grading.

195. Community or Corporate Internships in Geography. (1) Tutorial, to be arranged. Limited to juniors/seniors. Internship of eight to 10 hours per week in supervised setting in community agency or business. Students meet on regular basis with instructor and provide print or its online version. May be repeated for credit. Individual contract with supervising faculty member required. P/NP grading.

198A-198B. Honors Research in Geography I, II. (4-8) Tutorial, to be arranged. Preparation: 3.25 grade-point average overall, at least five upper-division geography courses with 3.5 grade-point average. Limited to juniors/seniors. Development and completion of honors thesis or comprehensive research project under direct supervision of one or two faculty members. May be repeated for maximum of 16 units. Individual contract required. Letter grading.

Special Studies. (2 to 8) Tutorial, to be arranged. Limited to juniors with B average in major or seniors. May be repeated for maximum of 16 units. P/NP or letter grading.

Core Graduate Courses

191. Variable Topics Research Seminars: Geogra...
247. **Advanced Topics in Cultural Geography.** (4) Seminar, two hours; discussion, one hour; reading period, one hour. Requisite: course 133. Lectures and discussions emphasize recent global aspects of development of cultural landscape in different geographic environments. S/U or letter grading.

248. **Advanced Topics in Economic Geography.** (4) Seminar, three hours; reading period, three hours. Designed to introduce students to the development of economic geography. S/U or letter grading.

249. **Advanced Population Geography.** (4) Lecture, three hours; reading period, one hour. Requisite: course 133. Advanced study of economic theories and principles S/U or letter grading.

250. **Advanced Topics in Urban Geography.** (4) Seminar, two hours; discussion, one hour; reading period, one hour. General study of hierarchy of urban places, including diffusion within urban hierarchy and theories to account for location and size distribution of cities. S/U or letter grading.

### Physical Geography

255. **Physical Basis of Geography.** (4) Lecture, three hours; reading period, one hour. Critical evaluation of formative influences, paradigm shifts, and present challenges. Focus on physical geography, illustrated from historical developments and changing research frontiers in geomorphology, climatology, oceanography, hydrology, and soil science. S/U or letter grading.

256. **Regional Climate and Terrestrial Surface Processes.** (4) Seminar, three hours. Designed for graduate students. Physical concepts and basic principles of land-surface/air interactions. Exploration of topics in terms of regional and global perspective and implications. Human activities cause changes in land cover, which in turn affect regional climate. Some regions, in particular, appear to be hot spots. Regions to be selected from climate S/U or letter grading.

257. **Land Degradation.** (4) Seminar, three hours. Discussion on impact of human activities and institutions on terrestrial ecosystems and goods and services they provide. Topics vary from year to year. May be repeated for credit with topic change. S/U or letter grading.

258. **Human Security and Environmental Change.** (4) Seminar, three hours. Discussion of impact of environmental change on food, water, and physical security of individuals and societies. Implications to environmental change. Topics vary from year to year. S/U or letter grading.

260. **Evolution, Ecology, Environmentalism, and Roots of Modern Anthropology.** (4) Seminar, three hours; reading period, one hour. Discussion of how contemporaneous development of modern concepts of evolution, ecology, and environmentalism influenced, and were influenced by, development of modern geography as academic discipline. S/U or letter grading.

### Special Studies

265. **Environmentalism: Climate Dimensions and Politics, Past, Present, Future.** (4) Lecture, three hours; discussion, one hour. Review of environmental theories and their practices in dynamic U.S. and international contexts, Issues of climate change, scenario planning, and matrix ecology and its implications in both urban and rural settings. Exploration of problems of increasing internationalization (or international implications) of environmental practices as part of both green and black economies. What does integrated environmental policy look like in this century? Letter grading.

271. **Seminar: Climatology.** (4) Seminar, three hours; reading period, one hour. Requisite: course 280. Selected topics. May be repeated for credit. S/U or letter grading.

272. **Seminar: Biogeography.** (4) Seminar, three hours; reading period, two hours. Requisite: course 281. Related research projects growing out of course 281. May be repeated for credit. S/U or letter grading.

274. **Humid Topics.** (4) Seminar, three hours; reading period, two hours. Designed for graduate students. Selected topics. Biophysical and cultural complex of humid topics, with emphasis on problems related to human settlement and livelihood. May be repeated for credit. S/U or letter grading.

277. **Coastal Geography.** (4) Seminar, three hours. Discussion of various coastal topics from biophysical, ecological, and human perspectives. Content may vary from year to year. May be repeated for credit. S/U or letter grading.

### Physical Geography Advanced

280. **Advanced Climatology.** (4) Lecture, three hours; laboratory, one hour. Preparation: first year of calculus and acquaintance with Fortran IV. Introduction to tools and techniques of relevance to natural and man-made landscapes. Such basic intellectual, mathematical, and computer programming tools are of special concern to physical geographers, ecologists, and engineers. S/U or letter grading.

281. **Advanced Topics in Biogeography.** (4) Lecture, two hours; discussion, one hour; reading period, one hour. Requisites: courses 108, and 110 or 116. Intensive review and analysis of physical and cultural factors influencing plant distributions. S/U or letter grading.

283. **Advanced Topics in Geomorphology.** (4) Lecture, two hours; discussion, one hour; reading period, eight hours. Preparation: courses from 101, 105, M107. Requisite: course 100. Analysis of geomorphic theories since scientific revolution, with emphasis on catastrophism, uniformitarianism, glacial theories, isostasy and eustasy, evolution and cyclic, thermodynamic and mechanics, quantification, and current paradigms. View of each theme in its contemporary milieu. S/U or letter grading.

286. **Advanced Topics in Environmental Change.** (4) Lecture, two hours; laboratory, two hours. Preparation: one course from 101, 105, M107 or 281. Topics vary from year to year and are determined by students interest. S/U or letter grading.

### Regional Geography

290. **South America.** (4) Seminar, three hours; reading period, two hours. Introduction to main issues in geography of South America, with focus mainly on cultural/historical geographical perspectives on national period; themes and periods can be adapted to individual interests. S/U or letter grading.

291. **Geography of Contemporary China.** (4) Seminar, three hours; reading period, two hours. Designed for graduate students. May be repeated for credit. S/U or letter grading.

292. **Seminar: Political Geography of Italy.** (4) Same as Italian M241.) Seminar, three hours; reading period, two hours. Themes in political geography with particular emphasis on Italy. May be repeated for credit. S/U or letter grading.

299B. **Research Group Seminars: Issues in Biophysical Geography.** (1) Seminar, one hour. Bimonthly seminar to discuss current research in biophysical geography. Topics vary from year to year. May be repeated for credit. S/U grading.

### Special Studies

375. **Teaching Apprentice Practicum.** (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

### Master of Applied Geospatial Information Systems and Technologies

401. **Applied Geospatial Data Science.** (4) Lecture, two hours; laboratory, two hours. Project-based exploration of essential methods and techniques in geographic information systems (GIS) and geospatial technology with focus on modeling, spatial analysis, and data visualization methods to addressing real-world problems and answering geospatial research questions. Topics include design, automation, and multi-step geospatial analysis methodology. Letter grading.

404. **Geospatial Databases and Data Management.** (4) Lecture, two hours; laboratory, two hours. Requisite: course 401 (may be taken concurrently). Design, development, and management of geospatial databases, including databases used in shared and scalable enterprise geographic information systems (GIS) platforms. Introduction of relational database theory and database design principles, and user access considerations. Students learn to develop and work with enterprise database systems that support large datasets and simultaneous access by many users. Introduction to enterprise GIS systems and techniques facilitating concurrent editing of shared spatial databases. Letter grading.

411. **Geospatial Imagery Analysis.** (4) Lecture, two hours; laboratory, two hours. Requisite: course 401. Introduction to field of remote sensing and image analysis, primarily involving environmental monitoring and Earth observation from space. Core concepts in remote sensing, processes by which images are captured, sensors, and platforms including satellites and airplanes, and key characteristics of captured imagery. Project-based instruction in techniques for processing, analyzing, and visualizing
remotely sensed imagery and raster data with propriety, open-source, and cloud-based remote sensing and image analysis platforms. Letter grading.

412. Programming for Geospatial Data Science I. (4) Lecture, two hours; laboratory, two hours. Requisite: course 401. Conceptual and practical instruction in use of scripting, automation, and computer programming within geospatial sciences. Students use Python programming language to develop geospatial processing scripts and applications, making use of popular geospatial data manipulation libraries. Introduction to statistical computing and tabular data processing and analysis techniques. Students learn to apply common spatial analysis methods in practical context. Emphasis on essential relationships, spatial autocorrelation analysis, cluster analysis, spatial regression analysis, point-pattern analysis, and space-time modeling. Letter grading.

413. Geospatial Statistics. (4) Lecture, two hours; laboratory, two hours. Requisite: course 401. Concepts and techniques fundamental to statistical analysis and visualization of data with geographic dimension. Introduction to statistical computing and tabular data processing and analysis techniques. Students learn to apply common spatial analysis methods in practical context. Emphasis on essential relationships, spatial autocorrelation analysis, cluster analysis, spatial regression analysis, point-pattern analysis, and space-time modeling. Letter grading.

414. Programming for Geospatial Data Science II. (4) Lecture, two hours; laboratory, two hours. Requisite: course 401. Introduction to technologies and techniques that support growing field of interactive Web-based geographic information systems and mapping. Study of theory and concepts underlying this rapidly growing field. Applied training is provided in Web map design, development, and programming. Students learn to develop sophisticated interactive Web maps and applications both by using existing Web mapping platforms and also by coding custom Web maps integrating HTML, CSS, JavaScript programming language, and Web mapping code libraries. Letter grading.

415. Geospatial Data Science Futures. (4) Seminar, two hours; laboratory, two hours. Requisite: course 401. Applied exploration of emerging technologies and methods in geospatial technology with focus on learning state-of-art geospatial data analysis and management techniques. Topics of interest introduced in seminar format by subject matter experts and faculty. Through discussions and biweekly applied project work, geospatial research methods are situated in their broader context. Application of innovative geospatial research methods to better understanding spatial dimension of data. Letter grading.

498. Capstone I: Geospatial Research Methods. (4) Seminar, two hours; laboratory, two hours. Requisite: course 401. Instruction in core geospatial project management and research design techniques, as well as geospatial technology research methods. Structured environment for students to propose and begin capstone project. Includes study of appropriate and ethical application of geospatial methods and technology. Projects proposed should be original analyses of geospatial data that solve pressing problem, optionally developed in conjunction with university or industry partner. Letter grading.

499. Capstone II: Geospatial Capstone Project. (4) Laboratory, four hours. Requisites: courses 401, 498. Completion of required capstone research project. Students meet weekly with faculty adviser to discuss progress, learn technical writing skills, and chart goals for timely completion of project. Successful completion and approval of capstone project is required for satisfactory completion of course. May be repeated for credit. Letter grading required to meet MAGIS program requirements. S/U or letter grading.

Special Studies

495. Teaching College Geography. (2) Seminar, one hour; laboratory, three hours. Classroom practice in teaching, with individual and group instruction on related educational methods, materials, and evaluation. May be repeated for credit. S/U grading.

596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. May be repeated for credit. S/U grading.

597. Preparation for PhD Qualifying Examinations. (2 to 8) Tutorial, to be arranged. Independent study. May be repeated for credit. S/U grading.


Overview

The worldwide expansion of the older adult population ensures that issues regarding aging will dominate our environmental, economic, social, political, psychological, and medical concerns and endeavors well into the twenty-first century. The undergraduate minor in Gerontology provides students with a foundation understanding of the current state of science related to human aging, enables students to assess longevity’s potential contribution and challenge to contemporary society, and provides students with an appreciation of opportunities to contribute, personally and professionally, to a diverse aging society.

Undergraduate Minor Gerontology Minor Admission

To enter the Gerontology minor, students must have an overall grade-point average of 2.0 or better and a grade of B or better in Gerontology M108.

The Minor

Required Upper-Division Courses (28 to 32 units): (1) Gerontology M108, (2) four courses from Gerontology M104C, M104D, M119O, M119X, M124XP, M150, M165, Psychology 124C, 150, (3) two terms of Gerontology 195 or 199.

Policies

Students who have completed Clusters 80A with a grade of B or better, and have an overall grade-point average of 2.0 or better, do not need to take Gerontology M108. Successful completion of this cluster sequence (Clusters 80A, 80BX, 80CW) counts for M108 and one elective course.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Gerontology Lower-Division Courses

10. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

59. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

98. Student Research Program. (1 to 2) Tutorial (sustained research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (including this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

M104C. Diversity in Aging: Roles of Gender and Ethnicity. (4) (Same as Chicana/o and Central American Studies M106B, Gender Studies M104C, Public Affairs M1013, and Social Welfare M104C) Lecture, four hours. Exploration of complexity of variables related to diversity of aging population and variability in aging processes. Examination of gender and ethnicity within context of both physical and social aging, in multidisciplinary perspective utilizing faculty from variety of fields to address issues of diversity. Letter grading.

M104D. Public Policy and Aging. (4) (Same as Social Welfare M104D) Lecture, four hours. Examination of theoretical models and concepts of policy process, with application to aging policy. Analysis of decision-making processes that affect aging policy. Description of history of contemporary aging policy, exploration of current policy issues affecting elderly. P/NP or letter grading.

M104E. Social Aspects of Aging. (4) (Same as Social Welfare M104E) Lecture, four hours. Topics include theories of aging, economic factors, changing roles, social relationships, and special populations. Weekly seminars organized around key aspect of social gerontology. P/NP or letter grading.
Global Health / 519

Undergraduate Minor

Global Health Minor

Admission

To be admitted to the minor, students must be in good academic standing (overall grade-point average of 2.0 or better) and have completed all lower-division minor courses with a GPA of 2.0 or better in those courses.

After satisfying these requirements, students may declare the minor in consultation with the academic counselor.

The Minor

Required Lower-Division Courses (10 units):

Two courses from Civil Engineering 58X, Clusters 80A, 80BX, 80CW, Community Health Sciences 91, Global Studies 1, History 3D, Honors College 1, 14, 26, International and Area Studies 1, Molecular, Cell, and Developmental Biology 60, Nursing 50, Statistics 13, World Arts and Cultures 2, 33.

Required Upper-Division Courses (20 to 25 units):

Global Health 100 and four courses from the following theme areas, with a maximum of two courses from any single area:

Art: World Arts and Cultures 144, C158, C159, 160.

Community Health: Community Health Sciences 100, 161, CM170, 187A, 187B, 195, Health Policy and Management 140, Psychiatry and Biobehavioral Sciences 175, Psychology 150.

Environmental Health: Environment 166, M167, Environmental Health Sciences 100, C185A, C185B.

Genetics: Honors Collegium 141, Society and Genetics 162, 163.


Health Humanities and Communication: English Composition 131C, History 179A, 179B.


Policies

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall
grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Global Health

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript, P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required: consult Undergraduate Research Center. May be repeated, P/NP grading.

Upper-Division Courses

100. Global Health and Development. (4) Lecture, three hours; discussion, one hour (when scheduled). Interdisciplinary examination of key issues in area of global health, with focus on developing world. Provides basis for understanding current debates that frame global health problems and actions in and across nations with strikingly different political-economic contexts. Discussion of how local and international communities attempt to address challenges of global health problems and how interventions play out through range of policy and programmatic approaches. P/NP or letter grading.

110A-110B. Field Studies in Global Health. (4-4) Seminar, three hours. Enforced corequisite for course 110A: course 110B. Exploration of issues regarding global health in important locations around world. Hands-on experiential courses offered for students participating in UCLA Travel Study Program. Field trips included to gain first-hand experience. May be repeated with topic and/or location change. Offered in summer only. P/NP or letter grading.

140. Equity-Focused Program Evaluation in Global Health: Theory and Practice. (4) Lecture, three hours; discussion, one hour. Requisite: course 100. Interdisciplinary course to provide solid understanding of equity-focused evaluation theories and practices. Discussions are guided by principles of equity and human rights-based approach to global health. Focus on evaluation of policies, programs, and equitable delivery of health services for most vulnerable and marginalized populations. Case studies to learn about equity-focused research and evaluation concepts and methodologies. Case study topics include impact of COVID-19 pandemic and response to it in relation to our students. For instance, COVID-19 has had greater impact on African American, Latin American, and indigenous communities than on white populations, and it has unmasked disparities in access to health care, education, and technology, which often reflect in student performance. Students are encouraged to examine relevance of class discussions in their own communities and in terms of their aspirations for creating better, more equitable, and healthier world. P/NP or letter grading.

150. Migration and Health. (4) Lecture, three hours; discussion, one hour. Introduction to history, current status, and future of migration and health using social determinants of health model to foster multidisciplinary analysis of status of migrant health around world. Exploration of social determinants of health affecting migrating populations, including gender, race, ethnicity, socioeconomic status, poverty, religion, politics, governance, and environment. Letter grading.

160. Selected Topics in Global Health. (4) Lecture, three hours; discussion, one hour (when scheduled). Examination of one or more topics related to global health. May be repeated for credit with topic change. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript, P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.


Overview

The Bachelor of Arts (BA) degree in Global Jazz Studies is a capstone major designed to provide students with an interdisciplinary education that draws from various areas of the UCLA Herb Alpert School of Music, as well as from the arts and social sciences. The curriculum is designed around three major areas: (1) performance courses designed to advanced students’ skills individually and playing in small combos and larger ensembles; (2) musician-ship and music theory courses in which students master improvisation, basics of music theory, arranging, and composition; and (3) broad understanding of the historical and societal context of the development and advancement of jazz in the United States and globally.

Faculty Roster

Professors

Terence O. Blanchard
Robin D.G. Kelley, PhD (Gary B. Nash Endowed Professor of U.S. History)
Arturo O’Farrill, MM

Professors Emeriti

Kenneth E. Burrell, BA
James W. Newton, BM

Lecturers

Duane C. Benjamin
Clayton Cameron, BM
Jésus A. Guzmán
Charles A. Harrison, MM
Tamar Hendelman, BM
T. Jacques Lesure
Hitomi M. Oba, MA
Daniel A. Rosenboom, DMA
Olmart Ruiz, MFA
Luciana Souza, MM
Arturo J. Stabile, MM

Adjunct Professors

Mark F. Turner, BM
Michele A. Weir, MA

Adjunct Associate Professors

Alison S. Deane, MM
Roberto Miranda, MM
Ruth Price

Undergraduate Major

Global Jazz Studies BA

Capstone Major

The Global Jazz Studies major is a designated capstone major. The capstone project, usually done in the senior year, is tailored to each student and includes a seminar class (course 186A) and a capstone presentation such as a recital, lecture-demonstration, or lecture-recital (186B). The capstone experience provides an appropriate vehicle for the faculty to assess the students’ accomplishments during their tenure in the program.
Learning Outcomes

The Global Jazz Studies major has the following learning outcomes:

- Advanced-level performance of multiple jazz styles across historical periods and contemporary jazz performance practices
- Demonstrated proficiency in styles representative of Africa, the African diaspora, and at least one other world music cultural context
- Demonstrated advanced skill and understanding in improvisation, musical structure and instrumentation, composition, arranging, timbre, and expression
- Demonstrated basic proficiency in areas of programming, recording, and/or post-production
- Demonstrated interdisciplinary knowledge of global jazz as text and method
- Interrogation of the concerns of jazz as a comprehensive practice, including its capacity to transform the musical, political, and socioeconomic world it engages

Entry to the Major

Admission

Applicants are reviewed individually, based on a questionnaire, grade-point average, test scores, a personal statement of purpose, and an on-campus audition. Applicants who are unable to travel to UCLA have the option of submitting a video audition in place of the on-campus audition.

Transfer Students

Transfer applicants to the Global Jazz Studies major with 90 or more units must complete asessment courses (equivalent to Global Jazz Studies 175), 8 units of large jazz ensemble (Global Jazz Studies 122A through 122C, 127A, 127B, 127C, 129A, 129B, 129C).

Scholarly foundations (20 units)—Global Jazz Studies 101, 125; one course (at least 4 units) selected from each of the following three subject areas: African American Studies 108, M150D, M158C, Global Jazz Studies M109, M119, M130, M131, 165, 188, 199, Music Industry 102, 104A, 107A, 115.

Capstone seminar and project (4 units)—Global Jazz Studies 186A, 186B.

Policies

Preparation for the Major

All entering first years are required to take the Music Theory Assessment Examination either during New Student Sessions or during zero week of fall quarter. The examination score is used to determine eligibility and placement in first-year music core courses (Music 3, M6A, M6B, M6C). Examination results may require enrollment in Music 3 as a requisite to course M6A. Entering transfer students with fewer than 15 units of prior music theory must take the Music Theory Assessment Examination.

Each course must be completed with a grade of C or better.

The Major

Each course must be taken for a letter grade and be completed with a grade of C or better. Students must have an overall grade-point average of 2.0 or better. No more than eight units from upper-division tutorials (195-199) may be applied toward the degree.

Global Jazz Studies

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery. UCLA history of women in jazz and allied musical traditions from 1880s to present. Survey of women vocalists, instrumentalists, composers/arrangers, and producers and their impact on development of jazz. P/NP or letter grading.


M25. Global Pop. (5) (Same as Ethnomusicology M25.) Lecture, four hours; discussion, one hour. Development of world music or world beat, including its meaning and importance to contemporary culture as well as its history and impact. P/NP or letter grading.

M35. Blues, Society, and American Culture. (5) (Same as Ethnomusicology M35.) Lecture, four hours; discussion, one hour. Sociocultural history and survey of blues music tradition from its roots in West Africa to its emergence in African American oral culture, with emphasis on philosophical underpinnings and social and political impact of blues and its influence on development of country, jazz, gospel, rhythm and blues, rock, hip-hop music, and other media. P/NP or letter grading.

M50A-M50B. Jazz in American Culture. (5–5) (Same as Ethnomusicology M50A-M50B.) Lecture, four hours; discussion, one hour. Course M50A is not required to M50B. Survey of development of jazz in American culture. Discussion of different compositional/performance techniques and approaches that distinguish different sub-styles of jazz from one another, as well as key historical figures that shaped development of jazz from its early years through modern jazz. Important historical social issues (segregation, Depression, World War II, Civil Rights Movement) that intersect with history of U.S. and jazz music. P/NP or letter grading. M50A. Late 19th Century through 1940s; M50B. 1940s to Present.

Global Jazz Studies Composition Studio. (2) Studio, one hour per week to be arranged with instructor; outside study, five hours. Limited to Global Jazz Studies majors. One-on-one composition lessons with assignments and compositions tailored to student progress and level of achievement. Lessons address various, cross-cultural concepts in harmonic, melodic, and rhythmic construction, orchestration, analyses of global jazz masterworks, form, texture, style, notation, ornamentation, improvisation, and performance feasibility. May be repeated for credit. P/NP or letter grading.

71A-71L. Instruction in Jazz Performance. (2 each) Studio, one hour of individual instruction. Limited to Global Jazz Studies majors. Knowledge of jazz repertoire, concepts, and techniques gained through private lessons on specific instrument and voice. Students meet weekly with instructor to demonstrate their performance skills and receive assessment of their progress in learning material. May be repeated for maximum of 12 units. Letter grading. 71A, Guitar; 71B, Percussion; 71C, Piano; 71D, Saxophone; 71E, String Bass; 71F, Trombone; 71G, Trumpet; 71L, Voice.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101. Cross-Cultural Perspectives in Jazz. (4) Lecture, four hours. Exploration of assimilation and rethe of jazz from U.S. in various countries, with particular emphasis on cultural and social features that form basis for new jazz-ethnic music styles. Letter grading.

M103. Creating Musical Community. (4) (Same as Ethnomusicology M103, Music M103, and Ethnomusicology M103.) Seminar, four hours; discussion, one hour. Limited to school of music majors. Faculty and students make music together in different modes. Students learn certain repertoire, refine it, and bring it to concert performance. Students critically engage musical literacies and notion of social contract that forms basis of musical notation. Drawing from American music folk game traditions, highlights complex history of this country and way in which entire body is used as resource when instruments are unavailable. Letter grading.

M110A-M110B. African American Musical Heritage. (5–5) (Formerly numbered M122A-M122B.) (Same as African American Studies M116A-M116B and Ethnomusicology M122A-M122B.) Lecture, four hours; discussion, one hour. Sociocultural history and survey of African American music covering Africa and its impact on America; music of 17th through 19th centuries; minstrelsy and its impact on representation of blacks in film, television, and theater; religious music, including hymns, spirituals, and gospel; black music of Caribbean and Central and South America; and music of black Los Angeles. P/NP or letter grading.

M110B. Sociocultural history and survey of African American music covering Africa and its impact on America; music of 17th through 19th centuries; minstrelsy and its impact on representation of blacks in film, television, and theater; religious music, including hymns, spirituals, and gospel; black music of Caribbean and Central and South America; and music of black Los Angeles. P/NP or letter grading.

M111. Ellingtonia. (4) (Formerly numbered M111A-M111B.) Lecture, four hours; discussion, one hour. Historical and social context of Duke Ellington's life and career, and reaching influence of his efforts. Ellington's music, known as Ellingtonia, is one of largest and perhaps most important bodies of music ever produced in U.S. Covers many contributions of other artists who
worked with Ellington, such as composer Billy Strayhorn and musicians Johnny Hodges, Cootie Williams, and Mercer Ellington. P/NP or letter grading.

M119. Cultural History of Rap. (5) (Same as African American Studies M119 and Ethnomusicology M119.) Lecture, four hours; discussion, one hour. Introduction to development of rap music and hip-hop culture, with emphasis on musical and verbal qualities, philosophical and sociological origins, gender representation, and influences on cinema and popular culture. P/NP or letter grading.

122A–122B–122C. Jazz Styles and Analysis. (4—4—4) Lecture, four hours; outside study, eight hours. Limited to Global Jazz Studies majors or consent of instructor. In-depth analysis of jazz styles and repertoire intended for students with music backgrounds. Letter grading.

122A. Early Jazz to Swing Era, 122B. Bebop to Avant-garde, 122C. Jazz since Sixties. Lecture, four hours; discussion, one hour. Introduction to process. In lieu of recital, students may develop recital component; to be arranged by UCLA Jazz Orchestra. P/ NP or letter grading.

125. Jazz Arranging and Orchestration. (4) Lecture, three hours. Limited to Global Jazz Studies majors. Study of specific instruments and their unique use and application in jazz (jazz notation and terminology, transcription, woodwind doublings, brass mutes, etc.). Analysis of different writing techniques and approaches that distinguish different sub-styles of jazz from one another. Assignments focus on writing for medium and large groups with final project of arrangement to be read by UCLA Jazz Orchestra. P/ NP or letter grading.

M128. Exploration in Rhythms. (2) Same as Ethnomusicology M128.) Lecture, two hours; outside study, four hours. Preparation: audition. Exploration of compositional and improvisation more intensely in smaller jazz combination groups of four to eight musicians. May be repeated for maximum of 12 units. Letter grading.

127A-127B-127C. Jazz since Sixties. Lecture, four hours; outside study, four hours. Course 127A with grade of C or better is requisite to 127B; course 127B with grade of C or better is requisite to 127C. Study of jazz harmony through use of piano keyboard. Letter grading.

M129. Jazz since Sixties. (2–2–2) Laboratory, two hours; outside study, four hours. Preparation: laboratory. Application of concepts, structural paradigms, and inspiration from one another. Assignments focus on writing for UCLA Jazz Orchestra. P/ NP or letter grading.

M130. Culture of Jazz Aesthetics. (4) (Same as Anthropology M118 and Ethnomusicology M130.) Lecture, three hours; laboratory, two hours; outside study, four hours. Elements of jazz theory and improvisation. Letter grading.

M144. Sociology of Jazz. (2) Same as Sociology M144.) Lecture, two hours; outside study, four hours. Elements of jazz theory and improvisation. Letter grading.
tion of ideas and the movement of people all around the world. *Goverance and conflict* courses focus on challenges to the nation-state from forms of governance above (regional and global forms of governance) and below (autonomy and secessionist movements); and from security threats beyond interstate warfare (ethnic conflict, terrorism, civil wars). *Markets and resources* courses address the interactions among global, regional, national, and subnational economic processes over resources and market dynamics; their effects on different societies with respect to economic growth, poverty, inequality, the environment; and the interactions among market forces, political institutions, and public policy.

The curriculum draws on insights from disciplines across the humanities and social sciences to give students the theoretical and methodological skills and knowledge base necessary to understand this complex and rapidly changing world.

**Undergraduate Major**

**Global Studies BA**

**Capstone Major**

The Global Studies major is a designated capstone major. As students progress through the major, they move from a set of broad themes, theories, and perspectives to a more specialized focus about which they develop a specific research expertise and write a thesis. In completing the capstone, students should demonstrate an appropriate mastery of a specialized area of global studies and a critical understanding of current scholarly concerns, literatures, and debates. They should also be able to identify and analyze primary sources and use those sources and appropriate scholarly literature to design and carry out a research project.

**Learning Outcomes**

The Global Studies major has the following learning outcomes:

- Critical thinking about basic political processes, institutions, and concepts as they operate in different national and cultural contexts
- Impartial evaluation of arguments
- Application of mathematical and logical reasoning to political processes
- Use and evaluation of statistical and other types of evidence in arguments
- Recognition of limits of quantitative and non-quantitative analysis
- Knowledge of diverse theories of politics acquired through critical engagement with texts, media, and contexts
- Location, evaluation, and use of information and scholarship to place political events in broader historical, cross-national, and theoretical contexts
- Employment of cultural, hermeneutical, normative, and historical approaches
- Written and oral arguments using appropriate evidence, with sensitivity to opposing perspectives, about significant political processes, events, and concepts

**Entry to the Major**

**Admission**

Admission to the Global Studies major is by application only and is highly competitive, with only a limited number of students admitted each year. To be eligible to apply, UCLA students must have completed all nonlanguage preparation for the major courses and one modern foreign language equivalent to level 3 by the end of the term in which they are applying. Any remaining language courses may be completed after students have been accepted to the major. Each preparation for the major course must be taken for a letter grade, and the UC grade-point average for all preparation courses must be a minimum of 3.25. In addition, students must have earned a grade of B or better in Global Studies 1.

The application period is once per year, and students must apply no later than the end of fall quarter of their junior year.

Meeting the above minimums does not guarantee admission to the program. Admission is on a competitive basis, using the above qualifications as minimum standards for consideration.

**Pre-major**

Incoming first-year and transfer students may be admitted as Global Studies pre-majors on acceptance to UCLA. Pre-major students must apply for the major at the end of fall quarter of their junior year; they are not automatically accepted into the major.

**Transfer Students**

Transfer applicants to the Global Studies pre-major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one modern world history course, one major world region languages and cultures course, one international politics course, one macroeconomics or microeconomics course, one statistics course, and demonstrated proficiency equivalent to level 3 at UCLA in one modern foreign language. Transfer students must apply for the major by the end of fall quarter of their junior year.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

**Requirements**

**Preparation for the Major**

*Required: Global Studies 1 with a grade of B or better; one methods course selected from Political Science 6, 6R, 30, Statistics 10, 12, or 13; demonstrated proficiency equivalent to level 6 at UCLA in one modern foreign language; and five additional courses as follows: (1) one culture and society course selected from Anthropology 3, 4, Comparative Literature 1C or 2CW, 1D or 2D, 4CW or 4DW, Ethnomusicology M25, Gender Studies 10, Geography 3, 6, History 2B, World Arts and Cultures 20, or 33, (2) one governance and conflict course selected from History 10B, 22, Political Science 10, 20, 50, 50R, or Sociology 1, and (3) one markets and resources course selected from Economics 1, 2, Environment 12, Clusters M1A, or Sociology 51. The remaining two courses, taken from two separate categories, may be selected from the three lists above. One course from the following list may be applied toward the culture and society category: Asian 70C, Asian American Studies 10, Chicana/o and Central American Studies 10B, French 14, 14W, History 8A, 9E, International and Area Studies 31, 33, 50, Italian 42A, 42B, 46, Middle Eastern Studies M50CW, Russian 90A, 90B, 90BW, Spanish 42, or 44.*

**The Major**

*Required: Global Studies 102, 103, 104, and six elective courses, two from each of the following categories: Culture and Society—Anthropology 146, M148, Asian American Studies M130C, 170, M172A, M172C, Chicana/o and Central American Studies 120, 143, CM147, Comparative Literature 100, M148, English 130, 131, 133, 134, Film and Television 106C, 112, French 121, 142, Gender Studies 102, M147C, M162, Geography 141, 151, 175A, Global Studies 125, 140, Political Science M184A, Religion M107, Southeast Asian 157, Society and Genetics 134, Sociology 151, 152, 154, M162, 191F Governance and Conflict—Asian American Studies 171A, M171D, 171E, Chicana/o and Central American Studies 151, Environment M125, Geography M131, 148, History 121E, 121F, 144, M186A, Honors Collegium 125, Political Science 120A, 120B, 121A, 122A, M122B, 123A, 123B, 125A, 126, 128A, 132A, M132B, 135, 137A, 138B, 169, Sociology 182 Markets and Resources—Anthropology 143, Chicana/o and Central American Studies M125, 176, Economics 121, 122, Environment 134, Geography M127, 150, Global Studies 120, 145, History 131A, 134C, International Development Studies M120, Political Science 124A, 151B, M167C, 167D, Spanish 135, Sociology 183. Required Summer Global Learning Institute: After successful completion of two courses from Global Studies 102, 103, 104, students are expected to attend a summer Global Learning Institute at one of several locations around the world in which they enroll in Global Studies 110A and 110B. Required Capstone: During their senior year, students must also take two capstone courses—Global Studies 191 and research/field experience practicum: International and Area Studies 195CE or Global Studies 199. Honors Program In addition to completing all courses required for the major, students must take courses 199A and 199B, in which they research and write an honors thesis. Policies Preparation for the Major Courses must be completed with a grade-point average of 3.25 or better.*
Honors Program

Majors who have completed Global Studies 102, 103, 104, 191, and who have a 3.5 grade-point average (GPA) in all courses offered for the major are eligible to formally apply for the honors program.

To receive honors at graduation, students must have at least a 3.5 GPA in courses applied toward the major (including 199A and 199B) and an overall GPA of 3.25. Highest honors may be granted at the discretion of the faculty sponsor and the faculty committee to students demonstrating exceptional ability on the senior thesis.

Undergraduate Minor

Global Studies Minor

The Global Studies minor offers students a multidisciplinary curriculum in the humanities and social sciences through which they can explore the complex and multifaceted interconnections that characterize the contemporary world. The minor is designed to complement and enrich studies in their major.

Admission

To enter the minor, students must (1) be in good academic standing (minimum 2.0 grade-point average) and (2) have completed Global Studies 1 and one course in two of the following three categories: (a) culture and society—Anthropology 3, 4, Asian 70C, Asian American Studies 10, Chicana/o and Central American Studies 10B, Comparative Literature 1C or 2CW, 1D or 2D, 4CW or 4DW, Ethnomusicology M25, French 14, 14W, Gender Studies 10, Geography 3, 6, History 2B, 8A, International and Area Studies 31, Italian 42A, 42B, Middle Eastern Studies M50CW, Russian 90B, 90BW, Spanish 42, 44, World Arts and Cultures 20, or 33, (b) governance and conflict—History 10B, 22, Political Science 10, 20, 50, 50R, or Sociology 1, and (c) markets and resources—Economics 1, 2, Environment 12, Clusters M1A, or Sociology 51.

The Minor


Policies

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor.

Successful completion of the minor is indicated on the transcript and diploma.

Global Studies Lower-Division Courses

1. Introduction to Globalization. (5) Lecture, three hours; discussion, one hour. Introduction to concept and history of globalization, and to political, economic, social, and environmental dimensions of global integration today. Topics include finance and trade, colonialism, Industrial Revolution, urbanization, immigration, and climate change, among others. P/NP or letter grading.

2. Globalization in Context. (5) Lecture, six hours. Requisite: course 100B. Corequisite: course 110B. Culture, economy, history, and politics of different locations around world and how they are affected by globalization. Field trips included to gain first-hand experience of these processes. Offered in summer only. P/NP or letter grading.


5. Globalization in Context: Governance and Conflict. (5) Lecture, six hours. Requisite: course 103. Corequisite: course 113BD. History, politics, philosophy, and governance of global governance and how they are affected by globalization. Field trips included to gain first-hand experience of these processes. Offered in summer only. P/NP or letter grading.

6. Globalization in Context Seminar: World Governance. (5) Seminar, six hours. Requisite: course 114AD. Corequisite: course 114BD. Culture, economy, history, and politics of race, gender, and religion and how they are affected by globalization. Field trips included to gain first-hand experience of these processes. Offered in summer only. P/NP or letter grading.

10. Introduction to International Business. (4) Lecture, three hours; discussion, one hour (when scheduled). Over last five decades, world has increasingly become complex; in many ways, opportunities for businesses and entrepreneurs. However, recent world events have demonstrated volatile nature of globalization and pitfalls that can also manifest for firms doing business in global setting. Students gain understanding of dynamic environment of international business, and how firm managers navigate complex world of international business to capitalize upon opportunities and mitigate against risks. P/NP or letter grading.

125. Los Angeles as Global City: Exporter and Importer of Global Culture. (4) Lecture, three hours; discussion, one hour. Study of phenomenon of globalization through the Los Angeles case. Focus on how city produces global culture, including filmed entertainment and culture of celebrity and food; and how it absorbs cultural inputs from world over. Emphasis on interface between relationship between export and import of global culture. City’s distinct cultural milieu influences nature of its cultural exports, but its viability as cultural capital depends on its ability to accommodate diversity of all cultures. Study creates immersive experience through films, guest speakers, and urban field trips. P/NP or letter grading.

140. Hollywood and America’s Global Image. (4) Lecture, three hours; discussion, one hour (when scheduled). Focus on Hollywood’s role in shaping America’s global image. Questions probe with regard to Hollywood’s movies and television shows, and how they represent American attitudes towards foreign cultures as well as our own. Examination of critical aspects of Hollywood’s role in shaping America’s global image. Questioning of whether Hollywood can be more effective as America’s cultural ambassador. P/NP or letter grading.

145. Rethinking Global Capitalism: Race, Class, and Wood’s role in shaping America’s global image. Questions probe with regard to Hollywood’s movies and television shows, and how they represent American attitudes towards foreign cultures as well as our own. Examination of critical aspects of Hollywood’s role in shaping America’s global image. Questioning of whether Hollywood can be more effective as America’s cultural ambassador. P/NP or letter grading.

160. Selected Topics in Global Studies. (4) Lecture, three hours; discussion, one hour (when scheduled). Enforced requisites: courses 110A, 110B. Limited to senior Global Studies majors. Organized on topics basis with readings, discussions, papers, and development of culminating project. May not be repeated for credit. Letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.


192. Undergraduate Practicum in Global Studies. (2) Seminar, two hours; practicum, to be arranged. Enrolled juniors and limited to practicum for advanced undergraduate students to serve as undergraduate course assistants in global studies courses. Students in preparation and presentation of materials and development of innovative programs with guidance of faculty members. May not be applied toward major requirements. May be repeated for credit. P/NP grading.

193. Research Group Seminars. (1) Seminar, two hours. Designed to encourage participation and stimulate research in specific areas for undergraduate students who are part of departmental research group or internship. Discussion of research methods or current literature in field of global studies or of research of faculty members or students. May be repeated for credit. P/NP grading.

199A. Directed Research in Global Studies. (4) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research under guidance of faculty mentor. Culminating paper required. May be applied toward requirements via petition. May be repeated for credit. Individual contract required. Letter grading.


Graduate Course

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495A. Teaching Assistant Pedagogy Seminar. (2) Seminar, two hours. Overview of evidence-based pedagogical theories, strategies, and best practices geared towards preparing first-time teaching assistants to teach at UCLA. Discussion, development, and implementation of pedagogical techniques to promote inclusive teaching and support student learning outcomes. S/U grading.

495A. Introduction to Evidence-Based Undergraduate Teaching. (2) Seminar, nine hours. Students who are part of departmental research group or internship. Discussion of research methods or current literature in field of global studies or of research of faculty members or students. May be repeated for credit. S/U grading.

495B. Teaching as Research. (2) Seminar, nine hours. Enrolled juniors and limited to practicum for advanced undergraduate students to serve as undergraduate course assistants in global studies courses. Students in preparation and presentation of materials and development of innovative programs with guidance of faculty members. May not be applied toward major requirements. May be repeated for credit. P/NP grading.

496A. Introduction to Evidence-Based Undergraduate Teaching. (2) Seminar, nine hours. Enrolled juniors and limited to practicum for advanced undergraduate students to serve as undergraduate course assistants in global studies courses. Students in preparation and presentation of materials and development of innovative programs with guidance of faculty members. May not be applied toward major requirements. May be repeated for credit. S/U grading.

496B. Teaching as Research. (2) Seminar, nine hours. Enrolled juniors and limited to practicum for advanced undergraduate students to serve as undergraduate course assistants in global studies courses. Students in preparation and presentation of materials and development of innovative programs with guidance of faculty members. May not be applied toward major requirements. May be repeated for credit. S/U grading.

496C. Implementing and Communicating Teaching as Research Project. (2 to 4) Tutorial, three to six hours. Enrolled juniors and limited to practicum for advanced undergraduate students to serve as undergraduate course assistants in global studies courses. Students in preparation and presentation of materials and development of innovative programs with guidance of faculty members. Final drafting and submission of senior thesis. Culminating paper of 35 to 50 pages required. Individual contract required. Letter grading.

Graduate Student Professional Development

Graduate Courses

495A. Teaching Assistant Pedagogy Seminar. (2) Seminar, two hours. Overview of evidence-based pedagogical theories, strategies, and best practices geared towards preparing first-time teaching assistants to teach at UCLA. Discussion, development, and implementation of pedagogical techniques to promote inclusive teaching and support student learning outcomes. S/U grading.

495A. Introduction to Evidence-Based Undergraduate Teaching. (2) Seminar, nine hours. Students who are part of departmental research group or internship. Discussion of research methods or current literature in field of global studies or of research of faculty members or students. May be repeated for credit. S/U grading.

495B. Teaching as Research. (2) Seminar, nine hours. Enrolled juniors and limited to practicum for advanced undergraduate students to serve as undergraduate course assistants in global studies courses. Students in preparation and presentation of materials and development of innovative programs with guidance of faculty members. May not be applied toward major requirements. May be repeated for credit. S/U grading.

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496C. Implementing and Communicating Teaching as Research Project. (2 to 4) Tutorial, three to six hours. Enrolled juniors and limited to practicum for advanced undergraduate students to serve as undergraduate course assistants in global studies courses. Students in preparation and presentation of materials and development of innovative programs with guidance of faculty members. Final drafting and submission of senior thesis. Culminating paper of 35 to 50 pages required. Individual contract required. Letter grading.

Graduate Student Professional Development

Graduate Courses

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495A. Introduction to Evidence-Based Undergraduate Teaching. (2) Seminar, nine hours. Students who are part of departmental research group or internship. Discussion of research methods or current literature in field of global studies or of research of faculty members or students. May be repeated for credit. S/U grading.

495B. Teaching as Research. (2) Seminar, nine hours. Enrolled juniors and limited to practicum for advanced undergraduate students to serve as undergraduate course assistants in global studies courses. Students in preparation and presentation of materials and development of innovative programs with guidance of faculty members. May not be applied toward major requirements. May be repeated for credit. S/U grading.

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496C. Implementing and Communicating Teaching as Research Project. (2 to 4) Tutorial, three to six hours. Enrolled juniors and limited to practicum for advanced undergraduate students to serve as undergraduate course assistants in global studies courses. Students in preparation and presentation of materials and development of innovative programs with guidance of faculty members. Final drafting and submission of senior thesis. Culminating paper of 35 to 50 pages required. Individual contract required. Letter grading.


**Head and Neck Surgery**

David Geffen School of Medicine
62-132 Center for Health Sciences
Box 951624
Los Angeles, CA 90095-1624

Head and Neck Surgery
310-206-3631

Maie St. John, MD, PhD, Chair

Overview

The Department of Head and Neck Surgery academic programs consist of a nationally recognized residency program, medical school education, prestigious fellowships, and ongoing continuing medical education. A critical success factor in these academic efforts is the high level of clinical expertise demonstrated by all faculty members, which attracts outstanding applicants. Additionally, department faculty members have an active commitment to basic science and clinical research as an integral component of the program of instruction. These tenets not only ensure quality at every educational level, but also provide a superior milieu for the development of teacher-investigators.

The residency program is incorporated into the department patient care and research activities in six affiliated medical centers and exposes residents to all of the subspecialties during their training. Medical student teaching is a combined effort by faculty members, fellows, and residents, consisting of lectures, didactic learning, and hands-on experience in clinical and research settings. The department’s one- and two-year fellowships are long-standing and sought after by graduate from the best residency programs in the country. Through the continuation of exceptional educational programs, the department accomplishes its commitment to maintain excellence in patient care, to achieve academically, and to advance research in the field.

For more details on the Department of Head and Neck Surgery and courses offered, see the department website.
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Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Healthcare Administration
Graduate Courses

400. Field Studies. (4) Fieldwork, to be arranged. Culmination of fieldwork process that takes approximately one year from internship search process, through actual field placement, to this integrative course. Deliberate consideration and reflection on relationship between summer practicum and principles and competencies of health-care management and policy learned during academic year. Students complete professional management or policy-related consulting report based on organizational problem or health policy issue on which students focused during summer. S/U or letter grading.


402. Management and Organizational Behavior in Health Systems. (4) Lecture, three hours; discussion, one hour. Application of contemporary management and organization behavioral theory to systems that provide personal health care services. Environmental characteristics, decision-making, structure and culture, and processes of health services organizations. Letter grading.

403. Health-Care Information Systems and Technology. (4) Lecture, three hours; discussion, one hour. Provides strong foundation in health information technology (HIT) for those working in health care, with emphasis on development of knowledge and skill to plan, manage and implement HIT systems in health-care delivery organizations with clinical and business partners and evolving HIT spaces. Background and evolution of HIT; how it is planned, implemented, and managed; and how it improves health-care delivery organizations, external research organizations, regulatory organizations, providers, and patients/consumers. Fundamentals of technology, electronic medical records (EMR), electronic health records (EHR), personal health records (PHR), meaningful use, interoperability, and health information exchanges (HIE). Letter grading.

404. Health-Care Strategy. (4) Lecture, three hours; discussion, one hour. Examination of leaders and leadership in health care delivery organizations, biopharma, and medical technology. Special attention to structure and dynamics of competitive markets, corporate-level strategic planning and marketing, managerial ethics and values, organizational creativity/innovation. Letter grading.

405. Leadership and Ethics. (4) Lecture, three hours; discussion, one hour. Preparation: completion of immersion course 596. Examination of leaders and leadership in health care and other organizations to provide broad introduction to leaders, leadership, and organizational characteristics of organizational leaders. Relationship and importance of vision, values, change, strategy, and communication. Identification of characteristics of successful leaders. Students evaluate their own leadership style and identify opportunities to further develop their leadership abilities. Letter grading.

406. Health-Care Marketing. (4) Lecture, three hours; discussion, one hour. Introduction to concepts of health-care marketing. Exploration of principles of market-driven decision-making process. Examination of development of key elements in annual marketing process and of consumer, competitor, company analysis, market segmentation, and target markets. Letter grading.

407. Digital Health Transformation. (4) Lecture, three hours; activity, one hour. Prepares students to lead digital health transformation by deepening knowledge of health technologies driving innovative health-care delivery. Ten learning modules to develop and leadership competencies required to advance and accelerate digital health transformation in one’s organization, whether it is startup or large, mature health system. Letter grading.


411. Microeconomic Theory for Health Sector. (4) Lecture, three hours; discussion, one hour. Microeconomic aspects of health-care system, including health-care costs, demand, and supply. Students practice efficient modes of treatment, market efficiency, and competition. Letter grading.

412. Statistics for Health Management Decision Making. (4) Lecture, three hours; discussion, one hour. Sampling situations, with special attention to those occurring in biological and social sciences. Topics include distributions, tests of hypotheses, estimation, types of error, and confidence levels, and sample size. Letter grading.

413. Health Care Operations Management. (4) Lecture, three hours; discussion, one hour. Development of skills in analyzing and improving health care systems and processes by integrating systems analysis, quality management, operations research techniques, exploratory data analytics, and data visualization. Emphasis on use of organizational data, especially time-stamp data, to study processes and outcomes of care, particularly as it relates to flow analysis and improving flow. Hands-on use of computer-based modeling tools, including spreadsheets and spreadsheet add-ins focus on formulating, designing, and constructing models; drawing conclusions from model results; and translating results into written end-user reports to support process improvement and quality improvement efforts. Letter grading.

414. Health Care Financial Accounting. (4) Lecture, three hours; discussion, one hour. Examination of purpose and methods of financial accounting (including for profit, not-for-profit, and governmental), function and organization of financial and special industry characteristics affecting financial management (to include third party payers, price or rate-setting and cost-shifting, taxation and health care incentives, and emerging health care organizations). Letter grading.

415. Health Care Financial Management. (4) Lecture, three hours; discussion, one hour. Concepts of financial management and managerial accounting as applied within health care industry. Builds managerial financial decision-making skills and key analytical methods used in applications of health care financial management. Students gain understanding and respond to financial recommendations of advisers, lenders, investors, and other stakeholders by applying concepts such as time value of money, financial forecasting, capital planning, and budgeting. Letter grading.


417. Health Informatics & Bioinformatics. (4) Lecture, three hours; discussion, one hour. Exploration of data sources and uses in health care, e.g., electronic medical records, social media, wireless biosensors, system and facility data. Review of hands-on techniques including data management, development of indexes and metrics, choosing and implementing
Health Policy and Management

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illustrating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial, arranged for credit. Only 1 unit may be applied toward MHA minimum total course requirement. S/U or letter grading.

596. Directed Individual Study or Research. (1 to 4) Tutorial, to be arranged with MHA program faculty member. Limited to graduate students. Professional development seminars, required. Limited to graduate students. Only 1 unit may be applied toward MHA minimum total course requirement. S/U or letter grading.

597. Preparation for Master’s Comprehensive Capstone Project. (1 to 4) Tutorial, to be arranged for credit. A written report is required. Limited to graduate students. Only 1 unit may be applied toward MHA minimum total course requirement. May be repeated for credit. S/U or letter grading.

Upper-Division Courses

100. Health Care Systems and Health Policy. (4) Lecture, four hours; discussion, one hour. Limited to nonmajors. Not open for credit to students with credit for course 120. Structure and function of U.S. health care system, health care policy, and issues and forces shaping its future. P/NP or letter grading.


120. Health Care Systems: Structures, Functions, and Policies. (4) Lecture, four hours; discussion, one hour. Required: Public Health 50B. Limited to Public Health majors. Not open for credit to students with credit for course 100. Introduction to health policy and management focusing on basic concepts underlying health care organization, finance, and policy. Topics include development of U.S. health care system, comparisons to international health care systems, trends in health care spending, role of public and private insurance, care delivery, disparities in health status and health care, and current landscape of health policy reform. Letter grading.

C121. Tobacco: Prevention, Use, and Public Policy. (4) Lecture, four hours. Limited to juniors/seniors. Study of tobacco use and its health consequences, including interplay of historical, biological, sociocultural, political, and economic forces with knowledge, attitudes, and behaviors associated with tobacco use. Introductory to prevention interventions, cessation interventions, anti-tobacco efforts in U.S., and international trends in tobacco use. Concurrently scheduled with course C221. Letter grading.

140. Foundations of Maternal and Child Health. (4) Seminar, four hours. Introduction to field of maternal and child health, with focus on major issues affecting health and well-being of children and families over life course. Emphasis on development of individuals and supportive programs at different stages of child’s life; application of life course health development framework to understand health disparities and implications for policy and practice. Letter grading.

M168. Healthcare for American Indians. (4) (Same as American Indian Studies CM168B.) Lecture, two hours; discussion, one hour. Identification of traditional health beliefs, health practices, and healthcare systems of American Indian tribes to understand role of U.S. government in healthcare services for Indian people. Description of health problems that have affected American Indian people. Letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced prerequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators, individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced prerequisite: course 188SA. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced prerequisite: course 188SB. Limited to graduate students. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

197. Individual Studies in Health Services. (2 to 4) Tutorial, four hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research in Health Policy and Management. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Enrolled in CAPS for additional instruction under guidance of faculty mentors. Collaboration with faculty mentors on their research in area related to health policy and management. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200A-200B. Health Systems Organization and Financing. (4) Lecture, three hours; discussion, one hour. Limited to graduate health services students. In-depth analysis of health services systems in U.S., using relevant theories, concepts, and models. S/U or letter grading.

M201. Topics in Theoretical Epidemiology. (4) (Same as Epidemiology M203.) Lecture, three hours. Emphasis on methods that help to understand how systems operate and how to intervene on them. Exploration of how to characterize human-centered problems that arise, and how to handle complexity as core design and development challenge. Examination of different traditions of studying and modeling (re)production and propagation of ideas, both qualitatively and quantitatively, to address questions that arise in public health. Consideration of utility and limitations of these methods for providing insight to stakeholders who are addressing population health problem. S/U or letter grading.

202. Introduction to Statistics and Research Methods for Health Services Research. (4) Lecture, two hours; laboratory, two hours. Overview of statistical and research methods for health services research. Preparation for subsequent graduate coursework in statistics and leading independent research projects. Students learn to develop analytical skills involving collection, analysis, presentation, and interpretation of statistics and how they can be applied to public health. S/U or letter grading.

M203A. Microeconomic Analysis for Public Health and Policy. (4) (Same as Public Policy M201A.) Lecture, four hours. Restricted to students with credit for Mathematics 3A, 3B, or 31A. Course M203A is requisite to M203B. Basic concepts of microeconomics, with emphasis on their application to actual situations and their use in problem solving and focus on theories of firms and markets. Extensive use of differential calculus. Letter grading.

M203B. Microeconomic Analysis for Public Health and Policy. (4) (Same as Public Policy M204A.) Lecture, four hours. Restricted to students with credit for one course from Mathematics 3A, 3B, or 31A. Basic concepts of microeconomics, with emphasis on their application to actual situations and their use in problem solving and focus on theories of firms and markets. Extensive use of differential calculus. Letter grading.

M204A-M204B-M204C. Seminars: Pharmaceutical Economics and Policy. (1-1-2) (Same as Economics M204L-M204M-M204N.) Seminar, three hours every other week. Required: knowledge of one course from Mathematics 3A, 3B, or 31A. Topics in economics of pharmaceutical industry, including rates of innovation, drug regulation, and economic impact of pharmaceuticals. In Progress (M204A, M204B) and letter (M204C) grading.

M205. Pharmaceutical Policy. (4) (Formerly numbered 205S.) (Same as Public Policy M265S.) Lecture, three hours. Policy issues pertaining to pharmaceutical sector. Topics include determinants of expenditures on drugs, price setting in industry, health insurance coverage for pharmaceuticals, and research and development process. Letter grading.

214. Measurement of Effectiveness and Outcomes of Health Care. (4) Lecture, three hours. Overview of health services issues associated with organization, financing, and delivery of healthcare services to vulnerable populations within domestic and international contexts to gain understanding of social, political, and cultural issues that lead to disparities in access, quality, and cost of healthcare services that lead to vulnerability for particular population groups. Introduction to strategies that have been adopted to address these health disparities. Analysis and development of policy and management options that serve needs of vulnerable populations within healthcare system. Letter grading.

215A. Healthcare Quality and Performance Management. (4) Lecture, four hours. Management and optimization of individual and organizational operations of American healthcare system. Exploration of ways in which they actually function and how to ensure their quality and effectiveness. Examination of roles, activities, and daily challenges of managers and how these challenges can best be met on day-to-day basis. Emphasis on applied practice with intent being improvement of student managerial competencies and on development of skills to manipulate processes in delivery of health services, primarily directed to improving effectiveness, efficiency, performance, and quality of healthcare services. Quality improvement
215B. Applied Methods for Improvement/Implementation Science. (4) Lecture, four hours. Planning and management of improvement programs in current work of students and future roles as change agents and leaders in health systems. Training in qualitative and analytic methods for applying improvement science in clinical settings and health systems. Completion of improvement projects that demonstrate student competence in improvement science. Emphasis on case studies and applications so students gain skills in improvement project design and implementation. Analyses of cases, individual improvement projects, and efforts to allow students to apply this knowledge to organizational examples. Letter grading.


217. Evidence-Based Medicine and Organizational Change. (4) Lecture, three hours. Requisites: courses 200A, 225A, 225B, or 236 for graduate students in public health or other health sciences disciplines. Participation of students in critical review and discussion of selected articles with focus on evidence, including clinical trials, meta-analysis, small and large area variations in care, and development and implementation of clinical guidelines. Emphasis on implications for future practice. Letter grading.

221. Tobacco: Prevention, Use, and Public Policy. (4) Lecture, four hours. Designed for juniors/seniors and graduate students. Study of tobacco use and its health consequences, including interplay of historical, biological, sociocultural, political, and economic forces with knowledge, attitudes, and behavior choices of individuals. Introduction to prevention interventions, cessation interventions, anti-tobacco efforts in U.S. and international trends in tobacco use. Currently scheduled with course C121. Letter grading.

225A-225B. Health Services Research Design. (6-6) Lecture, four hours; laboratory, two hours. Limited to departmental MS and PhD students. Letter grading.

225A. Introduction to scope of health services research, conceptualization and design of health services research, choice and assessment of measures for such research, and methods for studies involving direct and indirect data. Preparation and overview of conducting health services research, alternative research paradigms, building conceptual models of what students are trying to study, designing and testing measures, and dissemination of results. Focus with concern over how forces of knowledge, attitudes, and behavior choices of individuals. Introduction to prevention interventions, cessation interventions, anti-tobacco efforts in U.S. and international trends in tobacco use. Currently scheduled with course C121. Letter grading.

225A. Health Economics: Low- and Middle-Income Countries’ Perspectives. (2-2) Seminar, two hours. Designed for graduate students interested in understanding how microeconomics influence health and behaviors of consumers and providers in health sector. Offers critical framework for understanding investment for health issues of interest. Study of differences in methods and research designs commonly used in public health and health services research, including feasibility studies, convergent parallel design, sequential mixed methods, and multi-phase studies with emphasis on intended and unintended outcomes. May be repeated for credit with topic change. Letter grading.

225B. Research Methods for Improvement/Implementation Science. (4) Same as Community Health Sciences M225B, Seminar, three hours; discussion, one hour. Limited to graduate students. Highly recommended: courses 225A and 225B, or completion of coursework in basic research design and methods. Introduction to mixed methods research that will allow students to engage in research to improve public health research. Equips students with skills to critique mixed method research designs and to design mixed methods research studies to investigate health issues of interest. Study of different methods and research designs commonly used in public health and health services research, including feasibility studies, convergent parallel design, sequential mixed methods, and multi-phase studies with emphasis on intended and unintended outcomes. May be repeated for credit with topic change. Letter grading.

230A-230B. Health Economics: Low- and Middle-Income Countries’ Perspectives. (2) Seminar, two hours. Designed for doctoral students. Emphasis on topics which illustrate current issues in public health policy. Discussion of historical perspectives on health-care delivery and financing and the challenges reform movements, public health activities, childbirth, and AIDS. S/U or letter grading.

232. Leadership Capstone Seminar. (4) Seminar, four hours. Preparation: completion of summer internship requirement. Designed for graduate students completing their master’s training in health management and health policy. Examination of leaders and leadership in healthcare and other organizations to provide introduction to literature on skills, behaviors, and characteristics of successful leaders. Students evaluate their own leadership style and identify opportunities to further develop their leadership abilities. Letter grading.

239A. Special Topics in Health Services: Advanced Topics in Decision Analysis and Cost-Effectiveness Analysis. (4) Lecture, four hours. Requisite: course 236 for graduate students. Introduction to decision analysis and cost-effectiveness analyses, understand methods used to construct quality-adjusted life years (QALYs), conduct Markov analyses, critically analyze large-scale published cost-effectiveness analyses, identify important assumptions and limitations of published CEAs to peer, and use advanced features of TreeAge software to construct and analyze CEA models, including Markov models. May be repeated for credit with topic change.

240. Global Health Institutions, Policies, and Systems. (4) Lecture, four hours. Introduction to global health, from health policy and management perspective. Examination of institutions, from global to local, through lenses including governance, financing, history, and agenda-setting. Discussion of major topics in global health systems, such as human resources and health IT. Through series of short assignments, students develop critical thinking skills and experience in working in teams. Letter grading.

241. Economics of Health Policy. (4) Lecture. Four hours. Requisites: courses 225A or 236 or doctoral standing. Second-level health economics with emphasis on health policy applications, designed to provide more nuanced view of health economics than does course M236. Provides more training for master’s students interested in policy, as well as material and insights for doctoral students who may find it useful in thinking about dissertation topics. Emphasis on special characteristics of health and healthcare and how these characteristics can result in market failure and various policy tools that can be used to deal with these failures. Because U.S. is only developed country that has truly been successful in providing health care to entire population, examination of global health sector in the United States may be conducted to more directly to that topic. Alternative conceptual models to traditional market one, discussion of proposed U.S. reforms, and examination of systems in selected other countries. Letter grading.

242. Determinants of Health. (4) Same as Community Health Sciences M242, Seminar, three hours; laboratory, one hour. Requisites: courses 200A, M236, M287. Conceptual and practical tools for analysis of health policy, emphasizing role of analysis during various phases of lifecycle of public policy, characteristics of successful leaders. Students evaluate own leadership style and identify opportunities to further develop their leadership abilities. Letter grading.

243. Population Health Approach to Autism Spectrum Disorder. (4) Lecture, three hours. Overview of impact that Autism Spectrum Disorder has on individuals, families, and communities, including access to...
services, ongoing therapies, and adult vocational and residential placement. Covers opportunities for re-
structure and national policy. S/U or letter grading.

244. Telehealth and Technology. (4) Lecture, four hours. Preparation: working knowledge of Excel, PowerPoint, Internet, and smartphone devices. Connects multiple aspects of Telehealth and how to deploy them in health-care operations setting. Exploration of new de-
vices/technologies in wireless world, delivery modalities, and user experience/interface (UK/ 
U) design. Study teaches ways to apply new technol-
ogy to facilitate efficient health-care business oper-
adions. Students implement Telehealth projects, and in-
creased knowledge of key drivers of transformation. S/U or letter grading.

M245. Primary Health Care. (4) Same as Commu-

nity Health Sciences M248.) Lecture, four hours. Strongly recommended requisite: Public Health 200A, 
200B. Recommended requisite: course 240 or Com-
munity Health Sciences 200. Primary Health care (PHC) systems and should be able to resolve 80 percent or more of population’s health problems. Overview of organi-
zation, structure, and functions of primary health care with emphasis on interrelated roles and functions of health-care setting. Study of history and origins of PHC, roles and functions of PHC in health systems, different or-
ganizational and managerial approaches to organizing and delivering health care. Students should have completed MPH framework, tools for measuring how well PHC programs and ser-
vices are functioning. Review and critical analysis of evidence-based on PHC effectiveness and impact and present detailed case studies of PHC programs in diverse settings around world. Letter grading.

249. Advanced Research Topics in Health Policy 
and Management. (2 to 4) Seminar, to be arranged. Limited to Public Health graduate students. Seminars may be organized in special topics. Advanced study and analysis of current topics in health policy and 
management, Discussion of current research and liter-
ature in relation to current topics. S/U or letter grading.

M249Q. Editorial Board Apprenticeship. (2) (Same as Psychiatry M210.) Seminar, two hours. Designed for postgraduate fellows to be an advanced PPD students. Participation in peer review process for academic journal, Health Psychology, with consideration of inter-
face between behavioral science, health, and medi-
cine. Reading and analysis of submissions and feedback from editor of suitability for final review, S/U or letter grading.

249S. Special Topics in Health Service: Introduction 
to Implementation Science. (4) Seminar, two hours. Description: courses 200A, 200B. Designed to prepare students for chal-
enges involved in conducting health services research on clinical topics and populations. Topics include for-
mulating appropriate questions, identifying sources, 
and analyzing evidence for different approaches currently used to address some of main causes of death and disability in U.S. including tobacco, alcohol, firearms, food, and obesity. Read-
ings, case studies, exploration of public use data, group discussions, and directed individual research. Students engage in discussion and debate regarding core challenges and emerging trends. S/U or letter grading.

260. World Health. (4) Lecture, two hours. Designed for graduate students. Overview of world health, with emphasis on healthcare, demographics, and economics. Key areas in-
clude burden of infectious diseases, health eco-
nomics, and impact of healthcare policy on healthcare delivery. Letter grading.

265. Challenges in Clinical Health Services Re-
search: Methods and Applications. (4–4) Lecture, two hours. Directed at students in MPH programs should have completed at least one year of doctoral coursework. Focus on rela-
tionships among gender inequality, restrictive gender norms, and health. Examination of evidence pulled to-
gether by World Health Organization (WHO) Commis-
sion on social determinants of health and others on how gender inequality and restrictive gender norms impact health across sexes and genders. Examination of evidence on extent of gender inequality in other so-
cial determinants of health globally including educa-
tion, work, and poverty. Focus on policies to improve health outcomes. Discussion of exam-
ple policy briefs and approaches to inequalities in education, work, family, and other spheres. Students have opportunity to dive deeper into area of choice. S/U or letter grading.

266A-266B. Community-Based Participatory Health 
Research: Methods. (4–4) Lecture, one hour; discussion, one hour; fieldwork, two hours. Limited to clinical scholars fellows. Mentoring of field 
experiences with introduction to critical issues in con-
ducting research in community settings. Review of as-
signments, interventions, and evaluation designs for community settings and discussion of practical issues in partnering with communities. Letter grading.

M269. Healthcare Policy and Finance. (4) (Same as Public Policy M269.) Seminar, three hours; outside study, nine hours. Exploration of demand for health in-
surance, policies for public insurance (Medicaid and Medicare), uninsured, and health insurance reform. Examination of effects of managed care on health care costs, consumer protection, and rise of competitive healthcare markets. Letter grading.

M274. Health Status and Health Behaviors of Racial and Ethnic Minority Populations. (Same as Psy-
chology M274.) Lecture, two hours; discussion, one hour. Limited to graduate students. Overview of physical and mental health behaviors and status of major racial/ethnic groups in U.S. Where appropriate, discus-
sion of international issues as well. S/U or letter grading.

280. Health Reform: Policy, Research, and Imple-
mentation Issues. (4) Seminar, three hours. Requi-
sites: courses 200A, 200B. Limited to second-year MPH and doctoral students. Analysis of components of major federal healthcare reform legislative initiative to identify important policy, research, and implementa-
tion issues. Historical perspective of analysis to understand how and why this legislation was constructed and how it passed Congress. Con-
ducting of policy analyses of selected components through completion of written assignments. Examina-
tion of respective roles of federal and state govern-
ment in implementing and administering various com-
ponents. Identification of significant implementation challenges and state and local leve-
els and development of possible strategies for ad-
dressing those challenges. Letter grading.

286. American Political Institutions and Health Poli-
cy. (4) Lecture, four hours. Preparation: completion of core MPH curriculum. Master's students in other degree programs are welcome to register. Doctoral students should have completed at least one year of doctoral coursework. Focus on rela-
tionships among gender inequality, restrictive gender norms, and health. Examination of evidence pulled to-
gether by World Health Organization (WHO) Commis-
sion on social determinants of health and others on how gender inequality and restrictive gender norms impact health across sexes and genders. Examination of evidence on extent of gender inequality in other so-
cial determinants of health globally including educa-
tion, work, and poverty. Focus on policies to improve health outcomes. Discussion of exam-
ple policy briefs and approaches to inequalities in education, work, family, and other spheres. Students have opportunity to dive deeper into area of choice. S/U or letter grading.

287. Politics of Health Policy. (4) (Same as Community Health Sciences M287.) Lecture, four hours. Preparation: completion of core MPH curriculum. Master's students in other degree programs are welcome to register. Doctoral students should have completed at least one year of doctoral coursework. Focus on rela-
tionships among gender inequality, restrictive gender norms, and health. Examination of evidence pulled to-
gether by World Health Organization (WHO) Commis-
sion on social determinants of health and others on how gender inequality and restrictive gender norms impact health across sexes and genders. Examination of evidence on extent of gender inequality in other so-
cial determinants of health globally including educa-
tion, work, and poverty. Focus on policies to improve health outcomes. Discussion of exam-
ple policy briefs and approaches to inequalities in education, work, family, and other spheres. Students have opportunity to dive deeper into area of choice. S/U or letter grading.
fects of political structure and current political divisions, including efforts such as to repeal and dismantle Affordable Care Act. Letter grading.

288. Role and Impact of Technology on Health Services. (4) Lecture, four hours. Examination of role and impact of technology on health services in the U.S. from point of view of system itself. Exploration of various types of technologies for their policy, economic, and organizational impact. Letter grading.


375. Teaching in Professional Practice. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.


410. Public Health Informatics. (4) Lecture, three hours. Preparation: general familiarity and understanding of basic information technology. Recommended requisite: course 251. Introduction to field of public health informatics and examination of impact of information technology on public health care. Overview of health care, from systems conceptualization and design to project planning and development to system implementation and use. Letter grading.

434. Building Advocacy Skills: Reproductive Health Focus. (4) (Same as Community Health Sciences M430.) Seminar, three hours. Recommended requisite: one prior health policy course such as Community Health Sciences M235. Designed for School of Public Health graduate and doctoral students. Skills-building course to develop competency in assessing, developing, and implementing advocacy strategies for reproductive health initiatives. Introduction to legislative and community advocacy initiatives and to policymaking process, including policy analysis and development. Necessary for legislative advocacy. Identification of advocacy goals and objectives, development of advocacy plan, coalition building, organizational capacity building, media relations, and message development for various audiences. Students learn about range of former and current reproductive health advocacy campaigns. Letter grading.

435. Innovations and Current Trends in Ambulatory Care. (4) Lecture, three hours. Required: courses 200A, 200B. Examination of U.S. ambulatory care delivery system, with focus on more recent trends that are highlighted under Patient Protection and Affordable Care Act of 2010. Exploration of ambulatory care delivery system, infrastructure challenges, financing and quality of care, role of healthcare reform in shaping future of ambulatory care, concepts of clinical and disease management, role of electronic health record, accountable care organizations, measurement, and accountable care organizations, measurement, and implementation of these models. Letter grading.


438. Issues and Problems of Local Health Administration. (4) Lecture, three hours. Preparation: one health service course. Required: course 100, Epistemology of Health. Overview of issues currently faced by local health departments, including providing public health programs during fiscal constraint, quality improvement, interagency relationships and partnerships, and political and public interactions. Letter grading.

439. Data Software for Public Health Professionals. (4) Lecture, two hours; activity, one hour. Development of software skills around data analytics (e.g., Excel), including use of formulas and functions, formatting and manipulating datasets, developing visualizations including charts and tables, using lookup and database functions, and implementing basic analytic models. Letter grading.

440A. Healthcare Information Systems and Technology. (4) Lecture, four hours. Preparation: completion of summer internship. Provides strong foundation in health information technology (HIT) for those working in healthcare with emphasis on development of knowledge and skill to plan, manage, and implement HIT systems in healthcare delivery organizations with clinical and business partners and evolving HIT spaces. Background and evolution of HIT; how it is planned, implemented, and managed; and how it can be productively used by healthcare delivery organizations. Overview of research on health care organizations, providers, and patients/consumers. Fundamentals of technology, electronic medical records (EMR), electronic health records (EHR), personal
Requisite: course 440A. Health and Management. (4)

440B. Health Information Systems: Organization and Management. (4) Lecture, two hours; laboratory, three hours. Requisite: course 440A. Health and administrative research using clinical records. Principles of planning for routine and special studies. Individual investigation in methods of obtaining and processing data to meet needs of programs in institution and agency. Introduction to principles of medical auditing; analysis of medical and health services. S/U or letter grading.

441. Data Analytics: Identifying, Collecting, and Analyzing Data in Health Care. (4) Lecture, three hours. Requisite: course 439 or proof of waiver examination. Exploration of data sources and uses in health care, e.g., electronic medical records, social media, wireless biosensors, system and facility data. Review of hands-on techniques including data management, development of indexes and metrics, choosing and implementing analysis methods and visualizations. Discussion of role of data collection and processing within health care system. Letter grading.


446. Health-Care Operations Management. (4) Lecture, four hours. Health-care managers are charged with reducing costs and improving financial outcomes in their organizations while simultaneously improving patient service and satisfaction. Focus on operations improvement and how health-care organizations can get things done. Review of integrated, systematic approach and wide variety of operations improvement tools. Designed to further prepare students for entry into managerial positions in health-care organizations by making them aware of importance of operations techniques and strategies at all career levels, and providing them with sufficient knowledge of health-care operations so they can provide departmental input to organization’s leadership. S/U or letter grading.

M449A-M449B. Child Health, Programs, and Policies. (4-4) Same as: Community Health Sciences M436A-M436B.) Lecture, four hours. Course M449A is requisite to M449B. Examination of history of child health policy trends and determinants of health, structure, and function of health service system; needs, programs, and policies affecting especially at-risk populations. Letter grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate advisor and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. No more than 8 units may be applied toward master’s degree minimum total course requirement; may not be applied toward minimum graduate course requirement. S/U grading.

502. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. Limited to graduate students. Individual guided studies under direct faculty supervision. Only 4 units may be applied toward MPH and MS minimum total course requirement. May be repeated for credit. S/U or letter grading.


504. Doctoral Dissertation Research. (2 to 12) Tutorial, to be arranged. May be repeated for credit. S/U grading.

505. Doctoral Dissertation Research. (2 to 12) Tutorial, to be arranged. May be repeated for credit. S/U grading.

Faculty Roster

Professors

Andrew Apter, PhD
Sebouh D. Aslianian, PhD (Richard Hovannisian Professor of Modern Armenian History)
Eric R. Avila, PhD (Waldo W. Neikirk Term Professor)
Peter Baldwin, PhD
Stephen A. Bell, PhD
Joel T. Braslow, MD, PhD, in Residence
Soraya de Chadarevian, PhD
Robin L.H. Derby, PhD (Dr. E. Bradford Burns Professor of Latin American Studies)
Caroline C. Ford, PhD
James L. Gelvin, PhD
Nile S. Green, PhD (Ibn Khaldun Endowed Professor of World History)
F. Tobias Higbie, PhD
Robin D.G. Kelley, PhD (Gary B. Nash Endowed Professor of U.S. History)
Vinay Lal, PhD
Kelly A. Lylte Hernández, PhD (Thomas E. Lilka Professor of History)
Valerie J. Matsumoto, PhD (George and Sakaye Aratani Professor of Japanese American Incarceration, Redress, and Community)
Michael Meranze, PhD
David N. Myers, PhD (Sady and Ludwig Kahn Professor of Jewish History)
Anthony R. Pagden, PhD
H. Glenn Penny, PhD (Henry J. Bruman Professor of German History)
Carla Gardina Pestana, PhD (Joyce Oldham Appleby Endowed Professor of America in the World)
David D. Phillips, PhD
Theodore M. Porter, PhD
Sarah Abrevaya Stein, PhD (Viterbi Family Endowed Professor of Mediterranean Jewish Studies)
Brenda Stevenson, PhD (Nickoll Family Endowed Professor of History)
Sanjay Subrahmanyam, PhD (Irvina and Jean Stone Professor)
William R. Summerhill, PhD
Kevin B. Terraciano, PhD
Stefania Tutino, PhD (Peter Reill Professor of European History, 1450 to Modern)
Richard van Ghahn, PhD
R. Bin Wong, PhD
Gregory D. Woolf, PhD (Ronald J. Melior Professor of Ancient History)
David K. Yoo, PhD

Professors Emeriti

Edward A. Alpers, PhD
Francis R. Anderson, BA
Stephen A. Aron, PhD (Robert N. Burr Endowed History Department Professor Emeritus)
Ivan T. Berend, PhD
Kathryn Bernhardt, PhD
Ruth H. Bloch, PhD
Robert P. Brenner, PhD
Giorgio Buccellati, PhD
Claus-Peter Clasen, PhD
Robert Dallek, PhD
Ellen C. DuBois, PhD
John B. Duncan, PhD
Christopher Ehret, PhD
Benjamin A. Elman, PhD
Robert G. Frank, Jr., PhD
Stephen R. Frank, PhD
Saul P. Friedländer, PhD (1939 Club Professor Emeritus)
Frank O. Gatell, PhD
Patrick Geary, PhD
J. Arch Getty, PhD
Carlo Ginzburg, Laurea in lettere (Franklin D. Murphy Professor Emeritus of Italian Renaissance Studies)
Robert A. Hill, MSc
Thomas S. Hines, PhD
Richard G. Hovannisian, PhD (Armenian Educational Foundation Professor Emeritus of Modern Armenian History)
Daniel W. Howe, PhD
Philip C. Huang, PhD
Lynn A. Hunt, PhD (Eugen Weber Professor Emerita of Modern European History)
Margaret C. Jacob, PhD
Russell Jacoby, PhD
Nikki Kiddie, PhD
Naomi R. Lamoreaux, PhD
John H. Laslett, DPhil
Peter J. Loewenberg, PhD
Araf Marsot, DPhil
Lauro R. Martines, PhD
Ronald J. Melior, PhD
Michael G. Morony, PhD
Fred G. Notelhefer, PhD
Patricia O’Brien, PhD
Herman Ooms, PhD
Merrick Posnansky, PhD
Geoffrey Robinson, PhD
Teófilo F. Ruiz, PhD (Robert and Dorothy Welman Professor Emeritus of Medieval History)
David Sabeau, PhD (Henry J. Bruman Professor Emeritus of German History)
Michael Salmon, PhD

Theodore M. Porter, PhD

H. Glenn Penny, PhD (Henry J. Bruman Professor of German History)

Carla Gardina Pestana, PhD (Joyce Oldham Appleby Endowed Professor of America in the World)

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David D. Phillips, PhD

Theodore M. Porter, PhD

H. Glenn Penny, PhD (Henry J. Bruman Professor of German History)
Debora L. Silverman, PhD (Presidential Professor Emerita of Modern European History)
Geoffrey W. Symcox, PhD
Mary Terrall, PhD
Albion M. Urdank, PhD
Mary A. Yeager, PhD
William H. Worger, PhD
Matthew Norton Wise, PhD
James W. Wilkie, PhD
Albion M. Urdank, PhD
Mary Terrall, PhD
Geoffrey W. Symcox, PhD

History is the study of the past of our own soci-
ety. Its main emphasis is on the many aspects of social history; but intellectual, cul-
tural, and political history are also strongly represen-
ted.

Career Prospects
The undergraduate History major is flexible and far-reaching. Leading to a Bachelor of Arts (BA) degree, it is excellent preparation for a wide va-iety of careers—law, teaching, business, the communications media, public services, and medicine.

The graduate program leads to the Doctor of Philosophy (PhD) degree in History (a master’s degree may be earned in the process of com-
pleting PhD requirements). Traditionally, the Master of Arts (MA) and PhD in History have led to careers in high school, college, and uni-
versity teaching. Increasingly, they are also be-
ing put to use in government service, interna-
tional business, museum and archival work, and journalism.

Undergraduate Policies
Advanced Placement Credit in History
For entering first years, no course credit is granted for any AP examination.

Undergraduate Major

History BA

Capstone Major
The History major is a designated capstone major. Undergraduate students take a cap-
stone seminar in which they demonstrate mas-
tery of a specialized area of history and a criti-
cal understanding of current scholarly concerns, literature, and debate, then design and complete a research project using those pri-
mary sources and literature.

Learning Outcomes
The History major has the following learning outcomes:
• Demonstrated appropriate mastery of a spe-
cialized area of history
• Demonstrated critical understanding of cur-
rent scholarly concerns, literature, and deb-
ates
• Identification and analysis of primary sources
• Design and execution of a research project, drawing on primary sources and appropriate scholarly literature
• Demonstrated ability to organize and present a brief oral presentation about research

Entry to the Major
Pre-major
While students are completing the lower-divi-
sion preparation for the major courses, they may be classified as History pre-majors.

After completing the six courses with a mini-
mum grade-point average of 2.0, students should petition to enter the major in one of the undergraduate counseling offices, 6284 or 6290 Bunche Hall.

Transfer Students
Transfer applicants to the History major with 90 or more units must complete the following intro-
ductive courses prior to admission to UCLA: one semester or two quarters of history of Western civilization or world history, one histor-
ical practice course, and three additional lower-
division history courses.

Transfer credit for the pre-major courses is sub-
ject to department approval. Transfer students should consult with the undergraduate coun-
selors before enrolling in any courses for the major.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements
Preparation for the Major
Required: Six lower-division history courses as follows: two history survey courses selected from History 1A, 1B, 1C, 2B, 2C, 3A, 3B, 3C, 3D, M4, 5, 8A, 8B, 8C, 9A, 9C, 9D, 9E, M10A, 10B, 11A, 11B, 12A, 12B, 12C, 13A, 13B, 13C, 14, 20, 21, or 22; one course selected from His-
tory 94, 96W, or 97A through 97O; three addi-
tional lower-division history courses (except History 19, 99, 99HC, 99).

The Major
Required: At least 10 upper-division history courses, including (1) two courses in U.S. his-


history, (2) two courses in non-Western history from the same area (i.e., Latin America, Asia, Near East, Africa), (3) two courses in European history or in history of science, (4) one course from 187A through C187R, and (5) one cap-
stone seminar from the History 191 series.

The requirements for U.S., non-Western, and European history may be fulfilled with either upper-


or lower-division courses, but majors are re-
moved to take a minimum of 10 upper-di-
vision history courses.


Honors Program
The honors thesis must be completed in three terms, on the basis of work carried out in His-
tory 198A, 198B, and 198C.
Policies

Preparation for the Major
Each course must be taken for a letter grade.

The Major
Each course must be taken for a letter grade.

There is no language requirement for the major; however, students wishing to enter the honors program or planning to do graduate work in history are urged to pursue language study early in their undergraduate careers.

Honors Program
The honors program is designed for History majors who are interested in completing a year-long research project that culminates in an honors thesis. A 3.5 departmental grade-point average is required for admission. To graduate with departmental honors, students must have a cumulative or overall GPA of at least 3.0 in all University-level coursework and at least a 3.5 GPA in all coursework required for the major.

The honors thesis must be completed in three terms, on the basis of work carried out in History 198A, 198B, and 198C. Students must register their intention to undertake an honors thesis with the undergraduate affairs vice chair no later than spring quarter of their junior year.

When students register for honors, they must provide the undergraduate affairs vice chair with a two-paragraph description of their thesis project, which must be approved in writing by the faculty member who agrees to act as their adviser. The undergraduate affairs vice chair must also approve the proposed project in writing.

The faculty adviser is primarily responsible for guiding the thesis work to its completion and assigns grades for the honors courses after the thesis is complete. The honors thesis should be 40 to 60 pages in length and be based on primary source material. Determination of the level of honors awarded (no honors, honors, or highest honors) is made by the undergraduate affairs vice chair, acting in conjunction with the honors committee, at the end of the term in which the thesis is completed.

Undergraduate Minors

History Minor
The History minor introduces students to historical processes and institutions.

Admission
To enter the minor, students must have an overall grade-point average of 2.0 or better and file a petition in the Undergraduate office, 6284 Bunche Hall.

The Minor
Required Lower-Division Courses (10 units): Any two lower-division history courses.

Required Upper-Division Courses (20 units): Any five upper-division history courses.

History of Science, Technology, and Medicine Minor
The History of Science, Technology, and Medicine minor takes as its subject matter the ideas, practices, and people concerned with the knowledge of the natural and social world. Using the tools of historical analysis, it explores the development, significance, and impact of science, technology, and medicine around the world. The goal of the minor is to give undergraduates majoring in fields other than history the opportunity to pursue a rigorous program in the historical dimensions of science, technology, and medicine, and their place in society. Students will learn to think critically and write analytically about these subjects.

Admission
To enter the minor, students must be in good academic standing (2.0 grade-point average), have completed 45 units and at least one lower-division course in the history of science or medicine for a letter grade, and file a petition with an adviser in the History Department undergraduate counseling offices, 6284 or 6290 Bunche Hall.

The Minor
Students must take seven classes to satisfy the requirements for the minor. The lower-division requirement is designed to give the student a broad understanding (in time and space) of the historical development of science, technology, and medicine. The upper-division requirement allows students to choose from an array of more focused classes.

Required Lower-Division Courses (10 units): Two courses from History 2B, 3A through 3D.


Students are required to write at least one research paper on a topic in history of science, technology, or medicine. To this end, they must take at least one of the following: History 191I (capstone research seminar); History 199 (individual independent study approved by department adviser); or an honors collegium seminar with a required research paper.

Policies

History 191 and 199 may be applied only once toward the minor.

Honors collegium courses with significant history of science, technology, and medicine content may be applied toward the upper-division course requirement for the minor.

One upper-division course outside the department may be counted toward the minor, with approval of the history of science field coordinator. The course must address social, historical, and philosophical aspects of science, technology, and medicine.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must maintain an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Major

History MA, CPhil, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

History

Lower-Division Courses
1A. Introduction to Western Civilization: Ancient Civilizations, Prehistory to circa AD 843. (5) Lecture, three hours; discussion, one hour. Survey of diverse cultures that shaped foundation of Western civilization to onset of 9th century AD. Investigation of first civilizations in Near East and Egypt. Analysis of worlds of Greeks and Romans. Examination of ways in which western European societies created new syntheses through selective appropriation of Greek and Roman cultures and introduction of new cultural forms. P/NP or letter grading.

1AH. Introduction to Western Civilization: Ancient Civilizations, Prehistory to circa AD 843 (Honors). (5) Lecture, three hours; discussion, two hours. Honors sequence parallel to course 1A. P/NP or letter grading.

1B. Introduction to Western Civilization: Circa 843 to circa 1715. (5) Lecture, three hours; discussion, one hour. Introduction to history of the West and its connections to rest of world from 843 to 1715. Profound social, political, cultural, and intellectual changes that affected development of modern world. Topics covered include economic, social, and cultural aspects of feudal system; relationship between Church and empire; new religious movements (including the Reformation); formation of nation-states; relationship between Western Europe and non-European and non-Christian people and traditions. P/NP or letter grading.
colonial rule of previous centuries brought about global structures of inequality. Examination of some of the most significant events, ideas, and people is necessary in order to understand the present world. This course aims to reflect on current conjectures, P/NP or letter grading.


14. Atlantic World, 1492 to 1830. (5) Lecture, three hours; discussion, one hour. Strongly recommended for History majors planning to take more advanced courses in this field. Examination of some of the most significant events, ideas, and people is necessary in order to understand the present world. This course aims to reflect on current conjectures, P/NP or letter grading.

19. Flat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20. World History to AD 600. (5) Lecture, three hours; discussion, two hours. Examination of early civilizations of Asia, North Africa, and Europe—Mesopotamia, Egypt, Israel, India, China, Greece, and Rome—from development of settled agricultural communities until about AD 500, with focus on rise of cities, organization of society, nature of kingship, writing and growth of bureaucracy, varieties of religious expression, and linkage between culture and society. P/NP or letter grading.

21. World History, circa 600 to 1760. (5) Lecture, three hours; discussion, two hours. Outline of world history from the rise of Islam to the start of Industrial Revolution. Structured around a broad chronological narrative of salient developments in political and social dynamics and their impact on the growth of culture and society. Reading of variety of contemporary accounts to look at way people perceived cultures outside their own. P/NP or letter grading.

22. Contemporary World History, 1760 to Present. (5) Lecture, three hours; discussion, two hours. Broad thematic survey of world history since the mid-18th century. Examination, through lecture and discussion, of global implications of imperialism, total war, nationalism, cultural change, decolonization, changes in women’s roles, and the eclipse of older civilizations. Designed to introduce students to historical study, help them understand issues and dilemmas facing the world today, and prepare them for more in-depth work on major regions or countries of the world. P/NP or letter grading.

M60. Achaemenid Civilization and Empire of Alexander. (5) (Same as Ancient Near East M60 and Ira- nian M60.) Lecture, three hours; discussion, one hour. Survey of the development of, analysis of, rise and fall of Achaemenid Persia, first world empire of antiquity, which was ended by Alexander the Great, whose campaigns were as transformative as they were vio- lent. Alexander connected ancient Mediterranean and Macedonian empires, facility with ancient primary sources, and development of analytical skills central to discipline of history that allow conceptualizing issues of diversity and othering in ancient world. P/NP or letter grading.

M60W. Achaemenid Civilization and Empire of Alex- ander. (5) (Same as Ancient Near East M60W and Ira- nian M60W.) Lecture, three hours; discussion, one hour. Required: English Composition 2. Not open for credit to students with credit for course M60. Survey of period from circa 600 to 300 BCE, rise and fall of Achaemenid Persia, first world empire of antiquity, which was ended by Alexander the Great, whose campaigns were as transformative as they were vio- lent. Alexander connected ancient Mediterranean and Macedonian empires, facility with ancient primary sources, and development of analytical skills central to discipline of history that allow conceptualizing issues of diversity and othering in ancient world. Satis- fies Writing II requirement. P/NP or letter grading.

88. Sophomore Seminars: History. (4) Seminar, three hours; discussion, two hours. Open for credit to 20 lower-division stu- dents. Readings and discussions designed to intro- duce students to current research in discipline. Culmi- nating project may be required. P/NP or letter grading.

88GE. Sophomore Seminar: Special Topics in History. (5) Seminar, four hours. Requisite: designated GE lecture course; see Schedule of Classes for specific requisite lecture and seminar topics. Designed for sophomores/juniors. Exploration of aspects of specific topics through reading assignments, discussions, P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Lim- ited to 20 students. Designed as adjunct to lower-divi- sion lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu- dents. Honors content noted on transcript. P/NP or letter grading.

89H. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. De- signed as adjunct to lower-division lecture course. In- dividual projects on one particular theme, with lecture material supplemented by translations of writings of princes, poets, philosophers, and mystics who created Persian republic of letters between Shiraz, Sa- manabad, and Delhi, and even as far as Siberia and China. Examination of why and how various ethnic and professional groups made Persian into one of most important languages in world history. P/NP or letter grading.


99. Student Research Program. (1 to 2) Tutorial (su- pervised research or other scholarly work), three hours or less, one hour (when scheduled). Entry-level divider-division students under guidance of faculty mentor. Stu- dents must be in good academic standing and en- rolled in minimum of 12 units (excluding this course), individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100. History and Historians. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Study of historiography, including in- troduction to history of history, and results of these processes, and sources and development of history. Attention also to representative historians. P/NP or letter grading.

101. Topics in World History. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of specific historical themes from world historical perspective. May be re- peated for maximum of 16 units with topic and/or in- structor change. P/NP or letter grading.

102A. Iran and Persianate World. (4) Lecture, three hours; discussion, one hour (when scheduled). De- signed for juniors/seniors. Development of model of Persianate world to bring together histories of Iran, India, and central Asia (including Afghanistan) between circa 1200 and 2000 CE, and interaction of different peoples between major cultural centers where Persian was used as common language of in- tellectual, religious, social, and political exchange. May be applied toward honors credit for eligible stu- dents. P/NP or letter grading.

102B. Middle Eastern History. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Political and cultural institutions of ancient Egypt and ideas on which they were based. P/NP or letter grading. 102C. History of Modern Egypt. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Political and cultural institutions of ancient Egypt and ideas on which they were based. P/NP or letter grading.

103A. World History to 500. (4–4) Lecture, three hours; discussion, one hour (when scheduled). Not open for credit to students with credit for course M103A. Designed for juniors/seniors. Political and cultural institutions of ancient Egypt and ideas on which they were based. P/NP or letter grading.

103B. World History to 1500. (4–4) Lecture, three hours; discussion, one hour (when scheduled). Not open for credit to students with credit for course M103B. Designed for juniors/seniors. Political and cultural institutions of ancient Egypt and ideas on which they were based. P/NP or letter grading.

103C. World History to 1600. (4–4) Lecture, three hours; discussion, one hour (when scheduled). Not open for credit to students with credit for course M103C. Designed for juniors/seniors. Political and cultural institutions of ancient Egypt and ideas on which they were based. P/NP or letter grading.

104A. History of Ancient Mesopotamia. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Political and cultural institutions of ancient Egypt and ideas on which they were based. P/NP or letter grading.

104B. Sumerians. (4) (Same as Ancient Near East M104B.) Lecture, three hours. Designed for juniors/se- niors. Overview of Sumer and related cultures of Greater Mesopotamia in 4th and 3rd millennia BCE,
with focus on rich cultural history of region and integration of archaeological, art historical, and written records. P/NP or letter grading.

M104C. Babylonians. (Same as Ancient Near East M104C. Exploring the age of the Hammurabi's law code, Babylonian culture from Sargonic to Neo-Assyrian periods, with special focus on religious and economic systems. P/NP or letter grading.

M104D. Assyrians. (Same as Ancient Near East M104D.) Lecture, three hours. Designed for juniors/seniors. Overview of Assyrian cultural history from its origins to the fall of Nineveh, with special focus on Assyrian military campaigns, religion, and art. P/NP or letter grading.

105A-105B-105C. Survey of Middle East, 500 to Present. (4-4-4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Background and circumstances of rise of Islam, creation of Islamic Empire, and its development. Rise of Dynastic Successor States and Modern States. Social, intellectual, political, and economic development. P/NP or letter grading. 105A. 500 to 1300; 105B. 1300 to 1700; 105C. 1700 to Present.

M106A-106B-106C. History of North Africa from Islamic Conquest to Modern. (4-4-4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of early development of Islam with special attention to role of God, Caliphal authority, scribes, political, religious, and social history. P/NP or letter grading.

107A-107B-107C. Armenian History. (4-4-4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Overview of Armenian cultural history from its origins to the fall of the last Armenian kingdom, with special focus on Great Revolt of 1071 and death of Alexander. P/NP or letter grading.

108A. History of North Africa from Islamic Conquest. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of political, social, economic, religious, artistic, and literary history of Islamic culture in Western Europe. P/NP or letter grading.


109B. History of Israel-Palestinian Conflict, 1881 to Present. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of origins of Arab-Israeli dispute from mid-19th century through founding of state of Israel and expulsion/fight of three quarters of million Palestinians from their homes. Exploration of social history of Palestine up to Zionist colonization, origins of Zionism and Palestinian nationalism, varieties of Zionism, and Palestinian identity. P/NP or letter grading.

M110A-M110B-M110C. Iranian Civilization. (4-4-4) (Same as Ancient Near East M110A-M110B-M110C and Iranian M110A-M110B-M110C.) Lecture, three hours; discussion, one hour (when scheduled), P/NP or letter grading. M110A. History of Achaemenid Empire. Emphasis on political history, state structure, empire’s religions, and interactions with Hellenistic and Roman worlds. Further accent on Parthian conquest of Iran and Mesopotamia, Seleucid demise and Arsacid hegemony. P/NP or letter grading.

M110B. History of Arsacid (Parthian) Empire. From Hellenistic rule in Persia to Sasanian conquest. Examination of Parthian state structure, empire’s religions, interactions with Hellenistic and Roman worlds. Further accent on Parthian conquest of Iran and Mesopotamia, Seleucid demise and Arsacid hegemony. P/NP or letter grading.

M110C. History of Early Sasanian Empire—From Ardashir I to Rise of Peroz (circa 224–459 CE) From fall of Arsacids to Muslim conquest of Iran. Examination of political, economic, and religious history, evolution of state structure, empire’s religious landscape (Mazdism, Manichaeism, Christianity), Church of Persia, Judaism, Persian and Roman/BYZANTINE interaction, Persian and Roman/Roman conflicts and cooperation, Persia and Huns.

111A-111B-111C. Topics in Middle Eastern History. (4-4-4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. May be repeated for maximum of 16 units with topic and/or instructor change. P/NP or letter grading. 111A. Pre-modern. Examination of major issues in history of Middle East. 111B. Early Modern. Examination of Islamic history. Emphasis on post-classical economic history, evolution of state structure, empire’s religious landscape (Mazdism, Manichaeism, Christianity), Church of Persia, Judaism, Persian and Roman/BYZANTINE interaction, Persian and Roman/Roman conflicts and cooperation, Persia and Huns.

112A-112B. History of Ancient Mediterranean World. (4-4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. P/NP or letter grading. 112A. Survey of history of ancient East from earliest times to foundation of Persian Empire. 112B. History and institutions of Greeks from their arrival to death of Alexander.

112D. History of Ancient Mediterranean World. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examinations of history of ancient Greek world from circa 2000 to 300 BC and its legacy in modern times. Study of Mycenaean civilization, the Homeric Greeks, and the development of Greek civilization. P/NP or letter grading.

M112C. History of Ancient Mediterranean World. (4) (Same as Classics M114A.) Lecture, five hours. Intensive on-site study of history and culture of ancient Rome from founding of city to conversion of Christianity. Part of UCLA Summer Travel Program. P/NP or letter grading.

112D. History and Monuments of Ancient Greece: Field Studies. (4) Fieldwork, three hours. Designed for corequisites. Upper division daily seminars in ancient Greece involve visits to museums and archaeological sites. Part of UCLA Summer Travel Program. P/NP or letter grading.


113A-113B. History of Ancient Greece. (4-4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. P/NP or letter grading. 113A. Rise of Greek City-State. Emphasis on archaic period and early classical age through Persian Wars. 113B. Classical Period. Clash between Athens and Sparta, consequences of Macedon, and aftermath of the Alexander the Great.

M113C. Ancient Historiography: Theory and Practice. (4) (Same as Classics M133.) Lecture, three hours. Study of the development of writing history in cultures of ancient Greece and Rome. Focus is literary, centered on questions of genre and rhetoric. Encourages appreciation for how ancient historiography relates to ancient genres (e.g., biography, oratory). Readings may draw widely from various authors, including Herodotus, Thucydides, Livy, Tacitus, and others. P/NP or letter grading.

114A-114B-114C. History of Rome. (4-4-4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. P/NP or letter grading. 114A. To Death of Caesar. Emphasis on development of imperialism and on constitutional and social struggles of late republic. 114B. From Death of Caesar to Time of Constantine. Early empire treated in more detail, supplemented by survey of social and economic changes in 3rd century. 114C. Transformation of Classical World. Political, cultural, and ideological history of Mediterranean in late antiquity, from crisis of Roman Empire in 3rd century to barbarian and Arab invasions and beginning of medieval states and societies in 7th century.

115. Topics in Ancient History. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors. Introduction to topics in Greek and Roman history, including Roman law, ancient Greek and Roman slavery, world of Caesar Augustus, Greek democracy, and Alexander the Great. May be repeated for maximum of 16 units with topic and/or instructor change. P/NP or letter grading.


119A-119B. Medieval Europe. (4–4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors. Basic introduction to Western Europe from Latin antiquity to age of discovery, with emphasis on medieval use of Greeko-
112C. Medieval Civilization: Mediterranean Heartlands. (4) [Discuss the interactions and cultural developments in the Mediterranean region during the medieval period (when scheduled). Designed for juniors/seniors. Survey of Western Mediterranean Europe, social/economic/cultural within political framework, including its relation with other cultures. P/N or letter grading.

119D. Topics in Medieval History. (4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Special topics in history of Middle Ages, including religion in society, justice and law, politics and government, economic progress and renewal, and cultural representations. May be repeated for maximum of 16 units with topic and/or instructor change. P/N or letter grading.

120A-120B. East-Central Europe. (4–4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. P/N or letter grading.

120A. Long 19th Century, 1870 to 1914. Analysis of characteristics of peripheral 19th-century capitalism, effort to modernize and catch up, and the factors and consequences of its partial failure in economy, politics, and culture. 120B. Short 20th Century, 1918 to 1990. Analysis and interpretation of stormy history of crisis zone of Europe, the waves of war, revolts and rebellions, and different types of extremism led to historical de-tour; 70 years of departure from Western values and at last the end of war. P/N or letter grading.

120C. East-Central Europe in Transition, 1988 to 1993. (4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. P/N or letter grading.

120D. Film and History: Central and Eastern Europe, 1945 to 1989. (4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. P/N or letter grading.]

121A. History of Modern Europe: Renaissance and Reformation, 1450 to 1660. (4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Reorganization of power, new forms of representation, and the historical importance of the Reformation from the perspective of both power and religion. P/N or letter grading.

121B. History of Modern Europe: Baroque Culture and Absolutist Politics, 1660 to 1715. (4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Changing nature of state and social domination; redeployment of military violence; strategies of population discipline; absolutism and baroque culture; new forms of bureaucratic intervention; nobility, peasantry, and body; witch persecutions. P/N or letter grading.

121C. History of Modern Europe: Old Regime and Revolutionary Era, 1715 to 1815. (4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Reorganization of power, new forms of representation, and the historical importance of the Reformation from the perspective of both power and religion. P/N or letter grading.

121D. History of Modern Europe: Bourgeois Century, 1815 to 1914. (4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Enlightened absolutism and reform, change of new political and economic ideas, crisis of Old Regime, impact of French Revolution and Napoleonic empire. P/N or letter grading.

121E. History of Modern Europe: Era of Total War, 1914 to 1945. (4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. World War I, international World War II, social, cultural, political, and economic aspects, with focus on strain between model of parliamentary democracy and dynamics of mass politics (e.g., Bolshevik Revolution, Italian Fascism, national socialism, and Spanish Civil War). P/N or letter grading.

121F. History of Modern Europe: World War II and Its Aftermath, 1939 to Present. (4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. World War II, origins and existence; Cold War, reconstruction in West, de-Stalinization, decolonization, crisis of welfare state, background to and course of 1989 revolutions, current political configurations. P/N or letter grading.

122A-122F. Cultural and Intellectual History of Modern Europe. (4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/se- niors. Climates of taste and climates of opinion. Edu- cation, moral, and religious attitudes; art, thought, and manners of time in historical context. P/N or letter grading.

122A. Culture and History of Modern Europe, 1815 to 1848. (4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/se- niors. The ideational and cultural impact of 18th-century Enlightenment; political and legal thought; the Great to Nicholas II. (4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Westernization of state and society; conflict of old and new; free choice versus determinant factors. Scenarios for future. P/N or letter grading.

122B. Culture and History of Modern Europe, 1848 to Present. (4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Enlightened absolutism and political reforms and social changes; Revolution of 1848; Russian in World War I; fall of old regime. P/N or letter grading.

122C. History of Russia: Revolutionary Russia and Soviet Union. (4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Revolutions of 1917, Civil War, consolidation of Bolshevik regime; succession crisis and ascendency of Stalin, collectivization and industrialization; foreign policy and World War II; death of Stalin, de-Stalinization, development since; stagnation or stagnation? P/N or letter grading.

122D. History of Russia: Imperial Russia from Peter the Great to Nicholas II. (4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Westernization of state and society; conflict of old and new; free choice versus determinant factors. Scenarios for future. P/N or letter grading.

122E. History of Russia: Imperial Russia from 1815 to 1881. (4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Kievan Russia and its culture, Appa- range principalities and towns; Mongol invasion; unification of Russian state by Muscovy, Autocracy and its aftermath. P/N or letter grading.

122F. History of Russia: Imperial Russia from 1881 to 1917. (4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Westernization of state and society; conflict of old and new; free choice versus determinant factors. Scenarios for future. P/N or letter grading.

M127A. History of Russia, Origins to Rise of Muscovy. (4) [Same as Russian M118.] Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Kievan Russia: Appa- range principalities and towns; Mongol invasion; unification of Russian state by Muscovy, Autocracy and its aftermath. P/N or letter grading.

127B. History of Russia: Imperial Russia from Peter the Great to Nicholas II. (4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Westernization of state and society; conflict of old and new; free choice versus determinant factors. Scenarios for future. P/N or letter grading.

127C. History of Russia: Revolutionary Russia and Soviet Union. (4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Revolutions of 1917, Civil War, consolidation of Bolshevik regime; succession crisis and ascendency of Stalin, collectivization and industrialization; foreign policy and World War II; death of Stalin, de-Stalinization, development since; stagnation or stagnation? P/N or letter grading.

128A-128B. History of Italy. (4–4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. P/N or letter grading.

128A. 1350 to 1559. Most important social, economic, political, and cultural developments in history of Italy during later Middle Ages and Renaissance. 128B. 1559 to 1848. Counter-Revolution and absolutism, Enlightenment reforms, revolutionary era, and first Greek Revolutions. 128C. 1848-1870. Political, eco- nomic, social, diplomatic, and ideological developments.

128A-129B. Social History of Spain and Portugal. (4–4) [Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. P/N or letter grading.

129A. Age of Silver in Spain and Por- tugal, 1479 to 1789. Development of popular history in Iberian Peninsula. Emphasis on peasants and urban society in history, gold routes, slave trade, history of women, and development of different types of collective vio- lence. 129B. Rebellion and Revolution in Modern Spain and Portugal, 1789 to Present. Spain’s position in the world and its potential as a model discussed through investigations of urban history, during this century; two world wars, shift from mon- archy to republic to national socialism to divided na- tion, and finally reunification. Consideration of polit- ical, social, economic, and cultural spheres. P/N or letter grading.
agrarian social structure, history of women, problems of slow industrial development, imperialism, anarchism, and labor history.

130. History of European Political Thought. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Introduction to principal themes in history of European political thought from classical antiquity to close of early modern period. Study of outstanding contributions to history of social, political, and moral philosophy in texts of major thinkers such as Plato, Aristotle, Machiavelli, More, Hobbes, Locke, and Rousseau. Reconstruction of intellectual and ideological context from which their work emerged to help students make sense of works of political philosophy in their relevant historical setting and to know something about Athenian democracy, Roman republic, emergence of European nation-states, Renaissance, early modern European civil wars, American and French Revolutions, and Enlightenment. Focus on emergence of some crucial concepts during this period—ideas about state, self, rights, sovereignty, liberty, private property, and more—that define way we think about politics and society in modern world. P/NP or letter grading.

131A-131B. Marxist Theory and History. (4–4) Lecture, three hours; discussion, one hour (when scheduled). Course 131A is generally requisite to 131B. Designed for juniors/seniors. Introduction to Marxist philosophy and method; conception of historical stages; competition of classes; relations of transition from feudalism to capitalism via reading Capital; theory of politics and state in relationship to historical interpretation of 19th-century European revolutions; capital crises. P/NP or letter grading.

132. Topics in European History. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Integrated introduction to important aspects of European history, with emphasis on specific topic within broad framework. May be repeated for maximum of 16 units with topic and/or instructor change. P/NP or letter grading.

M133A-M133B. History of Women in Europe. (4–4) (Same as Gender Studies M133C.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. History of social, political, and cultural roles of women in Western Europe from early Middle Ages to present. P/NP or letter grading. M133A, 800 to 1715; M133B, 1715 to Present.

M133C. History of Prostitution. (4) (Same as Gender Studies M133C.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of molding of American society in English North America from 1600 to 1763. Emphasis on interaction of three core interlocking vergences: Western European, West African, and American Indian. P/NP or letter grading.

134A-134B. Economic History of Europe. (4–4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. P/NP or letter grading. 134A, 1780 to 1914. Analysis of emergence of European world economy, first Industrial Revolution, revolutionary changes in technology, demographic patterns, education, transportation, and interaction between Western core and European peripheries; industrialization, 194C. 20th Century. Changing European economy after World War I and II and in 1990s; impact of fourth and fifth Industrial Revolutions; Great Depressions of century; war years; political and social reconstruction; changing nationalization strategies; import-substituting industrialization in peripheries; Soviet modernization dictatorship in East Central Europe and its collapse; integration processes in second half of century and rival of European Union: modernization model at end of century.

135A. Europe and World: Exploration and Conquest, 1400 to 1700. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. First phase of European expansion in America, Africa, and Eurasia. Analysis of motives and methods of expansion, differing patterns of European settlement, including plantation economy, and development of new commercial networks, including Atlantic slave trade. P/NP or letter grading.

135B. Europe and World: Colonialism, Slavery, and Revolution, 1700 to 1870. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Origins and gradual increase of European dominance of world trade, impact of European colonial expansion for input and output of new revolutionary ideas that took shape in wake of Enlightenment of 18th century, and beginnings of industrialization. P/NP or letter grading.


136A-136B-136C. History of Britain. (4–4–4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Analysis of British economy, society, and polity, with focus on dynamics of both stage and change in each period. P/NP or letter grading.

136A, Tudor-Stuart Times, 1485 to 1715. Political, socioeconomic, religious, and cultural history of Britain under Tudors and Stuarts. Topics include Reformation, transatlantic migration, emergence of mercantilist colonies, 17th-century political upheavals and their impact on political and socioeconomic structures. 136B. Making of Modern Britain, 1715 to 1867. Social, economic, political, and cultural history of Britain from Hanoverian revolution to advent of mass democracy in mid-Victorian era. Themes include social change under pressure of industrialization, emergence of free British Empire, loss of America, shifts in religious and social position. 136C. Modern Britain since 1832.

137A-137B. British Empire since 1873. 137C. (4–4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Development of British Empire, including evolution of colonial nationalism, development of commonwealth idea, and changes in British colonial policy. P/NP or letter grading.

138A. Colonial America, 1600 to 1763. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of molding of American society in English North America from 1600 to 1763. Emphasis on interaction of three core interlocking vergences: Western European, West African, and American Indian. P/NP or letter grading.

138B. Revolutionary America, 1760 to 1800. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Historical context and consequences of American Revolution, nature of revolutionary process, creation of constitutional national government, and development of capitalist economy. P/NP or letter grading.

138C. U.S. History, 1800 to 1850. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Discussion of major social, political, economic, and cultural transformations of first half of 19th century and how these changes helped to drive wedge between North and South. P/NP or letter grading.

139A. U.S., Civil War and Reconstruction. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Rise of sectionalism, antislavery crusade; formation of Confederate States; war years; political and social reconstruction. P/NP or letter grading.

139B. U.S., 1875 to 1900. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. American political, social, and institutional history in period of great change. Emphasis on altering concepts of role of government and responses to that alteration. P/NP or letter grading.


141A-141B. American Economic History. (4–4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Principal ideas about economy and society, that have been at work in American history. Sources of these ideas, their connections with one another, their relationship to American life, and their expression in great documents of American thought. P/NP or letter grading.

M142C. History of Religion in U.S. (4) (Same as Religion M142C.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Consideration of religious dimension of people’s experience in U.S. Examination of number of religious traditions that have been important in this country, with emphasis on relating developments in religion to other aspects of American culture. P/NP or letter grading.

142D. American Popular Culture. (4) Lecture, three hours; discussion, one hour (when scheduled). Recommended requisites: courses 13B, 13C. Designed for juniors/seniors. Survey of American cultural history since 1865, with emphasis on historical development of urban, consumer-oriented American mass culture that enveloped diverse groups of Americans as producers and consumers. Historical development of American popular culture according to changing set of political, economic, and social circumstances. Evolution of national and global framework for mass circulation of popular cultural forms, with arrival of new technologies that enabled that development. P/NP or letter grading.


144. America in World. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Rise of sectionalism, antislavery crusade; formation of Confederate States; war years; political and social reconstruction. P/NP or letter grading.

M144C. Critical Issues in U.S.-Philippine Relations. (4) (Same as Asian American Studies M171D.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. American economic, political, and cultural influence on the Philippines since 1765, 1766, 176C. Designed for juniors/seniors. Examination of complex interrelationship between U.S. colon-
nialism, Philippine nationalism, history of Filipino Americans, and Philippine diaspora in 20th century. P/NP or letter grading.

145A-145B. U.S. Urban History. (4-4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. P/NP or letter grading. 145A. U.S. Cities: Overview. Demographic, geographic, political, economic, and social development of U.S. cities in 18th to 20th centuries. Survey supplemented with case studies drawn from historical research used to inform museum exhibitions, public policy, historical commemoration, digital projects, and social media productions. Through assigned readings, analytical writing, and collaborative research, students engage with variety of approaches, tools, and media. Reassessing community. Within framework of domination and survival of America’s deaf community and developments of deaf identity over time. P/NP or letter grading.

148. Introduction to Public/Applied History. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. History of Native Americans from contact to present, with emphasis on three great transitions of Afro-American life: transi- tion from Africa to New World slavery, transition from slavery to freedom, and transition from rural to urban milieus. P/NP or letter grading.

146. American Working Class Movements. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Major episodes in social, trade union, and cultural history of American working classes from 1830 to present. Emphasis on both organized and unorganized labor, history of Knights of Labor, AFL-CIO, and development of labor politics. P/NP or letter grading.

146B. Racial and Ethnic Relations. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Major episodes in social, trade union, and cultural history of American working classes from 1830 to present. Emphasis on both organized and unorganized labor, history of Knights of Labor, AFL-CIO, and development of labor politics. P/NP or letter grading.

146C. Migrant Nation: How Mobility Shapes American Society, Politics, and Culture. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Use of overlapping diaspora model that integrates North Atlantic (Europe), Mediterranean (North African), Pacific (China/Japan/Hawaii), and Latin (Mexico to Brazil) worlds to provide chronological and analytic survey of American and comparative immigration from 1730 to present. Special focus on Southern California. P/NP or letter grading.

147A and 147B. East Asia: A Historical Survey and Cultural Interaction. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Introduction to major themes in history of East Asian women from abolition of slavery and Civil War to rise of women’s rights movement in mid-19th century. P/NP or letter grading.

147C. History of Women in Colonial British America and Early U.S., 1600 to 1860. (4) (Same as Gender Studies M147B.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Introduction to major themes in history of American women from abolition of slavery and Civil War to rise of women’s rights movement in mid-19th century. P/NP or letter grading.

147D. History of Women in U.S., 1860 to 1980. (4) (Same as Gender Studies M147D.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Introduction to major themes in history of American women from abolition of slavery and Civil War to rise of women’s rights movement in mid-19th century. P/NP or letter grading.

150. Comparative Slavery Systems. (4) (Same as African American Studies M150A.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examining of various New World slave societies, with emphasis on outlining similarities and differences among legal status, treatment, and slave cultures of North American, Caribbean, and Latin American slave societies. P/NP or letter grading.

150B-150C. Introduction to Afro-American History. (4-4) (Same as African American Studies M150B-M150C.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of African American experience, with emphasis on three great transitions of Afro-American life: transition from Africa to New World slavery, transition from slavery to freedom, and transition from rural to urban milieus. P/NP or letter grading.

150D. Recent African American Urban History: Funk Music and Politics of Black Popular Culture. (4) (Same as African American Studies M150D.) Lecture, three hours; discussion, one hour (when scheduled). Survey of African American urban history in U.S. through 20th century, with special focus on three great transitions of Afro-American life: transition from Africa to New World slavery, transition from slavery to freedom, and transition from rural to urban milieus. P/NP or letter grading.

150E. African American Nationalism in First Half of 20th Century. (4) (Same as African American Studies M150E.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Critical examination of African American search in first half of 20th century for national/group cohesion through collectively built institutions, associations, organized protest movements, and ideological self-definition. P/NP or letter grading.

151A. History of Chicano Peoples. (4) (Same as Chicana/o and Central American Studies M151A.) Lecture, three hours; discussion, one hour (when scheduled). Survey of social history of Mexican (Chicano) community and people of Mexican descent (Indio-Mestizo-Mulato) north of Rio through 17th, 18th, and 19th centuries. Focus on labor and politics. Provides integrated understanding of change over time in Mexican community by inquiry into major formative historical forces affecting community. Social structure, culture, political organization, conflict, and international relations. Emphasis on social forces, class analysis, social, economic, and labor conflict, ideas, domination, and resistance. Developments related to historical events of significance occurring both in U.S. and Mexico. Lectures, special presentations, reading assignments, written examinations, library and field research, and submission of paper. P/NP or letter grading.

151B. History of Chicana and Chicano Society. (4) (Same as Chicana/o and Central American Studies M151B.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey lecture course on historical development of Mexican (Chicano) community and people of Mexican descent in U.S. through 20th century, with special focus on characteristics of social structure, labor and politics. Provides integrated understanding of change over time in Mexican community by inquiry into major formative historical and policy issues affecting community. Within framework of domination and resistance, discussion deals with social structure, economy, law and culture, political organization, conflict, and ideology. Developments related to historical events of significance occurring both in U.S. and Mexico. Lectures, special presentations, reading assignments, written examinations, library and field research, and submission of paper. P/NP or letter grading.

151C. Understanding Whiteness in American History and Culture. (4) (Same as Chicano Studies M151C.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. History, construction, and representa- tion of whiteness in American society. Lectures and discussions trace evolution of identity and explore its significance to historical construction of race class in American history. Letter grading.

151D. Chicana Historiography. (4) (Same as Chicana/o and Central American Studies M151D.) Lecture, three hours; discussion, one hour (when scheduled). Examina- tion of Chicana historiography, looking closely at how practice of writing of history has placed Chicanas into particular narratives. Using Chicana feminist approaches to study of history, revisiting of specific historical periods and moments such as Spanish Conquest, Mexican Period, American Conquest, Mexican Revolution, and Chicano Movement to excavate untold stories about women’s participation in and contribu- tion to making of Chicana and Chicano history. P/NP or letter grading.

151E. Latino Metropolis: Architecture and Urbanism in Americas. (4) (Same as Chicana/o and Central American Studies M151E and Urban Planning M187.) Lecture, four hours. Introduction to history of architecture and urbanism in Americas, from fabled cities of Aztec empire to barrios of Angeles and Miami. Emphasis on role of cities in Latina/Latino experience and uses of architecture and city planning to forge new social identities rooted in historical expe- riences of conquest, immigration, nationalization, and revolution. P/NP or letter grading.


153. American West. (4) Lecture, three hours; discus- sion, one hour (when scheduled). Designed for juniors/ seniors. Study of West as frontier and, as region, in transit from Atlantic seaboard to Pacific, from 17th century to present. P/NP or letter grading.

154. History of California. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Economic, social, intellectual, and po- litical development of California from earliest times to present. P/NP or letter grading.

155. History of Los Angeles. (4) (Same as Chicana/ o and Central American Studies M155.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Social, economic, cultural, and political development of Los Angeles and its envi- ronment from its formation to the present. Emphasis on diverse peoples of area, changing physical environ- ment, various interpretations of city, and Los Angeles’ place among American urban centers. P/NP or letter grading.
156. Topics in U.S. History. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of specific historical themes and/or issues in U.S. history. May be repeated for maximum of 16 units with topic and/or instructor change. P/NP or letter grading.

157A. Early Latin America. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of social and cultural history of Latin America from conquest to independence, with emphasis on internal view of Indian groups and patterns on basis of records produced by Indians themselves. P/NP or letter grading.

159. Latin America in 19th Century. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Advanced survey of Latin American history from conquest to independence, with emphasis on internal view of Indian groups and patterns on basis of records produced by Indians themselves. P/NP or letter grading.

160B. Mexican Revolution since 1910. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of concept of permanent crisis to describe and explain structure of revolution under one-party democracy. Analysis of Mexico's national and 19th-century problems and crises that have influenced modern-day Mexico, if in modified form. P/NP or letter grading.

161. Topics in Latin America History. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of major issues in history of Latin America. May be repeated for maximum of 16 units with topic and/or instructor change. P/NP or letter grading.

161B. Latin American Eliteolore. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Eliteolore (defined as oral or noninstitutionalized knowledge involving leaders' conceptual and peripheral folklore (in contrast to folklore (followers' traditional or popular views). Eliteolore genres include oral history, literature, and cinema. P/NP or letter grading.

166B. Mexico since 1690. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Exploration of development of colonial society in Brazil from discovery in 1500 to independence in 1822, placing it in context of Portugal's overseas expansion in Asia, Africa, and Americas. Emphasis on Portuguese, indigenous, and African roots of modern Brazil. P/NP or letter grading.

166C. History of Argentina. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. History of economic, political, social, and cultural development of Argentina from 1810 to the present. Emphasis on 19th-century development of agro-export economy and 20th-century formation of mass society. P/NP or letter grading.

167A. History of Latin America. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Survey of economic, political, social, and cultural development of Latin America since 1810, emphasizing achievements and problems of Latin America seen in context of social-economic trends; human agency, structural change, and historical conjunctures. P/NP or letter grading.

169A. Thought and Society in China. (4–4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of history of China from earliest times to present, with emphasis on society and economy, evolution of state, and significance of Christianity and Islam. P/NP or letter grading.

170. Culture and Power in Late Imperial China. (4) Lecture, three hours; discussion, one hour (when scheduled). Recommended preparation: courses 11A, 11B. Designed for juniors/seniors. Analysis of relations of power and cultural expressions of dominance and resistance in late imperial China (1000 to 1700), with emphasis on interplay of economic forces, ideas, and social and political institutions. Examination of institutions of state, family, and social norms of folk societies, and changes in social roles. P/NP or letter grading.

170B. Selected Topics in Chinese History from 1500. (4) Lecture, three hours; discussion, one hour (when scheduled). Recommended requisite: course 11B. Designed for juniors/seniors. Selected topics that may vary from year to year. May include law and Chinese society and culture; society and economy; and rural China. May be repeated for maximum of 16 units with topic and/or instructor change. P/NP or letter grading.

171. Variable Topics in Japanese History. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Topics include women and family, women in Confucian ideology, women in literati culture, feminist movement, and women and communist revolution. P/NP or letter grading.

172. 20th-Century China. (4) Lecture, three hours; discussion, one hour (when scheduled). Recommended preparation: course 11B. Designed for juniors/seniors. Political and events and intellectual developments seen in context of social-economic trends; human agency, structural change, and historical conjunctures. P/NP or letter grading.

174. Economic History of China. (4) Lecture, three years; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of development of Chinese economy and social, technological, intellectual, and political dynamics that produced distinctive patterns in evolution of China's economy from antiquity to present day. P/NP or letter grading.

175. Variable Topics in Japanese History. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Important topics in Japanese history, including political change, economic development, social questions, and popular culture, as well as women and the arts. May be repeated for maximum of 16 units with topic and/or instructor change. P/NP or letter grading.

176A. Japan—Ancient and Medieval History. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Political, economic, and cultural development of Japan from prehistory to 1600. P/NP or letter grading.

176B. Japanese History: Early Modern, 1600 to 1868. (4) Lecture, three hours; discussion, one hour (when scheduled). Recommended preparation: courses 11A, 11B. Designed for juniors/seniors. Political, economic, and cultural development of Japan from 1600 to 1868. P/NP or letter grading.

176C. Modern Japanese History, 1850 to 1945. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Investigation of meaning of modern "Japan" for newly national (and international) Japan, and its effects on its long-term development. P/NP or letter grading.
also include gender, sexuality, aesthetics, fascism, eu-
genics and race, hygiene, bloodsucking, monsters, anarchism, time, colonialism, feminism, art, censorship, protest, and Catholic Church. (None of the above.)

17A. Japanese Popular Culture. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Topics in 19th-, 20th-, and 21st-century Japanese culture, including contemporary manga, anime, and video games. P/NP or letter grading.

17B. Modern Japanese. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Reading and writing in modern Japanese with emphasis on contemporary culture and media. P/NP or letter grading.

17C. Shinto, Buddhism, and Japanese Folk Reli-
gion. (4) Same as Religion M173C.) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Introduction to the major beliefs and practices of Shinto and Buddhism in Japan. P/NP or letter grading.

17D. Postwar Japanese History through Film. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Exploration of postwar Japanese history through film and cultural criticism. Focus on themes of national identity, postwar reconstruction, and political and social issues in postwar Japan. P/NP or letter grading.

17E. History of South Asia. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Introduction to the history of South Asia, including the Mughal Empire, British rule, and decolonization. P/NP or letter grading.

17F. Gandhi and Making of Modern India. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Examination of the life and legacy of Mohandas Gandhi, a key figure in Indian independence movement. P/NP or letter grading.

17G. Indian Identity in U.S. and Diaspora. (4) Same as Asian American Studies M172A.) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Exploration of the experiences of Indians in the United States and other diasporic communities. P/NP or letter grading.

17H. Cultural and Political History of Contempo-
rary South Asia. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Historical and political developments in South Asia, including colonialism, decolonization, and contemporary issues. P/NP or letter grading.

17I. History of Southeast Asia since 1815. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Survey of the history of Southeast Asia from 1815 to the present, with an emphasis on political, economic, cultural, and social developments. P/NP or letter grading.

17J. History of Southeast Asia. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Examination of major issues in the history of Southeast Asia, including colonialism, decolonization, and contemporary developments. P/NP or letter grading.

17K. Comparative Histories of Southeast Asia. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Variable topics with a focus on the history of Southeast Asia from a comparative perspective. Topics may include the history of human rights in Southeast Asia, economic history of Southeast Asia. P/NP or letter grading.

17L. Introduction to History and Culture of Iranian 
Jews. (4) Same as Iranian M178 and Jewish Studies M178.) Lecture, three hours. Introduction to the political, institutional, social, and cultural history of the Iranian-Jewish community in Iran and the United States. P/NP or letter grading.

17M. Topics in History of Medicine. (4) Lecture, three hours. Designed for seniors/juniors. Topics may include global and comparative perspectives on the history of medicine. P/NP or letter grading.

17N. History of Science: Foundations of Modern Medicine. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Topics may include scientific and technological developments in medicine, including the history of medical education, public health, and medical ethics. P/NP or letter grading.

17O. Topics in History of Science. (4) Lecture, three hours. Designed for seniors/juniors. Topics may include the history of science and technology, focusing on specific periods or regions. P/NP or letter grading.

17P. Historical Perspectives on Gender and Sci-
ence. (4) Same as Gender Studies M180B.) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Historical perspectives on the role of gender and sex in the history of science, including the history of women in science and the impact of gender on scientific research and development. P/NP or letter grading.

17Q. Science and Technology in 20th Century. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Development of science and technology and their impact on society, technology, and culture. P/NP or letter grading.

17R. Topics in Jewish History. (4) Same as Jewish Studies M181.) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Examination of major issues in Jewish history. May be repeated for maximum of 16 units with topic and/or instructor change. P/NP or letter grading.
History

C191D-C191R. Topics in History. (4 each) Seminar, three hours. Designed for seniors. Limited to 15 students meeting with faculty member. Reading and discussion of selected topics, and development of culminating project. May be repeated once for credit. P/NP or letter grading. C191D. U.S. May be concurrently scheduled with course C201H; C191J. Africa. (Formerly numbered 192B.) May be concurrently scheduled with course C201N; C191K. History of Religion. May be concurrently scheduled with course C201H; C191L. Jewish History. (Formerly numbered 191L.) May be concurrently scheduled with course C201O; C191H. History of Literature. May be concurrently scheduled with course C201Q; C191R, Japan. (Formerly numbered 191R) May be concurrently scheduled with course C201M.

C190. Community or Corporate Internships in History. (4) Seminar, one hour. Limited to seniors. Internship in applied/public history. Students meet on regular basis with faculty supervisor. A cumulative total of 200 hours. Limited to juniors/seniors. Internship in corporate history. Students meet on regular basis with faculty supervisor. A cumulative total of 200 hours. Limited to juniors/seniors. Internship in community history. Students meet on regular basis with faculty supervisor. A cumulative total of 200 hours. Limited to juniors/seniors. Internship in corporate history (with comparison to quantitative analysis). Examines selected topics in the history of Washington program students. Internships in Washington, DC. Through Center for American Politics and Public Policy program in Washington, DC. Focus on development and execution of original empirical research based on experiences from Washington, DC-based field placements. Study of variety of qualitative methods (observation, interviewing, etc.), with comparison to quantitative analysis. Examination of features of solid and significant research; intensive writing. Letter grading.

C194DC. Quarter in Washington, DC, Research Seminar. (4) (Same as Communication C191DC, Political Science M191DC, and Sociology M191DC.) Seminar, three hours. Limited to CAPPP Program students. Seminars for undergraduate students in Center for American Politics and Public Policy’s program in Washington, DC. Focus on development and execution of original empirical research based on experiences from Washington, DC-based field placements. Study of variety of qualitative methods (observation, interviewing, etc.), with comparison to quantitative analysis. Examination of features of solid and significant research; intensive writing. Letter grading.

C195. Community or Corporate Internships in History. (4) Tutorial, to be arranged; fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship in applied/public history setting coordinated through Public History Initiative. Students meet on regular basis with faculty supervisor, provide periodic reports of their experience, and write an informal report. Four units may be applied toward major requirements. Individual contract with supervising faculty member required. P/NP or letter grading.

C195CE. Community and Corporate Internships in History. (4) Tutorial, to be arranged; fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship in applied/public history setting coordinated through Center for Community Engagement. Students complete and submit written assignments, attend biweekly meetings with graduate student instructor, and write final research paper. Faculty mentor and graduate student instructor construct series of reading assignments related to internship site. May be repeated with consent of Center for Community Engagement. No more than 8 units may be applied toward major; units applied must be taken for a grade. Four units may be applied toward concentration or distribution requirements. Individual contract with supervising faculty member required. P/NP or letter grading.

M190DC. Quarter in Washington, DC, Internships. (4) (Same as Communication M191DC, Political Science M191DC, and Sociology M191DC.) Tutorial, four hours. Limited to seniors. Internships in Washington program students. Internships in Washington, DC, through Center for American Politics and Public Policy Program. Students meet on regular basis with instructor and provide periodic reports of their experience. Individual contract with supervising faculty member required. P/NP grading.

Graduate Courses

M200A-200U. Advanced Historiography. (4 each) Seminar, three hours. May be repeated for credit. 200A, Ancient Greece; 200B, Ancient Rome; 200C, Medieval; 200D, Europe; 200H, U.S.; 200I, Latin America; 200J, Near East; 200L, China; 200N, Africa; 200O, Science/Technology; 200P, Theory of History. 200R, Jewish History; 200S, Armenia and Caucasus; 200T, Southeast Asia; 200U, Psychohistory. 200F-200Q. Topics in Historiography. (4 each) Seminar, three hours. Designed for graduate students. Proseminar on historiography involving close reading and critical discussion of secondary scholarship and primary sources on selected topics. Reading, discussion, and analytical writing culminating in one or several historiographical essays. May be repeated for credit. S/U or letter grading. 200R, Jewish History; 200S, Armenia and Caucasus; 200T, Southeast Asia; 200U, Psychohistory. 200F-200Q. Topics in Historiography. (4 each) Seminar, three hours. Designed for graduate students. Proseminar on historiography involving close reading and critical discussion of secondary scholarship and primary sources on selected topics. Reading, discussion, and analytical writing culminating in one or several historiographical essays. May be repeated for credit. S/U or letter grading. 200R, Jewish History; 200S, Armenia and Caucasus; 200T, Southeast Asia; 200U, Psychohistory. 200F-200Q. Topics in Historiography. (4 each) Seminar, three hours. Designed for graduate students. Proseminar on historiography involving close reading and critical discussion of secondary scholarship and primary sources on selected topics. Reading, discussion, and analytical writing culminating in one or several historiographical essays. May be repeated for credit. S/U or letter grading. 200R, Jewish History; 200S, Armenia and Caucasus; 200T, Southeast Asia; 200U, Psychohistory.
226A-226B. Seminars: Italian Renaissance. (4–4) Seminar, three hours. Course 226A is requisite to 226B. In Progress (226A) and letter (226B) grading.
227A-227B. Seminars: Reformations. (4–4) Seminar, three hours. Course 227A is requisite to 227B. In Progress (227A) and letter (227B) grading.
229A-229B. Seminars: Early Modern European History. (4–4) Seminar, three hours. Course 229A is requisite to 229B. In Progress (229A) and letter (229B) grading.
M230A-M230B. Seminars: Modern European History. (4–4) Same as Art History M230B-M230C. Seminar, three hours. Course M230A is requisite to M230B. May be repeated for credit with consent of adviser. In Progress (M230A) and letter (M230B) grading.
231A-231B. Seminars: Modern European Intellectual and Cultural History. (4–4) Seminar, three hours. Course 231A is requisite to 231B. In Progress (231A) and letter (231B) grading.
232A-232B. Seminars: French History of 19th and 20th Centuries. (4–4) Seminar, three hours. Course 232A is requisite to 232B. In Progress (232A) and letter (232B) grading.
233A-233B. Seminars: Russian/Soviet History. (4–4) Seminar, three hours. Course 233A is requisite to 233B. In Progress (233A) and letter (233B) grading.
234A-234B. Seminars: Modern History of Spain, Portugal, and Italy. (4–4) Seminar, three hours. Course 234A is requisite to 234B. In Progress (234A) and letter (234B) grading.
235A-235B. Economic History of Europe, 1780 to 1919. (4–4) Seminar, three hours. Course 235A is requisite to 235B. Analysis of Internationalization of European world economy, emergence of Western core and its relationship with European peripheries. Comparative analysis on different regions, stressing main characteristics of postwar European economy. In Progress (235A) and letter (235B) grading.
235C-235D. Economic History of 20th-Century Europe. (4–4) Seminar, three hours. Course 235C is requisite to 235D. Cyclical trend, various economic regimes, and integration process of Europe. In Progress (235C) and letter (235D) grading.
M236A. Proseminar: Political Psychology. (4) Same as Political Science M236A and Psychology M236A. Seminar, three hours. Introduction to the research literature on political psychology. Topics include the psychology of peace and war, the rise of nationalism, and political decision making.
236A-236B. Seminars: Political Psychology. (4–4) Seminar, three hours. Course 236A is requisite to 236B. In Progress (236A) and letter (236B) grading.
237A-237B. Seminars: Byzantine History. (4–4) Seminar, three hours. Course 237A is requisite to 237B. In Progress (237A) and letter (237B) grading.
238A-238B. Seminars: Islamic History. (4–4) Seminar, three hours. Course 238A is requisite to 238B. In Progress (238A) and letter (238B) grading.
239A-239B. Seminars: English History—Middle Ages. (4–4) Seminar, three hours. Course 239A is requisite to 239B. In Progress (239A) and letter (239B) grading.
240A-240B. Seminars: English History—Modern History. (4–4) Seminar, three hours. Course 240A is requisite to 240B. In Progress (240A) and letter (240B) grading.
241A-241B. Seminars: German History. (4–4) Seminar, three hours. Course 241A is requisite to 241B. In Progress (241A) and letter (241B) grading.
244A-244B. Seminars: British Empire History. (4–4) Seminar, three hours. Course 244A is requisite to 244B. In Progress (244A) and letter (244B) grading.
245. Colloquium: U.S. History. (4) Seminar, three hours. Normally limited to and required of all entering graduate students in U.S. history. Critical introduction to historical method, with emphasis on new methodological and conceptual approaches. Use of primary and secondary sources.
250A-250B. Seminars: U.S. History of Middle 19th Century. (4–4) Seminar, three hours. Course 250A is requisite to 250B. In Progress (250A) and letter (250B) grading.
251A-251B. Collaborative Research Seminars: American History. (4–4) Seminar, three hours. Research seminars taught jointly by two faculty members. In Progress (251A) and letter (251B) grading.
252A-252B. Seminars: Recent U.S. History to 1930. (4–4) Seminar, three hours. Course 252A is requisite to 252B. In Progress (252A) and letter (252B) grading.
253A-253B. Seminars: Recent U.S. History since 1930. (4–4) Seminar, three hours. Course 253A is requisite to 253B. In Progress (253A) and letter (253B) grading.
254A-254B. Seminars: U.S. Social and/or Intellectual History. (4–4) Seminar, three hours. Course 254A is requisite to 254B. In Progress (254A) and letter (254B) grading.
255A-255B. Business Enterprise and American Culture. (4–4) Seminar, three hours. Course 255A is requisite to 255B. In Progress (255A) and letter (255B) grading.
256A-256B. Seminars: America in World. (4–4) Seminar, three hours. Course 256A is requisite to 256B. In Progress (256A) and letter (256B) grading.
M256C. Political Economy of Race. (4) Same as African American Studies M256C. Seminar, four hours. Examination of historiography of history of capitalism and history of African diaspora, especially in their overlapping concerns with organization of race and racial states in contemporary world, development of modern imperialism—and emergence of global Black resistance to both. Themes and topics considered may include capitalism and question of slavery; law, regulations, and legal pluralism in organization of markets and nations; uneven development and nature of Black sovereignty; history of regimes of gender and sexuality in social and capital reproduction; modalities of capital accumulation and production of space; racial violence and territorial expansion; emancipation and growth of empire; history of finance capital and its discourses of debt; capitalism and history of anti-Blackness; racism, neoliberalism, and governmentality, and emergence and radical political tradition and its critiques of racial capitalism. S/U or letter grading.
257A-257B. Seminars: U.S. Urban History. (4–4) Seminar, three hours. Course 257A is requisite to 257B. In Progress (257A) and letter (257B) grading.
282A-282B. Seminars: Chinese History. (4–4) Seminar, three hours. Course 282A is requisite to 282B. In Progress (282A) and letter (282B) grading.

282A-282B. Seminars: Japanese History. (4–4) Seminar, three hours. Course 282A is requisite to 282B. In Progress (282A) and letter (282B) grading.

282B, Japan in Age of Empire. (4) Same as Anthropology M247P and Asian M292.) Seminar, three hours. Designed for graduate students. Since late 19th century, Japan expanded its empire into East and Southeast Asia. Coverage of that period and array of anthropological studies conducted in Japan’s colonies and occupied areas in this historically explored area of study of colonialism. S/U or letter grading.


288A-288B. Seminars: South Asia. (4–4) Seminar, three hours. Course 288A is requisite to 288B. In Progress (288A) and letter (288B) grading.

289A-289B. Seminars: Southeast Asia. (4–4) Seminar, three hours. Course 289A is requisite to 289B. In Progress (289A) and letter (289B) grading.

291A-291B. Seminars: Jewish History. (4–4) Seminar, three hours. Course 291A is requisite to 291B. Studies in intellectual and social history of Jewish people from ancient times to modern period. In Progress (291A) and letter (291B) grading.

289A-289B. Seminars: Southeast Asia. (4–4) Seminar, three hours. Course 289A is requisite to 289B. In Progress (289A) and letter (289B) grading.

291A-291B. Seminars: Jewish History. (4–4) Seminar, three hours. Course 291A is requisite to 291B. Studies in intellectual and social history of Jewish people from ancient times to modern period. In Progress (291A) and letter (291B) grading.

293A-293B. Seminars: History of Religions. (4–4) Seminar, three hours. Course 293A is requisite to 293B. In Progress (293A) and letter (293B) grading.

294A-294B. Western Science, Religion, and Political Economy, 1600 to 1830. (4–4) Seminar, three hours. Study of science integrated within matrix of religious belief and scientific discovery in modern Europe and, to a lesser extent, American colonies. Examination of relationships of both cultural and political to economic and social change. S/U or letter grading.

295. Theories of Scientific Change. (4) Seminar, three hours. Historical and philosophical perspectives on science, science and culture, and the role of scientific change and logic and psychology of scientific discovery. Readings and seminars given on such authors as Popper, Kuhn, Lakatos, Feyerabend, and others. S/U grading.

297A-297B. Seminars: History of Science. (4–4) Seminar, three hours. Course 297A is requisite to 297B. In Progress (297A) and letter (297B) grading.

200. Directed Study for Graduate Students. (1 to 8) Reading and seminar-style discussions with instructors of original papers, seminars, and colloquia in special areas. Number of times PhD candidates may take this course is subject to consent of graduate studies committee. S/U grading.
1. Plague Culture. (5) Seminar, three hours. Study of episodes and metaphors of plague in Western culture from ancient times into age of AIDS. Topics include scripture, ancient tragedy, Black Death, realistic novel, high aesthetic metaphors of plague, Nazi propaganda, existential and absurdist thought, postwar cinema, contemporary films, and modern science and medicine. P/NP or letter grading.

2. Comparative Genocide. (4) Lecture, four hours; discussion, one hour. Social comparative study of genocide, combining theoretical concepts with case studies (such as Armenia, the Holocaust, American Indians, Uganda under Amin and Obote, etc.). P/NP or letter grading.

3. Personal Brain Management. (5) Seminar, four hours. Designed for College Honors students. Exploration of various aspects of pathological and social context. Examination of pathological behaviors in context of their medical and psychiatric framework when they correspond to clinical diagnostic entity. Texts used as springboard to elaboration on recurrent themes in history of human civilization. P/NP or letter grading.

5. Representing Cleopatra: History, Drama, and Film. (5) Seminar, three hours. Examination of legendary figures as they have been by her contemporaries and study of origins of myths about her and ways in which subsequent cultures and eras have imagined her in literary, visual, and cinematic representations. P/NP or letter grading.

6. Energy Issues: Before and Now. (5) Seminar, three hours. Review of physics and chemistry of concepts of energy, history over ages of turning of discoveries into products in this area, including use of fossil fuel, and discussion of current energy issues, including alternative energies. P/NP or letter grading.

7. Saint and Heretic: Joan of Arc and Gilles de Rais, and discussion of current energy issues, including alternative therapies, educational media, and drugs can alter our way of thinking. New wave of information technologies and biotechnologies is changing existing landscape. P/NP or letter grading.

11W. Postmodern Literature and Culture. (5) Seminar, three hours. Discussion, one hour. Designed for College Honors students. Examination of postmodern cultural forms that challenge master narratives or belief systems, fostering skepticism toward totalizing truth claims while encouraging us to embrace diverse perspectives and heterogeneous models of identity. Satisfies Writing II requirement. Letter grading.

12. Sacred Form: Literature and Poetry in India from Bronze Age to Premodern Times. (4) Seminar, three hours. Examination of literary development in India from early religious poetry (prior to 1000 BC) to broad range of literary styles and diverse religious and philosophical movements through classical, medi eval, and premodern period. P/NP or letter grading.

13. Inquiry in Numbers. (5) Seminar, four hours. Preparation: high school algebra. Designed for College Honors students. Teaches nonmathematicians to love mathematics and to see mathematics as mathematicians do, not as means to end, but as beautiful and artful in its own right, including elementary number theory and study of whole numbers. Development of new ways to think about roles of law. P/NP or letter grading.

14. Interaction of Science and Society. (5) Seminar, three hours. Examination of interaction of science and society and effects of this interaction on history, development of social policies and strategies of dissent. Introduction to Greek legal system, values that animated that system, and new ways to think about roles of law. P/NP or letter grading.

15. Symmetry. (5) Seminar, four hours. Symmetry is one of fundamental intellectual frameworks of civilization, one that permeates sciences, arts, and other en devors. In harmony with symmetry, revolutionaries ideas as modeled in Galileo, Darwin, and others, and selected contemporary issues such as genetic engineering and war against infectious diseases. P/NP or letter grading.


18. Trial of Socrates. (5) Seminar, three hours. Examination of life and times of Socrates and trial that led to his execution, including in-class staging. P/NP or letter grading.

19. College Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery. P/NP or letter grading.

20. Introduction to History and Philosophy of Science. (5) Lecture, three hours; discussion, one hour. Exploration of difference between science and other systems of knowledge; study of history and philosophy of science and evaluability as objective knowledge. P/NP or letter grading.

21W. Rise and Fall of Modernism. (3) Seminar, three hours; writing laboratory, two hours. Enforced prerequisite: English Composition 3 or 3H or English as a Second Language 36. Study of early and middle 20th century’s attempt to construct significance in a general climate of disillusionment by way of literature, literary criticism, and other intellectual movements. Satisfies Writing II requirement. Letter grading.

22. Comparative Odysseys. (3) Seminar, three hours. Designed for College Honors students. Greek and Chinese classics have in common two modes of her oism: one glorifying prowess and another celebrating mental cunning. Both modes are associated principally with men motivated by piety and honor. Interruption of these traditional constructions of heroic, patriarchal definitions of courage and value by the female characters in many readings in both cultures. Satisfies Writing II requirement. Letter grading.

23. Political Dissidence Today and in Ancient Greece: Trial and Death of Socrates in Its Classical and Legal Context. (5) Seminar, three hours. Study of trial and death of Socrates by examining its relevance today to civil treatments and disobedience in the U.S. and to variety of contemporary theories and strategies of dissent. Introduction to Greek legal system, values that animated that system, and new ways to think about roles of law. P/NP or letter grading.

24. We Could Be Heroes: Race, Gender, and the Contemporary Hero Narrative. (5) Seminar, four hours. Ways in which hero narratives represent and work through intersections of race and gender. In particular, conflation of courage and violence. Readings include Writer as Migrant by Jin Ha, Odyssey by Homer, Journey to West by Anthony Yu, Tripmaster Monkey by Maxine Kingston, and Ignorance by Milan Kundera. P/NP or letter grading.

25. Politics and Passion: Judgment, Justice, and the Contemporary Political. (5) Seminar, four hours. How to combine judgment and emotions without them standing in way of justice, including our ability to listen and respond to pain of others. What should our political lives? Should it be our reason or our emotions? Or is there some way to combine the two? Exploration of these questions through debates on place of emotions in politics, from ancient to contemporary thinkers within philosophical framework. P/NP or letter grading.

26. Representing Medicine: Art, Literature, and Film. (5) Seminar, four hours. Limited to Freshman Summer Program students. Exploration of interdisciplinary dimensions of medical representation, with emphasis on cross-cultural 20th-century portrayals of profession, including representation of patient-doctor relations, healthcare sites and circumstances, aging, alternative treatments, and mental health. Offered in summer only. P/NP or letter grading.

27. Varied Mathematics. (5) Seminar, four hours. In formal approach to mathematics and engineering topics. Ideas through stories from historical and anthropological sources. Simplification of topics that cause difficulties in traditional mathematics. Examples emphasize practical solutions. In place of terms used in mathematics, relevant views from popular culture,
including gambling, playing card games, and student contributions. Sources include computer, control, space, and other contemporary scientific issues, and reckoning with the idea of culture, cultural appropriation, including remixes of political speech, viral videos, and comedy mashups. Examination of fine line between heroic cultural altruism and allegations of theft. Satisfies Writing II requirement. P/NP or letter grading.

49. Evidence in Law, Science, History, and Journalism. (5) Seminar, three hours. Examination of drug use and abuse and consequent social issues and policies both historically and in the contemporary U.S., including discussion of current research on neurobiological properties of different drugs and corresponding clinical interventions. P/NP or letter grading.

50. Politics of Reproduction. (4) Seminar, three hours. Examination of both local, and global interests as they shape and reflect reproductive practices, public policy, and exercise of power. P/NP or letter grading.


54. South America, and Polynesia. P/NP or letter grading.

28. Material Culture and the Museum: Introduction to Collections-Based Research. (5) Seminar, three hours. Examination of relationship between people, objects, and the way that human beings have historically and contemporaneously created and conceived of things and their use and importance in daily life and in performance of cultural identity. Consideration of questions including how past and present intersect, how people have made sense of world over time and space, and how objects, heritage, collectors, and museums converge, diverge, and intersect. P/NP or letter grading.

29. Imaging Human Rights. (5) Seminar, four hours. Introduction to debate on international human rights. History of natural rights and examination of rise of human rights regimes during 20th century. Drawing upon art, history, psychology, political science, law, history, literature, and film to investigate how this shift from natural rights to human rights involves reimagining of humanity and the human being in relation to other living beings. Questions include: What is the role of human rights in international law? How do films reflect on, and even constitute, historical events? Examination of relationship between film and history and some ways in which film has functioned as history. Tracing questions of film and history from silent era to postfilm digital present, exposure to major issues in scholarship of human rights, film and media studies while also learning about ways that films can engage with history. P/NP or letter grading.


31. Poets and Prophets: Back to Future with Ray Bradbury and Rod Serling. (5) Seminar, three hours. Examination of various aspects of human condition and how they are portrayed in a range of genres including science fiction. Introduction of authors as both poets reflecting on social issues of their time, as well as prophets of future dystopia of human making. Reading texts of Ray Bradbury and viewing original screen episodes of Rod Serling’s The Twilight Zone to see that these artists forecast some of pressing issues facing humanity today: climate change and threat of ecological and planetary catastrophe, and other concerns. P/NP or letter grading.

32. Intellectual Powers: Sociological, Historical, and Cultural Prisms. (5) Seminar, three hours. Examination of society and culture as a whole, how they mix with various aspects of human nature including art, science, politics, and economics. P/NP or letter grading.

33. Extraterrestrial Life. (4) Seminar, three hours. Tracing of writing and rewriting of tradition in which the question of whether or not there is intelligent life in the universe but rather uses this question as a pedagogical tool to introduce important scientific concepts. P/NP or letter grading.

34. Understanding Ecology: Finding Interdisciplinary Approaches to Environmental Problems. (5) Seminar, four hours. Designed for College Honors students. Examination of ecological basis of planet’s most important environmental issues, including global climate change, ocean acidification, biodiversity loss, deforestation, pollution, and declining freshwater resources. Satisfies Writing II requirement. Letter grading.

35. Poetry in Age of Mass Incarceration. (5) Seminar, three hours. Examination of function of poetry in relation to mass incarceration. Examination of contemporary American carceral history and various tools that poets have used to challenge dichotomy of innocence versus criminality. Some tools include writing poems about police violence, editing anthologies with creative works of incarcerated people, and teaching poetry in detention centers. Examination of how poets have striven to make legible state violence where it is otherwise unseen. In workshop component, students respond creatively to works discussed during seminars in order to better understand and confront one of largest social issues of our time. This generative practice allows for better development of portfolio of literary techniques to use while writing creatively. Students learn how to affirmingly critique work of their peers and receive criticisms of their own works. Letter grading.

36. Global Geographies and Idea of Home. (5) Seminar, three hours. Designed for College Honors students. Home is potent symbolic notion across eras and cultures, locale from which we depart and to which we return. But this is only one moment within far-reaching genealogies of Cultural Appropriation. Use of remix as lens through which to explore aesthetics and politics of historical and contemporary cultural appropriation, including remixes of political speech, viral videos, and comedy mashups. Examination of fine line between heroic cultural altruism and allegations of theft. Satisfies Writing II requirement. P/NP or letter grading.

37. Film and History/Film as History. (5) Seminar, four hours. Designed for College Honors students. How do films reflect on, and even constitute, historical events? Examination of relationship between film and history and some ways in which film has functioned as history. Tracing questions of film and history from silent era to postfilm digital present, exposure to major issues in scholarship of human rights, film and media studies while also learning about ways that films can engage with history. P/NP or letter grading.

38. Film and History/Film as History. (5) Seminar, three hours. Designed for College Honors students. How do films reflect on, and even constitute, historical events? Examination of relationship between film and history and some ways in which film has functioned as history. Tracing questions of film and history from silent era to postfilm digital present, exposure to major issues in scholarship of human rights, film and media studies while also learning about ways that films can engage with history. P/NP or letter grading.

39. Philosophy Ramble. (5) Seminar, three hours. Designed for College Honors students. Grounded in Aristotelian-style philosophy found in Martha Nussbaum’s Quality of Life and P.M.S. Hacker’s Intellectual Powers. Prompted by wide range of philosophical readings and employing Socratic method of asking questions, examining perspectives, and engaging in philo-
Vladimir Nabokov, Russian-American writer, teacher, translator, lepidopterist, and composer of chess problems. Nabokov’s eclecticism lends themselves well to the study of creativity—way of understanding the world through relationship between literacy and thought. Reading and writing about art and science built into course. Satisfies Writing II requirement. Letter grading.

64. Neuroscience and Psychology of Art and Biology of Aesthetics. (5) Seminar, three hours. Interdisciplinary approach to study of premise that beauty, whatever of faces, art works, or other subjects, is processed by brain and can be understood as neurological and psychological phenomenon. P/NP or letter grading.

65W. Body-Mind Literacy. (6) Seminar, four hours. Enforced requisite: English Composition 3. Designed for College Honors students. Examination of social and cultural assumptions about body and mind and how they are integrated and/or disconnected. Experiential and interdisciplinary approach. Satisfies Writing II requirement. Letter grading.

70A. Genetic Engineering in Medicine, Agriculture, and Law. (5) Lecture, three hours; discussion, two hours. Not open to students with credit for Life Sciences 3, 4, former Microbiology 7, or Molecular, Cell, and Developmental Biology 70. Historical and scientific study of genetic engineering in medicine, agriculture, and law, including examination of social, ethical, and legal issues raised by new technology. P/NP or letter grading.

70AL Gene Discovery Laboratory. (5) Seminar, three hours; laboratory, five hours. Recommended requisite: course 70A. Laboratory work in genomics research and seminar discussion that apply experimental concepts and techniques taught in course 70A. P/NP or letter grading.

71. Cross-Cultural Approaches to Media History and Culture. (5) Seminar, three hours. Examination of media, media history, and media culture from cross-cultural perspective, one that demands redefinition of media and understanding of art in cross-cultural context. P/NP or letter grading.

73. Elementary Particles in the Universe. (4) Lecture, two hours; discussion, 90 minutes. No special mathematical knowledge required. Examination of elementary particle physics, including status of its current study in laboratories around the world and its role in assessing the early evolution of the universe. P/NP or letter grading.

77. Greeks and Persians: Ancient Encounters from Herodotus to Alexander. (5) Seminar, three hours. Designed for College Honors students. Examination of multiple encounters between Greeks and Persians in antiquity, from origins of Achaemenid Empire through its conflicts with Greek world of Mediterranean, to Alexander. Considerations of multiple constructions of other in antiquity, Near Eastern versus Greek testimony, and art and archaeological evidence of these two civilizations. P/NP or letter grading.

78. Science and Religion from Copernicus to Darwinism. (5) Seminar, three hours. Are science and religion incompatible? It appears so, but struggles of scientists such as Darwin, Galileo, and Newton tell far richer story of each supporting each other, sometimes in competition, science and religion were, and remain, in constant dialog. Letter grading.

79. Personal Financial Health: Theory and Practice. (6) Seminar, three hours; fieldwork, four hours. Designed for College Honors students. Special tutorial or mathematics preparation not required. Theory and practice of managing financial health, allowing for broad discussion of larger theoretical picture of economy and personal finance. Emphasis on practical hands-on look at personal finance, including budgeting, debt, insurance, investing, and purchasing. Examination of financial issues through three principal standpoints: psychology of finance, historical perspective of finance, and socioeconomic perspective of finance. P/NP or letter grading.

80. Cossacks and Narratives about Them. (5) Seminar, four hours. Designed for College Honors students. Examination of two Cossack societies: Ukrainian (Zaporozhian) Cossacks and Russian (Don) Cossacks. Both emerged in 16th and 17th centuries as warrior societies along contact zone between Ukraine, Scythians and Turkic world. How frontier status and liminal cultural profile prove to be mythic, and Cossacks figure prominently in imagination of cultures they impacted over centuries, especially in folklore, literature, film, and opera. Study of Cossacks throughout the age not just as Cossack in society but ways in which Cossacks have been viewed through paradigms of Polish, Russian, Ukrainian, Jewish, Ottoman, and west European cultures. P/NP or letter grading.

81. Poetry and Protest Movements. (5) Seminar, three hours. Examination of role that poetry has played in social justice movements globally throughout 20th and 21st centuries. Includes creative writing seminar and workshop component. P/NP or letter grading.

82. Community and Labor Development from Ground Up. (4) Lecture, three hours; discussion, one hour. Introduction to practical applications of community development and outreach efforts in Los Angeles area, with projects from Community Outreach Partnership Center within School of Public Policy and Social Research. P/NP or letter grading.

83W. Politics and Rhetoric of Literature. (6) Seminar, four hours; writing laboratory, two hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Examination of rhetoric, politics, and political writing and literature in study of literature from classical times to the present, broadening into general discussions of development of political discourse in Western thought, particularly conflict between individual and public, ethics and the practical business of living. Satisfies Writing II requirement. Letter grading.

84. Conflicts between Languages. (5) Seminar, three hours; discussion, one hour. Examination of American languages, including the presence of African American English, Spanish, and other languages in situations in three countries abroad and discussion of various aspects of minority languages in the U.S. P/NP or letter grading.

85. Biological Clock. (5) Seminar, four hours. Designed for College Honors students, but open to all majors. Rotation of Earth imposed diurnal oscillations of physical changes on all living organisms on Earth. Protein complexes, called circadian or biological clock, allow organisms to anticipate and adapt to daily environmental changes, and knowledge of it comes from molecular biology, biochemistry, cell biology, genetics, and genomics. Study of these processes and interdisciplinary approaches to understanding biological clock work and how it affects health and well-being. P/NP or letter grading.

88. Psychology of Fear. (5) Seminar, three hours; fieldwork, one hour. Examination of phobias, including anxiety disorder triggered by intense fear, examination of structures and processes of irrational fears, and discussion of courage and fear reduction strategies. P/NP or letter grading.

87W. Worlds of Neil Gaiman: Graphic Novels, Social Media, and Fantasy Fiction. (5) Seminar, four hours. Enforced requisite: English Composition 3. Designed for College Honors students, but open to all majors. Features of Neil Gaiman, exploring his contributions to children’s and young adult literature, novels, graphic novels, video games, film and television, and online writing. Use of multiple lenses to understand his work, including philosophy, culture, and media studies. Satisfies Writing II requirement. Letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Examinations to include writing seminar instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

90. Hollywood and Global Responsibility. (5) Seminar, three hours. Designed for College Honors students. American filmmakers have enormous power to reach global audiences. When they use this platform to reflect their lives or perceive the world in most parts of world, objections arise. Where is line between free speech and artificical expression and social responsibility? How can Hollywood become more globally responsible given its business realities and lack of government oversight? Study of different case studies affecting different countries and cultures to illuminate discourse on ethics and art. P/NP or letter grading.

99. Student Research Program, (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101D. Counseling Multicultural Communities. (2) Seminar, two hours. Study of issues of culture and identity in cross-cultural counseling, including development of working model. P/NP grading.

101E. Leading Undergraduate Seminars. (1) Seminar, one hour. Limited to students who have been accepted into the Undergraduate Student Initiated Education (USIE) program. Learning and exploration of issues that are integral to developing seminars and development of skills to become effective student facilitators. Practical techniques and lectures, as well as pedagogical, organizational, and technological issues confronted by new instructors. Discussion of key topics, followed by discussion of syllable that students are developing for their seminars and conducting of micro-teaching presentations. Guests expand on topics that arise from class discussions. May be repeated once for credit. P/NP grading.

101G. Graduate School Preparation. (2) Seminar, two hours. Limited to AAP students. Designed to help AAP students familiarize themselves with academic disciplines they would like to pursue in graduate school. Through course readings, guest speakers, and interactive assignments, students learn more about their graduate school options and how to navigate application process. P/NP grading.

M102. Culture, Media, and Los Angeles. (6) (Same as African American Studies M102 and Asian American Studies M160.) Lecture, four hours; screenings, two hours. Designed for juniors/seniors. Role of media in society and its influence on contemporary cultural environment, specifically in Los Angeles; issues of representation as they pertain to race, ethnicity, gender, and sexuality. P/NP or letter grading.

103. Scientific Knowledge, Industrial Growth, and Social Power. (5) Lecture, three hours; laboratory, two hours. Examination, using nanotechnology, of both benefits and risks to economy and society when new technologies are in process of development. P/NP or letter grading.

104. Fundamental Forms of Social Relationships from Theory to Research Design. (5) Seminar, three hours. Relational models theory postulates that four elementary models organize social coordination, emotions, motives, and norms among all actors and how they impact on social relationships between individuals and cultures. Study and critique of theory, development of research questions, planning of study, design of its methodology, and writing of research proposal. P/NP or letter grading.

105. Racial and Ethnic Disparities in Healthcare. (5) Seminar, three hours. Examination of ways in which race and ethnicity impact delivery of healthcare in U.S. and discussion of policies to address disparities in healthcare and diversity in healthcare professionals. P/NP or letter grading.
M106. Imaginary Women. (5) [Same as Gender Studies M106.] Seminar, four hours. Designed for ju- nior/senior College Honors students. Study of four fe- male cultural icons—heroine, economic archi- infanticide mother, intellectual woman, and warrior woman—as they appear in their classical and modern manifestations in European and American cultures. P/ NP or letter grading.

107. Literature and Political Order: Homer, Shake- speare, Dostoevsky. (5) Seminar, three hours. De- signed for College Honors students. Examination of political order and questions of violence, power, lead- ership, and oppression through the reading of literary texts, specifically Iliad by Homer, Julius Caesar and Henry IV, Part 1 by Shakespeare, and Brothers Karam- zov by Dostoevsky. P/NP or letter grading.


109. Living Consciously: Philosophy in Everyday Life. (5) Seminar, three hours. What do decisions you make and actions you take say about who you are? What does it look like when you consciously inform your everyday life with your own mindfully developed way of seeing world? Through readings, discussions, exercises, and writing, explore of practice and en- suing results of living consciously. Students develop and articulate their personal philosophies through in- tensively and personally exploring various ways of thinking about and acting in world, and through ex- ploring how social world influences and creates philosophies by which we live (whether we know it or not). Letter grading.

110. Marxist and Post-Marxist Approaches to Cul- tural Studies. (4) Seminar, four hours. Examination of Marxist and post-Marxist approaches to culture, including classic texts, theoretical and empirical works, and the Marxist roots of postmodernism. P/NP or letter grading.

111. Stress and Coping. (4) Seminar, four hours. Ex- amination of research and theory on stress and coping, with emphasis on physical and mental conse- quences of stress and moderators of both social support and personality in coping strategies. P/NP or letter grading.

112. Hyperconnected World: Society and Internet. (5) Seminar, three hours. Designed for College Honors students. Exploration of social, political, economic, psychological, and cultural dimensions of our hyper- connected world via Internet. Topics include transforma- tions of social relationships online, virtual versus real communities, identity and its creations, trust and deception, and the impact of media, surveillance, privacy, economics, intellectual property, culture, edu- cation, and knowledge, and digital wellness. P/NP or letter grading.

113. Architecture from Los Angeles: Work of Frank Gehry, Thom Mayne, and Greg Lynn. (5) Seminar, three hours. Within last 30 years, body of architectural work originating in Los Angeles but reaching world both in material construction and aesthetic influence has emerged. Study of works of these seminal archi- tects—Frank Gehry, Thom Mayne, and Greg Lynn. Site visits and hands-on practice in how to read archi- tectural plans and how to use computers and mod- eling in architectural study and design. P/NP or letter grading.

114. Architecture from Los Angeles: Work of Frank Gehry, Thom Mayne, and Greg Lynn. (5) Seminar, three hours. Within last 30 years, body of architectural work originating in Los Angeles but reaching world both in material construction and aesthetic influence has emerged. Study of works of these seminal archi- tects—Frank Gehry, Thom Mayne, and Greg Lynn. Site visits and hands-on practice in how to read archi- tectural plans and how to use computers and mod- eling in architectural study and design. P/NP or letter grading.

115. Poetry and Society in England, 1588 to 1688: Verse, Politics, Religion, and Sexuality from Spanish Armada to Glorious Revolution. (5) Seminar, three hours. Designed for College Honors students. Poetry of England in century between 1588 and 1688 through prism of evolving political, philosophical, theological, sexual, economic, and scientific practices of that day and vice versa to understand poetry in cultural and historical context. Study of range of subjects from alchemy to zoology and become class resource on some relevant topic such as Renaiss- ance medicine, Calvinism, scholasticism, Cromwell and New Model Army, Elizabethan foreign policy, Stuart architecture, agricultural and dietary changes, and printing and publishing conventions. P/NP or letter grading.

116. Art, Alive: Art and Improvisation in Museums. (4) [Same as Theater M187.] Seminar, four hours. Of- fered in collaboration with Los Angeles County Mu- seum of Art (LACMA). Interpretation of art in collection through acting, dialogues, movement, and music. Re- search into history and art history and production of creative performance piece required. P/NP or letter grading.

117. London and Culture of Male Homosexuality, 1870 to 1919. (5) Seminar, five hours. Designed for College Honors students. Examination of male homo- sexual subculture that thrived in London during period when brilliant Irish writer Oscar Wilde (1854 to 1900) was at height of his fame. Study of period's inde- cency. Study of Wilde trials, cultural consequences of Labouchere Amendment criminalizing male homo- sexual acts, some of Wilde's writings, and exciting new research that has come to light offering insight into links that gay men in London had with theatrical world, prostitution, aristocrats, and underground pub- lishing. P/NP or letter grading.

118. Roots of Patriarchy: Ancient Goddesses and Heroines. (4) [Same as Gender Studies M128.] Lec- ture, three hours. Examination of ancient goddesses and heroines—European, Neolithic, Near Eastern, Celtic, Sumerian, Indus Valley, Meso-American, and Greco-Roman—using translations of ancient texts, ar- chaeological evidence, and feminist methodology in order to discover implications of ancient patriarchy on modern society. P/NP or letter grading.

119. Hollywood and Cultural Diversity in America. (5) Seminar, three hours. Designed for College Honors students. Hollywood filmmakers often produce movies where characters confront societal issues such as sexism, racism, and other forms of discrimi- nation. So it is surprising to see recent media cov- erage that turns magnifying glass around and exposes Hollywood's own severe problems when it comes to racial and cultural representation that vary across entities. How do these works change? Why do they need to be analyzed? Are there any parallels to Hollywood's efforts to the experiences of women artists elsewhere in the world? P/NP or letter grading.

120. Art and Performance: Interdisciplinary Approach to Collections of Getty Center. (4) [Same as Theater M108.] Lecture, four hours; discussion, one hour. Drawing from objects in five major collections at Getty Museum, focus on five parallel historical periods through examination of variety of practices associated with curation, curatorial practice, and administration. Letter grading.

121. Psychoanalysis before Freud, and a Little After. (5) Lecture, three hours; discussion, one hour. Exam- ination of different ways human beings have devel- oped concepts of themselves through history from early civilizations through Middle Ages, Renaissance, Reformation, scientific revolution, Enlightenment, orig- ins of modern world, Freud’s Fin de siècle Vienna, and post-Freudian visions of the human. Examination of Intersections of these different concepts in various media such as contemporary art, popular culture, and movies. P/NP or letter grading.

122. Chemical Communication across Tree of Life. (5) Seminar, three hours; discussion, two hours. De- signed for College Honors students. Chemical com- munication governs relationships among most biolog- ical entities, across entire tree of life from viruses to Homo sapiens. Biosensed devices are using knowl- edge gleaned from chemosensory systems to change face of robotics, with wide applications in consumer industries, homeland security, and space exploration. Chemical, physical, and biological principles to be combined as pedagogical tools for teaching larger lesson in science. Synthesis of information and con- cepts across disciplines to develop student hypoth- eses and conclusions. P/NP or letter grading.


124. Midwives, Mothers, and Medicine: Perspec- tives on History of Childbirth. (4) Seminar, three hours. Using examples from history and anthropology, exam- ination of variety of practices associated with child- birth over time and across cultures, addressing such themes as shifting roles among birthing women, midwives, and medical men and cultural meanings of birth. P/NP or letter grading.

125. Communities and Nations in Conflict: Theory and Practice of International Conflict Resolution. (5) Lecture, three hours; discussion, one hour. Intro- duction to theory and practice of international conflict resolution, with emphasis on international conflict. Transitional justice mechanisms, from international criminal tribu- nals, special courts, and International Criminal Court to indigenous approaches such as community justice systems. Examination of environmental conflict reso- lution, homeland security and terrorism, role of gender in conflict, and role of media in conflict. P/NP or letter grading.

126. Waves of Resistance: Race, Empire, and Social Justice in Asia and Pacific Islands. (5) Seminar, three hours. Designed for College Honors students. Exam- ination of historical and contemporary waves of rac- ial violence, empire, and social justice in Asia and Pa- cific Islands. Global forces such as capitalism, colo- nialism, and globalization played significant role in political, economic, and social forces such as American Samoa, Guam, Hawaii, Marshall Islands, Philippines, Okinawa, and South Korea. Explo- ration of how various groups of people have re- sponded to these forces to have better understanding of how race, empire, and social justice have con- nected these distant and diverse areas and peoples. P/NP or letter grading.

127. Citizenship, Leadership, and Service. (4) Sem- inar, four hours. Fieldwork and participatory study of interactions between citizen- ship, leadership, and service, including both theoret- ical work in classroom and practical work in service organizations in the field. P/NP or letter grading.

128. Humor as Means of Social Control. (5) Seminar, four hours. Designed for College Honors stu- dents. Application of venerable humanist insights and social scientific thinking to contemporary social phe- nomenon of human laughter and humor. While Aris- totle and Hobbes thought humor was bad for society, Locke and Bahktin would have disputed them for dif- ferent reasons. Integration of their ideas and ideas of contemporary anthropology and linguistics, as well as social and biological science, to critically evaluate how social scientists investigate mass media political satire and humor. P/NP or letter grading.

129. Research in Psychology and Legacy of John Wooden. (5) Seminar, four hours. Designed for Col- lege Honors students. Exploration of life and work of Coach John Wooden, with particular attention to his pyramid of success, how he was viewed and is re- membered by his players, and relationship between his philosophy and academic research. His philosoph- ical approach as lens through which to explore re- search in fields of psychology. Connects different elements of Coach Wooden’s pyr- amid of success (and other aspects of his coaching philosophy) to research in psychology. P/NP or letter grading.

130. Spreading the Cure: Activists, Experts, and Health Care. (5) Seminar, four hours. Study of how ac- tivists, experts, and political movements shape public- health policy and biomedical science. What are best
way to confront health challenges, from rare diseases to extreme poverty, disease, environmental degradation, and social, political aspects of health inequities, drug policy, aging, AIDS, breast cancer, clean water, gun violence, and prostate cancer. P/N/P or letter grading.

131. Global Dimensions of Education and Inequality. (5) Seminar, three hours. Exploration of education and inequality, especially in relation to development of human capital and local development are impacting poor countries and poor people who reside in rich and poor countries. Examination of how different countries have used education to promote social equality and development and analysis of why some countries appear to be making more progress than others. Consideration of how factors such as history, particularly related to colonialism, political economy, and culture affect character and performance of schools. P/N/P or letter grading.

132. New Women and Activism from America to Asia. (5) Seminar, three hours. Designed for College Honors students. Examination of academic, social, and regional boundaries by looking at women’s movements in the U.S. and East Asia in early 20th century, with examination of how issues of women’s rights, labor rights, the environment, women’s roles in the entertainment industry, and how race, gender, and sexuality have impacted conditions on Earth during past two centuries, including loss of biodiversity, burning of fossil fuels, oceanification, and ozone depletion. P/N/P or letter grading.

133. Practice and Ethics of Ethnographic Fieldwork. (5) Seminar, three hours. Examination of ethics and practices of ethnographic fieldwork. This is not field methods but one intended to convey rich knowledge fieldwork can produce in many disciplines and kinds of ethical issues raised in doing fieldwork. P/N/P or letter grading.

134. Democracy and Utopias. (5) Seminar, three hours. Designed for College Honors students. Political culture of modern democracy fosters idea of progress and constant reform and is also wary of radical upheaval. Political culture of ancient Greek democracy made possible two things: awareness of having achieved unmatched superiority over any other society and birth of utopia. Democracy praised itself as perfect form of government, but it let flourish counterfactual thought for absolute, just, and blissful political order. Examination of this paradoxical link between democracy and utopia by tracing its history in works of Aristophanes, Plato, Thomas More, Tommaso Campanella, Francis Bacon, and Charles Fourier to show relevance to contemporary politics. P/N/P or letter grading.

135. Poetry and Society in England, 1588 to 1688. (8) Seminar, four hours. Reading and discussion of poems to comprehend meaning and place in configurations of rapidly transforming society. Tensions and changes in that culture, and lives of authors, these works helped negotiate. How and why metaphorical and cavalier modes emerge in period of intense struggle. Interplay of form, content, and meaning within these modes. Evidence offered about personal psychology, gender politics, and status competitions of this period, especially Donne, Herbert, Jonson, Carew, and Marvell. What kind of work were the poems doing? How, and how well, were they doing it? And, what kinds of work should we do on them reading.

136. Art, Entertainment, and Social Change. (5) Seminar, three hours. Integrative examination of evolving impact of arts and entertainment industry on various aspects of society, including politics, self-concept, and experience of everyday life, among others. P/N/P or letter grading.

137. Living Drama in America: Perspectives on Race and Buddhism. (5) Seminar, three hours. Reconstruction of and deeper histories behind images of Buddha in America, including non-western monks; ornate, golden temples with scent of incense; serene Zen meditation centers; and popular Buddhists from Richard Gere to Thich Nhat Hanh to the Dalai Lama. P/N/P or letter grading.

138. Empire, Border Crossing, and Multiethnic Storytelling. (5) Seminar, four hours. Exploration of postcolonial studies through contemporary works of multilingual American literature. How do our current histories and fictions about the national identity and intersectionality do our creative and critical texts offer as they intersect notions of race, class, gender, sexual identity, ethnicity, nationality, and migration? What aesthetic or critical possibilities do multiethnic American storytelling open up for future of postcolonial and transnational studies? P/N/P or letter grading.


140. Dominants and Subordinates in Social Psychology of Privilege and Oppression in Public Education. (5) Lecture, one hour; seminar, three hours. Study of how structural positions in education and environmental genomics, structural and functional genomics, transcriptionomics, proteomics, pharmacogenomics, and metabolomics. P/N/P or letter grading.

141. Biology and Medicine in Postgenomic Era. (5) Seminar, four hours. Analysis of human genomic project, comparative and evolutionary genomics, and environmental genomics, structural and functional genomics, transcriptionomics, proteomics, pharmacogenomics, and metabolomics. P/N/P or letter grading.

142. Free Will and Moral Responsibility: From Neuroscience to Philosophy and Back. (5) Seminar, four hours. Survey of methods, and conclusions of neuroscientific and philosophical investigations of free will. Consideration of neuroscientific arguments that humans are not free when they choose and philosophical arguments about what is required for freedom and what is required for responsibility. Discussion of extent to which philosophical investigations of free will and explanations of behavior in artificial communities. P/N/P or letter grading.

143. Latinx Immigration History and Politics. (4) Lecture, three hours. Study of Latinx immigration history, the consequences of immigration, and how race, gender, and sexuality impact and are impacted by immigration. Examines the dynamic role of Latinx communities in shaping a democratic society and the role of immigration in shaping democratic institutions. P/N/P or letter grading.

144. Art and Trauma. (5) Seminar, three hours. Examination of study of visual arts, literature, and film. Study of artistic and traumatic ways that humans have made possible two things: awareness of having achieved unmatched superiority over any other society and birth of utopia. Democracy praised itself as perfect form of government, but it let flourish counterfactual thought for absolute, just, and blissful political order. Examination of this paradoxical link between democracy and utopia by tracing its history in works of Aristophanes, Plato, Thomas More, Tommaso Campanella, Francis Bacon, and Charles Fourier to show relevance to contemporary politics. P/N/P or letter grading.

145. Politics of Crisis: Migration, Identity, and Religion. (4) Seminar, three hours. Examination of individual and collective religious response of Latin Americans and Latinas/Latinos in U.S. to displacement, deportations, and migration. P/N/P or letter grading.

146. Educating Global Social Inequality. (5) Seminar, three hours. Designed for College Honors students. Global and comparative study of regions in front line of climate change, such as tropical islands and poles that are among civil society confront social, political, and natural disasters, through study of visual arts, literature, and film. Study of authors and artists from U.S., Australia, New Zealand, Guyana, Mexico, and Maldives to examine threat of climate change in its complex cultural imaginations. P/N/P or letter grading.

147. The Anthropocene: An Archaeological Perspective. (5) Seminar, four hours. Examination of new geological period, informally labeled the Anthropo- cene, in which environment is profoundly impacted by human activities. Evidence that anthropogenic forces have affected conditions on Earth during past two centuries, including loss of biodiversity, burning of fossil fuels, oceanification, and ozone depletion. P/N/P or letter grading.

148. Simulating Society: Exploring Artificial Communities. (5) Seminar, three hours. Computer laboratory, one hour. Examination of social behavior through computer simulations of behavior in artificial communities. P/N/P or letter grading.

149. Art and Trauma. (5) Seminar, three hours. Examination of study of visual arts, literature, and film. Study of artistic and traumatic ways that humans have made possible two things: awareness of having achieved unmatched superiority over any other society and birth of utopia. Democracy praised itself as perfect form of government, but it let flourish counterfactual thought for absolute, just, and blissful political order. Examination of this paradoxical link between democracy and utopia by tracing its history in works of Aristophanes, Plato, Thomas More, Tommaso Campanella, Francis Bacon, and Charles Fourier to show relevance to contemporary politics. P/N/P or letter grading.

150. Solo Performer’s Toolbox: Storytelling for Artists and TED Talkers. (5) Seminar, three hours. Designed for College Honors students. Creation and presentation of original one-person performance speech. Discussion of narrative, acting, and performance. Exploration of personal themes, tone, and subject matter. Addressing of physical or emotional strengths and weaknesses in relation to creative processes of presentation and performance. Writing; interpretation, and summation of one-character plays and synthesis of this knowledge to benefit writing and performance. Identification and exploration of student’s unique personal voice in order to establish clear and creative point of view in developing or performing their story. Analysis of dramatic structure, dramatic action, and creation of believable and interesting character. Focus, concentration, imagination, and relaxation during their solo performance, and maintaining professional decorum and discipline. P/N/P or letter grading.

151. Victorian Sexual Scandals. (5) Lecture, four hours. Examination of degree of scandal and the Victorian view of sex. Introduction to four major sex scandals that took place in London between 1870 and 1895 to understand ways in which institutions create frameworks for understanding desire, sexuality and gender identities, and relations between sexual scripts and legal actions. Sodomy trial of Ernest Boulton and Frederick Luton. Examination of extent of queer networks among gay men and transgender individuals. Interrogation of apparent straight admirers during time of Offences against the Person Act 1861. The Maiden Tribute of Modern Babyl on, in which journalist W. T. Stead exposed extent of sexual trafficking of children. Investigation of 'mutilated and disemboweled, attributed to Jack the Ripper. Trials of Oscar Wilde who was sent to jail for two years in solitary confinement with hard labor for gross indecency. P/N/P or letter grading.
156. Political Opposition in Early Modern Europe. (5) Seminar, three hours. Designed for College Honors students. Examination of tradition of radical political movements from the Renaissance to French Revolution. Topics include Machiavelli’s contributions to political thought, turmoil of 16th-century France and Dutch Republic and their radical underside of Protestant thought, French Wars of Religion, Dutch revolt against Spanish, English Civil Wars, and radical thought of European Enlightenment and its contributions to French Revolution. P/NP or letter grading.

M157. International Relations of Middle East. (4) Seminar, four hours. Designed for College Honors students. Examination of tradition of radical political movements from the Renaissance to French Revolution. Topics include Machiavelli’s contributions to political thought, turmoil of 16th-century France and Dutch Republic and their radical underside of Protestant thought, French Wars of Religion, Dutch revolt against Spanish, English Civil Wars, and radical thought of European Enlightenment and its contributions to French Revolution. P/NP or letter grading.


159. Feminism, Art, and Metaphors of Trauma. (5) Seminar, three hours. Exploration into visual metaphors of remembrance. Exploration, across several centuries, of artworks of feminist artists who have been exposed to, or ally with, relentless traumas; sexual violence, casualties of war, racial and social injustice, and trafficking of women and girls. Focus on visual manifestations of anguish, persistence, and reckoning that populate and coalesce in these artworks. Topics explored through group and individual studio art projects designed to give tangible insights into emergence of artworks manifested in wake of tragedy. P/NP or letter grading.


164. Catapults of Remembrance: The Art of Healing and Silence. (5) Seminar, three hours. Study of remembrance through various artistic forms, including visual arts, literature, and music, as a means of healing and reconciliation. Examination of the role of art in addressing trauma and fostering healing. Focus on specific artworks and movements that have engaged with themes of memory and healing. P/NP or letter grading.

165. Privacy versus National Security. (5) Seminar, four hours. Designed for College Honors students. Contemporary debates about the balance between privacy and national security, including discussions of the extent to which surveillance conducted by the National Security Agency (NSA) and other government agencies violates individual rights and freedoms. Examination of the legal and ethical implications of such practices. P/NP or letter grading.

166. Stories of Cultural Distance and Imposed Assimilation. (5) Seminar, three hours. Exploration of the experiences and perspectives of individuals and communities who have been assimilated into dominant cultures. Focus on the ways in which these individuals and communities negotiate their cultural identities and resist assimilation. P/NP or letter grading.


168. Paris: Biography of City from 1715 to World War II. (5) Seminar, three hours. Designed for College Honors students. Examination of Paris from the early 18th century to the World War II. Focus on the cultural, economic, and political changes that shaped the city, including its role as a center of artistic and intellectual innovation. P/NP or letter grading.

169. Imposture and National Identity. (5) Seminar, three hours. Cross-cultural approach to study of imposture (assumption of false identity) as a window through which to examine cultural modernity and national identity. Study of imposture in literature, film, and art. P/NP or letter grading.


171. Emotion, Reason, and Political Power. (5) Seminar, three hours. Study of the role of emotion in political decision-making and the impact of political emotions on political outcomes. Examination of the relationship between emotion and reason in political discourse and the ways in which emotional appeals can influence political discourse and decision-making. P/NP or letter grading.

172. French Thinkers of Society. (5) Seminar, four hours. In-depth study of the political philosophies of French thinkers who have contributed to the development of modern political thought. Examination of the ideas of thinkers such as Michel Foucault, Emmanuel Kant, and Jean-Jacques Rousseau in shaping contemporary political thought. P/NP or letter grading.

173. American Political Thought from Revolution to Civil War. (5) Seminar, three hours. Exploration of the development of American political thought from the Revolution to the Civil War. Focus on the political, economic, and social changes that shaped this period, including the development of political parties, the role of the federal government, and the impact of slavery on American political thought. P/NP or letter grading.


175. Terrorism, Counterterrorism, and Weapons of Mass Destruction: Practical Approach. (5) Seminar, four hours. Examination of the tactics and strategies used by terrorists and the responses of governments to these threats. Focus on the role of intelligence and the legal framework for counterterrorism. P/NP or letter grading.

176A. Context of Arab World: Cairo and Alexandria. (5) Seminar, four hours; fieldwork, eight hours. Emphasis on Cairo and Alexandria. Offered in summer only. P/NP or letter grading.

176B. Reading Arab World: Cairo and Alexandria. (5) Seminar, four hours; fieldwork, eight hours. Emphasis on Cairo and Alexandria. Offered in summer only. P/NP or letter grading.

177. Biotechnology and Art. (5) Seminar, six hours. Examination of the ethical, social, and political implications of biotechnology and its role in shaping contemporary culture. Focus on the ways in which biotechnology has been used to redefine human identity and the challenges it poses for traditional concepts of morality, justice, and responsibility. P/NP or letter grading.

178. Secret Coup, Imperial Wars, and American Democracy since World War II. (5) Seminar, three hours. Study of the role of covert operations and intelligence agencies in shaping American foreign policy and its impact on democracy. Focus on the ways in which secret actions have influenced American political discourse and the challenges they pose for democratic accountability. P/NP or letter grading.
Guatemala, Nicaragua, and Chile, and implication of these actions for vitality of American democracy. P/NP or letter grading.

M179. Critical Vision: History of Art as Social and Political Commentary. (Same as Communication M169.) Seminar, three hours. Study of tradition of visual arts (painting, graphic art, photography, sculpture) as vehicles for social and political commentary. P/NP or letter grading.

M180. Structure, Patterns, and Polyhedra. (5) Same as Chemistry M117.) Lecture, four hours; activity, two hours. Exploration of structures and their geometric underpinnings, with examples and applications from architecture (space frames, domes), biology (enzyme complexes, viruses), chemistry (symmetry, molecular cages), design (tiling), engineering (space filling), and physics (crystals structure) to effect working knowledge of symmetry, two-dimensional patterns, and three-dimensional solids. P/NP or letter grading.

182. From Scientific Revolution to Industrial Revolution. (5) Seminar, four hours. Designed for College Honors students. Examination of most important development in making of Western power and hegemony: rise of new science and its relationship first to Britain, then European, Industrial Revolution. Once seen as solely product of material factors such as abundance of high wages, and available labor, Industrial Revolution is shown as also possessing critically important knowledge of components, one scientific culture derived from Newtonian science and mechanics. P/NP or letter grading.

M183. Being Human: Identity and Mental Illness. (5) (Same as Disability Studies M183 and Society and Genetics M183.) Seminar, three hours. Exploration of relationships between identity and mental illness through different approaches to nature and treatment of mental disorder, from biomedical accounts of brain-based pathology (and identity) to Mad Pride movement employing identity on mental diversity. Enduring philosophical questions regarding personal identity, consciousness, selfhood and mind-body relationship are investigated through consideration of conditions such as disintegrative identity disorder, trauma, psychosis, autism, and depression. P/NP or letter grading.

184. Indian and Pakistan: Historic Roots of Conflict and Prospects for Cooperation. (5) Seminar, three hours. Designed for College Honors students. History of India and Pakistan from demise of British India’s Empire in mid-August 1947, with inept partition of state of both nations and their potential for conflict and cooperation. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

193A. Journal Club Seminars. (2) Seminar, two hours; discussion, two hours. Study of key research journals and important research articles. Presentations by program faculty members and other leading researchers. May be repeated for credit. P/NP grading.

193B. Journal Club Seminars: Arts and Humanities Summer Research Program. (2) Seminar, one hour; discussion, one hour. Limited to students selected for Humanities Summer Research Program. Study of humanities research journals and monographs. Weekly student research reports and presentations by humanities faculty members. May be repeated for credit. P/NP grading.

193C. Journal Club Seminars: Mellon Mays Undergraduate Research Scholars. (2) Seminar, one hour; discussion, one hour. Limited to Mellon Mays undergraduate fellows. Study of key research journals and important research articles in arts, humanities, and social sciences. Weekly research reports and presentations by Mellon Mays students. Presentations by program faculty members and other leading researchers. P/NP grading.

199. Directed Honors Studies. (4) Tutorial, two hours. Preparation: minimum of 4 units completed in Honors Collegium with grade of B or better, overall UCLA grade-point average of 3.0 or better. Special research/ writing tutorial with director of one of Honors Collegium course to pursue in greater depth significant topics from one collegium course. May be repeated for credit. P/NP or letter grading.
Human Genetics

Lower-Division Courses

19. Fiat Lux Freshman Seminars, (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program, (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

CM113. Ethical, Legal, and Societal Topics in Genet-ics, (2) Same as Society and Genetics M113.) Lecture, two hours. Discussion of social, cultural, ethical, and legal issues in genetics and genetic counseling. Concurrently scheduled with course C413. Letter grading.

CM124. Machine Learning Applications in Genetics, (4) (Same as Computer Science CM124.) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: Computer Science 32 or Program in Computing 100C with grade of C– or better, Mathematics 33A, and one course from Civil Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, Mathematics 170E, or Statistics 100A. Designed for engineering students as well as students from biological sciences and medical school. Introduction to computational analysis of genetic variation and computational interdisciplinary research in genomics. Topics include introduction to genetics, identification of genes involved in disease, inferring human population history, technologies for obtaining genetic information, and genetic sequencing. Focus on formulating interdisciplinary problems and then solving those problems using computational techniques from statistics and computer science. Concurrently scheduled with course CM224. Letter grading.

CM136C. Societal and Medical Issues in Human Ge-netics, (5) (Same as Society and Genetics M102.) Lecture, three hours; discussion, two hours. Sequence of entire human genome is now known. Consideration of how this knowledge impacts concepts of ourselves as individuals and of our place in biological universe, concepts of race/ethnicity and gender, ability of DNA-based forensics to define individuals, ownership and commodification of genes, issues of privacy and confidentiality, issues of genetic discrimination, issues of predictive genetic testing. Discussion of human cloning for reproductive and therapeutic purposes. Exposure to medical genetics cases. Discussion of role of whole genome sequencing in clinical setting. Human Genome Project influence on medicine and on our concepts of self and identity. Concurrently scheduled with course CM236C. Letter grading.

C144. Genomic Technology, (4) Lecture, three hours; discussion, one hour. Requisite: Life Sciences 4. Survey of key technologies that have led to successful application of genomic tools with focus on current state and future of genomics and the impact of these tools in research. Concurrently scheduled with course C244. P/NP or letter grading.

188SA. Individual Studies for USIE Facilitators, (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators, (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

Graduate Courses

M203. Stochastic Models in Biology. (4) (Same as Biostatistics M203.) Lecture, four hours. Requisite: Mathematics 170A or equivalent experience in probability. Mathematical description of biological relationships, with particular attention to areas where conditions for deterministic models are inadequate. Examples of stochastic models from genetics, physical biology, and variety of other biological and medical disciplines. S/U or letter grading.

M207A. Theoretical Genetic Modeling. (4) (Same as Biostatistics M207A and Biostatistics M272.) Lecture, three hours; discussion, one hour. Requisites: Mathematics 115A, 131A, Statistics 100B. Mathematical models in statistical genetics. Topics include population genetics, genetic epidemiology, gene mapping, design of genetic experiments, DNA sequence analysis and molecular phylogeny. S/U or letter grading.

M207B. Applied Genetic Modeling. (4) (Same as Bioinformatics M207B and Biostatistics M237.) Lecture, three hours; laboratory, one hour. Requisites: Biostatistics 200B, 202B (may be taken concurrently) or equivalent coursework or consent of instructor. Covers basic genetic concepts (prior knowledge of human genetics not required). Topics include statistical methodology underlying genetic analysis of both quantitative and qualitative complex traits. Laboratory hands-on computer analysis of genetic data; laboratory reports required. Course complements M207A; students may take either and are encouraged to take both. S/U or letter grading.

210. Topics in Genomics, (2) Seminar, two hours. Survey of current biological theory and technology used in genomic research. Topics include genomic technologies, functional genomics, proteomics, statistical genetics, bioinformatics, and ethical issues in human genetics. S/U grading.

M211. Mathematical and Statistical Phylogenetics. (4) (Same as Bioinformatics M211 and Biostatistics M211.) Lecture, three hours; discussion, two hours; outside study, six hours. Requisites: Computer Science 32 or Program in Computing 100C with grade of C– or better, Mathematics 33A, and one course from Civil Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, Mathematics 170E, or Statistics 100A. Designed for engineering students as well as students from biological sciences and medical school. Introduction to computational analysis of genetic variation and computational interdisciplinary research in genetics. Topics include evolutionary tree reconstruction methods, studies of viral evolution, phylogeography and coalescent approaches. Examples provided from evolutionary biology and evolutionary medicine, with unique focus on implications for human disease processes. Laboratory hands-on computer analysis of sequence data. S/U or letter grading.

CM224. Machine Learning Applications in Genetics. (4) (Same as Bioinformatics M224 and Computer Science CM224A.) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: Computer Science 32 or Program in Computing 10C with grade of C– or better, Mathematics 33A, and one course from Civil Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, Mathematics 170E, or Statistics 100A. Designed for engineering students as well as students from biological sciences and medical school. Introduction to computational analysis of genetic variation and computational interdisciplinary research in genetics. Topics include introduction to genetics, identification of genes involved in human genetics not required). Topics include evolutionary tree reconstruction methods, studies of viral evolution, phylogeography and coalescent approaches. Examples provided from evolutionary biology and evolutionary medicine, with unique focus on implications for human disease processes. Laboratory hands-on computer analysis of sequence data. S/U or letter grading.

Human Genetics

Graduate Majors

Genetic Counseling MS

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Human Genetics MS, PhD

The program offers the MS and PhD degrees; graduate study leading to a PhD degree is emphasized. Under special circumstances, and only after consultation with and approval by the Department of Human Genetics, individuals may apply for admission to the MS program.

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Articulated Degree Programs

Articulated degree programs permit no credit overlap; students must complete degree requirements separately for each degree.

• Human Genetics PhD/Doctor of Medicine

Inclusions of biological and medical significance. In addition, courses on medical and ethical issues provide students with a societal perspective on human genetics.

Graduate students are expected to demonstrate integrity, creativity, critical thinking, perseverance, motivation, and determination to work hard; effective and appropriate oral and written communication skills needed for scientific presentation of the data including content, organization, logical flow, grammar, vocabulary, and proper citations; and the ability to design, revise, create, and implement experimental protocols and computational programs. They learn topics including transfer of biological information in a living organism, how genotype affects phenotype (subsuming environment), genetic variation in population, principles of research in genetics and genomics; and themes including evolution of thought in genetics and genomics history, how genetic informs disease and vice versa, genomics and integrating current tools in genomics research (statistical analysis, big data, and bioinformatics), and analysis in genetics and genomics.

The PhD is also offered with the MD as an articulated degree program.
those problems using computational techniques from statistics and computer science. Concurrently scheduled with course CM124. Letter grading.

M226. Machine Learning in Bioinformatics. (4) Same as Computer Science M226, Biomedical Engineering M226, and Computer Science M226.) Lecture, four hours; outside study, eight hours. Enforced requisite: Computer Science 32 or Computer in 10C with grade of C- or better, and one course from Biostatistics 100A, 110A, Civil Engineering 1110, Electrical and Computer Engineering 131A, Mathematics 170A, or Statistics 100A. Familiarity with probability, matrix algebra, and algorithms expected. Designed for engineering students as well as students from biological sciences and medical school. Introduction to current topics in bioinformatics, genomics, and computational genetics and preparation for computational interdisciplinary research. Focus on statistical and computational aspects of these datasets. Statistical machine learning provides models and inference algorithms that can analyze biological datasets. Genomics Aspects. (4) Sequence of entire human genome is now known. Introduction to computational approaches to clinical genetics. Topics include overview of various pediatric, adult-onset and biochemical genetic disorders, newborn screening, and current treatment strategies. Practical exercises include case preparation, obtaining family history, drawing and interpreting pedigrees, interpreting various family genotypes, and preparing for computational interdisciplinary research. Letter grading.

M229S. Seminar: Current Topics in Bioinformatics. (4) (Same as Biological Chemistry M229S and Computer Science M229S.) Seminar, four hours; outside study, eight hours. Designed for graduate engineering students. Course is devoted to current topics from biological sciences and medical school. Introduction to current topics in bioinformatics, genomics, and computational genetics and preparation for computational interdisciplinary research. Focus on statistical and computational aspects of these datasets. Statistical machine learning provides models and inference algorithms that can analyze biological datasets. Genomics Aspects. (4) Sequence of entire human genome is now known. Introduction to computational approaches to clinical genetics. Topics include overview of various pediatric, adult-onset and biochemical genetic disorders, newborn screening, and current treatment strategies. Practical exercises include case preparation, obtaining family history, drawing and interpreting pedigrees, interpreting various family genotypes, and preparing for computational interdisciplinary research. Letter grading.

M236A. Advanced Human Genetics A: Molecular Aspects. (4) Lecture, three hours. Recommended prepa- ration: prior knowledge of basic concepts in molecular biology and genetics. Advanced topics in human genetics related to medical genetics, and relevant techniques. Topics include genetic technologies, human genome, mapping and identification of disease-causing mutations, transcriptomics, proteomics, functional genomics, epigenetics, and stem cells. Reading materials include original research articles and reviews or book chapters. Letter grading.

M236B. Advanced Human Genetics B: Genetics and Genomics Aspects. (4) Seminar, four hours; discus- sion. Focus on genetics is a fundamental scientific field that studies inheritance in humans and therefore also has immediate practical value for human health and disease. Identification of genes and genetic variation involved in human diseases, traits, and behavior is one of main goals of human genetic studies. Genomic technologies are rapidly advancing and allow for comprehensive and multi-scale analysis of human genome. Covers different themes in field of human genetics, including genetics of monogenic dis- orders, genetic mapping of complex traits, transcriptome analysis, and epigenomic studies of human disease. Genomic technologies by themselves are limited in capacity, but when combined with other scientific and technological tools, can be used to infer human genetic variation.

C236C. Societal and Medical Issues in Human Ge- netics. (5) Lecture, three hours; discussion, two hours. Sequence of entire human genome is now known. Consideration of how this knowledge impacts concepts of ourselves as individuals and of our place in biological universe, concepts of race/ethnicity and gender, ability of DNA-based forensics to identify specific individ- uals, ownership and commodification of genes, issues of privacy and confidentiality, issues of genealogies and ethics of predictive genetic testing. Discussion of human cloning for reproductive and therapeutic purposes. Exposure to medical genetics cases. Discussion of role of whole genome se- quencing in clinical setting. Human Genome Project influence on medicine and on our concepts of self and identity. Concurrently scheduled with course CM136C. Letter grading.

C244. Genomic Technology. (4) Lecture, three hours; discussion, one hour. Requisite: Life Sciences 4. Survey of key technologies that have led to successful application of genomics to biology, with focus on theory behind specific genome-wide technologies and their use in current research. Focus on medical applications of bioinformatics and genomic technologies. Topics include overview of various psychiatric, adult-onset and biochemical genetic disorders, newborn screening, and current treatment strategies. Practical exercises include case preparation, obtaining family history, drawing and interpreting pedigrees, interpreting various family genotypes, and preparing for computational interdisciplinary research. Letter grading.

M255. Mapping and Mining Human Genome. (3) (Same as Pathology M255.) Lecture, three hours. Basic molecular genetic and cytogenetic techniques of gene mapping and display of genomic map scrutinized in detail, particularly gene families and clusters of genes that have remained linked from mouse to human. Discussion of localizations of disease genes. Letter grading.

M260A. Introduction to Bioinformatics. (4) (Same as Biostatistics M221, Chemistry CM260A, and Com- puter Science CM221.) Lecture, four hours; discus- sion. Two hours, Requisites: Computer Science CM32 Program in Computing 10C with grade of C- or better, and one course from Civil and Environmental Engi- neering 110, Electrical and Computer Engineering 113A, Mathematics 170A, Mathematics 170E, or Stat- istics 100A. Prior knowledge of bioinformatics not required. Designed for engineering students as well as students from biological sciences and medical school. Introduction to bioinformatics and methodologies, with emphasis on developing new computational methods and statistical and computational techniques to analyze biological data. Focus on sequence analysis and alignment algo- rithms. S/U or letter grading. Concurrently scheduled with course CM124. Letter grading.

M265. Computational Methods in Genomics. (4) (Same as Biostatistics M225S and Computer Science M225S.) Lecture, two and one half hours; discussion, two and one half hours; outside study, seven hours. Introduction to computational approaches in bioinfor- matics, genomics, and computational genetics and preparation for computational interdisciplinary re- search in genetics and genomics. Topics include gen- ome analysis, association analysis, population genetics, association anal- ysis, association study design, isolated and admixed populations, population substructure, human struc- tural variation, model organisms, and genomic tech- nology and preparation for computational interdisciplinary research in genetics and genomics. Topics include gen- ome analysis, association analysis, population genetics, association anal- ysis, association study design, isolated and admixed populations, population substructure, human struc- tural variation, model organisms, and genomic tech- nology and preparation for computational interdisciplinary research in genetics and genomics. Topics include gen- ome analysis, association analysis, population genetics, association anal- ysis, association study design, isolated and admixed populations, population substructure, human struc- tural variation, model organisms, and genomic tech-
include family dynamics, burden of disease, crisis intervention, dynamics of grief and bereavement, multicultural sensitivity, coping mechanisms, transference and countertransference, and disability organizations and advocacy. Practice exercises include role-playing in a range of advanced psychosocial situations, shadowing support groups and families, simulating patient full session under different scenarios including with interpreters and professionals. Letter grading.

405. Professional Development in Genetic Counseling. (4) Lecture, four hours. Limited to Genetic Counseling students. Focus on professional development as genetic counselors are prepared to make the transition to practicing professionals in areas of job search, billing/reimbursement/insurance coverage, service delivery, professional relationships and boundaries, clinical decision making, professional ethics, and legal and ethical issues. Students are given opportunities to present their work for feedback and discussion. Letter grading.

406. Foundations of Genomic Medicine. (2) Lecture, two hours. Limited to Genetic Counseling students. Focus on fundamental concepts in human biology, with emphasis on implications and relevance to medical genetics, molecular and cytogenetics fellows and residents. The primary focus of the interdisciplinary Indo-European Languages and Cultures (ECL Faculty Committee)

Brent H. Vine, PhD, Chair

Faculty Committee

David M. Goldstein, PhD (Linguistics)
Stephanie W. Jamison, PhD (Asian Languages and Cultures)
Brent H. Vine, PhD (Classics)
Anthony D. Yates, PhD (Near Eastern Languages and Cultures)

Overview

The primary focus of the interdisciplinary Indo-European Studies program is the study of the ancient Indo-European languages and of their reconstructed ancestor, Proto-Indo-European, based on methods drawn from comparative historical, theoretical, and computational linguistics. Goals of this study include the reconstruction of the Proto-Indo-European language, elucidating its subsequent development into the historical Indo-European languages, and showing how data from the archaic Indo-European languages contribute to a theory of language. There is also attention to other aspects of the nonmaterial culture of the speakers of Proto-Indo-European (such as social structure, religious beliefs, mythology, and poetry), and how these are reflected in the text.

414. Genetic Counseling Communication Seminar. (1) Seminar, one hour. Limited to Genetic Counseling students. Topics in communicating genetic counseling skills with diverse audiences using various communication modalities, with emphasis on crafting presentations for health care, public, and advocacy audiences. Includes critical reading, review, and discussion of literature in context of communication. S/U grading.

430. Clinical Applications of Cytogenetics and Molecular Medicine. (4) Lecture, one hour. Cytogenetics and molecular laboratory techniques to diagnose human genetic disorders. Topics include types of abnormalities seen in human genetic disorders, nomenclature for the diagnosis of these abnormalities, recurrence risk, uses and limitations of common cytogenetic and molecular technologies in clinical testing, current nomenclature, and written components of laboratory reports. Includes laboratory tours. Letter grading.

431A. Fieldwork. (1) Fieldwork, three to four hours; discussion, one hour. Limited to Genetic Counseling Students. First fieldwork rotation to establish basic skill in genetic counseling skills. Students are supervised by certified genetic counselors and medical geneticists. In group discussion setting, students present cases along with relevant psychosocial, ethical, and professional issues to engage in active reflection of clinical supervision experiences, understand dynamics and responsibilities of supervisor/supervisee relationship, and identify personal growth opportunities and limitations in scope of patient practice. S/U grading.


431C. Fieldwork. (5) Fieldwork, 15 to 20 hours; discussion, one hour. Enforced requisite: course 431B. Limited to Genetic Counseling Students. Students use progressive genetic counseling skills with direct patient contact in different clinical settings. Students are supervised by certified genetic counselors and medical geneticists. In group discussion setting, students present cases along with relevant psychosocial, ethical, and professional issues to engage in active reflection of clinical supervision experiences, understand dynamics and responsibilities of supervisor/supervisee relationship, and identify personal growth opportunities and limitations in scope of patient practice. S/U grading.

431D. Fieldwork. (5) Clinical, 15 to 20 hours; discussion, one hour. Enforced requisite: course 431C. Limited to Genetic Counseling students. Students utilize progressive genetic counseling skills with direct patient contact in different clinical settings. Students are supervised by certified genetic counselors and medical geneticists. Students see complex cases, and activities include follow-up activities on genetic test results, referrals, resources, explaining genetic test results to patients, presenting cases at relevant case conferences, follow-up of action items from case conference, and exploring and addressing psychosocial aspects of patient encounters. Responsibility for conducting genetic counseling session from beginning to end. In group discussion setting, students present cases along with relevant psychosocial, ethical, and professional issues to engage in active reflection of clinical supervision experiences, understand dynamics and responsibilities of supervisor/supervisee relationship, and identify personal growth opportunities and limitations in scope of patient practice. S/U grading.

596. Directed Individual Study and Research. (2 to 12) Tutorial, to be arranged. Individual study or research for graduate students. May be repeated for credit. S/U grading.

597. Preparation for MS Comprehensive Examination or PhD Qualifying Examinations. (2 to 12) Tutorial, to be arranged. Preparation of research data and writing of MS thesis. May be repeated for credit. S/U grading.

598. MS Thesis Research and Writing. (2 to 12) Tutorial, to be arranged. Preparation of research data and writing of MS thesis. May be repeated for credit. S/U grading.


INDO-EUROPEAN STUDIES

Interdepartmental Program
College of Letters and Science
100 Dodd Hall
Box 95147
Los Angeles, CA 90095-1417

Brent H. Vine, PhD, Chair

ECL Faculty Committee

David M. Goldstein, PhD (Linguistics)
Stephanie W. Jamison, PhD (Asian Languages and Cultures)
Brent H. Vine, PhD (Classics)
Anthony D. Yates, PhD (Near Eastern Languages and Cultures)

Overview

The primary focus of the interdisciplinary Indo-European Studies program is the study of the ancient Indo-European languages and of their reconstructed ancestor, Proto-Indo-European, based on methods drawn from comparative historical, theoretical, and computational linguistics. Goals of this study include the reconstruction of the Proto-Indo-European language, elucidating its subsequent development into the historical Indo-European languages, and showing how data from the archaic Indo-European languages contribute to a theory of language. There is also attention to other aspects of the nonmaterial culture of the speakers of Proto-Indo-European (such as social structure, religious beliefs, mythology, and poetry), and how these are reflected in the text.
tual traditions of the ancient Indo-European languages.

Graduate Major

Indo-European Studies MA, CPhil, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Indo-European Studies Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.


M70. Language and Evolution. (5) (Same as Linguistics M4.) Lecture, three hours; discussion, one hour. Homologous Sapiens is only species on Earth with capacity to create articulate language and to manipulate speech sounds. How and why our species developed this ability is question of fundamental scientific and humanistic importance. Survey of origin of human language from number of intellectual perspectives, including linguistics, anthropology, and evolutionary biology. Exploration of relationship between language faculty and linguistic theory. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

131. European Archaeology: Neolithic to Bronze Age. (4) Lecture, four hours. Survey of European cultures from beginning of food-producing economy in 7th millennium BC to beginning of Bronze Age in 3rd millennium BC. P/NP or letter grading.

132. European Archaeology: Bronze Age. (4) Requisite: course 131. Lecture, four hours. Survey of European cultures from around 3000 BC to the period of destruction of the Mycenaean culture about 1200 BC. Aegaean area and rest of Europe.

140. Food and Language and Myth. (4) Lecture, three hours; discussion, one hour. Introduction to study of food in fields of linguistics and mythology. What is special about language used to talk about food, what is history of food words, and how does language impinge upon food? How do myths and narratives revolving around food function in different cultures? Students explore history of food words and learn how to analyze myths. Students become aware of how language in food is manipulated and how to tell more effective stories about food. P/NP or letter grading.

M150. Introduction to Indo-European Linguistics. (8) (Same as Linguistics M150) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: Linguistics 1 or 20, Indo-European languages (ancient and modern), including their relationships, chief characteristics, writing systems, and sociolinguistic contexts; nature of reconstructed Indo-European proto-language and proto-culture. One or more Indo-European languages may be investigated in detail, P/NP or letter grading.

C160. Indo-European Comparative Mythology and Poetics. (4) Seminar, three hours. Preparation: familiarity with at least one ancient Indo-European language. Comparison of major Indo-European mythological and poetic traditions and reconstruction of their common sources. Topics include divinities and their names; symbolic systems in social context; myths, folk narratives, belief systems; relations with literature; and literary continuations of mythographic material. Concurrently scheduled with course C260. P/NP or letter grading.


M168B. Introductory Hittite. (4) (Same as Ancient Near East M168B.) Lecture, three hours. Recommended requisite: course M168A. Readings of selected Hittite texts from variety of genres and historical periods. Individual topics in synchronic and historical grammar of Hittite and in history and culture of Hittites are treated in detail. P/NP or letter grading.

M172. Elementary Luwian. (4) (Same as Ancient Near East M172.) Lecture, three hours. Recommended preparation: knowledge of language with case system. Introduction to Luwian grammar through lectures covering morphological and syntactic structures, and readings of selected hieroglyphic and cuneiform texts. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate upper-division course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental read-
STUDIES
Miriam Posner, PhD
Assistant Professors
Gregory H. Leazer, DLS
Jean-François Blanchette, PhD
Associate Professors
Christine L. Borgman, PhD
Howard A. Besser, PhD
Marcia J. Bates, PhD
Johanna R. Drucker, PhD
Michelle L. Caswell, PhD
Professors
Todd M. Franke, PhD,
Information Studies
Los Angeles, CA 90095-1520
Box 951520
Studies Building
207 School of Education and Information
Admission
To enter the minor, students must have a cumulative grade-point average of 2.0 or better in the minor application. Applicants are available on the minor website.

Overview
The Department of Information Studies has one of the top-ranked programs of its kind in the country and has developed an international reputation in the areas of information policy, information-seeking behavior, user interface development, archives, preservation, and cataloging. Whether students choose to pursue a master's degree or a doctorate degree, they graduate with a broad understanding of both theory and practice.

For information about the Information Studies department and programs, see the department website.

Career Prospects
Students with Master of Library and Information Science (MLIS) degrees go on to careers as librarians, archivists, and information professionals in a variety of organizational settings. The Doctor of Philosophy (PhD) focuses on the preparation of scholars in the field.

Upper-Division Elective Courses (12-15 units):

Policies
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade and be a minimum of 4 units. Students must have a cumulative grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Majors
Information Studies PhD
Requirements
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Master of Library and Information Science
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Concurrent Degree Program
Concurrent degree programs allow students to reduce the number of courses required for two degrees, since some courses may apply to both degrees.

• Master of Library and Information Science/Latin American Studies MA

Information Studies
Lower-Division Courses
10. Information and Power. 5 hours. Introduction to core concepts of information and power and relation between them in range of social, economic, political, cultural, technological, and institutional contexts. Topics include markets and economies; cultural and media institutions; state interests in information; conflict and warfare; information organization, classification, and access; power and technology infrastructure; and intellectual freedom. Letter grading.

INFORMATION STUDIES
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207 School of Education and Information Studies Building
Box 951520
Los Angeles, CA 90095-1520
Information Studies
310-825-5269
Department e-mail
Todd M. Franke, PhD, Interim Chair

Faculty Roster

Professors
Michelle L. Caswell, PhD
Johanna R. Drucker, PhD (Martin and Bernard Breslauer Professor of Bibliography)
Jonathan Furner, PhD
Anne J. Gilliland-Swetland, PhD
Kimberley Gomez, PhD
Louis M. Gomez, PhD
Christopher M. Kelty, PhD
Leah A. Lievrouw, PhD
Safiya U. Noble, PhD
Ellen J. Pearlestein, MA
Ramesh Srinivasan, PhD

Professors Emeriti
Marcia J. Bates, PhD
Howard A. Besser, PhD
Christine L. Borgman, PhD (Presidential Professor Emerita of Information Studies)
Clara M. Chu, PhD
Beverly P. Lynch, PhD
John V. Richardson, PhD
Elaine Svenonius, PhD
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Robert D. Montoya, PhD
Sarah T. Roberts, PhD
Shawn G. VanCOUR, PhD

Assistant Professors
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Noopur Raval, PhD
Tonia N. Sutherland, PhD, MLIS
Thuy Vo Dang, PhD
Lecturers
Lynn Boyden, MLIS
Melissa A. Gill, MLIS
Luz H. Mendes, MLIS
Meredith A. Reese, MA
Yuriko Shimoda, MLIS


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19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in the fields of expertise and highlighting many paths of discovery at UCLA. P/NP grading.

20. Digital Cultures and Societies. (5) Lecture, four hours. Examination of social and cultural contexts of global digital networks and systems. Exploration of ethical, infrastructural, and political questions raised at intersection of technologies and cultures. Topics include data surveillance, algorithms, artificial intelligence (AI) systems, digital economies and labor, social media platforms and non-Western uses of technology, digital media literacies, and more. Letter grading.

30. Internet and Society. (5) Lecture, four hours. Introduction to key historical and sociotechnical developments that have given rise to today’s Internet and related information and communication technologies, from networked computing and telecommunications in 20th century to contemporary digital networks and platforms. Focus on economic, political, and cultural consequences of those developments and technologies in society today. Letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division courses, four hours. Exploration of topics of greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

97. Variable Topics in Information Studies. (4) Seminar, four hours. Designed for freshmen/sophomores, but open to all undergraduate students. Exploration of changing setting of basic concepts and issues in study of information, information technology, and society and culture at introductory level. May be repeated for credit with consent of instructor. Letter grading.

99. Student Research Program. (1 to 2) Tutorial, to be arranged. Enrollment limited to 20 students. Designed as adjunct to lower-division courses. Research students under guidance of faculty mentor. Students analyze and create media projects related to personal and scholarly uses. Topics include theory and practice related to impact of economic, legal, and historically; developing and refining information literacies—ability to identify, locate, critically evaluate, and use, and create information effectively and ethically, for personal and professional purposes. Topics include familiarity and practice related to impact of economic, legal, and social/environmental issues on development of, access to, use, and assessment of information, currently and historically; developing and refining information research questions; conducting effective information researching; distinguishing among and critically evaluating information researching tools such as Google and databases, as well as types of items, such as ads, opinions, and factual studies; documenting sources used in information researching; effectively helping others learn information researching and critical thinking skills; understanding, evaluating, and applying cultural, design, and aesthetic principles. Letter grading.

115. Introduction to Information Literacies. (4) Lecture, two hours; discussion, one and one half hours. Question of what diversity and cultural differences mean in era of distributed networks and massive data. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

219. Directed Research in Information Studies. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. Letter grading.

Graduate Courses

200. Information in Society. (4) Lecture, two hours; discussion, two hours. Examination of processes by which information and knowledge are created, integrated, disseminated, organized, used, and preserved. Topics include new digital media and technology, evolution of literacy, development of information professions, and social issues related to information access. Letter grading.

201. Ethics, Diversity, and Change in Information Professions. (4) Lecture, two hours; discussion, two hours. Service learning course that serves as forum to discuss, learn, and understand ethical challenges of managing information in personal, academic, professional, and community context, and ethical implications for personal and professional practice, decision making, and public policy. Letter grading.


189A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Forreign corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topics, prepare preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. P/NP grading.

188B. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Forreign corequisite: course 188SA. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188C. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Forreign corequisite: course 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188D. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Forreign corequisite: course 188C. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

208. Scholarly Communication and Bibliometrics. (4) Lecture, four hours. Preparation: one inferential statistics course. Survey of current theory, method, and empirical studies at intersection of scholarly communication and bibliometrics, seeking to understand factors that shape how research is communicated, measured, and used in the scientific community. Letter grading.

way they practice knowledge, understanding, and making meaning of their worlds. How we draw boundaries around culture and community has become increasingly complicated, as culture becomes increasingly commodified. Through which information and evidence are authored, published, collocated, exchanged, preserved, and accessed. Examination of these artifacts and their properties, types, and relationships: media culture? How does this shape nature of how human beings needing, using, and acting on information. Topics include information theory, human information processing, information flow among social and corporate entities, and research on information needs and uses. Letter grading.


M235. Medical Knowledge Representation. (4) (Same as Bioengineering M228.) Lecture, four hours; outside study, eight hours. Designed for graduate students. Introduction to networked medical environment. Concepts include data structures used for representing knowledge (conceptual graphs, frame-based models), different data models for representing spatio-temporal information, rule-based implementations, current statistical methods for disease research (data mining, statistical classifiers, and hierarchical classification), and basic information retrieval. Review of work in constructing ontologies, with focus on problems common to medical ontologies, coding schemes, and standardized indices/terminologies (SNOMED, UMLs). Letter grading.

M234. Medical Information Infrastructures and Internet Technologies. (4) (Same as Bioengineering M227.) Lecture, four hours; outside study, eight hours. Designed for graduate students. Introduction to networking, communications, and Internet infrastructures in medical environment. Exposes students to basic concepts related to networking at several levels: low-level (TCP/IP, services), medium-level (network topologies), and high-level (model-driven, data services) implementations. Commonly used medical communication protocols (HL7, DICOM) and current medical information systems (HIS, RIS, PACS). Advances in networking, such as mobile computing, peer-to-peer protocols, grid/cloud computing. Introduction to security and encryption in networked environments. Letter grading.

M255. Medical Decision Making. (4) (Same as Bioengineering M229.) Lecture, two hours; fieldwork, two hours. How conservators work together with gallery and museum managers, mount makers, designers, and registrars to permit collections to be both accessed and preserved. Letter grading.

245. Information Access. (4) Lecture, two hours; discussion, one hour. Requisite: courses 200, 208. Provides fundamental knowledge and skills enabling information professionals to link users with information. Overview of structure of literature in different fields; information-seeking behavior of various groups, and types of communication with users; development of search strategies using print and electronic sources. Letter grading.

246. Information-Seeking Behavior. (4) Lecture, three hours; discussion, one hour. Study of factors and influences both internal and external with human beings needing, using, and acting on information. Topics include information theory, human information processing, information flow among social and corporate entities, and research on information needs and uses. Letter grading.

256A. Introduction to Information Literacy. (4) Lecture, three and one half hours. Social, cultural, and technical practices—formal and informal, institutional and personal—through which documents, records, and other forms of information are organized and represented. Letter grading.

256B. Information Literacy in Practice. (4) Lecture, three and one half hours. Designed for MLIS and PhD students. Survey of landscape of data practices and services. Letter grading. Preparation: Information Literacy in Practice, Information Research Methodology, and Data Curation and Policy.

260. Description and Access. (4) Lecture, four hours. Description of data and data representations. Focus on technical and social factors that shape data and the practices through which data are described and accessed. Letter grading.

262A. Data Management and Practice. (4) Lecture, three and one half hours. Designed for MLIS and PhD students. Continuation of course 262A to address topics of data curation and policy in more depth. Data selection and appraisal, archives and repositories, economic data management, data citation and metrics, technologies for data access and curation, provenance, intellectual property, policy roles of multiple stakeholders in data, and institutional challenges in curation and stewardship of research data. Assessment of data archives and repositories and group project to curate actual data of UCLA researchers in other academic departments. Letter grading.

262B. Data Curation and Policy. (4) Lecture, three and one half hours. Designed for MLIS students. Continuation of course 262B to address topics of data curation and policy in more depth. Data selection and appraisal, archives and repositories, economic data management, data citation and metrics, technologies for data access and curation, provenance, intellectual property, policy roles of multiple stakeholders in data, and institutional challenges in curation and stewardship of research data. Assessment of data archives and repositories and group project to curate actual data of UCLA researchers in other academic departments. Letter grading.

270. Systems and Infrastructures. (4) Lecture, four hours. Social, cultural, and technical practices through which data are described and accessed. Letter grading.

278. Information and Visualization. (4) Lecture, two hours; discussion, 90 minutes. Access to and analysis of information through visualization has become increasingly prevalent as digital tools have made creation of such visualizations easier and more popular. Many software tools for such visualizations come from statistical packages; others come from GIS or spatial mapping, while others are more diagrammatic in design. Basic visualization principles depend on visualization of function, structure and assumptions about user experience, and other graphical features that embody models of information in daily lives. Introduction to visualization design and visualization presents arguments about knowledge? What historical and critical tools can be brought into useful dialog with contemporary visualizations? Letter grading.

279. User Experience Design. (4) Seminar, four hours. Preparation: at least one course from 246, 272, 276, 277, 455. Prerequisites: courses 200, 260. Content varies from term to term on information design visualization, information design, and design research with an emphasis on information design. Letter grading.

280. Social Science Research Methodology for Information Studies. (4) Lecture, four hours. Understanding of nature, uses, and practice of research appropriate to information studies. Identification of research problems and design and evaluation of research. Social science quantitative and qualitative methods. Emphasis on inquiry methodology and empirical research. Letter grading.

281. Historical Methodology of Information Studies. (4) Lecture, four hours. Prerequisite: course 200. Introduction to historical research as it relates to library and information science. Identification of key primary and secondary source material for writing history in field. Historical analysis of selected histories of various areas in the profession. Problem-oriented approach. Letter grading.

282. Research Apprenticeship Course. (2 to 4) Seminar, two to four hours. Preparation: at least one course from 200, 260, 272, 276, 277. Prerequisites: at least two courses from the following: graduate research methods, introduction to research, and methodology. May be repeated for credit. S/U letter grading.

291A. Doctoral Seminar: Theoretical Traditions in Information Studies. (4) Seminar, four hours. Nature of information studies—ontological, epistemological, and ethical. Concepts of information and of information arts and sciences. Conceptions, theories, and models of information; information-related artifacts, agents, contexts, institutions, practices, properties, values, and resources. Introduction to key fields of information studies and cognitive disciplines. Frameworks for theory construction, such as critical theory, discourse analysis, hermeneutics, phenomenology, semiotics, social theory. Letter grading.

291B-291C. Special Topics in Theory of Information Studies. (4) Seminar, four hours. Enforced prerequisite for course 291C: course 291A. Topics include information and evidence—record-keeping and memory-making, personal and social trust and trustworthiness, accounting and trust, information and design—design and implementation of information systems and services, information aesthetics, information retrieval and knowledge organization, design and access, design and use—contexts, techniques, needs, barriers. Information and power—groups, ideologies, identities, structures. Information and value—information ethics, evaluation of information services. Information policy and law—processes, institutions, players, stakes. Information institutions and professions—domains, ecologies, cultures, communities. Economics, geographies, history, philosophy, politics, sociology of information. Letter grading.

298A. Doctoral Seminar: Research Methods and Design. (4) Seminar, four hours. Survey of quantitative, qualitative, and historical research designs. Ethical issues; conceptualization and measurement; indexes, scales, and sampling; experimental, survey, field, and evaluation research; data analysis. Letter grading.

298B-298C. Special Topics in Methodology of Information Studies. (4) Seminar, four hours. Enforced prerequisite for course 298C: course 298A. Topics include anthropological fieldwork methods, archival methodology, bibliographical studies, textual analysis, discourse analysis, historical methods, information visualization, network analysis—bibliometrics, informetrics, scientometrics, social network analysis. Letter grading.

298D. Doctoral Seminar: Research Methods and Design. (4) Seminar, four hours. Preparation: completion of information studies core courses. Drawing on literature from many fields, exploration of issues related to professional development, such as career planning, continuing education, mentoring, and reflective practice; students also engage in process of guided portfolio design for MLIS degree. S/U grading.

400. Professional Development and Portfolio Design. (2 to 4) Lecture, two hours; discussion, two hours. Preparation: completion of information studies core courses. Drawing on literature from many fields, exploration of issues related to professional development, such as career planning, continuing education, mentoring, and reflective practice; students also engage in process of guided portfolio design for MLIS degree. S/U grading.

410. Management Theory and Practice for Information Professionals. (4) Lecture, two hours; discussion, two hours. Principles and practice of management in all types of organizations where information professionals work. Letter grading.

422. College, University, and Research Libraries. (4) Lecture, four hours. Organization, administration, collection, facilities, finances, and problems of college and university libraries and their relationships within institutions of which they are part. Functions of research libraries and work of their staffs in serving scholars. Letter grading.


425. Library Services and Programs for Children. (4) Lecture, two hours; discussion, two hours. Theory and practice of service to children in public libraries. Overview of professional library service to children aged 11 and under; provides opportunities for students to gain experience in particular skills needed to provide that service. Letter grading.

426. Young Adult Literature. (4) Lecture, four hours. Overview of literature which is of interest to young adults (seventh grade and above). Discussion of special problems in working with young people and psychology of teenagers. S/U or letter grading.

427. Young Adult Services. (4) Lecture, 90 minutes; discussion, two hours. Theory and practice of service to teens and tweens in libraries. Overview of professional library service to youth aged 11 and over; opportunities for students to gain experience in particular skills needed to provide that service. Discussion of special challenges in working with young people and psychology of teenagers. S/U or letter grading.


431. Archives, Records, and Memory. (4) Lecture, four hours. Overview of historical and emerging conceptual foundations, major professional institutions, key practices, and contemporary issues and concerns of archival studies and American archival profession, as well as archival theory and practice within the context of archives and memory. S/U or letter grading.


433. Community-Based Archiving. (4) Lecture, three and one half hours. Builds on student understanding of and experience with community-oriented development of practical strategies for documenting their activities; managing, collecting, and preserving their records and other historical and cultural materials; and development of community-centered archival research. Students required to reflect critically on questions about definition, community memory and recordkeeping practices, motivations, possibility and political and social values, funding, and long-term sustainability, ownership, access and use, technological implementation, and collaborations. Letter grading.

434. Archival Use and Users. (4) Lecture, three and one half hours. Requisite: course 431. Examination of who uses archives and why, with ultimate goal of creating ways to better understand and meet needs of these users as well as engage new audiences in archival use. Students will have traditionally conceived of their users as academic researchers, more thorough investigation expands this conception of users to include genealogists, artists, K-12 students and educators, families of victims of human rights abuse, community members, and members of general public. Methods for studying users, ways to conduct outreach to target user groups, and ways in which archivists can acquire knowledge of public. Letter grading.


438B. Seminar: Advanced Issues in Archival Science—Archival Description and Access Systems. (4) Seminar, four hours. Requisite: course 431. Exploration of archival description and access systems in the U.S. and their development since World War II; data collection; access tools and implications of these issues in development of online archival access systems. Letter grading.

439. Seminar: Special Collections. (4) Seminar, two hours; discussion, 90 minutes. Students work with special collections materials on one focused theme or topic and have to think through research aspects of exhibit or symposium or collection assessment and then create well-focused and curated agenda for presentation, exhibition, or preservation of materials. Letter grading.


464. Metadata. (4) Lecture, four hours. Introduction to variety of metadata provided for digitized and other electronic information resources. Introductory theory and practice of designing and applying metadata. S/U or letter grading.

480. Introduction to Media Archiving and Preservation. (4) Seminar, four hours. Overview of history, conceptual foundations, policies, institutions, and professional methods that have shaped collections of audiovisual materials from early 20th century to present. Introduction to fundamental archival concepts and key practices, including collection development, appraisal, preservation, restoration, arrangement and description, and critical analysis of their specific application to media collections and materials. Discussion of classical and emergent models for media archive administration, including funding, programming, outreach, access, and reuse; changing role of technology in media creation, collection, and preservation; and preservation standards; and role of public, private, and national media archives, and cultural impact of historical and contemporary audiovisual media. Letter grading.

495. Teaching Assistant Training Seminar. (2) Seminar, two hours. Limited to departmental doctoral students. Preparation for teaching assistant appointments in departmental undergraduate courses. Prerequisites of instructional design and evaluation, curriculum development, instructional technology use, and key teaching issues (diversity, students with disabilities, academic integrity, copyright); S/U grading.

497. Directed Studies for PhD Qualifying Examinations. (2 to 12) Tutorial, to be arranged. S/U grading.

501. Cooperative Program. (2 to 8) Directed special studies in fields of bibliography, librarianship, and information science. Variable conference time depending on nature of study or complexity of research. No more than 8 units may be applied toward course requirement for MLS degree. S/U grading.

596. Directed Individual Study or Research. (1 to 8) Tutorial, to be arranged. Directed special studies in fields of bibliography, librarianship, and information science. Variable conference time depending on nature of study or complexity of research. No more than 8 units may be applied toward course requirement for MLS degree. S/U grading.

597. Directed Studies for PhD Qualifying Examinations. (2 to 12) Tutorial, to be arranged. S/U grading.

598. MLS Thesis Research and Writing. (2 to 8) Tutorial, to be arranged. Designed for graduate library and information science students. Supervised independent research for candidates in MLS thesis option. S/U grading.

599. PhD Research and Writing. (2 to 12) Tutorial, to be arranged. S/U grading.
Margaret E. Haberland-Noce, PhD
Peter M. Narins, PhD
Judith L. Smith, PhD
Allan J. Tobin, PhD (Eleanor I. Leslie Professor Emeritus of Neuroscience)

Associate Professors
Stephanie M. Correa, PhD
Eric J. Deeds, PhD
Elaine Y. Hsaio, PhD (De Logi Professor of Biological Sciences)
Amy C. Rowat, PhD (Marcie H. Rothman Presidential Professor of Food Studies)
Claudio J. Villanueva, PhD

Assistant Professors
Kacie D. Deters, PhD
Pearl J. Quijada, PhD

Senior Lecturer
Ronald H. Cooper, PhD

Lecturer
Joseph Esdin, PhD

Adjunct Professors
Tama W. Hasson, PhD
Million Mulugeta, DVM, PhD

Adjunct Associate Professors
Anthony R. Friscia, PhD
Janel E. Le Belle, PhD
Mark J. Tramo, PhD

Adjunct Assistant Professors
J. Edward Van Veen, PhD
Sharmila Venugopal, PhD

Overview
The cornerstone of the Physiological Science curriculum is vertebrate physiology, with emphases on integrative functions. The research and educational programs of the Department of Integrative Biology and Physiology focus on integrative physiology at several levels of organization from molecules to living organisms, microscopic structures to macroscopic organization, and cellular properties to organ functions. Students receive comprehensive instruction in all areas of physiological science, while elective courses reflect faculty research expertise, including developmental neurobiology, gene regulation/neural development, cellular neurobiology, molecular neurobiology, neuromuscular physiology, neuroendocrine physiology, cardiac physiology, diet and degenerative disease, auditory and visual behavior, biomechanics of rehabilitative medicine, muscle cell biology, inflammatory cell biology, vascular biology, cardiac electrophysiology, neuromotor control, and social control of neuronal plasticity.

Undergraduate Major
Physiological Science BS
Learning Outcomes
The Physiological Science major has the following learning outcomes:

- Demonstrated broad-based knowledge of the fundamentals of anatomy and vertebrate physiology
- Demonstrated ability to address scientific questions or solve problems using quantitative and inquiry-related skills, including developing hypotheses, designing and performing experiments, analyzing data, and interpreting results
- Reading and understanding of primary scientific literature
- Understanding key questions and hypotheses
- Interpretation of results and conclusions
- Discrimination of quality through critique
- Appreciation for research by participating in one or more laboratory experiences
- Value science and research and their relevance to one’s own life and society

Entry to the Major
Admission
To enter the Physiological Science major, students must complete Chemistry and Biochemistry 14A, 14B, and 14C, or 20A, 20B, and 30A, Life Sciences 7A, 7B, Mathematics 3A, 3B, and 3C, or 31A, 31B, and 32A, or Life Sciences 30A, 30B, and 40, or Statistics 13, and Physics 1A or 5A, with a minimum grade of C in each course and a grade-point average of 2.5 or better in all before fall quarter of their third year. Repetition of more than one of these nine preparation courses results in denial of admission to the major. After successful completion of the courses, students must contact the Undergraduate Advising Office to declare the major.

Transfer Students
Transfer applicants to the Physiological Science major with 90 or more quarter units must complete the following introductory courses prior to admission to UCLA: one year of general biology with laboratory for majors, preferably equivalent to Life Sciences 7A, 7B, and 7C, one year of calculus, one year of general chemistry with laboratory for majors, and one semester of organic chemistry with laboratory. A second semester of organic chemistry or one year of calculus-based physics is strongly recommended but not required for admission. Transfer credit for UCLA Extension coursework and for any departmental courses is subject to prior approval by the department; consult with the undergraduate counselor before enrolling in any courses for the major.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements
Preparation for the Major
Life Sciences Core Curriculum
Required: Chemistry and Biochemistry 14A, 14B, 14BL, 14C, 14CL, and 14D, or 20A, 20B, 20L, 30A, 30AL, 30B, and 30BL; Life Sciences 7A, 7B, 7C, 23L; Life Sciences 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, and 3C, or 31A, 31B, and 32A; Physics 1A, 1B, 1C, 4AL, and 4BL, or 5A, 5B, and 5C.

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The Major
Required: Physiological Science 107, 111A, 111B, 111L, Chemistry and Biochemistry 153A.
A total of five upper-division physiological science electives is required. Eight units of course 199 or 4 units each (8 units total) of courses 198A and 198B, for students in the departmental honors program, may be applied toward the elective requirement.

Honors Program
The honors program provides exceptional students with the opportunity for individual research culminating in an honors thesis.

Policies
Preparation for the Major
For all preparation courses, students must complete each course with a grade of C or better. Repetition of more than one preparation course results in dismissal from the major.

The Major
One 200-level graduate course may be applied toward the elective requirement with departmental approval. Courses 189HC, 191H, 192, 193, 195, 196, and graduate courses at the 300, 400, or 500 level may not be applied toward the elective requirement.

Each required and elective course must be taken for a letter grade, and a C average must be maintained in all upper-division courses taken for the major. A grade of C or better is required in Physiological Science 107 and 111A to enroll in course 111B. If students fail to meet these requirements, they may be dismissed from the major.

Honors Program
Students must have a 3.0 overall grade-point average (GPA) and a 3.2 GPA in the Life Sciences core curriculum. After completion of all requirements and with the recommendation of the faculty adviser, the undergraduate affairs committee confers departmental honors at graduation.

Graduate Major
Physiological Science MS
Applicants interested in pursuing graduate study may apply directly to the interdepartmental Molecular, Cellular, and Integrative Physiology PhD program or the interdepartmental Neuroscience PhD program.

Requirements
Preparation for the Major
Life Sciences Core Curriculum
Required: Chemistry and Biochemistry 14A, 14B, 14BL, 14C, 14CL, and 14D, or 20A, 20B, 20L, 30A, 30AL, 30B, and 30BL; Life Sciences 7A, 7B, 7C, 23L; Life Sciences 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, and 3C, or 31A, 31B, and 32A; Physics 1A, 1B, 1C, 4AL, and 4BL, or 5A, 5B, and 5C.
Physiological Science

Lower-Division Courses

3. Introduction to Human Physiology. (5) Lecture, three hours; laboratory, two hours. Not open to Physiological Science majors. Courses 3 and 5 may be taken independently, concurrently, or in either sequence. Understanding of human body, its organization from molecule to cellular to tissues and organs, and how component parts function in integrated manner to permit life as we know it. P/NP or letter grading.

5. Issues in Human Physiology: Diet and Exercise. (5) Lecture, three hours; discussion, 30 minutes; laboratory, 90 minutes. Not open to Physiological Science majors. Basic introduction to principles of human biology, with special emphasis on roles that exercise and nutrition play in health, and prevention and management of such illnesses as hypertension, diabetes, and heart disease. P/NP or letter grading.

6. The Human Machine: Physiological Processes. (4) Not open to Physiological Science majors. General introduction to human musculoskeletal, cardiovascular, and respiratory systems and their function, with special emphasis on roles that exercise and nutrition play in health, and prevention and management of such illnesses as hypertension, diabetes, and heart disease. P/NP or letter grading.

7. Science and Food: Physical and Molecular Origins of What We Eat. (5) Lecture, three hours; laboratory, two and one half hours. Preparation: high school chemistry, mathematics, physics. What makes lettuce crispy and some cuts of meat chewier than others? Exploration of origins of food texture and flavor. Concepts in physical sciences to explain macroscopic properties such as elasticity and phase behavior, as well as why and how the rate of food molecules in plants and animals we eat. Letter grading.

11. Head and Neck Anatomy; Evolutionary, Biomechanical, Developmental, and Clinical Approach. (4) Lecture, three hours; laboratory, two hours. Requisites: course 107. Strongly recommended; course 153. Prior to first meeting, complete Bloodborne Pathogens training course through UCLA Environmental Health and Safety. Introduction to head and neck anatomy, Dissection of head and neck, with focus on craniofacial, cranial, and muscular to put them in three-dimensional context. Coverage of evolutionary, developmental, physiological, and biomechanical aspects of skull, including comparative anatomy. Introduction to extracellular matrix molecules and musculature to understand their role in craniofacial development. Letter grading.

12. Molecular and Cellular Insights into Cardiovascular Disease and Development. (4) Lecture, three hours; discussion, one hour. Requisites: course 111B. Discussion of cellular and molecular players involved in cardiovascular disease, postnatal heart growth, and cardiovascular regeneration, to better understand emergence of cardiac dysfunction such as congenital heart disease, coronary artery disease, and atherosclerosis. Use of primary literature to highlight modern genetic tools such as transgenic animal models and sequencing technologies. Introduction to various cardiovascular cell lineages and/or gene perturbations contribute to cardiovascular pathophysiology such as cardiovascular disease, fibrosis, and vascular dysfunction. Letter grading.

111L. Physiological Science Laboratory. (3) Lecture, four hours. Requisites: courses 111A and 111B, with grades of C– or better. Required of Physiological Science majors. Designed to illustrate physiological principles studied in courses 111A, 111B. Letter grading.

120. Kidney: Understanding It from Development to Disease to Therapy. (4) Lecture, three hours. Enforced requisites: courses 101A and 101B or consent of instructor. View of basic renal function, with emphasis on broad range of renal diseases and their molecular mechanisms. Introduction to research methods typically employed in studies of kidney development and state-of-art research on kidney repair and regeneration. Letter grading.

121. Disease Mechanisms and Therapies. (5) Lecture, three hours; discussion, one hour. Requisites: Chemistry 135A, and Life Sciences 2, 3, and 4 or 7A, 7B, and 7C. Designed for junior/senior Biochemistry and life sciences majors. Use of disease mechanisms as pedagogical tools to develop higher-order knowledge of basic scientific concepts. Integration of concepts from genetics, molecular and cellular biology, physiology, and biochemistry to create molecular solutions to problem of inherited nephrologic disease. Letter grading.

122. Biomedical Technology and Physiology. (4) Lecture, four hours. Requisites: courses 111A, 111B, Life Sciences 2 or 7C, Physics 1A, 1B, and 1C, or 5A, 5B, and 5C, or 6A, 6B, and 6C. Developments in biomedical technology and their impact on treatment of disease, basic engineering principles, and designs that lend themselves to deciphering physiological states, and application of new technologies in clinical practice and biomedical research. Letter grading.

CM123. Neurobiology of Sleep. (4) As (Neuroscience CM123.) Lecture, three hours; discussion, one hour. Requisites: courses M101A and M101B or 111A and 111B or consent of instructor. Detailed look into science of sleep. Cellular and molecular mechanisms of falling asleep, many discrete brain structures involved in control of sleep. Focus on understanding homoeostatic regulation of sleep. How our sleep needs shaped by our evolutionary history, age, and gender. Latest insights into question of function of sleep, critical role sleep plays in memory formation and, close association between sleep and metabolism. Sleep disorders are considered as they provide insights into mechanisms underlying sleep. For background on science of sleep and circulation of sleep is good practice, concurrent enrollment of course CM126 is highly recommended. Concurrently scheduled with course CM223. Letter grading.

124. Molecular Biology of Aging. (4) Lecture, three hours. Requisites: Chemistry 135A, Life Sciences 1, 2, 3, and 4, or 7A, 7B, 7C. An introduction to the molecular biology of aging to the molecular biology of aging, with examination of aging as plastic trait modulated by genes and physiological processes. Discussion of how these findings integrate with both nutritional modulation of lifespan and complex and profound relationship between under-lying aging process and diseases of aging. Topics include diet, insulin, and age signaling, and link between tumor suppression and organismal aging. Letter grading.

125. Molecular Systems Biology. (5) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 2 or 4, 23L, and 2A, 7A, 7B, 7C. An introduction to the new science of systems biology, with examination of aging as plastic trait modulated by genes and physiological processes. Discussion of how these findings integrate with both nutritional modulation of lifespan and complex and profound relationship between under-lying aging process and diseases of aging. Topics include diet, insulin, and age signaling, and link between tumor suppression and organismal aging. Letter grading.

Upper-Division Courses

100. Experimental Statistics. (4) Lecture, four hours. Introduction to statistics with focus on computer simulation instead of formulas. Bootstrap and Monte Carlo methods used to analyze physiological data. P/NP or letter grading.

M106. Neurobiology of Bias and Discrimination. (4) (Same as Neuroscience M187 and Psychology M166.) Lecture, four hours. Limited to Junior/senior neuroscience, biomedical sciences, and psychology students. Exploration of aspects of mammalian brain function that generate prejudice, bias, and discrimination. Consideration of research at multiple levels of analysis, from genetic contributors to behavior. Discussion of societal implications of these research findings, including their relevance to public policies and criminal justice system. Letter grading.

107. Systems Anatomy. (5) Lecture, four hours; laboratory, three hours. Not open to Biological Sciences 2 or 7C, and Physics 1A, 5A, or 6A. Students must receive grades of C– or better to proceed to next course in series. Systems anatomy focused primarily on human anatomy. Topics include cardiovascular, reproductive, nervous, and skeletal-muscular systems, with introduction to biomechanical principles. Letter grading.

108. Systems Physiology. (5) Lecture, four hours. Not open to Biological Sciences or Chemistry majors. Introduction to principles of systems physiology, including endocrinology, transport physiology, and cardiovascular and pulmonary physiology. Letter grading.
and system-level organization of these timing sys-
cadian oscillations. Exploration of molecular, cellular,
and temporal roles of these variations in maintaining
homeostatic mechanisms of body and impact on ner-

128. Me, Myself, and Microbes: The Microbiome in
Health and Disease. (5) Lecture, four hours; discus-
sion, 90 minutes. Requisites: course 107 or Chemistry
153A; Life Sciences 2 and 3, or 7A, 7B, and 7C. Explora-
tion of host-microbiome interactions in health and
disease, drawing upon basic properties for microbial
communities, interactions with immunology, metaboli-

C152. Musculoskeletal Anatomy, Physiology, and
Biomechanics. (5) Lecture, three hours; discussion, one hour. Requisites: course 111B, Chemistry
153A, Life Sciences 2, 3, 4, and 23L. Examination of
musculoskeletal soft tissues. Integration of knowledge of
muscle, bone, and articular joint function to provide
insight into evolution of sense organs in both inverte-
brates and vertebrates. Letter grading.

C130. Sex Differences in Physiology and Disease. (4)
Lecture, three hours; laboratory, two hours. Examina-
tion of art of making and evaluating dynamical models
of physiological systems and of dynamical principles
inherent in physiological systems. Letter grading.

136. Pathophysiology of Cardiovascular Diseases.
(5) Lecture, four hours. Requisite: course 111B. Explo-
ation of cardiovascular system and how cardiovascular disease develops during the lifespan.
Examination on molecular and cellular mechanisms that mediate chronic diseases such as atherosclerosis, hy-
pertension, diabetes, and metabolic syndrome. Letter
grading.

M135. Dynamical Systems Modeling of Physiologi-
cal Processes. (5) (Same as Neuroscience M135.)
Lecture, four hours; laboratory, two hours. Examina-
tion of the differential and difference equations and of
methods of solution for the model systems used to
describe physiological processes. May be repeated for
credit. P/NP grading.

140. Hormones and Behavior in Humans and Other
Animals. (4) Formerly numbered M140.) Lecture,
three hours; discussion, one hour. Examination of hor-
mones and physiology of stress and learned behavior
in animals. Letter grading.

149. Systems Biology and Mechanisms of Major
Cardiometabolic Diseases. (4) Lecture, three hours;
discussion, one hour. Requisites: Life Sciences 7A,
7B, 7C. Integration of systems biology principles
across the integrative human systems and their

M154. Neural Mechanisms Controlling Movement. (6)
(Same as Neuroscience M145.) Lecture, four hours;
lab, two hours. Requisites: course 111A or M180A or
Neuroscience M101A. Examination of central nervous
system organization required for production of complex
movements such as locomotion, mastication, and
swal-
lowing. Letter grading.

146. Principles of Nervous System Development. (5)
Lecture, three hours; discussion, two hours. Requir-
es: courses 107 (or Neuroscience 102) and 111A (or
M180A). Examination of the normal development of the
nervous system as series of integrated steps begin-
ning with several embryonic cells and culminating as
core of highly ordered system. Topics include neur-

Neurobiology of Learning and Memory. (5) Lec-
ture, four hours; discussion, one hour. Requisite:
course 111A or M180A. Changes in central nervous
system that accompany learning, with emphasis on

Physiological Regulation of Metabolism and
Nutrient Sensing. (4) Lecture, two and one half hours;
discussion, one hour. Requisites: courses 107; 150A;
150B. Study of energy metabolism and processing of macronu-
trients like carbohydrates, lipids, and proteins in mam-
als. Students gain tools and knowledge for synthe-
sizing information in nutrition research to add to basic understanding of macronutrient
metabolism. Use of clinical case studies to under-
stand how human mutations in metabolic pathways
lead to metabolic disease (diabetes, obesity, type 1,
2, and 3 diabetes, cystic fibrosis, familial hypercho-
lesterolemia, or early onset of Alzheimer disease).
Letter grading.

M165. Comparative Animal Physiology. (5)
Lecture, three hours; laboratory, six hours. Requisites:
Life Sciences 1, 2, 3, 5, and 7A, 7B, 7C; and 23L. Physi-
oiological response and function at molecular, cellular,

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cellular mechanisms. Letter grading.

Nutrient Sensing. (4) Lecture, two and one half hours;
discussion, one hour. Requisites: Life Sciences 7A,
7B, 7C. Strongly recommended; Chemistry 153A. De-
igned for majors/seniors. Integration of principles
gained through basic science curriculum with modern
dynamics of biological systems, approaches, and presently undergoing research. Letter
grading.

C150. Musculoskeletal Mechanics. (5) Lecture,
three hours; laboratory, two hours. Examination of
mechanical analysis of human musculoskeletal system.
Examination of anthropometric, strength, and

digital computer techniques to characterize and eval-
uate kinematic and kinetic components of movement.
Topics include biomechanics, modeling, and

146. Principles of Nervous System Development. (5)
Lecture, three hours; discussion, two hours. Requir-
es: courses 107 (or Neuroscience 102) and 111A (or
M180A). Examination of the normal development of the
nervous system as series of integrated steps begin-
ning with several embryonic cells and culminating as
core of highly ordered system. Topics include neur-
ulmonary system. Lecture grading.

144. Neural Control of Physiological Systems. (4)
Lecture, three hours; discussion, one hour. Enforced
requisites: course 111B, Development, histology, cell biology, and biochemistry of musculo-
skeletal soft tissues. Integration of knowledge of
molecular and cellular connective tissue function to
offer perspective on each of these levels to understand organization and physiological behavior of the intact system.

Molecular Mechanisms and Therapies for Muscu-
lar Dystrophy. (4) Lecture, three hours; discussion,
one hour. Enforced requisites: course 111A (may be
taken concurrently). Life Sciences 4 with grade of B
or better. Causes and pathogenesis of Duchenne muscu-
lar dystrophy and some fundamental scientific find-
ings. Interplay of therapies aimed at individual stages of pathogenic disease as method to develop critical expert-like
thinking skills. Lectures based on experiments from
primary scientific literature and expected to provide
understanding of the basic science curriculum with modern
dynamics of biological systems, approaches, and presently
undergoing research. Letter grading.

Comparative Animal Physiology. (5) Lecture,
three hours; laboratory, six hours. Requisites: Life Sci-
ces 1, 2, 3, 5, and 7A, 7B, 7C, and 23L. Physi-
o-
transformation in physiological state of cells, such as in malignant transformation. Exploration of cell biology in health and disease from basic principles to understanding the role of cytoskeleton to role of cell deformability in diseases such as cancer. Use of articles from primary literature regarding current research. Letter grading.

175. Why Fido Can't Speak: Biological Evolution of Language (1876A). Four hours; discussion, one hour. Requisite: course 111A or course 111B. Homo sapiens are the only species currently on planet to possess language. Exploration of whether other species possess communication blocks for language. Topics range from examination of how bees and ants signal about food sources to whether structured songs of birds, whales, and monkeys contain compositional content. (Same as Anthropology M174, Biological Anthropology M176, and Psychology M177.) Letter grading.

176. Auditory Neurosensory Speech Perception and Vocal Communication. (4) (Same as Neuroscience M176.) Lecture, two and one-half hours; discussion, 90 minutes. Requisite: course 107 or Neuroscience M101A. Homo sapiens are the only species currently on planet to possess language. Exploration of whether other species possess communication blocks for language. Topics range from examination of how bees and ants signal about food sources to whether structured songs of birds, whales, and monkeys contain compositional content. (Same as Anthropology M174, Biological Anthropology M176, and Psychology M177.) Letter grading.

177. Neuroethology. (5) Lecture, four hours; discussion, two hours. Requisite: course 111A or course 111B. Physical properties of animals nervous systems and physiological mechanisms underlying their generation. Topics include classical neuroethological models: acoustic and vibration communication in vertebrates, socialization in owls, electroreception and electrocommunication in electric fish, and neurobiology of birdsong. Letter grading.

178. Quantitative Regulatory Biology and Signal Transduction. (4) (Formerly numbered 178B.) (Same as Computational and Systems Biology M178 and Microbiology M178.) Lecture, three hours; laboratory, one hour. Requisite: Life Sciences 7A, 7B, 7C, 30A, 30B. Introduction to key biological regulatory circuit motifs and systems biology concepts that are critical to understanding how cellular responses are controlled. Letter grading.

180A. Neuroscience: From Molecules to Mind—Cellular and Systems Neuroscience. (5) (Same as Molecular, Cell, and Developmental Biology M175A, Neuroscience M101A, and Psychology M117A.) Lecture, four hours; discussion, 90 minutes. Requisite: Chemistry 14C or 30A (14C may be taken concurrently). Life Sciences 7C, Physics 1B or 1BH or 5C or 6B. Students must receive grade of C- or better to proceed to next course in series. Cellular neurophysiology, membrane potential, action potentials, and synaptic transmission. Sensory systems and motor systems; how assemblies of neurons process complex information and control movement. P/NP or letter grading.

180B. Neuroscience: From Molecules to Mind—Molecular and Developmental Neuroscience. (5) (Same as Neuroscience M101B, Molecular, Cell, and Developmental Biology M175B, and Psychology M117B.) Lecture, four hours; discussion, 90 minutes. Requisite: course M180A (with grade of C- or better), Life Sciences 7C. Molecular biology of channels and receptors; focus on independent systems, and neurotransmitter receptors. Molecular biology of supramolecular mechanisms: synaptic transmission, axonal transport, cytoskeleton, and muscle. Classical experiments in cellular and molecular approaches in developmental neurobiology. P/NP or letter grading.


188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Senior study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor. Enforced requisite: course 111A or Neuroscience M101A. P/NP or letter grading.

188B. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188A. Limited to junior/senior USIE facilitators. Senior study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while pursuing course work. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to students in College Honors Program. Designed as adjacent to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjacent to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.


191H. Honors Seminars: Current Topics in Physiolog. (4) Seminar, four hours. Requisites or corequisites: courses 190A, 198B. Limited to neuroscience and physiological science honors program students. Designed for juniors/seniors and required of departmental honors students. Presentation of primary paper in physiology literature. Reading and critical evaluation of current research literature. Presentation of student laboratory research hypothesis, approach, and results in form of oral and poster presentations. Letter grading.

192. Practicum in Systems Anatomy for Undergrad-uate Assistants. (3) Seminar, two hours; additional hours in laboratory setting, to be arranged. Requisite: course 107. Limited to juniors/seniors. Training and supervised practicum in systems anatomy for undergraduate assistants. Consult Undergraduate Office for further information. May not be applied toward elective requirements and may not be repeated for credit. Departmental application required. P/NP or letter grading.

192A. Introduction to Collaborative Learning Theory and Practice. (1) Seminar, one hour. Preparation: at least one term of prior experience in same course in which collaborative learning theory is practiced and refined under supervision of instructors. Training seminar for undergraduate students who are selected for learning assistant (LA) program. Exploration of current topics in pedagogy and education research focused on collaborative learning and practical applications in small-group settings. Students practice communication skills with frequent assessment of and feedback on progress. P/NP or letter grading.

192B. Methods and Application of Collaborative Learning Theory in Physical Sciences. (2 to 4) Seminar, two hours; laboratory, six hours. Requisites: course (may be taken concurrently), and at least one term of prior experience in same course in which collaborative learning theory is practiced and refined under supervision of instructors. Training seminar for undergraduate students who are selected for learning assistant (LA) program. Exploration of current topics in pedagogy and education research focused on collaborative learning and practical applications in small-group settings. Students practice communication skills with frequent assessment of and feedback on progress. P/NP or letter grading.

193. Journal Club Seminars: Physiological Science. (2) Seminar, one hour. Limited to undergraduate students. Discussion of readings selected from current literature in field. May be repeated for credit. P/NP grading.

194A. Research Group Seminars: Physiological Science. (2) Seminar, two hours. Required of undergradu-ate students in research traineeships such as MARC and UC Leads programs. Discussion of research methods and current literature in field or of research of faculty members or students. May be repeated for credit. Letter grading.

194B. Research Group Seminars: Physiological Sci-ence. (1) Seminar, two hours. Corequisite: course 198A or 198B or 198C or 199. Limited to juniors/seniors. Involvement in weekly laboratory research group meetings to encourage student participation in research and to stimulate progress in specific research areas. Discussion of use of specific research methods and current literature in field or of research of faculty members or students. May be repeated for credit. P/NP grading.

195. Field Studies in Physiological Science. (4) Tuto-rial, one hour; fieldwork, eight hours. Limited to seniors. Required of students applying for internships related to physiological science. May not be repeated for credit and may not be applied toward elective requirements for major. Individual contract with supervising faculty member required. P/NP grading.

196. Research Apprenticeship in Physiological Sci-ence. (2 to 4) Tutorial, three hours per week per unit. Limited to juniors/seniors. Entry-level research apprenticeship for upper-division students under guidance of faculty mentor. May be repeated for credit; consult department. Individual contract required. P/NP grading.

198A. Honors Research in Physiological Science. (4) Tutorial, 12 hours. Requisites: courses 111A, 111B, 193 (193 may be taken concurrently). Limited to junior/senior physiological science honors program students. Directed independent research for departmental honors with faculty member, involving definition of research topic and extensive reading and research in field of proposed honors thesis. May be repeated for credit. Individual contract required. In Progress grading. Credit may be given only on comple- tion of course 198B).

198B. Honors Research in Physiological Science. (4) Tutorial, 12 hours. Requisites: courses 198A (may be taken concurrently). Limited to junior/senior physiological science honors program students. Continued reading and research that culminate in final honors thesis. May be repeated for credit. Individual contract required. Letter grading.
Lecture, Graduate Courses

198C. Advanced Studies for Honors Research in Physiological Science. (4) Tutorial, 12 hours. Requisite: course 198B. Corequisite: course 193. Limited to junior/senior physiological science honors program students. Additional course to provide further research opportunities for departmental honors students. Development and completion of honors thesis or comprehensive research project under direct supervision of faculty advisor. Grade to be repeated for credit. Individual contract required. Letter grading.

199. Directed Research or Senior Project in Physiological Science. (2 to 4) Tutorial, 12 hours. Requisites: courses 111A and 111B or M180A and M180B. Must register, concurrent registration for project required. Course must be submitted to undergraduate affairs chair during first week of classes. Eight units of course 199 may be applied toward elective requirements for major. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200. Advanced Experimental Statistics. (4) Lecture, four hours; laboratory, one hour. Introduction to statistics with frequent use of computer simulation instead of formulas. Bootstrap and Monte Carlo methods introduced to analyze physiological data. S/U or letter grading.

M202. Cellular Neurophysiology. (4) (Same as Neuroscience M200F and Neuroscience M202F.) Lecture, three hours; laboratory, two hours. Requisites: courses 111A (or M180A or Physics 5C), 166. Advanced course in cellular physiology of neurons. Action and membrane potentials, channels and channel blockers, gate ions and neuronal homeostasis, synaptic receptors, drug-receptor interactions, transmitter release, modulation by second messengers, and sensory transduction. Letter grading.


211. Exercise Cardiovascular Physiology. (4) Attention to cardiovascular adaptations to acute exercise as well as adaptations associated with regular exercise training.

215. Molecular and Cellular Foundations of Physiology. (5) Lecture, three hours; discussion, two hours. Application of molecular and cellular approaches to systems level questions. Basic foundation for study of major physiological systems, with emphasis on levels of organization from molecular to macroscopic. Letter grading.

CM223. Neurobiology of Sleep. (Same as Neuroscience CM223.) Lecture, three hours; discussion, one hour. Detailed look into science of sleep. Cellular and molecular mechanisms of falling asleep, many discrete brain structures involved in control of sleep wakefulness, and mechanisms of sleep regulation of sleep. How our sleep needs shaped by our evolutionary history, age, and gender. Latest insights into question of function of sleep, critical role sleep plays in memory formation and, close association between sleep and metabolism. Sleep disorders are considered as they provide insights into mechanisms underlying sleep. For background on science of sleep and circadian rhythms, course C126 is highly recommended. Concurrently scheduled with course CM123. Letter grading.

C226. Biological Clocks. (4) Lecture, three hours; discussion, one hour. Requisites: courses 111A and 111B, or M180A and M180B. Course examines clock systems, including humans, elderly, and circadian rhythms in sleep and behavior. In many cases these rhythms are generated from within organisms and are called circadian rhythms. Biological basis of these daily rhythms or circadian oscillations. Exploration of molecular, cellular, and system-level organization of these timing systems and their relationship to human condition. Discussion in maintaining homeostatic mechanisms of body and impact on nervous system. Concurrently scheduled with course C126. Letter grading.


C230. Sex Differences in Physiology and Disease. (4) Lecture, three hours. Requisites: course 111B, Life Sciences 7A, 7B, 7C. Investigation of biological origins of sex differences in physiology (mostly vertebrate), and susceptibility to disease, including history of development of concepts to define sex, and interface between biological factors and gendered environments. Topics include evolution of sex chromosomes, molecular and environmental determination of gonadal type, dosage compensation, gonadal steroid hormone physiology. Reproductive as it applies to sex differences, intersection of genetic and environmental factors in differentiation of two sexes, defining sex and gender, gendered environ- ment, and biological sex as plastic. Discussion of the role of financial support for research of sex and gender differences in disease. Concurrently scheduled with course C130. Letter grading.

235. Advanced Concepts in Physiological Systems Modeling. (5) Lecture, four hours; laboratory, two hours. Examination of art of making and evaluating dynamical models of physiological systems and of dynamical systems inherent in physiological systems. Letter grading.

241. Neural Plasticity and Repair. (4) Lecture, four hours. Preparation: basic neuroscience background. Progress in basic and clinical neuroscience provides new insight to understand mechanisms of cell repair and strategies to promote neural healing. Focus on physiological, molecular, and anatomical basis governing repair processes in brain and spinal cord and their clinical importance in neurobiology. Letter grading.

C244. Neural Control of Physiological Systems. (4) Lecture, four hours. Requisite: course 111B or M180B. Role of central nervous system in control of respiration, circulation, sexual function, and bladder control. Material will be developed by combination of lecture and open discussion. Concurrently scheduled with course C144. Letter grading.

245. Neural Mechanisms Controlling Movement. (5) Lecture, four hours. Requisites: course 111A or M180A or Neuroscience M101A. Examination of central nervous system organization required for production of complex movements such as locomotion, motor control, and swallowing. Letter grading.

250A. Muscle Dynamics. (4) Lecture, four hours. Integrated study of electrical and dynamic parameters of muscle-action, including topics in length-tension and force-velocity interrelationships; critical analysis of electromyographic and digital computer techniques. Letter grading.

C250B. Musculoskeletal Mechanics. (5) Lecture, three hours. Requisites: course 107, Physics 6A. Introduction to biomechanical analysis of human musculoskeletal system. Examination of cinematographic, force platform, and digital computer techniques to characterize and evaluate kinematic and kinetic components of movement. Topics include biostructure, bio- dynamics, and modeling. Topics vary, including specific topics in comparative physiology of animals. Topics vary from year to year, with emphasis on systems physiology, neuroendocrinology, or behavioral physiology. S/U or letter grading.

C291A–291B–291C. Seminars: Cardiovascular Func- tion and Adaptation. (2 to 4 each) Seminar, two to four hours. Selected topics on cardiovascular function and adaptation. Students required to present two hours of seminar. Letter grading.

292. Evolution and Development of Auditory Sys- tem. (2 or 4) Seminar, two hours. Discussion of specific topics related to evolution, embryology, morphology, genetics, cytodifferentiation, and onset of function of auditory system, with special attention to centrifugal pathways. Emphasis on primary literature sources as

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well as current methodological approaches. Two-hour seminar presentation required for 2 units; seminar paper and two-hour seminar presentation required for 4 units. S/U or letter grading.

293A-293B-293C. Seminars: Musculoskeletal Function and Adaptation. (2 to 4 each) Seminar, one hour. Requisites: courses 138, 260. Selected topics on muscular determinants of movement, metabolic aspects of exercise, and mechanics of connective tissue. Students required to present two-hour seminar. S/U or letter grading.

294. Recent Advances in Neurophysiology. (1) Seminar, one hour. Requisite: Life Sciences 2 or undergraduate degree in science. Critical examination and discussion of recent data and publications that focus on synaptic function. Student presentations, readings, and participation in discussions required. S/U grading.


296. Research Seminar: Physiological Science. (2) Review of literature, discussion of original research, and analysis of current topics in physiological science. May not be applied toward MS or PhD course requirements. May be repeated for credit. S/U grading.

297. Seminar: Muscle Cell Biology. (2 to 4) Seminar, two hours. Selected topics in muscle cell biology. Students required to present two-hour seminar. May be repeated for credit.

298. Seminar: Nervous System Development. (1 to 2) Seminar, two hours. Selected topics in developmental neurobiology, such as neuronal migration, axonal guidance, gene expression, and synaptogenesis. Weekly primary literature student presentations. One-hour seminar presentation on assigned weekly reading required of all students; students enrolled for 2 units must also complete written analysis of additional primary literature papers. May be repeated for credit. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personal employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. In-Service Practicum for Teaching Assistants in Physiological Science. (2) Seminar, to be arranged. Required of all teaching assistants. Supervised practicum in teaching laboratory courses in physiological science material and use of teaching aids. May not be applied toward degree requirements. S/U grading.

501. Cooperative Program. (2 to 8) Preparation: consent of UCLA graduate adviser and graduate dean, and host department chair and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.

506. Individual Study for Graduate Students. (2 to 8) Tutorial, to be arranged. To enroll for letter grade, petition signed by faculty sponsor, graduate adviser, and graduate affairs committee chair must be submitted prior to end of second week of class. Eight units may be applied toward degree requirements for MS or PhD degree, provided that students enroll in two different 4-unit 596 classes in different laboratories under supervision of different mentors. Term paper required for letter grading. S/U or letter grading.

597. Preparation for MS Comprehensive Examination or PhD Qualifying Examinations. (2 to 16) Tutorial, to be arranged with faculty member serving as student’s comprehensive examination chair or PhD committee chair. May not be applied toward MS or PhD course requirements. May be repeated as necessary. S/U grading.

598. Research for and Preparation of PhD Dissertation. (2 to 16) Tutorial, to be arranged. May not be applied toward PhD course requirements. May be repeated as necessary. S/U grading.

INTERNATIONAL AND AREA STUDIES

Interdepartmental Program

College of Letters and Science

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International and Area Studies

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Adam D. Moore, PhD (Geography)

Helen M. Rees, PhD (Ethnomusicology)

Bonnie Taub, PhD (Anthropology, Community Health Sciences)

Kevin B. Terraciano, PhD (History)

Michael F. Thies, PhD (Political Science)

Overview

The International Institute offers a variety of area studies majors and minors through the International and Area Studies Interdepartmental Program (IDP). The overarching goal of each of these programs is to address the need for students to have a broad understanding of the international nature of the world and guide them through a course of study that allows them to apply that knowledge to a particular region of interest. The majors are structured so that area-specific content proceeds in tandem with instruction in the humanities and social sciences disciplines that provide the tools for analyzing the cultures, social structures, politics, and histories of the regional areas.

Emphasizing the contemporary world since 1750, the majors establish a common conceptual and thematic basis for study of regional areas. Students take a common core course that illuminates the international character of the contemporary world and introduces a set of contemporary issues and challenges that cross borders and regions. Thematic and conceptual courses equip students with a variety of disciplinary tools they can use to study a particular area or region. Studies culminate in a capstone seminar.

Undergraduate Study

Students considering a major or minor in the interdepartmental program should consult with the academic counselor as soon as possible in their UCLA career, but in no case later than the point at which they are about to begin taking upper-division courses. Students should select courses to fulfill major or minor requirements in consultation with the academic counselor.

Undergraduate Majors

African and Middle Eastern Studies BA

The African and Middle Eastern Studies major allows students to analyze the area or a subregion (e.g., Middle East, North Africa, Arab states, sub-Saharan Africa) from an interdisciplinary and modern perspective. The major seeks to ground students in broad international issues that they can then use to focus on particular concerns of that part of the world.

Study Abroad

African and Middle Eastern Studies majors are highly encouraged to study abroad. Students can travel to all areas through a variety of programs with various lengths (summer or during the academic year).

Students may partially fulfill the area studies elective requirement by participating in an International Institute Summer Travel Study program consisting of two courses in and on a particular region of the world. Contact the academic counselor for more information on available programs.

More information about study abroad programs is available through the UCLA International Education Office by e-mail, in person at 1332 Murphy Hall, or by phone at 310-825-4995.

Capstone Major

The African and Middle Eastern Studies major is a designated capstone major. Students must complete a capstone seminar or study-abroad program in which they engage in an in-depth analysis of a specific region or a thematic subject that spans regions. Through conceiving and executing a project, students demonstrate their working knowledge of scholarly discourse relative to a specialized topic. Students research, analyze, and writing skills are exhibited through their capstone work, along with their collaborative and oral communication skills.

Learning Outcomes

The African and Middle Eastern Studies major has the following learning outcomes:

• In-depth analysis of a specific region or a thematic subject that spans regions
• Demonstrated critical understanding of issues relevant to a specific region or theme
• Demonstrated skills, including research, analysis, and writing
• Identification and analysis of appropriate sources, material evidence, and other forms of primary documents
• Demonstrated proficiency at collaborative engagement with peers through constructive
feedback on written drafts and oral presentations
• Demonstrated proficiency at using peer feedback to enhance student’s own work
• Effective communication of complex ideas in a seminar setting
• Demonstrated effective oral and written communication of research findings
• Conception and execution of a project that identifies and engages with a specialized topic
• Working knowledge of scholarly discourse relative to a specialized topic

Entry to the Major

Admission
To be eligible to declare the African and Middle Eastern Studies major, students must have completed all nonlanguage preparation for the major courses and the foreign language courses through at least level 3 (elementary level). Any remaining language courses may be completed after students have been accepted to the major.

Pre-major
 Incoming first-year and transfer students may be admitted as African and Middle Eastern Studies pre-majors on acceptance to UCLA. Pre-major students must apply for major standing at the end of fall quarter of their junior year; they are not automatically accepted into the major.

Transfer Students
 Transfer applicants to the African and Middle Eastern Studies major, students must have completed all nonlanguage preparation for the major courses and the foreign language courses through level 3 (elementary level). Remaining language courses may be completed after students have been accepted to the major.

Transfer Students
 Transfer applicants to the African and Middle Eastern Studies pre-major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two courses from sociocultural anthropology, cultural geography, contemporary world history, and world literature and two courses from comparative politics, economic geography, macroeconomics, microeconomics, and introductory sociology. Transfer students must apply for the major by the end of fall quarter of their junior year.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Policies
 Each preparation for the major course must be taken for a letter grade, and students must have a UC grade-point average of 2.0 or better in those courses. In addition, students must have earned a grade of C or better in International and Area Studies 1.

Requirements
 Preparation for the Major
 Required: (1) International and Area Studies 1.
 (2) one area studies course from Art History 28, History 9D, 10B, 97F, 97J, Middle Eastern Studies M50CW, or Portuguese 40A, (3) two international politics and markets courses from Economics 1, 2, Geography 4, 6, Political Science 50 (or 50R), Sociology 1, (4) two international societies and cultures courses from Anthropology 3, Comparative Literature 1D (or 2DW or 4DW), Ethnomusicology 5, M25, Geography 3, History 2B, 22, World Arts and Cultures 20, 33, and (5) one area-related foreign language sequence through the intermediate level (e.g., Arabic 102C, Armenian 102C, 105C, Hebrew 102C, Iranian 102C, Turkic Languages 102C, 112C, 116C). The language requirement can also be fulfilled in part or in total by taking a placement examination given through the appropriate language department.

The Major
 The major consists of International and Area Studies 191 (capstone seminar) and 11 upper-division courses divided among area studies and international themes courses.


Honors Program
 Admission
 To enter the honors program, students must (1) have completed all preparation for the major requirements with a minimum 3.5 grade-point average in those courses, (2) have a 3.5 grade-point average in all upper-division coursework for the major, (3) obtain agreement from a faculty member to supervise their honors thesis, and (4) formally submit an application to the honors program. Application should normally be made during the junior year so as to best plan for completion of the honors thesis during the senior year. Contact the academic counselor for more details about the application, thesis requirements, and guidelines regarding the selection of a faculty thesis adviser.
 Requirements
 Honors are awarded to students who (1) complete all requirements for the major with a cumulative grade-point average of 3.5 or better in upper-division courses required for the major, (2) successfully complete courses 198A, 198B, and 198C, and (3) produce an honors thesis (approximately 35 to 50 pages) determined to be of honors quality by a committee of two faculty members—the chair of International and Area Studies and the faculty adviser of the student.
 Highest honors are awarded to students who (1) complete all requirements for the major with a cumulative grade-point average of 3.75 or better in upper-division courses required for the major, (2) successfully complete courses 198A, 198B, and 198C, and (3) produce an exceptional honors thesis (approximately 35 to 50 pages) determined to be of highest honors quality by a committee of two faculty members—the chair of International and Area Studies and the faculty adviser of the student.
 Honors and highest honors are recorded on the final transcript and diploma after students successfully complete the program.

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Honors Program
 The honors program is designed to offer highly motivated majors the opportunity to design and conduct their own independent research under the guidance of a faculty adviser and consists of a three-term directed-study series of courses—International and Area Studies 198A, 198B, 198C—culminating in an honors thesis.

Policies
 Preparation for the Major
 Each course must be taken for a letter grade.

The Major
 To count as one 4-unit course, 2-unit courses must either be taken twice or two courses from the same category (if applicable) may be taken. Each course must be taken for a letter grade, with a minimum overall grade-point average of 2.0.

Honors Program
 Admission
 To enter the honors program, students must (1) have completed all preparation for the major requirements with a minimum 3.5 grade-point average in those courses, (2) have a 3.5 grade-point average in all upper-division coursework for the major, (3) obtain agreement from a faculty member to supervise their honors thesis, and (4) formally submit an application to the honors program. Application should normally be made during the junior year so as to best plan for completion of the honors thesis during the senior year. Contact the academic counselor for more details about the application, thesis requirements, and guidelines regarding the selection of a faculty thesis adviser.

Requirements
 Honors are awarded to students who (1) complete all requirements for the major with a cumulative grade-point average of 3.5 or better in upper-division courses required for the major, (2) successfully complete courses 198A, 198B, and 198C, and (3) produce an honors thesis (approximately 35 to 50 pages) determined to be of honors quality by a committee of two faculty members—the chair of International and Area Studies and the faculty adviser of the student.
 Highest honors are awarded to students who (1) complete all requirements for the major with a cumulative grade-point average of 3.75 or better in upper-division courses required for the major, (2) successfully complete courses 198A, 198B, and 198C, and (3) produce an exceptional honors thesis (approximately 35 to 50 pages) determined to be of highest honors quality by a committee of two faculty members—the chair of International and Area Studies and the faculty adviser of the student.
 Honors and highest honors are recorded on the final transcript and diploma after students successfully complete the program.
Asian Studies BA

The Asian Studies major allows students to analyze the area or a subregion (e.g., Central Asia, East Asia, South Asia, Southeast Asia) from an interdisciplinary and modern perspective. The major seeks to ground students in broad international issues that they can then use to focus on particular concerns of that part of the world.

Study Abroad

Asian Studies majors are highly encouraged to study abroad. Students can travel to all areas through a variety of programs with various lengths (summer or during the academic year).

More information about study abroad programs is available through the UCLA International Education Office by e-mail, in person at 1332 Murphy Hall, or by phone at 310-825-4995.

Capstone Major

The African Studies major is a designated capstone major. Students must complete a capstone seminar or study-abroad program in which they engage in an in-depth analysis of a specific region or a thematic subject that spans regions. Through conceiving and executing a project, students demonstrate their working knowledge of scholarly discourse relative to a specialized topic. Student research, analytic, and writing skills are exhibited through their capstone work, along with their collaborative and oral communication skills.

Learning Outcomes

The Asian Studies major has the following learning outcomes:

- In-depth analysis of a specific region or a thematic subject that spans regions
- Demonstrated critical understanding of issues relevant to a specific region or theme
- Demonstrated skills, including research, analysis, and writing
- Identification and analysis of appropriate sources, material evidence, and other forms of primary documents
- Demonstrated proficiency at collaborative engagement with peers through constructive feedback on written drafts and oral presentations
- Demonstrated proficiency at using peer feedback to enhance student’s own work
- Effective communication of complex ideas in a seminar setting
- Demonstrated effective oral and written communication of research findings
- Conception and execution of a project that identifies and engages with a specialized topic
- Working knowledge of scholarly discourse relative to a specialized topic

Entry to the Major

Admission

To be eligible to declare the Asian Studies major, students must have completed all nonlanguage preparation for the major courses and the foreign language courses through at least level 3 (elementary level). Any remaining language courses may be completed after students have been accepted to the major.

Pre-major

Incoming first-year and transfer students may be admitted as Asian Studies pre-majors on acceptance to UCLA. Pre-major students must apply for major standing at the end of fall quarter of their junior year; they are not automatically accepted into the major.

Transfer Students

Transfer applicants to the Asian Studies pre-major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two courses from sociocultural anthropology, cultural geography, contemporary world history, and world literature and two courses from comparative politics, economic geography, macroeconomics, microeconomics, and introductory sociology. Transfer students must apply for the major by the end of fall quarter of their junior year.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Policies

Each preparation for the major course must be taken for a letter grade, and students must have a UC grade-point average of 2.0 or better in those courses. In addition, students must have earned a grade of C or better in International and Area Studies 1.

Requirements

Preparation for the Major

Required: (1) International and Area Studies 1, (2) one area studies course from Art History 29, 31, Asian 30, Chinese 40, 50 (or 50W), M60 (or M60W), 80, Clusters 25A, History 9A, 9C, 9E, 11B (or 11BH), 97G, 97M, 97N, International and Area Studies 31, 33, Japanese 50, 70, 75, 80, Korean 40W, 50, M60, 70, 80, South Asian M60, Southeast Asian M20, 50, 70, or Vietnamese 40, (3) two international politics and markets courses from Economics 1 2, Geography 4, 6, Political Science 50 (or 50R), Sociology 1, (4) two international societies and cultures courses from Anthropology 3, Comparative Literature 10 (or 2WD or 4WD), Ethnomusicology 5, M25, Geography 3, History 2B, 22, World Arts and Cultures 20, 33, and (5) one area-related foreign language sequence through the intermediate level (e.g., Chinese 6 or 6A, Filipino 6, Hindi-Urdu 100C, Indonesian 6, Japanese 6, Korean 6, Thai 6, Vietnamese 6). The language requirement can also be fulfilled in part or in total by taking a placement examination given through the appropriate language department.

The Major

The major consists of International and Area Studies 191 (capstone seminar) and 11 upper-division courses divided among area studies and international themes courses.


Honors Program
The honors program is designed to offer highly motivated majors the opportunity to design and conduct their own independent research under the guidance of a faculty adviser and consists of a three-term directed-study series of courses—International and Area Studies 198A, 198B, 198C—culminating in an honors thesis.

Policies
Preparation for the Major
Each course must be taken for a letter grade.

The Major
To count as one 4-unit course, 2-unit courses must either be taken twice or two courses from the same category (if applicable) may be taken. Each course must be taken for a letter grade, with a minimum overall grade-point average of 2.0.

Honors Program Admission
To enter the honors program, students must (1) have completed all preparation for the major requirements with a minimum 3.5 grade-point average in those courses, (2) have a 3.5 grade-point average in all upper-division coursework for the major, (3) obtain agreement from a faculty member to supervise their honors thesis, and (4) formally submit an application to the honors program. Application should normally be made during the junior year so as to best plan for completion of the honors thesis during the senior year. Contact the academic counselor for more details about the application, thesis requirements, and guidelines regarding the selection of a faculty thesis adviser.

Requirements
Honors are awarded to students who (1) complete all requirements for the major with a cumulative grade-point average of 3.5 or better in upper-division courses required for the major, (2) successfully complete courses 198A, 198B, and 198C, and (3) produce an honors thesis (approximately 35 to 50 pages) determined to be of honors quality by a committee of two faculty members—the chair of International and Area Studies and the faculty adviser of the student.

Highest honors are awarded to students who (1) complete all requirements for the major with a cumulative grade-point average of 3.75 or better in upper-division courses required for the major, (2) successfully complete courses 198A, 198B, and 198C, and (3) produce an exceptional honors thesis (approximately 35 to 50 pages) determined to be of highest honors quality by a committee of two faculty members—the chair of International and Area Studies and the faculty adviser of the student.

Honors and highest honors are recorded on the final transcript and diploma after students successfully complete the program.

European Studies BA
The European Studies major allows students to analyze the area or a subregion (e.g., Central and Eastern Europe, Mediterranean Europe, Scandinavia, Western Europe/European Union) from an interdisciplinary and modern perspective. The major seeks to ground students in broad international issues that they can then use to focus on particular concerns of that part of the world.

Capstone Major
The European Studies major is a designated capstone major. Students must complete a capstone seminar or study-abroad program in which they engage in an in-depth analysis of a specific region or a thematic subject that spans regions. Through conceiving and executing a project, students demonstrate their working knowledge of scholarly discourse relative to a specialized topic. Student research, analytic, and writing skills are exhibited through their capstone work, along with their collaborative and oral communication skills.

Study Abroad
European Studies majors are highly encouraged to study abroad. Students can travel to all areas through a variety of programs with various lengths (summer or during the academic year).

Students may partially fulfill the area studies elective requirement by participating in an International Institute Summer Travel Study program consisting of two courses in and on a particular region of the world. Contact the academic counselor for more information on available programs.

More information about study abroad programs is available through the UCLA International Education Office by e-mail, in person at 1332 Murphy Hall, or by phone at 310-825-4995.

Learning Outcomes
The European Studies major has the following learning outcomes:

- In-depth analysis of a specific region or a thematic subject that spans regions
- Demonstrated critical understanding of issues relevant to a specific region or theme
- Demonstrated skills, including research, analysis, and writing
- Identification and analysis of appropriate sources, material evidence, and other forms of primary documents
- Demonstrated proficiency at collaborative engagement with peers through constructive feedback on written drafts and oral presentations
- Demonstrated proficiency at using peer feedback to enhance student’s own work
- Effective communication of complex ideas in a seminar setting
- Demonstrated effective oral and written communication of research findings
- Conception and execution of a project that identifies and engages with a specialized topic
- Working knowledge of scholarly discourse relative to a specialized topic

Entry to the Major
Admission
To be eligible to declare the European Studies major, students must have completed all non-language preparation for the major courses and the foreign language courses through at least level 3 (elementary level). Any remaining language courses may be completed after students have been accepted to the major.

Pre-major
Incoming first-year and transfer students may be admitted as European Studies pre-majors on acceptance to UCLA. Pre-major students must apply for major standing at the end of fall quarter of their junior year; they are not automatically accepted into the major.

Transfer Students
Transfer applicants to the European Studies pre-major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two courses from sociocultural anthropology, cultural geography, contemporary world history, and world literature and two courses from comparative politics, economic geography, macroeconomics, microeconomics, and introductory sociology. Transfer students must apply for the major by the end of fall quarter of their junior year.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Policies
Preparation for the Major
Required: (1) International and Area Studies 1, (2) one area studies course from Central and East European Studies 91, Comparative Literature 1C, 2CW, 4CW, Dutch 10, English 88G, French 12, 14 (or 14W), 41, 60, German 50B, 59, 61A, History 1C (or 1CH), 97C, International and Area Studies 40, Italian 42B, 46, 50B, Portuguese 40A, Romanian 90, Russian 25 (or 25W), 30, 31, 32, 90B (or 90BW), Scandinavian 50 (or 50W), Slavic 30, Spanish 42, (3) two international politics and markets courses from Economics 1, 2, Geography 4, 6, Political Science 50 (or 50R), Sociology 1, (4) two international societies and cultures courses from Anthropology 3, Comparative Literature 1D (or 2DW or 4DW), Ethnomusicology 5, M25, Geography 3, History 2B, 2Z, World Arts and Cultures 2B, 33, and (5) one area-related foreign language sequence through the intermediate level (e.g., Czech 102C, Dutch 103C, French 6, German 6, Hungarian 102C, Italian 6, Polish 102C, Portuguese 3, Romanian 102C, Russian 6, Scandinavian 5, Serbian/Croatian 102C, Spanish 5, Ukrainian 102C, Yiddish 102C). The language requirement can also be fulfilled in part or in total by taking a placement examina-
The Major

The major consists of International and Area Studies 191 (capstone seminar) and 11 upper-division courses divided among area studies and international themes courses.

Area Studies: (1) Three humanities and arts groups 1 courses from Art History 127B, M127C, Central and East European Studies 125, C126, Comparative Literature C163, C164, Dutch 113, 131, English 115B, 164A, 164B, 164C, Ethnomusicology 133, Film and Television 106B, French 114C, 119, 120, 138, 139, 141, German 102, 103, 104, 110, 112, 173, 174, Italian 102C, 120, 121, M158, 139, 141, German 102, 103, 104, 110, 112, 173, 174, Italian 102C, 120, 121, 150, M158, Polish 152B, 152C, Russian 107B, 120, 121, 122, 125, 126, M127, 128, 130A, 130B, 130C, 131, M132, 140A through 140D, 150, Scandinavian 141A, 141B, 152, 153A, 156A; and (3) one additional elective course selected from either item 1 or 2 above.


The area studies electives listed above (group 1) focus on contemporary issues of that region after 1750. Students may substitute a maximum of three upper-division courses with focus on earlier historical aspects of the region or on diasporas with origins related to the region toward the area studies electives as long as the distribution between humanities and arts and social sciences is maintained. They may be selected from either of the following lists: humanities and arts groups 2: French 114A, 114B, 115, 116, 117, 118, 169, German 170, Italian 102A, 102B, 103A, 103B, 110, 113, 114B, 116A, 116B, 140, Russian C124C, C124D, C124E, C124F, C124G, C124H, C124I, Scandinavian 142A, 143C, 154 or social sciences groups 2: History 121A, 121B, 121C, 122A, 122B, 122C, 125A, 126, Political Science 111C.

Honors Program

The honors program is designed to offer highly motivated majors the opportunity to design and conduct their own independent research under the guidance of a faculty advisor and consists of a three-termed directed-study series of courses—International and Area Studies 198A, 198B, 198C—culminating in an honors thesis.

Policies

Preparation for the Major

Each course must be taken for a letter grade.

The Major

To count as one 4-unit course, 2-unit courses must either be taken twice or two courses from the same category (if applicable) may be taken. Each course must be taken for a letter grade, with a minimum overall grade-point average of 2.0.

Honors Program Admission

To enter the honors program, students must (1) have completed all preparation for the major with requirements with a minimum 3.5 grade-point average in those courses, (2) have a 3.5 grade-point average in all upper-division coursework for the major, (3) obtain agreement from a faculty member to supervise their honors thesis, and (4) formally submit an application to the honors program. Application should normally be made during the junior year so as to best plan for completion of the honors thesis during the senior year. Contact the academic counselor for more details about the application, thesis requirements, and guidelines regarding the selection of a faculty thesis advisor.

Requirements

Honors are awarded to students who (1) complete all requirements for the major with a cumulative grade-point average of 3.5 or better in upper-division courses required for the major, (2) successfully complete courses 198A, 198B, and 198C, and (3) produce an exceptional honors thesis (approximately 35 to 50 pages) determined to be of honors quality by a committee of two faculty members—the chair of International and Area Studies and the faculty adviser of the student.

Highest honors are awarded to students who (1) complete all requirements for the major with a cumulative grade-point average of 3.75 or better in upper-division courses required for the major, (2) successfully complete courses 198A, 198B, and 198C, and (3) produce an exceptional honors thesis (approximately 35 to 50 pages) determined to be of highest honors quality by a committee of two faculty members—the chair of International and Area Studies and the faculty adviser of the student.

Honors and highest honors are recorded on the final transcript and diploma after students successfully complete the program.

Latin American Studies BA

The Latin American Studies major allows students to analyze the area or a subregion (e.g., Amazonia, Caribbean, Central America, South America, Southern Cone) from an interdisciplinary and modern perspective. The major seeks to ground students in broad international issues that they can then use to focus on particular concerns of that part of the world.

Study Abroad

Latin American Studies majors are highly encouraged to study abroad. Students can travel to all areas through a variety of programs with various lengths (summer or during the academic year).

Students may partially fulfill the area studies elective requirement by participating in an International Institute Summer Travel Study program consisting of two courses in and on a particular region of the world. Contact the academic counselor for more information on available programs.

More information about study abroad programs is available through the UCLA International Education Office by e-mail, in person at 1332 Murphy Hall, or by phone at 310-825-4995.

Capstone Major

The Latin American Studies major is a designated capstone major. Students must complete a capstone seminar or study-abroad program in which they engage in an in-depth analysis of a specific region or a thematic subject that spans regions. Through conceiving and executing a project, students demonstrate their working knowledge of scholarly discourse relative to a specialized topic. Student research, analytic, and writing skills are exhibited through their capstone work, along with their collaborative and oral communication skills.

Learning Outcomes

The Latin American Studies major has the following learning outcomes:

- In-depth analysis of a specific region or a thematic subject that spans regions
- Demonstrated critical understanding of issues relevant to a specific region or theme
- Demonstrated skills, including research, analysis, and writing
- Identification and analysis of appropriate sources, material evidence, and other forms of primary documents
- Demonstrated proficiency at collaborative engagement with peers through constructive feedback on written drafts and oral presentations
- Demonstrated proficiency at using peer feedback to enhance student’s own work
- Effective communication of complex ideas in a seminar setting
- Demonstrated effective oral and written communication of research findings
- Conception and execution of a project that identifies and engages with a specialized topic
- Working knowledge of scholarly discourse relative to a specialized topic
Entry to the Major

Admission

To be eligible to declare the Latin American Studies major, students must have completed all nonlanguage preparation for the major courses and the foreign language courses through at least level 3 (elementary level). Any remaining language courses may be completed after students have been accepted to the major.

Pre-major

Incoming first-year and transfer students may be admitted as Latin American Studies pre-majors on acceptance to UCLA. Pre-major students must apply for major standing at the end of fall quarter of their junior year; they are not automatically accepted into the major.

Transfer Students

Transfer applicants to the Latin American Studies pre-major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two courses from socio-cultural anthropology, cultural geography, contemporary world history, and world literature and two courses from comparative politics, economic geography, macroeconomics, microeconomics, and introductory sociology. Transfer students must apply for the major by the end of fall quarter of their junior year.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Policies

Each preparation for the major course must be taken for a letter grade, and students must have a UC grade-point average of 2.0 or better in those courses. In addition, students must have earned a grade of C or better in International and Area Studies 1.

Requirements

Preparation for the Major


The area studies electives listed above (group 1) focus on contemporary issues of that region after 1750. Students may substitute a maximum of three upper-division courses with focus on earlier historical aspects of the region on or diasporas with origins related to the region toward the area studies electives as long the distribution between humanities and arts and social sciences is maintained. They may be selected from either of the following lists: humanities and arts group 2: Art History CM139A, C139B, CM141, Chicana/o and Central American Studies M105D, M105E, 109, 142, Ethnomusicology M116, Portuguese 143A, or social sciences group 2: Anthropology 114P, 114Q, Chicana/o and Central American Studies M119, M159B, 184, M187, History 157B.

Honors Program

The honors program is designed to offer highly motivated majors the opportunity to design and conduct their own independent research under the guidance of a faculty adviser and consists of a three-term directed-study series of courses—International and Area Studies 198A, 198B, 198C—culminating in an honors thesis.

Policies

Preparation for the Major

Each course must be taken for a letter grade.

The Major

To count as one 4-unit course, 2-unit courses must either be taken twice or two courses from the same category (if applicable) may be taken. Each course must be taken for a letter grade, with a minimum overall grade-point average of 2.0.

Honors Program

Admission

To enter the honors program, students must have completed all preparation for the major requirements with a minimum 3.5 grade-point average in those courses, have a 3.5 grade-point average in all upper-division coursework for the major, obtain agreement from a faculty member to supervise their honors thesis, and formally submit an application to the honors program. Application should normally be made during the junior year so as to best plan for completion of the honors thesis during the senior year. Contact the academic counselor for more details about the application, thesis requirements, and guidelines regarding the selection of a faculty thesis adviser.

Requirements

Honors are awarded to students who (1) complete all requirements for the major with a cumulative grade-point average of 3.5 or better in upper-division courses required for the major, (2) successfully complete courses 198A, 198B, and 198C, and (3) produce an honors thesis (approximately 35 to 50 pages) determined to be of honors quality by a committee of two faculty members—the chair of International and Area Studies and the faculty adviser of the student.

Highest honors are awarded to students who (1) complete all requirements for the major with a cumulative grade-point average of 3.75 or better in upper-division courses required for the major, (2) successfully complete courses 198A, 198B, and 198C, and (3) produce an exceptional honors thesis (approximately 35 to 50 pages) determined to be of highest honors quality by a committee of two faculty members—the chair of International and Area Studies and the faculty adviser of the student.

Honors and highest honors are recorded on the final transcript and diploma after students successfully complete the program.

Undergraduate Minors

African and Middle Eastern Studies Minor

The African and Middle Eastern Studies minor is designed for students who wish to augment their major with concerted study of the history, culture, and society of the Africa and the Middle East from an interdisciplinary and modern perspective.

Study Abroad

African and Middle Eastern Studies minors are highly encouraged to study abroad. Students can travel to all areas through a variety of programs with various lengths (summer or during the academic year). Students may partially fulfill the area studies elective requirement by participating in an International Institute Summer Travel Study pro-
gram consisting of two courses in and on a particular region of the world. Contact the academic counselor for more information on available programs.

More information about study abroad programs is available through the UCLA International Education Office by e-mail, in person at 1332 Murphy Hall, or by phone at 310-825-4995.

Admission

To enter the minor, students must be in good academic standing (overall grade-point average of 2.0 or better) and have completed all lower-division minor courses with a GPA of 2.0 or better in those courses.

The Minor

Required Lower-Division Courses (13 to 15 units): International and Area Studies 1 and two international societies and cultures courses from Anthropology 3, Comparative Literature 1D (or 2D or 4D), Economics 1, 2, Ethnomusicology 5, M25, Geography 3, 4, 6, History 2B, 22, Political Science 50 (or 50R), Sociology 1, World Arts and Cultures 20, 33. Students may substitute one area studies preparation course (from History 9D, 97F, or Middle Eastern Studies M2DCW) toward the international societies and cultures preparation requirement.

Required Upper-Division Courses (20 to 21 units): Five area studies group 1 courses as follows: (1) two humanities and arts group 1 courses from Arabic M110, 120, C141, M151, Armenian C151, C152, C153, Art History C120, Comparative Literature M148, M162, Ethnomusicology 161N (must be taken twice to equal one 4-unit course), Hebrew M113, C140, Iranian 141, 142, Islamic Studies M151, Jewish Studies M142, M144, 175, (2) two social sciences group 1 courses from Anthropology 135, M166Q, 167, History 105C, 107C, 109B, 111C, 167A, M184D, Honors Collegium M157, Political Science 132A, 157, 165, and (3) one additional elective course selected from the group 1 lists above or from the group 2 list below. The area studies electives listed above (group 1) focus on contemporary issues of that region after 1750. Students may substitute a maximum of one upper-division course with focus on earlier historical aspects of the region or on diasporas with origins related to the region toward the area studies additional elective category (item 3 above). The course may be selected from the following group 2 list: Ancient Near East M130, 150B, C165, Arabic 130, 132, 150, Armenian C155, Art History M110A, M110B, 119A, Hebrew 130, 135, History M103A, M103B, 105A, 105B, M106, 107A, 107D, 111A, 111B, 116A, 116B, Iranian M110A, M110B, M110C, 120, 131, 140, Islamic Studies 130, Jewish Studies M150A, 150B, M151A, M155, M182A, M182B, or M182C.

Policies

One upper-division language course (advanced level) may be applied to item 3 above by petition to the chair of the program. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

African Studies Minor

The African Studies minor is designed for students who wish to augment their major with a concerted study of the history, culture, and society of Africa from an interdisciplinary and modern perspective.

Study Abroad

African Studies minors are highly encouraged to study abroad. Students can travel to all areas through a variety of programs with various lengths (summer or during the academic year). Students may partially fulfill the area studies elective requirement by participating in an International Institute Summer Travel Study program consisting of two courses in and on a particular region of the world. Contact the academic counselor for more information on available programs.

More information about study abroad programs is available through the UCLA International Education Office by e-mail, in person at 1332 Murphy Hall, or by phone at 310-825-4995.

Admission

To enter the minor, students must be in good academic standing (overall grade-point average of 2.0 or better) and have completed all lower-division minor courses with a GPA of 2.0 or better in those courses.

The Minor

Required Lower-Division Courses (13 to 15 units): International and Area Studies 1 and two international societies and cultures courses from Anthropology 3, Comparative Literature 1D (or 2D or 4D), Economics 1, 2, Ethnomusicology 5, M25, Geography 3, 4, 6, History 2B, 22, Political Science 50 (or 50R), Sociology 1, World Arts and Cultures 20, 33. Students may substitute one additional elective course selected from the group 1 lists above or from the group 2 list below.

The area studies electives listed above (group 1) focus on contemporary issues of that region after 1750. Students may substitute a maximum of one upper-division course with focus on earlier historical aspects of the region or on diasporas with origins related to the region toward the area studies additional elective category (item 3 above). The course may be selected from the following group 2 list: Ancient Near East M130, 150B, C165, Art History M110A, M110B, French 160, Geography 135, History M103A, M103B, 166A, 168A, or World Arts and Cultures C139.

Policies

One upper-division language course (advanced level) may be applied to item 3 above by petition to the chair of the program. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

East Asian Studies Minor

The East Asian Studies minor is designed for students who wish to augment their major with a concerted study of the history, culture, and society of East Asia—China, Korea, and Japan—from an interdisciplinary and modern perspective.

Study Abroad

East Asian Studies minors are highly encouraged to study abroad. Students can travel to all areas through a variety of programs with various lengths (summer or during the academic year). Students may partially fulfill the area studies elective requirement by participating in an International Institute Summer Travel Study program consisting of two courses in and on a particular region of the world. Contact the academic counselor for more information on available programs.

More information about study abroad programs is available through the UCLA International Education Office by e-mail, in person at 1332 Murphy Hall, or by phone at 310-825-4995.

Admission

To be admitted to the minor, students must be in good academic standing (overall grade-point average of 2.0 or better) and have completed all lower-division minor courses with a GPA of 2.0 or better in those courses.

The Minor

Required Lower-Division Courses (13 to 15 units): International and Area Studies 1 and two international societies and cultures courses from Anthropology 3, Comparative Literature 1D (or 2D or 4D), Economics 1, 2, Ethnomusicology 5, M25, Geography 3, 4, 6, History 2B, 22, Political Science 50 (or 50R), Sociology 1, World Arts and Cultures 20, 33. Students may substitute one area studies preparation course (from Art History 28, Ethnomusicology 20B, French 60, History 10B, 97J, or Portuguese 40A) toward the international societies and cultures preparation requirement.

Required Upper-Division Courses (20 to 21 units): Five area studies group 1 courses as follows: (1) two humanities and arts group 1 courses from Arabic M110, 120, C141, M151, Armenian C151, C152, C153, Art History C120, Comparative Literature M148, M162, Ethnomusicology 161N (must be taken twice to equal one 4-unit course), Hebrew M113, C140, Iranian 141, 142, Islamic Studies M151, Jewish Studies M142, M144, 175, (2) two social sciences group 1 courses from Anthropology 135, M166Q, 167, History 105C, 107C, 109B, 111C, 167A, M184D, Honors Collegium M157, Political Science 132A, 157, 165, and (3) one additional elective course selected from the group 1 lists above or from the group 2 list below. The area studies electives listed above (group 1) focus on contemporary issues of that region after 1750. Students may substitute a maximum of one upper-division course with focus on earlier historical aspects of the region or on diasporas with origins related to the region toward the area studies additional elective category (item 3 above). The course may be selected from the following group 2 list: Ancient Near East M130, 150B, C165, Arabic 130, 132, 150, Armenian C155, Art History M110A, M110B, 119A, Hebrew 130, 135, History M103A, M103B, 105A, 105B, M106, 107A, 107D, 111A, 111B, 116A, 116B, Iranian M110A, M110B, M110C, 120, 131, 140, Islamic Studies 130, Jewish Studies M150A, 150B, M151A, M155, M182A, M182B, or M182C.
40, 50, 50W, M60, M60W, 80, Clusters 25A, History 9C, 11B, 97G, International and Area Studies 33, Japanese 50, 70, 75, 80, Korean 40W, 50, M60, 70, 75, or 80) toward the international societies and cultures preparation requirement.


The area studies electives listed above (group 1) focus on contemporary issues of that region after 1750. Students may substitute a maximum of one upper-division course with focus on earlier historical aspects of the region or on diasporas with origins related to the region toward the area studies additional elective category (item 3 above). The course may be selected from the following group 2 list: Anthropology 116Q, Art History C148A, C148B, C148C, 152A, C152B, C152D, 154B, Asian American Studies 111, 113, 121, 122B, 130A, M130C, 131A, 131B, 131C, 132A, Chinese C175, M183, 186, 191A, History 152, 170A, C172B, Japanese 165, 172, 191A, Korean C150, 165, 180A, 180B, 184A, or 191A.

Policies
One upper-division language course (advanced level) may be applied to item 3 above by petition to the chair of the program.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

European Studies Minor
The European Studies minor is designed for students who wish to augment their major with concerted study of the history, culture, and society of Europe from an interdisciplinary and modern perspective.

Study Abroad
European Studies minors are highly encouraged to study abroad. Students can travel to all areas through a variety of programs with various lengths (summer or during the academic year).

Students may partially fulfill the area studies elective requirement by participating in an International Institute Summer Travel Study program consisting of two courses in and on a particular region of the world. Contact the academic counselor for more information on available programs.

More information about study abroad programs is available through the UCLA International Education Office by e-mail, in person at 1332 Murphy Hall, or by phone at 310-825-4995.

Admission
To enter the minor, students must be in good academic standing (overall grade-point average of 2.0 or better) and have completed all lower-division minor courses with a GPA of 2.0 or better in those courses.

The Minor
Required Lower-Division Courses (13 to 15 units): International and Area Studies 1 and two international societies and cultures courses from Anthropology 3, Comparative Literature 1D (or 2DW or 4DW), Economics 1, 2, Ethnomusicology 5, M25, Geography 3, 4, 6, History 2B, 22, Political Science 50 (or 50R), Sociology 1, World Arts and Cultures 20, 33. Students may substitute one area studies preparation course (from Comparative Literature 1C, 2CW, 4CW, Dutch 10, English 88G, French 12, 14, 14W, 41, 60, German 50B, 59, 61A, History 1C, 1CH, 97C, International and Area Studies 40, Italian 42B, 46, 50B, Portuguese 40A, Romanian 90, Russian 25, 25W, 30, 31, 32, 90B, 90BW, Scandinavian 50, 50W, Swavic 90, or Spanish 42) toward the international societies and cultures preparation requirement.


The area studies electives listed above (group 1) focus on contemporary issues of that region after 1750. Students may substitute a maximum of one upper-division course with focus on earlier historical aspects of the region or on diasporas with origins related to the region toward the area studies additional elective category (item 3 above). The course may be selected from the following group 2 list: French 114A, 114B, 115, 116, 117, 118, 169, German 170, History 121A, 121B, 121C, 122A, 122B, 122C, 125A, 126, Italian 102A, 102B, 103A, 103B, 110, 113, 114B, 116A, 116B, 140, Political Science 111C, Russian C124C, C124D, C124F, C124H, C124I, C124P, C124T, Scandinavian 142A, 143C, or 154.

Policies
One upper-division language course (advanced level) may be applied to item 3 above by petition to the chair of the program.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Latin American Studies Minor
The Latin American Studies minor is designed for students who wish to augment their major with concerted study of the history, culture, and society of Latin America from an interdisciplinary and modern perspective.

Study Abroad
Latin American Studies minors are highly encouraged to study abroad. Students can travel to all areas through a variety of programs with various lengths (summer or during the academic year).

Students may partially fulfill the area studies elective requirement by participating in an International Institute Summer Travel Study program consisting of two courses in and on a particular region of the world. Contact the academic counselor for more information on available programs.

More information about study abroad programs is available through the UCLA International Education Office by e-mail, in person at 1332 Murphy Hall, or by phone at 310-825-4995.

Admission
To enter the minor, students must be in good academic standing (overall grade-point average of 2.0 or better) and have completed all lower-division minor courses with a GPA of 2.0 or better in those courses.
The Minor

Required Lower-Division Courses (13 to 15 units): International and Area Studies 1 and two international societies and cultures courses from Anthropology 3, Comparative Literature 1D (or 2DW or 4DW), Economics 1, 2, Ethnomusicology 5, M25, Geography 3, 4, 6, History 2B, 22, Political Science 50 (or 50R), Sociology 1, World Arts and Cultures 20, 33. Students may substitute one area studies preparation course from Clusters 26A, History 8A, 8AH, 8B, 8C, 97E, International and Area Studies 50, Portuguese 40B, 46, or Spanish 44) toward the international societies and cultures preparation requirement.

Required Upper-Division Courses (20 to 25 units): Five area studies group 1 courses as follows: (1) two humanities and arts group 1 courses from Art History C142A, C142B, 144, Comparative Literature 177, English 135, Ethnomusicology M108A, 108B, 161K (must be taken twice to equal one 4-unit course), Film and Television 106C, Portuguese 130A, 130B, 141B, 142A, 142B, Spanish 120, World Arts and Cultures C139, (2) two social sciences group 1 courses from African American Studies M154C, M154D, M178, Anthropology 161, 162, Chicano/a and Central American Studies 111, 117, M125, M132, C141, 143, 151, 169, Community Health Sciences 132, Gender Studies 129, M144, M147C, Geography 135, 172A, 172C, History 159, 160A, 160B, 162A, 162B, 162C, Political Science 124C, 154A, 154B, Public Health M106, Sociology 186, 191J, and (3) one additional elective course selected from the group 1 lists above or from the group 2 list below.

The area studies electives listed above (group 1) focus on contemporary issues of that region after 1750. Students may substitute a maximum of one upper-division course with focus on earlier historical aspects of the region or on diasporas with origins related to the region toward the area studies additional elective category (item 3 above). The course may be selected from the following group 2 list: Anthropology 114P, 114Q, Art History CM139A, CM139B, CM141, Chicano/a and Central American Studies M105D, M105E, 109, M119, 142, M159B, 184, M187, Ethnomusicology M116, History 157A, 157B, or Portuguese 143A.

Policies

One upper-division language course (advanced level) may be applied to item 3 above by petition to the chair of the program.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

South Asian Studies Minor

The South Asian Studies minor is designed for students who wish to augment their major with concentrated study of the history, culture, and society of South Asia from an interdisciplinary and modern perspective.

Study Abroad

South Asian Studies minors are highly encouraged to study abroad. Students can travel to all areas through a variety of programs with various lengths (summer or during the academic year). Students may partially fulfill the area studies elective requirement by participating in an International Summer Travel Study program consisting of two courses in and on a particular region of the world. Contact the academic counselor for more information on available programs.

More information about study abroad programs is available through the UCLA International Education Office by e-mail, in person at 1332 Murphy Hall, or by phone at 310-825-4995.

Admission

To enter the minor, students must be in good academic standing (overall grade-point average of 2.0 or better) and have completed all lower-division minor courses with a GPA of 2.0 or better in those courses.

The Minor

Required Lower-Division Courses (13 to 15 units): International and Area Studies 1 and two international societies and cultures courses from Anthropology 3, Comparative Literature 1D (or 2DW or 4DW), Economics 1, 2, Ethnomusicology 5, M25, Geography 3, 4, 6, History 2B, 22, Political Science 50 (or 50R), Sociology 1, World Arts and Cultures 20, 33. Students may substitute one area studies preparation course from Art History 31, History 9A, 97N, or Southeast Asian M60) toward the international societies and cultures preparation requirement.

Required Upper-Division Courses (20 to 21 units): Five area studies group 1 courses as follows: (1) two humanities and arts group 1 courses from Art History C154C, 154D, Asian 151, 153, Comparative Literature 177, Ethnomusicology 146, 147, South Asian 150, 155, (2) two social sciences group 1 courses from Asian American Studies 172C, Gender Studies M164A, History 174B, 174C, 175A, 175C, and (3) one additional elective course selected from the group 1 list above or from the group 2 list below.

The area studies electives listed above (group 1) focus on contemporary issues of that region after 1750. Students may substitute a maximum of one upper-division course with focus on earlier historical aspects of the region or on diasporas with origins related to the region toward the area studies additional elective category (item 3 above). The course may be selected from the following group 2 list: Anthropology 116P, Art History 154A, 154B, Asian 164, Asian American Studies M172A, 172B, History 174A, South Asian CM160, or 185.

Policies

One upper-division language course (advanced level) may be applied to item 3 above by petition to the chair of the program.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Southwest Asian Studies Minor

The Southwest Asian Studies minor is designed for students who wish to augment their major with concerted study of the history, culture, and society of Southwest Asia—Brunei, Cambodia, East Timor, Indonesia, Laos, Malaysia, Myanmar (Burma), Philippines, Singapore, Thailand, and Vietnam—from an interdisciplinary and modern perspective.

Study Abroad

Southeast Asian Studies minors are highly encouraged to study abroad. Students can travel to all areas through a variety of programs with various lengths (summer or during the academic year). Students may partially fulfill the area studies elective requirement by participating in an International Institute Summer Travel Study program consisting of two courses in and on a particular region of the world. Contact the academic counselor for more information on available programs.

More information about study abroad programs is available through the UCLA International Education Office by e-mail, in person at 1332 Murphy Hall, or by phone at 310-825-4995.

Admission

To enter the minor, students must be in good academic standing (overall grade-point average of 2.0 or better) and have completed all lower-division minor courses with a GPA of 2.0 or better in those courses.

The Minor

Required Lower-Division Courses (13 to 15 units): International and Area Studies 1 and two international societies and cultures courses from Anthropology 3, Comparative Literature 1D (or 2DW or 4DW), Economics 1, 2, Ethnomusicology 5, M25, Geography 3, 4, 6, History 2B, 22, Political Science 50 (or 50R), Sociology 1, World Arts and Cultures 20, 33. Students may substitute one area studies preparation course from Art History 31, History 9A, 97N, or Southeast Asian M60) toward the international societies and cultures preparation requirement.

Required Upper-Division Courses (20 to 21 units): Five area studies group 1 courses as follows: (1) two humanities and arts group 1 courses from Art History C154C, 154D, Asian 151, 153, Comparative Literature 177, Ethnomusicology 146, 147, South Asian 150, 155, (2) two social sciences group 1 courses from Asian American Studies 172C, Gender Studies M164A, History 174B, 174C, 175A, 175C, and (3) one additional elective course selected from the group 1 list above or from the group 2 list below.

The area studies electives listed above (group 1) focus on contemporary issues of that region after 1750. Students may substitute a maximum of one upper-division course with focus on earlier historical aspects of the region or on diasporas with origins related to the region toward the area studies additional elective category (item 3 above). The course may be selected from the following group 2 list: Anthropology 116P, Art History 154A, 154B, Asian 164, Asian American Studies M172A, 172B, History 174A, South Asian CM160, or 185.
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Lower-Division Courses

1. Introduction to International and Area Studies. (5) Lecture, three hours; discussion, one hour. Introduction to international and area studies from interdisciplinary framework, covering themes related to international politics and markets, as well as international societies and cultures, to illuminate and clarify profoundly international character of world we live in and to introduce set of contemporary issues and challenges that cross borders and affect every region of world. P/NP or letter grading.

M6A-M6B-M6C. Elementary Amharic. (4-4-4) Same as African American Studies M6A-M6B-M6C.) Lecture, five hours. Course M6A is required to M6B, which is requisite to M6C. Introduction to Amharic. Semitic language that is official language of Ethiopia. Coverage of basic Amharic grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

M7A-M7B-M7C. Elementary Yoruba. (4-4-4) Same as African American Studies M7A-M7B-M7C.) Lecture, five hours. Course M7A is requisite to M7B, which is requisite to M7C. Introduction to Yoruba, one of major languages of West Africa, which is spoken widely throughout southwest Nigeria, Benin, and Togo. Coverage of basic Yoruba grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

10. Explorations in International Studies. (2) Lecture, two hours. Exploration of key international events through active learning, designed to develop understanding of international issues and diverse skill set, including persuasive speaking, critical thinking, research skills, problem solving, teamwork, expository writing, and leadership skills. May be repeated for credit without limitation. P/NP grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

31. Introduction to Southeast Asia. (5) Lecture, three hours; discussion, one hour (when scheduled). Interdisciplinary survey designed as introduction to modern Southeast Asia. P/NP or letter grading.

33. Introduction to East Asia. (5) Lecture, three hours; discussion, one hour (when scheduled). Interdisciplinary survey designed as introduction to modern East Asia. P/NP or letter grading.

40. Introduction to Europe. (5) Lecture, three hours; discussion, one hour (when scheduled). Interdisciplinary survey designed as introduction to modern Europe. P/NP or letter grading.

50. Introduction to Latin America. (5) Lecture, three hours; discussion, one hour (when scheduled). Interdisciplinary survey designed as introduction to modern Latin America. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

89B. Field Study Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

101A-110B. Field Studies in International and Area Studies. (4-4) Seminar, three hours. Exploration of culture, economy, and politics of important locations around world. Hands-on experiential programs offered for students participating in UCLA Travel Study Program. Field trips included to gain firsthand experience. May be repeated with topic and/or location changed. Offered in summer only, P/NP or letter grading.

110A. Art of Citizen Diplomacy. (2) Seminar, two hours. Examination of theory, tools, and practice of civic engagement by highlighting student leadership. Provides students with practical tools in leadership, civic responsibility, and conflict resolution in order to tackle global issues such as change, gender equality, income equality, and human rights. Class activities to understand how ordinary citizens can build bridges between cultures. Letter grading.

118. Introduction to Experiential Learning Abroad. (2) Seminar, two hours. Intended for students planning to participate in international study abroad program during upcoming summer. Practical tools in effective listening, intercultural understanding, understanding multiple narratives, sharpening leadership skills, and articulating thoughts. Prepares students for study abroad experiences and offers them tools to appreciate their travel. Letter grading.

111C. Engaging Global Cultures: Reflecting on Fieldwork. (2) Lecture, three hours. Academic venue for students who have attended study abroad programs to reflect on and share their experiences in order to enhance benefits of program in which they participated. Practical tools in active listening and applying knowledge acquired during international travel. Students analyze complex layers of intercultural communication, world affairs, and conflict. Post-study abroad follow-up activities, including presentations on campus and in community, other on-campus education activities, and writing of journal article. Letter grading.

150. Selected Topics in International and Area Studies. (4) Lecture, three hours; discussion, one hour (when scheduled). Examination of one or more topics related to international and area studies. May be repeated for credit with topic change. P/NP or letter grading.

151. Special Courses in International and Area Studies. (4) Seminar, three hours. Program-sponsored experimental or temporary courses, such as those that do not fit into current curriculum. May be repeated for credit with topic change. Letter grading.

152. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

191. Variable Topics Senior Research Seminars: International and Area Studies. (4) Seminar, three hours. Enforced prerequisite: course 1. Limited to senior international and area studies majors. Organized on topics basis with readings, discussions, papers, and development of culminating project. May not be repeated for credit. Letter grading.

193. Colloquia and Speaker Series. (1) Seminar, two hours. Introduction to current scholarship in field of international and area studies. Attendance at selected presentations with required response papers. May be repeated for credit. P/NP grading.

195CE. Community or Corporate Internships in International and Area Studies. (4) Tutorial, to be arranged; fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship in corporate, governmental, or nonprofit setting courses through Center for Community Learning. Students complete weekly written assignments, attend biweekly meetings with graduate student coordinator, and write final research paper. Faculty sponsor and graduate student coordinator. May be repeated for credit. P/NP grading.

198A-198B-198C. Honors Research in International and Area Studies. (4-4-4) Tutorial, to be arranged. Limited to international and area studies honors program students. May be repeated for credit. Individual contract required. Letter grading. 198A. Supervised individual research or investigation under guidance of faculty mentor. Development and planning of honors thesis. 198B. Enforced prerequisite: course 198A. Supervised individual research or investigation under guidance of faculty mentor. Continued development and research for honors thesis. 198C. Enforced prerequisite: course 198B. Final drafting and submission of completed honors thesis. CULminating paper of 35 to 50 pages required.

199. Directed Research in International and Area Studies. (4) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research under guidance of faculty mentor. Culminating paper required. May be applied toward requirements via petition. May be repeated for credit. Individual contract required. Letter grading.
Graduate Course

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

INTERNATIONAL DEVELOPMENT STUDIES

Interdepartmental Program
College of Letters and Science
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International Development Studies
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Shaina S. Potts, PhD (Geography)
Alden H. Young, PhD (African American Studies, Sociology)

Overview

Through an interdisciplinary lens, the International Development Studies major offers students the opportunity to study, analyze, and critically assess the social, political, and economic forces that, throughout history, have shaped inequality in the modern world. The central objective of the program is to engage students with debates around the widening patterns of disparities of wealth, power, privilege, and access to social justice that occur both within and between the countries of the global north and global south.

Undergraduate Major

International Development Studies BA

The curriculum introduces students to key theoretical debates around development and to detailed case studies of successful and failed interventions; and provides methodological training. Core and elective courses illuminate the extent to which realities that affect people often arise owing to economic class, gender, race, ethnicity, religion, migrant status and other identities, and investigate the impact of policy solutions and forms of citizen engagement on communities and the environment. Students are trained to both think critically about these issues and explore ways to engage with development work at home and abroad through experiential learning, internships, immersive study abroad programs, independent faculty-guided research, and collaborative group projects.

Study Abroad

International Development Studies majors are highly encouraged to study abroad in developing areas of the world. Students can do so through a variety of programs with various lengths (summer or during the academic year). More information about study abroad programs is available through the UCLA International Education Office. Contact the office by e-mail, in person at 1332 Murphy Hall, or by phone at 310-825-4996.

Capstone Major

The International Development Studies major is a designated capstone major. Seniors must complete an advanced seminar that provides unique opportunity to work closely with a faculty member on a focused topic of research. Students completing the capstone should be able to demonstrate skills and expertise acquired in earlier coursework; identify, analyze, and select relevant data from primary and secondary sources; acquire a working knowledge of broader scholarly discourse; conceive and execute an original research paper; and engage with a community of scholars, presenting their work to peers as well as providing feedback on peers’ work. The seminar culminates in a written paper or project and a formal class report.

Learning Outcomes

The International Development Studies major has the following learning outcomes:

- Demonstrated specific skills and expertise, including original research, data analysis, clear and cogent writing, and general knowledge/critique of majors issues in the field
- Identification, analysis, selection, and use of relevant data from primary and secondary sources
- Working knowledge and formation of an opinion about diverse perspectives and discourses
- Design of an original research project that identifies, engages, and addresses a focused problem
- Active engagement with a community of scholars by expressing viewpoints through robust and informed discourse

Entry to the Major

Admission

Admission to the International Development Studies major is by application only. To be eligible to apply, students must have first completed all nonlanguage preparation courses and the foreign language courses through at least level 3 (elementary level). Any remaining language courses may be completed after students have been accepted to the major.

Pre-major

Incoming first-year and transfer students may be admitted as International Development Studies pre-majors on acceptance to UCLA. Pre-major students must apply for major standing at the end of fall quarter of their junior year; they are not automatically accepted into the major.

Transfer Students

Transfer applicants to the International Development Studies pre-major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two introductory macroeconomics, microeconomics, and/or economic geography courses; one statistics course; three courses, each from a separate category, selected from sociocultural anthropology, cultural or economic geography, cultural area studies, world history, comparative politics, and introductory sociology; and demonstrated proficiency equivalent to level 3 at UCLA in one modern foreign language. Transfer students must apply for the major by the end of fall quarter of their junior year.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Entry to the Major Policies

Each preparation for the major course must be taken for a letter grade, and students must have a UC grade-point average of 2.0 or better in those courses.

The application period is once per year, and students must apply no later than the end of fall quarter of their junior year.

Meeting the above minimums does not guarantee admission to the program. Admission is on a competitive basis, using the above qualifications as minimum standards for consideration.

Requirements

Preparation for the Major

Required: (1) International Development Studies 1; (2) one course from Economics 1, 2, Geography 4, Public Affairs 30, or 40; (3) one methods course from Economics 41, Education 35, History 96W, Political Science 6, 6R, Public Affairs 60, Sociology 20, Statistics 10, or 12; (4) three social sciences/area studies courses, each from a different category, selected from (a) Anthropology 3, (b) Gender Studies 10, (c) Geography 3, 5, 6, (d) Global Studies 1, International and Area Studies 1, 31, 33, 50, (e) History 8A, BB, BC, 8C, 9A, 9D, 9E, 10B, 10BW, 11B, 12B, 12C, 22, (f) Political Science 20, 50, (g) Sociology 1, (h) Comparative Literature 46W, Spanish 46, and (h) demonstrated proficiency in one modern foreign language equivalent to level 6 at UCLA.

The Major

Required: (1) Three core courses selected from International Development Studies 110, M120, 130, and 140; (2) capstone seminar course: International Development Studies 191; (3) one research methodology course from Anthropology 138P, Asian American Studies 103, C142A,
C142B, Chicana/o and Central American Studies M119, M122, 123, Economics 103, Political Science 170A, Public Affairs 115, 116, Sociology 113, Statistics 112, Urban Planning M122; (4) three social and critical theory courses, each from a different department, from Anthropology 130, 140, 143, 146, 147, Economics 111, 112, 114, Environment M125, M132, Gender Studies 102, 103, Geography M125, M127, M130, 141, 148, 150, 151, 158, International Development Studies 110 or M120 or 130 or 140 (if not taken under item 1), M150, Political Science 122A, M122B, 124A, 167D, 168, Public Affairs 110, Sociology 101, 102, M115, 122, 123, 182, 183, 191D, Urban Planning M110, M121, M160, CM166; (5) two regional courses, either from the same or separate developing regions of the world (East Asia and East Central Asia, Eastern Europe and West Central Asia, Latin America and Caribbean Basin, Middle East and North Africa, South and Southeast Asia and Pacific Islands, Sub-Saharan Africa) and one disciplinary elective listed below:


Eastern Europe and West Central Asia: Anthropology 163Q, Central and East European Studies 125, C126, Gender Studies M127, History 107C, 120B, 120D, 127B, 127C, Political Science 128B, 156A, Russian 120, 121, 122, M127, 131.


Honors Program

In addition to completing all courses required for the major, students must take courses 198A, 198B, and 198C, in which they research, write, and present an honors thesis.

Policies

Preparation for the Major

Each course must be taken for a letter grade.

The Major

Each course must be taken for a letter grade. Students must earn a grade of C or better in International Development Studies 110, M120, 130, and 140; no more than one of these three courses may be repeated. All three core courses must be taken prior to the capstone senior seminar 191 course.

Honors Program

Mahors who have completed International Development Studies 110, M120, and 130 and who have a 3.5 grade-point average in all courses offered for the major are eligible to formally apply for the honors program.

To receive honors at graduation, students must have at least a 3.5 GPA in courses applied toward the major (including courses 198A, 198B, 198C) and an overall GPA of 3.0.

Highest honors are awarded to students who complete the major (including courses 198A, 198B, 198C) with a 3.75 GPA and who produce an exceptional thesis.

International Development Studies

Lower-Division Courses

1. Introduction to International Development Studies. (5) Lecture, three hours; discussion, one hour. Exploration of historical and contemporary context of socioeconomic inequalities between Global South and Global North. Focus on cultural, political, and economic realities of developing world, which includes countries of Asia, eastern Europe, Africa, Middle East, and Latin America. P/NP or letter grading.

2. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

3. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

4. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. Individual honors contract required. Honors content noted on transcript. Letter grading.

5. Superfoods: Cultural and Global Perspectives. (4) Same as Food Studies M171 and Global Studies M177. Seminar, four hours. Exploration of superfoods, which are nutrient rich foods considered beneficial for well-being, health, and longevity, as they are high in minerals, vitamins, and antioxidants. While superfoods have been part of cultures’ diets for centuries, in recent decades they have been researched in scientific and medical communities. Citizens globally have begun to increasingly demand and consume foods that are nutritious, organic, and sustainable. It is

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99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

110. Culture, Power, and Development. (4) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course 1. Broad introduction to theoretical traditions in development studies, with focus on dynamics of culture, power, markets, states and social movements, with selected case studies in developing nations and comparative case analysis across Global South and North. Letter grading.

1120. Political Economy of Development. (4) Same as Political Science M167C.) Lecture, three or four hours; discussion, one hour (when scheduled). Requisite: course 1. Social scientific survey of debates over policies contributing to economic development and underdevelopment. Topics include measurement and statistics, social and industrial policies, inequality, poverty, and historical differences for development paths across Europe, Asia, Africa, and Latin America. Letter grading.

130. Theory and History in International Development. (4) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course 1. Social scientific survey of debates over policies contributing to economic development and underdevelopment. Topics include measurement and statistics, social and industrial policies, inequality, poverty, and historical differences for development paths across Europe, Asia, Africa, and Latin America. Letter grading.

140. Decolonizing Political Economy: Colonialism and Development. (4) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course 1. Introduction to approaches and intellectual traditions of critical development studies. Violence of colonization and struggle for decolonization were two of defining processes of 20th century. Consideration of how different social formations and political paths paths are redefined. May be repeated for credit with topic change. P/NP or letter grading.

579. Political Economy of Development Change. (4) Same as Political Science M152.) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course 1. Exploration of how governments at international, national, and regional levels are addressing—or not addressing—extraordinary challenges of climate change. Use of combination of readings, lectures, and discussions to better understand causes, consequences, and policies to address most important political problem of our time—not just in U.S., but in other major countries as well. Concentration on challenges and concentration on energy use, rather than agriculture, forestry, and land use. Letter grading.

160. Selected Topics in International Development Studies. (4) Lecture, three hours; discussion, one hour (when scheduled). Examination of one or more topics related to international development. May be repeated for credit with topic change. P/NP or letter grading.

1M77. Superfoods: Cultural and Global Perspectives. (4) Same as Food Studies M177 and Global Studies M177. Seminar, four hours. Exploration of superfoods, which are nutrient rich foods considered beneficial for well-being, health, and longevity, as they are high in minerals, vitamins, and antioxidants. While superfoods have been part of cultures’ diets for centuries, in recent decades they have been researched in scientific and medical communities. Citizens globally have begun to increasingly demand and consume foods that are nutritious, organic, and sustainable. It is
The minor in International Migration Studies orients students toward comparative, historical, and international dimensions, providing structured exposure to the relevant scholarship. It aims to build an appreciation of international migration and its dilemmas as it draws on the insights generated from a broad array of disciplines and methodological approaches needed for grappling with a vast social and intellectual phenomenon.

**Admission**

Admission to the International Migration Studies minor is by application and is competitive, using courses, grades, grade-point averages, and personal statements as minimum standards for consideration. To better ensure that they can be successful in their research, students must also secure a faculty member who serves as their thesis adviser, generally to be chosen from the list of affiliated faculty. Applicants must be in good academic standing with an overall grade-point average of 2.0 or better and demonstrate a genuine interest in the subject matter. Applicants are not automatically accepted into the minor and only a limited number of students are admitted each year. Applications must be submitted no later than spring quarter of the junior year.

**The Minor**

**Required Upper-Division Courses (28 to 32 units):**

1. **One core course:** Sociology 151 or 152; (2) four elective courses, from at least two departments, selected from Asian American Studies M130C, M166A, 167, Chicana/o and Central American Studies M124, 126, 128, 147, 154, 156, Urban Planning 141, 146X, C179, Economics 103, 151, English 134, German 175, History 145A, M146B, 146C, Political Science 143C, M181B, Psychology 129C, 133G, Slavic CM114, Sociology 116, 154, 156, Urban Planning 141; (3) two courses, International Migration Studies 155 and 199, to include an advanced theory course, and a thesis tutorial culminating in a thesis.

Students who take both core courses may apply the second course toward the elective requirement.

**Policies**

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade of C− or better. Successful completion of the minor is indicated on the transcript and diploma.
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International Migration Studies

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in a minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses


193. Colloquia and Speaker Series. (2) Seminar, two hours. Introduction to current scholarship in field of international migration studies. Attendance at selected presentations with required response papers. May be repeated for credit. P/NP grading.


L A B O R S T U D I E S

Interdepartmental Program

College of Letters and Science

9244 Bunche Hall
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Los Angeles, CA 90095-1478

Labor Studies
310-206-0812
Program e-mail

J. Christopher Zepeda-Millán, PhD, Chair

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Overview

Labor studies is an interdisciplinary field of scholarship that encompasses historical and contemporary study of the sociocultural economic, legal, and political forces that shape the lives of working people, labor markets, employment practices, and social movements seeking greater economic equity for workers and their communities. Labor studies also embraces the insights of critical race, ethnic, working class, and gender studies in order to understand work and social movements as a multidimensional site of study. Labor studies students gain a strong background in social scientific analysis and applied research, and have many opportunities for civic engagement. The program is intended for students who wish to gain an in-depth understanding of the broad array of issues related to labor, work, and social movements. Students are strongly encouraged to meet with a faculty and student coordinator, to create a pathway to graduation and to create a curriculum guide that consists of either a coherent integration of courses according to a thematic or topical investigation or, alternatively, a comprehensive survey of the main issues involved in the study of labor and social change.

Career Prospects

Graduates with a bachelor’s degree in Labor Studies are prepared for careers in nonprofit advocacy, public service, and labor and social movements broadly defined. With ample opportunities to develop and apply a variety of research modalities through coursework, students are also prepared to succeed in graduate and professional school programs in a wide variety of fields.

Undergraduate Study

Labor Studies is interdisciplinary by its nature, drawing on a variety of fields for instructors and researchers. Labor Studies majors and minors become part of an existing interdisciplinary research community with strong ties to researchers and teachers in the social sciences and professional schools.

Undergraduate Major

Labor Studies BA

The Labor Studies major offers an interdisciplinary approach to the study of inequality at work and in the community. The program prepares undergraduates for a wide range of careers including but not limited to labor relations; human resource management; human rights, labor and community organizing; business; law; domestic and international government work; nonprofit management; organizational leadership; economic forecasting; education; social work; and social welfare. To be admitted to the Labor Studies major, students must have a minimum grade point average of 2.5 and must have completed all non-language Labor Studies preparation for the major courses. Students must complete an application process, and file a petition to be admitted for the major at the program office.

Capstone Major

The Labor Studies major is a designated capstone major. Undergraduate students fulfill a research-intensive capstone course or service learning experience in their senior year.

Learning Outcomes

The Labor Studies major has the following learning outcomes:

- Demonstrated familiarity and competence in a range of interdisciplinary methodologies and approaches
- Demonstrated knowledge of the field of labor studies acquired through coursework
- Demonstrated familiarity with dynamics of social movements through study and/or experience
- Demonstrated ability to conceive and execute an original research project, either individually or in a research group
- Demonstrated ability to communicate research findings to academic and nonacademic audiences

Entry to the Major

Admission

To be admitted to the Labor Studies major, students must have a minimum grade point average of 2.5 and must have completed all non-language Labor Studies preparation for the major courses. Students must complete an application process, and file a petition to be admitted for the major at the program office.

Transfer Students

Transfer applicants to the Labor Studies major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one interdisciplinary labor history or one social structure and contemporary conditions course related to labor and/or social movements.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Labor Studies 10 and two lower-division courses selected from African American Studies 1, M5, Asian American Studies 10, 20, 40, 50, Chicana/o and Central American Studies 10B, Gender Studies 10, Geography 4, History 2B, 8B, 12A, 12B, 12C, Honors Collegium 82, Political Science 60, Public Policy 10A, 10B, Sociology 55, 51, Spanish 44; or Labor Studies M1A, M1B, M1CW.

The Major

Required Core Course (4 units): Labor Studies 101.

Capstone Research and/or Community-Engaged/Internship Experience (8 units): During their senior year, students must complete research-intensive capstone courses, community-engaged/internship experiences, or a combination of both, selected from Labor Studies 191A, 194A, 194B, 195A, 195B, 199, or an approved internship through the Center for Community Learning.

Policies

Preparation for the Major
Students may petition, prior to enrollment in the course, to apply other topical lower-division courses with substantial labor-related content.

The Major
Students may petition, prior to enrollment in the course, to apply other topical upper-division courses with substantial labor-related content.

Each major course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

Undergraduate Minor

Labor Studies Minor
The Labor Studies minor augments study in a traditional field. Students are required to complete both a departmental major and this minor. The faculty adviser certifies completion of the program.

Admission
To enter the minor, students must be in good academic standing, have a 2.5 grade-point average or better, have completed 45 units, and file a petition and meet with the faculty adviser and minor coordinator in 9244 Bunche Hall, 310-206-0812. Students are encouraged to meet early with the academic adviser to declare the minor and design a coherent program of coursework.

The Minor

Required Core Course (4 units): Labor Studies 101.


Policies
Students may petition, prior to enrollment in the course, to apply other topical courses with substantial labor-related studies content.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have a minimum grade of C (2.0) in each and an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Labor Studies

Lower-Division Courses
M1A-M1B-M1CW. Work, Labor, and Social Justice in U.S. (6-6-6) (Formerly numbered Labor and Workplace Studies M1A-M1B-M1CW) (Same as Clusters M24A-M24B-M24CW) Course M1A is enforced required course to M1B, which is enforced required to M1CW. Limited to first-year freshmen. Letter grading. M1A-M1B. Lecture, three hours; discussion, two hours. Exploration of ways in which work has been transformed over last century, impact of this transformation on working people, and role of labor movement as force for social justice. M1CW. Special Topics. Seminar, three hours. Enrollment limited to course M1B. Topics include labor law/history, gender, race, and workplace. Satisfies Writing II requirement.

10. Introduction to Labor and Workplace Studies. (8) (Formerly numbered Labor and Workplace Studies 10) Lecture, three hours; discussion, four hours. Introduction to the historical, social, and cultural dimensions of work and labor in the United States, with focus on major ideological trends and political debates and conflicts that have shaped workplace and labor relations. Intended for students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course).

M105. American Working Class Movements. (4) (Same as History M146B) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Major events and trends in the history of American working class from Colonial times to present, with emphasis on both organized and unorganized labor, history of Knights of Labor, AFL-CIO, and development of labor politics. P/NP or letter grading.

M108. Common Thread: Garment Workers Past, Present, Future. (4) (Same as Chicana/o and Central American Studies M128C and Gender Studies M169) Lecture, three hours. Study blends frameworks from economics, labor history, and ethnic studies to offer in-depth exploration of lives and experiences of garment industry workers from early 19th century to present. In contrast to traditional narratives, this course questions the taken-for-granted assumptions about work, including why some work is far more dangerous and degrading than those without, and how this understanding of work and value came to be common sense. Unpacking of these and other assumptions about work, value, and power, with focus on low-wage workers, their communities, and their place in contemporary society. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

98. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

98HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Described as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

97. Introduction to Labor Studies Research. (4) Seminar, three hours. Designed for freshmen/sophomores. Study of current topics and particular research methods in labor studies through readings and other assignments at introductory level. Consult Schedule of Classes for specific topics. Topics to be decided prior to the course and can be repeated for credit with topic change. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research) or other scholarly work, three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101. Introduction to Labor and Social Movements in Los Angeles. (4) (Formerly numbered Labor and Workplace Studies 101) Lecture, three hours; discussion, one hour. Students gain critical understanding of social justice, social movements, and workers and labor issues in context of global city of Los Angeles. In-depth examination of experience of workers and role of labor movement in Los Angeles, both historically and currently. Topics include changing organization of work in U.S. and reconfiguration of employment relationships; response of labor movement, historically and in present, to managerial initiatives; way in which organized labor has handled issues of class, race, ethnicity, gender, and immigration status; and challenges facing workers in 21st century and their institutional responses in Los Angeles. P/NP or letter grading.

M105. American Working Class Movements. (4) (Same as History M146B) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Major events and trends in the history of American working class from Colonial times to present, with emphasis on both organized and unorganized labor, history of Knights of Labor, AFL-CIO, and development of labor politics. P/NP or letter grading.

M108. Common Thread: Garment Workers Past, Present, Future. (4) (Same as Chicana/o and Central American Studies M128C and Gender Studies M169) Lecture, three hours. Study blends frameworks from economics, labor history, and ethnic studies to offer in-depth exploration of lives and experiences of garment industry workers from early 19th century to present. In contrast to traditional narratives, this course questions the taken-for-granted assumptions about work, including why some work is far more dangerous and degrading than those without, and how this understanding of work and value came to be common sense. Unpacking of these and other assumptions about work, value, and power, with focus on low-wage workers, their communities, and their place in contemporary society. P/NP or letter grading.

M144. African American Political Thought. (4) (Formerly numbered Labor and Workplace Studies M114C) (Same as African American Studies M114C and Political Science M130A) Lecture, three or four hours; discussion, one hour (when scheduled). Intensive introduction to African American political thought, with focus on major ideological trends and political philosophies as they have been applied and interpreted by African Americans. Debates and conflicts in black political thought, historical contest of African American social movements, and relationship between black political thought and major trends in Western thought. P/NP or letter grading.
M115. We Gone Be Alright: Developing Next Gener-
ating relevance to current issues. How movement par-
ter, political and social vision, and social and polit-
tical relevance to current issues. How movement par-
ticipated linked struggle for change with own personal
turn and growth. P/NP or letter grading.

M116. Asian American Social Movements. (4) Former-
ly numbered Labor and Workplace Studies M116.) (Same as American Studies M116.) Lecture, three hours. Designed for juniors/seniors. Examination of several
dimensions of Asian American social move-
ments, including grassroots, mass movement char-
acter, political and social context, and successful nego-
tiation in securing agreements between indepen-
dent parties. Theory and practice that underlies suc-
cessful negotiation. Experiential course in which
students learn broad array of negotiation skills, in-
cluding identifying one’s own (and others’) communi-
cation style, identifying and incorporating components of successful negotiation, and resolving conflict
between parties. Letter grading.

M119. Asian American and Pacific Islander Labor
Issues. (4) Formerly numbered Labor and Work-
place Studies M119B.) (Same as American Studies M119B.) Lecture, three hours. Examination of historical
and contemporary labor issues in Asian and Pacific
Islander American communities, with emphasis on key
role that Asian American and Pacific Islander American students can play in supporting labor struggles of low-income
immigrants. P/NP or letter grading.

M121. Issues in Latina/Latino Poverty: Mexican and
Central American Voices from Los Angeles. (4) For-
merly numbered Labor and Workplace Studies M121.
(Same as Chicana/o and Central American Studies M121.) Lecture, four hours. Examination of key issues (work, housing, and
neighborhoods) in urban poverty, with particular focus on
Mexican and Central American immigrant populations
in Los Angeles. Exploration of major theoretical
models that explain urban poverty and application of
them in Los Angeles context while exploring differ-
ces between Mexican and Central American immi-
grants. Social conditions and forces that help us un-
derstand lives of poor people in comparative context while learning about explicit policies and practice
between Mexican and Central American immi-

M122. Planning Issues in Latina/Latino Communi-
ties: Preserving and Strengthening Community As-
sets in Mexican and Salvadoran Los Angeles. (4) For-
merly numbered Labor and Workplace Studies M122.) (Same as Chicana/o and Central American Studies M122 and Urban Planning M171.) Lecture, four hours. How community and economic develop-
ment interact, role of assets in community develop-
ment, and unique synergies and pitfalls that enable or
disable community development to their poten-
tial. How to strengthen and how to preserve commu-
nity resources in Pico-Union neighborhood in Los
Angeles. Research entails historical analysis, reviews, in-
terviews, design and drafting, data collection and analy-

M123. Chicano/Latino Community Formation: Crimi-
nal Penalities and Gangs. (4) Formerly numbered
Labor and Workplace Studies M123.) (Same as Chicana/o and Central American Studies M119.) Lecture, four hours. Analysis of historical for-
arms, Chicano/Latin community and its
context in 20th century, with focus on labor, immigration, economic structures, electoral politics, and interna-
tional dimensions. Letter grading.

M124. Future of Work in Decarcerated California. (4)
(Same as African American Studies CM166B.) Semi-
inar, three hours. Limited to students in Community
Scholars program. Exploration of scope of emplo-
ment and nature of jobs that are attached to current
system of mass incarceration in California, with focus
on Los Angeles County. Study of history and evolution
of carceral system and its relationship to oppression of Black workers and the Black community. Explora-
tion of history of employment discrimination against
Black workers and how successful demand for unionized public sector work can evolve as anti-discrimination remedy. Investigation of work, especially by people of color, in existing carceral
regimes, and its impact on individual worker wellness
and community well-being. Examination of tension
between those who desire to decarcerate Cali-
ifornia and those to prevent downward mobility of
workers of color recruited by state to carry out failed
policies of war on drugs. P/NP or letter grading.

M166B. Future of Work in Decarcerated California II:
Applied Research and Policy Analysis for Imple-
mentation of Justice Transformation. (4) (Same as
African American Studies CM166B.) Seminar, three
hours. Limited to students in Community Scholars
program. Requires: course M124. Second course in
four-quarter participatory action research program that partners students with community-based change
agents, community-based organizations, and stud-
ents that focus on women and workers new to the
field who made up of undergraduate and graduate stu-
dents and community members. Students contribute
to development of collective policy platform that cen-
ters recommendations of formerly employed and for-
mormer incarcerated people in broader community vi-
sion for transitioning to decarcerated workforce. P/NP
or letter grading.

M125. U.S./Mexico Relations. (4) Formerly numbered
Labor and Workplace Studies M125.) (Same as Chi-
cana/o and Central American Studies M125.) Lecture,
four hours. Examination of complex relations in rela-
tionship between Mexico and U.S., using political
economic framework to explain economic integra-
tion between advanced industrial economies and
developing countries. P/NP or letter grading.

M126. Farm Worker Transnational Struggle. (4) For-
merly numbered Labor and Workplace Studies 126.
Lecture, three hours; discussion, one hour. Focus on
historical and contemporary issues farm workers face
in restructured economy, and class, racial, and gender
dynamics that shape their work experiences and eco-
nomic and political opportunities in society at large.
Study also covers gender, race, and class conflicts in
workplace and during collective struggles for equality in
contemporary political and cultural landscape and repro-
cultural legacy of farm workers’ struggle in U.S. and
its long-lasting impact on labor movement and immi-
grant workers’ social justice movements. Special focus
on assessing role of farm workers as labor and civil rights movements that have in pro-
moting multiracial and multiracial campaigns for
worker and economic justice from cross-border perspective. Students develop theoretical and prac-
tical understanding of farm workers’ experiences
across U.S.-Mexico border, and of legacy of United Farm Workers and other farm worker unions. P/NP
or letter grading.

M127. Farmworker Movements, Social Justice, and
United Farm Workers Legacy. (4) Formerly num-
bered Labor and Workplace Studies M127.) (Same as Chi-
cana/o and Central American Studies M127.) Lec-
ture, four hours; discussion, one hour. Historical, His-
torical and social context of farmworker organizing, in-
cluding its multiracial origins and its influence on fight
for equality of working women. Specific focus on or-
ganizing Jewish Farm Workers, Chicano Movement, and
their relationship to AFL-CIO, other unions, and their influence on Chicano Movement. Letter grading.

M128. Race, Gender, and U.S. Labor. (4) Formerly
numbered Labor and Workplace Studies M128.)
(Same as Chicana/o and Central American Studies M128.) Lecture, four hours. Designed for juniors/se-
niors. Introduction to history and organization of labor
movement in U.S. and North America. Discussion of
race, class, and gender issues raised within move-
ment, and various strategies for social change and
economic equity pursued through organized labor and
other means. Letter grading.

M129. Community-Engaged Research Methods. (4)
(Same as Chicana/o and Central American Studies
M129 and Public Affairs M117C.) Lecture, four hours.
Students are trained in designing, drafting, piloting,
and administering new survey focused on transitions
to adulthood. Students work closely with labor and
community partners serving Latinx, Asian Americans
and Pacific Islanders, Black, and Indigenous youth
and low-wage workers, this survey gathers data on
workplace development, education, health, mental health, and civic engagement of young people residing in Black, Indigenous, and people of color communities. Students are exposed to historical
discussions of race, class, and gender issues raised in
contemporary life, and critical quantitative science.
Includes testing questions on racial identity and atti-
dudes, gender identity, workforce development, labor
rights, healing and well-being. P/NP or letter grading.

M134XP. Engaging Immigrants and Their Families. (5)
(formerly numbered M134SL.) (Same as Chicana/o and
Central American Studies M134XP.) Lecture, two hours;
discussion, two hours; field placement, two hours. Survey and exploration of immigrant labor in Los Angeles with emphasis on their role acting in part to buffer, settle, and incorporate immigrants in
daily life. Focus on civil society to explore multiple
forms of interventions and impacts that take place in multiple communities across Los Angeles basin. Ser-
vice learning partnerships focus on organizations ad-
dressing immigration concerns. Letter grading.

M136. Working Families and Educational Inequal-
ities in Urban Schools. (4) Formerly numbered Labor and
Workplace Studies M136.) (Same as Education M136.) Seminar, three hours; fieldwork, five hours. Ex-
ploration of complex relationship between working-
class communities and educational outcomes in Amer-
ican urban schools. Drawing on multiple disciplinary frameworks that address issues of race, ethnicity, and
immigration, schools viewed as sites where inequali-
ties are produced and resisted. Review of history of
exclusionary treatment and divergent conceptual
frames that educational researchers have used to un-
derstand notion of inequality, access to quality public education, and how race, ethnicity, and class affect
school experiences for working-class and poor com-
munities. Look inside schools through community ser-
vice learning opportunity to examine systems, struc-
tures, and processes that sustain and repro-
duce inequality and policies that intend to remedy
educational inequalities in urban schools. Opportunity
to investigate issues of working-class families and in-
education policies they relate to their communities and experiences. P/NP or letter grading.

140. Working It: Women, Work, and Family. (4) For-
merly numbered Labor and Workplace Studies 140.)
Lecture, three hours; discussion, one hour. Examina-
tion of working women in U.S. history from 19th-cen-
tury midwives to 21st-century sex workers through film, oral history, and traditional forms of scholarship.
Exploration of personal and work life of women from vari-
ous intersections of working class, race, ethnicity, sexuality, and immigration status with focus on systems that have shaped workplace experi-
ences for women over time, including gender discrimi-
nation, sexual harassment, immigration, and repro-
cultural context of social justice movements. Special focus on assets and challenges of women in the workforce, and rights. Letter grading.

M143. Class and Gender in Care Work. (4) (Same as
Asian American Studies M162, Chicana/o and Central
American Studies M128B, and Gender Studies
M140C.) Lecture, three hours; discussion, one hour. Ex-
ploration of how gender, race, class, and citizen-
ship status shape domestic labor in U.S. Examination
of domestic worker experiences through film, fiction,
and traditional scholarship. Investigation of why do-
estic work is in high demand, who employs do-
mestic workers, and why immigrants and women of color make up large percentage of this workforce. Explo-ration of how domestic workers navigate pay and working conditions, and how they build community and family networks in shadows of their privileged em-ployers. P/NP or letter grading.

M144. Women’s Movement in Latin America. (4) (Formerly numbered Labor and Workplace Studies M144.) (Same as Central American and Latin American Studies M144 and Gender Studies M144.) Lecture, four hours. Course on women’s movements and femini-sm in Latin America and Caribbean to examine di-versity in labor, family, political, and cultural sites; how and why women have launched political and gender struggles. Discussion of forms of feminism and women’s con-sciousness that have emerged out of indigenous rights movements, environmental struggles, and labor movements, Christian-based communities, peasant and rural organizing, and new social movements that are concerned with race, sexuality, feminism, and human rights. Overview of movements in diversity of political systems as well as national and transnational arenas, students gain un-derstanding of historical contexts and political condi-tions that give rise to women’s resistance, as well as major debates in field of study. P/NP or letter grading.

M149. Media: Gender, Race, Class, and Sexuality. (5) (Formerly numbered Labor and Workplace Studies M149.) Same as Communication M149 and Gender Studies M149.) Lecture, three hours; activities. Limited to junior/senior Communication and Gender Studies majors and Labor Studies minors. Examina-tion of manner in which media culture influences people to perceive various dominant and dominated and/or colonized groups of people. Ways in which women, gay, lesbian, bisexual, transgendered, racial, and ethnic marginalized peoples, class relations, and other subaltern or subordinated groups are presented and are often misrepresented in media. Investigation and em-ployment of practical applications of communications and feminist theories for understanding ideological na-ture of social processes of representation—through use of media, guest presentations, lectures, class discussions, and readings. Introduction to theory and practice of cultural studies. Letter grading.

152. Work, Social Justice, and Arts. (4) (Formerly numbered Labor and Workplace Studies 152.) Lecture, three hours; field visit. Analysis of how art (in cartoons, poster art, murals, photography, film, visual art, theater, performance, dance, and music) has been in-fluential in popular movements for economic, racial, and social justice by artists, workers’ groups, Amer-ican labor movement, and other social movements such as civil rights, immigrants rights, and Black Lives Matter. Reflection on different dis-courses of art-making that have been used in specific historical struggles (1920s, Great Depression of 1930s, 1990s). Examination of what Angeles has to offer in terms of art, labor, and social justice movement art-making. Students visit labor, so-cial justice, or arts organization in L.A. that is focused on themes of work, labor, and art. Exploration of spect-rum of art forms (dance, music, sculpture, theater, vi-sual art, film, museum curation) that have been pro-duced and reproduced as reflections of work, labor, and social justice struggles in U.S. P/NP or letter grading.

153. Stories of Struggle: Work, Class, and Narrative in Contemporary America. (4) (Formerly numbered Labor and Workplace Studies 153.) Lecture, three hours. Overview of contemporary working narratives. Investigation of how working-class Americans from di-verser backgrounds have narrated their struggles with poverty, education, work, parenthood, bodily suffer-ing, and what readers can learn from these struggles as students, writers, and activ-ists. Emphasis on 21st-century narratives. Analysis of variety of genres, including poetry, lyrics, short stories, journalism, memoirs, letters, and autobiogra-phy, for how they portray working class people and what they offer working class movement culture. Consideration of class as intersectional context of experience of gender, and sexuality. Students read narratives about class and work, and contribute to body of working class literature through memoir, fiction, poetry, or journalism. P/NP or letter grading.

154. Storytelling for Activists and Organizers. (4) Lecture, three hours; field visit. Emphasis on memoir, or in boardroom; storytelling is one of earliest and most intrinsic forms of human expression; powerful tool for human connection. Through stories, people organize; stories become documents, and a communal knowledge; build empathy and trust; and work together to forge more just society. Pushing be-yond transactional storytelling model, story asks how stories have emerged and how stories have been used historically—allow people to connect with one another. Premise is that stories are basis of community soli-darity. Story also asks how labor activists and orga-nizers can use service of story to build social justice, and equitable and diverse society. Intro-duction to elements of effective storytelling. Analysis and investigation of stories in contemporary American life. Students practice telling stories in collaborative, workshop-style environment. P/NP or letter grading.

M156. Sociology of Race and Labor. (4) (Formerly numbered Labor and Workplace Studies M156.) (Same as African American Studies M156 and Sociology M156.) Lecture, three hours; discussion, one hour. Limited to juniors/seniors. Exploration of relation-ship between race/ethnicity, employment, and U.S. labor movement. Analysis of underlying racial di-versities and their representation historically. Consideration of circumstances under which workers and unions have excluded people of color from jobs and unions, as well as circumstances under which white workers and unions have organized workers of color into unions in efforts to improve their wages and working conditions. Impact of globalization on these dynamics. P/NP or letter grading.

M164A. Immigration, and Higher Educa-tion. (4) (Formerly numbered Labor and Workplace Studies M164A.) (Same as African American Studies M166A and Chicana/o and Central American Studies M166A.) Lecture, three hours. New immigrant rights movement, with particular atten-tion to labor and higher education. Overview of history of immigrant rights movement and examination of de-velopment of coalition efforts between labor move-ment and immigrant rights movement nationally and locally. Special focus on issue of immigrant students in higher education, challenges facing undocumented immigrant students, and legislative and policy issues that have emerged. Students conduct oral histories, family histories, research on immigration and immi-grant rights, write poetry and spoken word about immi-gration. Students are required to conduct student publication on immigrant students in higher education. P/NP or letter grading.

M166B. Research on Immigration Rights, Labor, and Higher Education. (4) (Formerly numbered Labor and Workplace Studies M166B.) (Same as Asian American Studies M166B and Chicana/o and Central American Studies M156B.) Seminar, two hours. Requi-site: course M166A. Expansion of research conducted by students in course M166A involving oral histories, research on immigration/labor/higher education, and evaluation of legislation and legal issues impacting undocumented students. Letter grading.

M166C. Research on Immigrant Students and High-er Education. (4) (Formerly numbered Labor and Workplace Studies M166C.) (Same as Asian American Studies M166C and Chicana/o and Central American Studies M156C.) Seminar, two hours. Requi-site: course M166A. Expansion of research conducted by students in course M166A involving oral histories, research on immigration/labor/higher education, and evaluation of legislation and legal issues impacting undocumented students. Letter grading.


M168. Stories of Struggle, Poverty, and Class. (4) (Formerly numbered Labor and Workplace Studies M168.) Lecture, three hours. With immigration and rights of migrants at center of current political and legal debates throughout world, study offers critical in-troduction to inevitable evolution of law and policy re-sulting from—and in reaction to—movement of immi-grants into U.S. Explores analytical tools and methods with which to engage current political debates about immigration. Using historical and modern texts, while incorporating elements of art, popular culture, and storytelling, study encourages discussion, de-bate, and analysis about immigrants’ role in develop-ment of rights and modern political debates about im-migration. Exploration of themes of inclusion, exclu-sion, integration, and multiculturalism. Students describe shortcomings of status-quo policies while also imaging and prescribing arguments about where law can and should go. P/NP or letter grading.

M169. Improving Worker Health: Social Movements, Activism, and Public Health. (4) (Formerly numbered Labor and Workplace Studies M169.) (Same as Community Health Sciences CM170.) Lecture, three hours; fieldwork, two hours. Examination of intersection between workplace and public health, analysis of social causes of health disparities, investi-gation of historical trends and social movements, in-terpretation of current policy debates, and develop-ment of innovative interventions. P/NP or letter grading.

M171. Labor and Economic Development. (4) (Formerly numbered Labor and Workplace Studies M171.) (Formerly numbered Labor and Workplace Studies M171.) Lecture, three hours; discussion, one hour. Overview of new immigrant rights movement, with particular atten-tion to labor and higher education. Overview of history of immigrant rights movement and examination of de-velopment of coalition efforts between labor move-ment and immigrant rights movement nationally and locally. Special focus on issue of immigrant students in higher education, challenges facing undocumented immigrant students, and legislative and policy issues that have emerged. Students conduct oral histories, family histories, research on immigration and immi-grant rights, write poetry and spoken word about immi-gration. Students are required to conduct student publication on immigrant students in higher education. P/NP or letter grading.

M173. Nonviolence and Social Movements. (4) (Formerly numbered Labor and Workplace Studies M173.) (Formerly numbered Labor and Workplace Studies M173.) Seminar, three hours; discussion, one hour. Overview of nonvio-lence and its impact on social movements both histori-cally and in its present context in contemporary so-ciety, featuring lectures, conversations, films, read-ings, and guest speakers. Exploration of some historic contributions of civil rights struggles and role of nonviolent struggle in labor movement. Exploration of particular lessons of nonviolent movements as they impact social change organizing in Los Angeles. P/NP or letter grading.

M174. Labor and Employment Law. (4) (Formerly numbered Labor and Workplace Studies 174.) Lecture, three hours. With immigration and rights of migrants at center of current political and legal debates throughout world, study offers critical in-troduction to inevitable evolution of law and policy re-sulting from—and in reaction to—movement of immi-grants into U.S. Explores analytical tools and methods with which to engage current political debates about immigration. Using historical and modern texts, while incorporating elements of art, popular culture, and storytelling, study encourages discussion, de-bate, and analysis about immigrants’ role in develop-ment of rights and modern political debates about im-migration. Exploration of themes of inclusion, exclu-sion, integration, and multiculturalism. Students describe shortcomings of status-quo policies while also imaging and prescribing arguments about where law can and should go. P/NP or letter grading.
tation; agitation as force for change in existing institutions and policies in democratic society. Intensive study of selected agitational movements and techniques and content of their communications. Letter grading. M176. Visual Communication and Social Advocacy. (4) (Formerly numbered Labor and Workplace Studies M176.) (Same as Communication M176.) Lecture, four hours, may be repeated for credit. Focus on understanding and practicing the visual communication techniques and current issues in communicating major social and political topics. Cartoons, posters, murals, and documentary photography have had powerful world impact. Survey of all forms of visual communication as features of modern mass media. Letter grading.

177. Spirituality, Mindfulness, Self-Care, and Social Justice. (4) (Formerly numbered Labor and Workplace Studies 177.) Seminar, three hours. Exploration of role of spirituality in organizing and activist work; integration of spirituality into activist work; and engagement with activist communities at large. Introduction to selected agitational movements and techniques; agitation as force for change in existing institutions and policies in democratic society. Intensive study of selected agitational movements and techniques and content of their communications. Letter grading.

178A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus and contract with faculty mentor. May not be repeated. Letter grading.


178C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor and collaborator to develop a research project. Focus on current topic affecting Angelinos and neighboring communities. Key outcomes may include production of policy reports, popular education events, public forum, materials for LA Labor Center and collaborative partners. Focus on enabling policy makers and other change agents. P/NP or letter grading.

179A. Neoliberalism, Social Justice, and Community Organizing. (4) (Formerly numbered Labor and Workplace Studies 179A.) Lecture, three hours. Study of intersection of neoliberalism, democracy, and rise of social justice and social movements in U.S. Theoretical depth, theoretically rigorous, and empirically-based understanding of dynamics that have produced specific forms of crisis that envelopes contemporary politics. Focus on understanding and explaining development and current structures of neoliberalism as both ideological frame and form of governance. Examination of some of main works on democratic theory and their relationship to current social justice that demonstrate how specific patterns of development of neoliberalism in U.S. since 1980 has undermined democratic governance and produced conditions that have deepened inequality and undermined democracy. Examination of emergent forms of social movements and different models of popular sovereignty through politics of social movements as mechanisms that have been undermined in current period. Focus on those elements being undermined in current period. Focus on those efforts to promote social justice as basis for inclusive and responsive form of popular sovereignty through politics of social movements and community organizing. Study of various forms of social movements and different models of and approaches to community organizing and their relationship to democratic governance. P/NP or letter grading.

M180. Southern California Regional Economy. (4) (Formerly numbered Labor and Workplace Studies M180.) (Same as Urban Planning CM137.) Lecture, three hours. Introduction to regional economy, with emphasis on economic sectors, labor market composition, and review of conflicting portrayals depicting dynamics of region. Two all-day bus tours of key economic regions and guest lectures by regional experts. Letter grading.

181. Law, Activism, and Social Science Research Principles, Methods, and Practices. (4) (Formerly numbered Labor and Workplace Studies 181.) Lecture, three hours. Introduction to basic social science research methods. Through comparison of lecture, key readings, and participation in hands-on research project, students develop understanding of critical debates regarding role of research in socioeconomic context that impacts workers and their organizations and communities at large. Introduction to several research method techniques that are highly effective in producing sound and rigorous studies about and for labor movement, including important data that can be used for political activism. Special emphasis given to understanding research that has supported different labor movements. P/NP or letter grading.

182. Oral History for Social Change. (4) (Formerly numbered Labor and Workplace Studies M182.) Lecture, three hours. Introduction to field of oral history and its role in social movements. Students receive hands-on experience through independent fieldwork where they design, execute, and process oral history research project on contemporary topics such as immigration, work, housing, incarceration, and social movements. Through reading and discussion students learn oral history methodologies and ethical approaches to working with human subjects. Emphasis on innovative uses of oral history interviews that bring silenced voices to wide public audience for social justice. Students are responsible for interviewing and processing required. P/NP or letter grading.

187. Special Courses in Labor and Workplace Studies. (4) (Formerly numbered Labor and Workplace Studies 187.) Lecture, three hours; discussion, one hour. Program-sponsored experimental or temporary courses, such as those taught by visiting faculty members. May be repeated for credit. P/NP or letter grading.

188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus and contract with faculty mentor. May not be repeated. Letter grading.


189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to seminar course and dedicated to topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit for students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as an upper-division independent research course. In- dividual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

M190A. Introduction to Community-Engaged Research. (4) (Formerly numbered Labor and Workplace Studies M190A.) (Same as Community Engagement and Social Change M190A.) Seminar, three hours. Enroll by consent of instructor. Designed for students participating in Astin Community Scholars Program. Students learn from faculty, community stakeholders, graduate students, and key academic experts about organizing models, best practices, and changing landscape in chosen topic. Provides students with opportunity to work with leaders from key community and labor organizations across six-month dynamic participatory research project. Focus on current topic affecting Angelinos and neighboring communities. Key outcomes may include production of policy reports, popular education events, public forum, materials for LA Labor Center and collaborative partners. Focus on enabling policy makers and other change agents. P/NP or letter grading.

191A. Labor Studies: Research Principles, Methods, and Practices. (4) (Formerly numbered 191.) Seminar, three hours. First part of Labor Studies capstone senior research project series with focus on fundamentals of social science research methods. Through lectures, key readings, and in-class exercises, students develop understanding of critical debates regarding role of research within socioeconomic and political contexts that impact organizations, and communities at large. Overview of various research methods and techniques, literature review, data collection, analysis, and final paper. Focus on workers, labor and immigrant rights movements, policy initiatives, and/or political action in Los Angeles as research lens. P/NP or letter grading.

191B. Labor Studies: Research in Action. (4) Seminar, three hours; fieldwork, five hours. Requisite: course 191A. Second part of Labor Studies capstone senior research project series with focus on research methods in action. Through lectures, key readings, in-class exercises, and fieldwork, students develop understanding of capstone research project, including re- fined research question(s), advanced literature review, research design and plan, data collection and analysis, and final paper outline. Continued development of applied qualitative and quantitative research skills with focus on workers, labor and immigrant rights movements, policy initiatives, and/or political action in Los Angeles as research lens. P/NP or letter grading.

194A. Research Group Seminars: Labor Summer Research Program. (4) (Formerly numbered Labor and Workplace Studies 194A.) Seminar, three hours. Enforced corequisite: course 194C. Designed for undergraduate students who are part of Labor Summer Research Program. Focus on research methods used by union researchers and scholars engaged in labor relations and workplace studies. Through combination of lectures, key readings, and active participation in hands-on research fieldwork, development of understanding of critical research with community residents and organizations, our responsibilities when conducting research in historically disenfranchised communities, and relations-
debates regarding role of research and socioeconomic contexts that impact low-wage workers and their families. May be repeated for credit. Offered in summer only. P/NP or letter grading.

194B. Research Group Seminars: Labor and Workplace Studies. (4) Formerly numbered Labor and Workplace Studies 194B. Seminar, three hours. Designed for undergraduate students who are part of research group. Discussion of research methods and current literature in field of labor studies or of research of faculty members and/or students. May be repeated for credit. P/NP or letter grading.

194C. Field Research Group Seminar. (4) Seminar, one hour; fieldwork, 15 hours. Designed for undergraduate students who are part of Labor Summer Research program. Offers opportunity for immersion in applied research in field of labor studies. Field research and analysis contributing to research project. Students learn how to conduct surveys, analyze data, and contribute their analysis to research brief. Students develop understanding of critical debates regarding role of research and supervision of regular faculty member required. May be repeated for credit. Offered in summer only. P/NP or letter grading.

195A. Community or Corporate Internships in Labor and Workplace Studies. (4) Formerly numbered Labor and Workplace Studies 195A. Tutorial, one hour; fieldwork, 15 hours. Enforced corequisite: course 194A. Limited to juniors/seniors. Internship in supervised setting in community agency, labor union, or other organization concerned with work and employment issues. Placements to be arranged by instructor. Students meet on regular basis with instructor and provide periodic written reports on their experience. May be repeated for credit. Individual contract with supervising faculty member required. Offered in summer only. P/NP or letter grading.

195B. Community or Corporate Internships in Labor and Workplace Studies. (2 to 5) (Formerly numbered Labor and Workplace Studies 195B.) Tutorial, to be arranged; internship, up to 15 hours. Limited to juniors/seniors. Internship in supervised setting in community agency, labor union, or other organization concerned with work and employment issues. Placements to be arranged by instructor. Students meet on regular basis with instructor and provide periodic written reports on their experience. May be repeated for credit. Individual contract with supervising faculty member required. P/NP or letter grading.

195CE. Worker and Community Organizing for Social Change: Research Justice Internship. (4) Tutorial, to be arranged; fieldwork, eight to 10 hours. Students work intensively with community organization on structured activity that supports organization’s mission and student’s intellectual development. Students meet regularly with graduate student instructor to reflect on internship experience, assigned readings, and reflective writing assignments. Students complete final paper that links research and experience. May be repeated for credit with consent of Center for Community Engagement. No more than 8 units may be applied toward major; units applied must be taken for letter grade. Letter grading.

199. Directed Research in Labor and Workplace Studies. (2 to 4) (Formerly numbered Labor and Workplace Studies 199.) Tutorial, one hour. Limited to juniors/seniors. Supervised individual research under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Course

375. Teaching Apprentice Practicum. (1 to 4) (Formerly numbered Labor and Workplace Studies 375.) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

LATIN AMERICAN STUDIES

Interdepartmental Program
College of Letters and Science
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Los Angeles, CA 90095-1487

Latin American Studies
310-206-6571

Program e-mail
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Bonnie Taub, PhD, Co-Chair

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Adriana J. Bergero, PhD (Spanish and Portuguese)
Charlene Villaseñor Black, PhD (Art History, Chicana/o and Central American Studies)
Verónica Cortínez, PhD (Spanish and Portuguese)
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David E. Hayes-Bautista, PhD (Health Policy and Management, Medicine-General Internal)
Susanna B. Hecht, PhD (Environment and Sustainability, Geography, Urban Planning)
Rubén Hernández-León, PhD (Sociology)
Elfrain Kristal, PhD (Comparative Literature, Spanish and Portuguese)
Steven J. Loza, PhD (Ethnomusicology)
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Cecilia Menijar, PhD (Sociology)
José Luiz Passos, PhD (Spanish and Portuguese)
Fernando Pérez-Montesinos, PhD (History)
William R. Summerhill, PhD (History)
Bonnie Taub, PhD (Anthropology, Community Health Sciences)
Kevin B. Terraciano, PhD (History)
Maarten H. Van Delden, PhD (Spanish and Portuguese)

Overview
For more than 60 years, UCLA has been a leader among U.S. universities in teaching and research on Latin America. The Master of Arts (MA) program in Latin American Studies offers graduate students the unique opportunity to pursue interdisciplinary research. Students design their own programs by choosing courses from various fields of study that focus on Latin America. Students can work with leaders in their chosen fields of study. The program features more than 100 affiliated faculty from multiple departments in the humanities, social sciences, fine arts, and several professional schools.

Undergraduate Study
Information on the undergraduate program in this discipline, which offers a major and a minor in Latin American Studies, can be found in the International and Area Studies section.

Graduate Majors
Latin American Studies MA
Students are able to complete the degree in one to two years, and can choose to write a final thesis or submit three revised seminar papers in partial satisfaction of the degree.

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Articulated Degree Programs
Articulated degree programs permit no credit overlap; students must complete degree requirements separately for each degree.

• Latin American Studies MA/Master of Education
• Latin American Studies MA/Master of Library and Information Science
• Latin American Studies MA/Master of Public Health

Concurrent Degree Programs
Concurrent degree programs allow students to reduce the number of courses required for two degrees, since some courses may apply to both degrees.

• Latin American Studies MA/Master of Business Administration
• Latin American Studies MA/Master of Urban and Regional Planning

Latin American Studies
Graduate Courses

205. Latin Americanist Scholarship. (4) Lecture, three hours. Panoramic introduction to methods and issues in various disciplines that study Latin America, with guest lecturers from various fields. (Latin American Studies core course.)

250B. Interdisciplinary Seminar: Latin American Studies. (4) Seminar, three hours. Problem-oriented seminar on critical areas stressed in University’s cooperative programs in Latin America.

250C. Interdisciplinary Topics in Latin American Studies. (4) Reading knowledge of Spanish or Portuguese normally required. Seminar devoted to selected topics of an interdisciplinary nature.

M262. HIV/AIDS and Culture in Latin America. (4)
(Same as Community Health Sciences M250.) Seminar, three hours. Exploration of cultural, political, and public health context for people living with and at risk for HIV/AIDS and their families in Latin America. Public health aspects, including epidemiology, comorbidity concerns and community interventions, medical anthropological study of experience of those impacted, and grassroots responses, as well as political/economic context addressing poverty and structural violence. Letter grading.

M264. Latin America: Traditional Medicine, Shamanism, and Folk Illness. (4) (Same as Anthropology M233Q and Community Health Sciences M264.) Lecture, three hours. Recommended preparation: Community Health Sciences 132, bilingual English/Spanish skills, Examination of role of traditional medicine and shamanism in Latin America and exploration of how indigenous and mestizo groups diagnose and treat folk illness and Western-defined diseases with variety of health-seeking methods. Examination of art, music, and ritual and case examples of religion and healing practices via lecture, film, and audiotape. Letter grading.

M268A-M268B. Seminars: Recent Latin American History. (4) (Same as History M268A-M268B) Seminar, three hours. Course M268A is requisite to M268B. Reading knowledge of Spanish and Portuguese normally required. Seminar devoted to selected topics of interdisciplinary nature. In Progress (M268A) and letter (M268B) grading.

291A-291B. Variable Topics in Latin American Studies. (4-4) Seminar, three hours. Selected topics on Latin America. May be repeated for credit with topic change. S/U or letter grading.

501. Cooperative Program. (2 to 8) Preparation: consent of UCLA graduate adviser and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.

596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. May be repeated, but only 4 units may be applied toward the minimum graduate course requirement. S/U or letter grading.

597. Preparation for MA Comprehensive Examination. (4) Tutorial, to be arranged. Ordinarily taken only during term in which student is being examined. S/U grading.

598. Research and Preparation of MA Thesis. (4) Tutorial, to be arranged. Only 4 units may be applied toward minimum graduate course requirement. S/U grading.

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**Law School**

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**Law**

310-825-4841

**Admissions e-mail**

Russell Korobkin, JD, **Interim Dean**

**Faculty Roster**

**Professors**

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E. Tendayi Achiume, JD (Alicia Miriana Professor of Law)
Iman Anabtawi, JD, MA

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**Stephan M. Bainbridge, JD, MS** *(William D. Warren Professor of Law)*
LaToya J. Baldwin Clark, JD, MA, PhD, Acting
Steven A. Bank, JD (Paul Hastings Endowed Professor of Business Law)
Stuart A. Banner, JD (Norman Abrams Endowed Professor of Law)

**Mario Biagioli, MFA, MA, PhD**

**William C. Boyd, JD, MA, PhD** (Michael J. Klein Professor of Law)

**Taimie L. Bryant, JD, MA, PhD**

**Daniel J. Bussel, JD**

**Devon W. Carbado, JD** (Honorable Harry Pregerson Endowed Professor of Law)

**Ann E. Carlson, JD** (Shirley Shapiro Professor of Environmental Law)

**Kimberly A. Clausing, MA, PhD** (Eric M. Zolt Professor of Tax Law and Policy)

**Beth A. Crogan, JD**

**Kimberle W. Crenshaw, JD, LLM** (Promise Institute Professor of Human Rights)

**Scott L. Cummings, JD** (Robert Hensignon Endowed Professor of Legal Ethics)

**Joshua F. Dienstaug, MA, PhD (Shapiro Family Endowed Professor of Modern Political Theory)**

**Sharon Dolovich, JD**

**Ingrid V. Eagly, JD**

**Blake E.B. Emerson, JD, MA, MPhil, PhD**

**Joseph R. Fishkin, JD, MPhil, DPhil**

**Cary C. Franklin, JD, MSI, DPhil (McDonald/Wright Professor of Law)**

**Meirav Furth-Matzkin, LLM, SJD, Acting**

**Fanna Gamal, JD, Acting**

**Stephen A. Gardbaum, JD, CPE, MSc, PhD**

**Dana A. Gross, JD**

**Cheryl I. Harris, JD** (Rosalinde and Arthur Gilbert Foundation Endowed Professor of Civil Rights and Civil Liberties)

**Richard L. Hasen, JD, MA, PhD**

**Barbara Herman, MA, PhD (Gloria and Paul Griffin Professor of Philosophy)**

**Jill R. Horwitz, JD, MA, PhD** (David Sanders Professor of Law and Medicine)

**Leslie N. Johns, JD, MA, MIS, Acting**

**Jenny Kang, JD**

**Sung Hui Kim, JD, MA**

**Russell Korobkin, JD** (Richard C. Maxwell Professor of Law)

**Maximo Langer, SJD, LLB (David G. Price and Dallas P. Price Professor of Law)**

**Douglas G. Lichtman, JD**

**Aaron M. Littman, JD, MPhil, Acting**

**Timothy F. Malloy, JD** (Frank G. Wells Endowed Professor of Environmental Law)

**David W. Marcus, JD**

**Mark P. McKenna, JD**

**Jon D. Michaels, JD, MA**

**Hirosi Motomura, JD** (Susan Westerberg Prager Endowed Professor of Law)

**Neil W. Netanel, JD, JSD (Pete Kameron Endowed Professor of Law)**

**Jason S. Oh, JD (Lowell Milken Professor of Law)**

**James J. Park, JD**

**Edward A. Parson, MSc, PhD** (Dan and Rae Emmett Endowed Professor of Environmental Law)

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**Sunita Patel, JD, Acting**

**Mark A. Peterson, AM, PhD**

**Kal Raustiala, JD, PhD** (Promise Institute Professor of Comparative and International Law)

**Fernán Restrepo, JSD, LLB, MSc, LLM, PhD, Acting**

**Angela R. Riley, JD**

**James Salzman, JD, MSc**

**Richard H. Sander, JD, MA, PhD** (Jesse Dukeminier Professor of Law)

**Joanna C. Schwartz, JD**

**Andrew D. Selbst, JD, MEng, Acting**

**Seana Shiffrin, JD, DPhil (Pete Kameron Professor of Law and Social Justice)**

**Anna K. Spain Bradley, JD**

**Clyde S. Spillenger, JD, MA, MPhil**

**Kirk J. Stark, JD** (Barrall Family Endowed Professor of Tax Law)

**Richard H. Steinberg, JD, PhD (Jonathan D. Varat Endowed Professor of Law)**

**Rebecca Stone, JD, MPhil, DPhil**

**Xiyin Tang, JD, Acting**

**Neridah Thaxton, JD, MA, PhD**

**Lauren V. van Schilfgaarde, JD, Acting**

**Andrew Verstein, JD**

**John D. Villasenor, MS, PhD**

**Eugene Volokh, JD (Gary T. Schwartz Endowed Professor of Law)**

**Alex L. Wang, JD**

**Lindsay F. Wiley, JD, MPH**

**Adam D. Winkler, JD, MA (Connell Professor of Law)**

**Jonathan M. Zaslaff, JD, MA, MPhil, PhD**

**Noah D. Zatz, JD, MA**

**Professors Emeriti**

**Richard L. Abel, PhD, LLB, LL.D (Connell Professor Emeritus of Law)**

**Norman Abrams, JD**

**Alison G. Anderson, JD**

**Peter L. Arenella, JD**

**Michael R. Asimow, JD**

**Paul B. Bergman, JD**

**Gary L. Blasi, MA**

**Grace Ganz Blumberg, JD, LLM**

**Susan Fletcher French, JD**

**Carole E. Goldberg, JD (Jonathan D. Varat Endowed Professor Emerita of Law)**

**Robert D. Goldstein, JD, MEd**

**Mark F. Grady, JD**

**Kenneth W. Graham, Jr., JD**

**Kenneth N. Klue, JD**

**William A. Klein, LLB (Richard C. Maxwell Professor Emeritus of Law)**

**Christine A. Littleton, JD**

**Gerald P. Lopez, JD**

**Lynn M. LoPucki, JD, LLM (Security Pacific Bank Professor Emeritus)**

**Daniel H. Lowenstein, LLB**

**Henry W. McGee, Jr., JD, LLM**

**Albert J. Moore, JD**

**Stephen R. Munzer, JD**

**Grant S. Nelson, JD**

**Frances E. Olsen, JD, SJD**

**William D. Pettit, JD**

**Anna K. Spain Bradley, JD (Fearing Miller Professor Emerita of Law)**

**Katherine W.V. Stone, JD (Arjay and Frances Fearing Miller Professor Emerita of Law)**

**Samuel C. Thompson, JD, MA, LLM**
Overview
The UCLA School of Law is designed to produce lawyers who are well-prepared for the various private and public roles that are assigned to members of the legal profession. The school pioneered clinical teaching, is a leader in interdisciplinary research and training, and is at the forefront of efforts to link research to its effects on society and the legal profession. Students do not undertake a specific major but have the opportunity to enroll in a wide variety of courses dealing with various legal fields.

The law school is unique in that it also offers students an opportunity to specialize in six specific areas of law: business law and policy; critical race studies; international and comparative law; law and philosophy; media, entertainment, and technology law and policy; and public interest law and policy.

Graduate Study
The school offers a three-year curriculum leading to the Juris Doctor (JD) degree and three advanced degrees—Master of Laws (LLM), Master of Legal Studies (MLS), and Doctor of Juridical Science (SDJ).

Courses
The undergraduate degree courses offered by the School of Law are designed for undergraduate students only. For information about the legal curriculum of the School of Law, see the school website.

Graduate Majors
Doctor of Juridical Science
Information about the Juridical Science program, how to apply, and requirements is available on the school website.

Juris Doctor
Information about the Juris Doctor program, how to apply, and requirements is available on the school website.

Concurrent Degree Programs
Concurrent degree programs allow students to reduce the number of courses required for two degrees, since some courses may apply to both degrees.

Master of Legal Studies
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Articulated Degree Programs
Articulated degree programs permit no credit overlap; students must complete degree requirements separately for each degree.

• Master of Legal Studies/Doctor of Medicine

Law, Undergraduate
Lower-Division Courses
156. American Political Thought Seminar. (3) Seminar, nine hours. Examination of American political thought from founding to writings of Abraham Lincoln. Readings include Locke’s Second Treatise of Government, Declaration of Independence, Federalist numbers 10 and 51, and numerous writings and speeches of Lincoln, including extensive portions of Lincoln-Douglas debates. Emphasis on class discussion. Letter grading.

161. Consumer Bankruptcy Policy Seminar. (3) Seminar, 13 hours. Examination of consumer bankruptcy policy with one architect of 1978 Bankruptcy Code. Discussion of debt payment in ancient Babylon where spouses and siblings could be sold in slavery for nonpayment of relative’s debt. Examination of bankruptcy in U.S. history and analysis of heart of consumer bankruptcy policy, such as when debtors should be released from debts, what property debtors should keep, and how debtors can put together repayment plans. P/NP or letter grading.

Master of Legal Studies
173. Topics in American Constitutional History. (4) Lecture, three hours. Introduction to major themes, events, and cases in American constitutional history. U.S. Supreme Court decisions and other sources of constitutional meaning, including popular movements and expressions of constitutional principle from actors in other branches of federal government and in states. Emphasis on historical background and ideological context for particular constitutional controversies at various points in American history, with more formal analysis of particular decisions and competing methods of constitutional interpretation considered. Topics include origins of judicial review, debates over meaning of federalism in early republic, slavery and constitution, Reconstruction Amendments, laissez-faire constitutionalism, citizenship and empire, origins of civil liberties, New Deal constitutionalism, and pre-history of Brown versus Board of Education. P/NP or letter grading.

174. Seminar: Individual Rights Protected by U.S. Constitution. (3) Seminar, two hours. Limited to juniors/seniors. Breadth introduction to and examination of individual rights protected under Bill of Rights and 14th Amendment to U.S. Constitution, including freedom of speech and press, religious freedom, right to privacy (including procreative rights) and due process of law, constitutional protection against discrimination based on race and gender, and basic criminal procedure protections. Emphasis on principal Supreme Court cases establishing scope of those rights and their limits. Letter grading.

180. Special Topics in Law. (4) Lecture, four hours. Topics of special interest to undergraduate students. Specific topic to be announced each term depending on particular interest of instructors or students. May be repeated for credit. P/NP or letter grading.

182. Law and Popular Culture. (4) Lecture, four hours. Focus on interface between two important subjects—law and popular culture. Students view series of films or television shows related to law, lawyers, and legal system. Discussion of pop culture treatment of subjects such as adversary system, good and bad lawyers, female lawyers, lawyers from lesbian, gay, bisexual, and transgender community, minority lawyers, work life of lawyers, legal education, ethical issues, jury system, and criminal and civil justice, drawing on film theories and critical methods, to be conducted, followed by major presentation of student work to class and writing of major research paper. P/NP or letter grading.

183. Law and Order. (2) Lecture, two hours. Introduc-
tion to basic principles of criminal law. How to read and interpret judicial cases and provisions of penal code to learn how American criminal justice system works. Discussions structured to simulate experience of typical law school classroom. P/NP or letter grading.

184. Introduction to Legal Education. (4) Lecture, four hours. Preliminary introduction to legal pedagogy and overview of American legal system. Analysis of appellate and U.S. Supreme Court cases and legislative materials to develop foundational law school skills and become familiar with principles of both scholarly and practice-oriented legal analysis. Topics include introduction to case analysis, reading cases, exploring precedents, stare decisis, separation of powers, and statutory interpretation. P/NP or letter grading.

185. Corporate Mock Trial. (4) Lecture, four hours. Introduction to basic principles of business law, such as how law applies to various business entities, duties and liabilities of corporate officers and directors, and shareholder derivative suits. American legal system and how litigation progresses from filing of complaints through trial. Students participate in mock trial at end of course. P/NP or letter grading.

186. Law and Order. (4) Lecture, four hours. Introduc-
tion to basic principles of criminal law. How to read and interpret judicial cases and provisions of penal code to learn how American criminal justice system works. Discussions structured to simulate experience of typical law school classroom. P/NP or letter grading.

187A. Legal History Colloquium. (3) Seminar, two hours. Corequisite: course 193. Reading of scholarly papers prepared by school faculty members and other scholars in fields of legal history, economics, and political science. Preparation of critiques and discussion of major papers presented in seminar setting with author of papers. P/NP or letter grading.

187B. Politics and International Law Colloquium. (3) Seminar, two hours. Corequisite: course 193. Limited to College Honors students. Lectures on alternative theoretical approaches (including realism, institutionalism, and constructivism) to understand relationship between politics and international law. Weekly presentations on topics by 10 leading law and political science scholars from the U.S. and abroad. Reading of scholarly papers, preparation of critiques, and discussion of issues in seminar setting with authors of papers. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

191. Variable Topics Research Seminars: Law—California Legal History. (4) Seminar, two hours. Corequisite: course 193. Reading of scholarly research papers presented in colloquium series. Reading of legal cases and supplemental materials to provide legal framework for each colloquium paper presented in colloquium. Supervised by faculty member in charge of colloquium series. May be repeated for credit. P/NP or letter grading.

193. Journal Club Seminars: Law. (1) Seminar, one hour; discussion, two hours. Corequisite: course 187A. Adjunct course limited to undergraduate students taking law colloquium. Intensive review and follow-up of scholarly papers presented in colloquium series. Reading of legal cases and supplemental material to provide legal framework for each scholarly paper presented in colloquium. Supervised by faculty member in charge of colloquium series. May be repeated for credit. P/NP or letter grading.

199. Directed Research in Law. (1 to 6) Tutorial, three hours per week per unit. Limited to juniors/seniors. Supervised individual research under guidance of faculty mentor. Culminating scholarly paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

LESBIAN, GAY, BISEXUAL, TRANSGENDER, AND QUEER STUDIES

Interdisciplinary Minor
College of Letters and Science
350 Kaplan Hall
Box 957233
Los Angeles, CA 90095-7233

Lesbian, Gay, Bisexual, Transgender, and Queer Studies
310-825-7650
Joshua J. Guzmán, PhD, Chair

Faculty Committee
Anurima Banerji, PhD (World Arts and Cultures/Dance)
Maylei S. Blackwell, PhD (Chicana/o and Central American Studies, Gender Studies)
Cesar D. Favela, PhD (Musicology)
Michael F. Fleming, BA (Social Welfare)
Alícia Gaspar de Alba, PhD (Chicana/o and Central American Studies, English, Gender Studies)
Joshua J. Guzmán, PhD (Gender Studies)
Ju Hui Judy Han, PhD (Gender Studies)
Ella H. Haselswerdt, Ph.D (Classics)
Grace Kyungwon Hong, PhD (Asian American Studies, Gender Studies)
Michael A. Hunter, PhD (Urban Planning)
Summer Kim Lee, PhD (English)
Alma Lópezs Gaspar de Alba, PhD (Chicana/o and Central American Studies)
Uri G. McMillan, PhD (English, Gender Studies)
Jean A. Metzger, PhD (Theater)
Ho’osta Mo’e’hahne, PhD (English)
Sherene H. Razack, PhD (Gender Studies)
Carlos E. Santos, PhD (Social Welfare)
Gary M. Segura, PhD (Chicana/o and Central American Studies, Political Science, Public Policy)
Justin J. Torres, MFA (English)

Overview
Although the initial focus in lesbian, gay, bisexual, transgender, and queer (LGBTQ) studies is usually on minority sexualities and transgenders, it is impossible to study them in any meaningful way without raising questions about gender, race, ethnicity, economics/class, globalism, and the construction of scientific knowledge. Thus lesbian, gay, bisexual, transgender, and queer studies, which may at first seem to concern the private practices of a small number of people, inevitably leads to the much larger study of sexuality and culture. The Lesbian, Gay Bisexual, Transgender, and Queer Studies program represents an important vantage point from which to investigate the social construction of sexual identity, social control of behavior, changing definitions of the family, and the place of sexual and gender expression in the public and private spheres. Because of the
kinds of questions asked, LGBTQ studies is the site of some of the most exciting work being done today on the relationship between sexuality and culture.

### Undergraduate Minor

**Lesbian, Gay, Bisexual, Transgender, and Queer Studies Minor**

The minor in Lesbian, Gay, Bisexual, Transgender, and Queer Studies offers students the opportunity to study sexuality from a variety of cultural and disciplinary perspectives meant to engage students in some of the most cutting-edge research in the field. In addition, seniors in the minor are expected to do a capstone internship in an international, national, or community organization, thereby acquiring invaluable firsthand knowledge, experience, and data. After completing the minor, students should be familiar with the theoretical tools that different disciplines employ to study sexuality. They should be acquainted with some of the many different ways sexuality has been organized in the past and is organized in different cultures in the present and should have an enhanced understanding and appreciation both of the sexual diversity of the world in which they live and of the complex ways in which sexuality intersects with other categories of identity and practice.

### Admission

To enter the Lesbian, Gay, Bisexual, Transgender, and Queer Studies minor, students must have an overall grade-point average of 2.0 or better.

### The Minor

**Required Upper-Division Courses (28 units):**


### Policies

Students may petition to apply one non-listed course to the minor if they can show that lesbian, gay, bisexual, transgender, or queer issues represent a significant part (at least 25 percent) of the course content. Students are strongly urged to keep in close contact with the student services adviser, who can help them plan their course of study.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

**Lesbian, Gay, Bisexual, Transgender, and Queer Studies Lower-Division Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>M101A</td>
<td>Premodern Queer Literatures and Cultures</td>
<td></td>
<td>(Same as English M101A and Gender Studies M105A.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Survey of discrete period of queer literature from beginning to circa 1850. Works by such writers as Sappho, Plato, Marlowe, Shakespeare, and Thomas Gray may be included. May be repeated for credit with topic or instructor change. P/NP or letter grading.</td>
</tr>
<tr>
<td>M101B</td>
<td>Queer Literatures and Cultures, 1850 to 1970</td>
<td></td>
<td>(Same as English M101B and Gender Studies M105B.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Examination of literary and cultural production through the lens of gender and sexuality. Depending on instructor, emphasis may be historical, regional, national, comparative, or thematic and include other intersectional vectors of identity and representation such as race and ethnicity. May be repeated for credit with topic or instructor change. P/NP or letter grading.</td>
</tr>
<tr>
<td>M101C</td>
<td>Queer Literatures and Cultures after 1970</td>
<td></td>
<td>(Same as English M101C and Gender Studies M105C.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Examination of cultural production, specifically literature, produced by queers after Stonewall rebellion in New York in 1969, widely regarded as origins or beginning of modern lesbian and gay rights movement in U.S. Films and writing by such authors as Andrew Holleran, Leslie Feinberg, Achy Obejas, Essex Hemphill, Audre Lorde, Cheryl Dunye, and Alison Bechdel may be included. May be repeated for credit with topic or instructor change. P/NP or letter grading.</td>
</tr>
<tr>
<td>M101D</td>
<td>Studies in Queer Literatures and Cultures</td>
<td></td>
<td>(Same as English M101D and Gender Studies M105D.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Variable specialized studies course in queer literatures and cultures. Topics focus on particular problem or issue in terms of its relationship to queer cultures and writings. May be repeated for credit with topic or instructor change. P/NP or letter grading.</td>
</tr>
<tr>
<td>M107B</td>
<td>Studies in Gender and Sexuality</td>
<td></td>
<td>(Same as English M107B and Gender Studies M107B.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Examination of literary and cultural production through the lens of gender and sexuality. Depending on instructor, emphasis may be historical, regional, national, comparative, or thematic and include other intersectional vectors of identity and representation such as race and ethnicity. May be repeated for credit with topic or instructor change. P/NP or letter grading.</td>
</tr>
<tr>
<td>M114</td>
<td>Introduction to Lesbian, Gay, Bisexual, Transgender, and Queer Studies</td>
<td></td>
<td>(Same as Gender Studies M114.) Lecture, three hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Survey of discrete period of queer literature from beginning to circa 1850. Works by such writers as Sappho, Plato, Marlowe, Shakespeare, and Thomas Gray may be included. May be repeated for credit with topic or instructor change. P/NP or letter grading.</td>
</tr>
<tr>
<td>M115</td>
<td>Topics in Study of Gender and Sexual Orientation</td>
<td></td>
<td>(Same as Gender Studies M115.) Lecture/ discussion, three hours. Requisite: course M114 or Gender Studies 10, Studies in arts, humanities, social sciences, and/or life sciences on aspects of sexual orientation, gender identity, and lesbian, gay, and/or bisexual issues; variable topics may include cultural representations, historical and political change, life and health experiences, and queer or transgender theories; multilingual and cross-cultural emphases. May be repeated for credit. Letter grading.</td>
</tr>
<tr>
<td>M116</td>
<td>Sexuality and the City: Queer Los Angeles</td>
<td></td>
<td>(Same as Gender Studies M116.) Lecture, three hours. Requisite: course M114. Investigation of history, culture, and political economy of lesbian, gay, bisexual, and transgender Los Angeles. Letter grading.</td>
</tr>
<tr>
<td>M118</td>
<td>Queering American History</td>
<td></td>
<td>(Same as Gender Studies M118.) Lecture, four hours. Enforced requisite: one prior lesbian, gay, bisexual, transgender, and queer studies course. History of sexual and gender minorities in U.S. Topics include changing norms, romantic friendships, medical discourse, liberation politics, post-Stonewall culture, AIDS, trans-gender movement, queer theory, and politics. P/NP or letter grading.</td>
</tr>
<tr>
<td>M125</td>
<td>Exploring Intersections of Ability and Sexualilty</td>
<td></td>
<td>(Same as Disability Studies M125.) Lecture, three hours. Exploration of identity as means of understanding cultural formations, dominant/nondominant power dynamics, and systems of visual representation. Intersectional approach to explore how ability and sexuality intersect, overlap, and change notions of identity. Use of scholarship may include studies in lesbian, gay, bisexual, and transgender studies, popular culture, performance, and film to investigate factors that shape ability and sexuality as basis for identity. May be repeated for credit with topic or instructor change. P/NP or letter grading.</td>
</tr>
<tr>
<td>M126</td>
<td>Feminist and Queer Theory</td>
<td></td>
<td>(Same as English M126 and Gender Studies M126.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Recommended: one course from English 120, 121, Gender Studies 102, 103, or 104. Investigation of key concepts and debates in study of gender, sexuality, and kinship, with focus on their interrelated significance for making of culture. Readings to be interdisciplinary, with possible emphasis on impact of changing ideas of gender and sexuality on specific historical cultures. May be repeated for credit with topic or instructor change. P/NP or letter grading.</td>
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</table>

M133. Chicana/o and Central American Literature. (4) (Same as Chicana/o and Central American Studies M133 and Gender Studies M133.) Lecture, four hours. Exploration of intersection of radical First and Third World feminisms and their relevance and application to Chicana identity, representation of Chicanas/o and Central American Studies M133 and Gender Studies M133. Chicana Lesbian Literature. (4)

M135. Bilingual Writing Workshop. (4) (Same as Chicana/o and Central American Studies CM135 and Gender Studies M135.) Seminar, four hours. Limited to juniors/seniors. Writing sample required; access to course web page mandatory; need not be bilingual to enroll. Technical instruction, analysis, and theoretical discussion of bilingual creative expression through genre of short fiction. Bilingualism as both politics and aesthetics to be central theme. Discussion and analysis of Chicana/Chicana and Latina/Latino short story collections. Peer critique of weekly writing assignments. Emphasis on narrative techniques such as character, point of view, setting, plot, voice, and dialogue, and magical realism as prevailing Chicana/Chicana and Latina/Latino style. Some attention to process of manuscript preparation, public reading, and publication. Lecture.

M136. Censored! Art on Trial. (4) (Same as Chicana/o and Central American Studies M136.) Lecture, four hours. Examination of censorship in visual arts, particularly as it affects Chicana/Chicana and Latina/Latina artists such as Alma Lopez, Esther Hernandez, and Alex Donis. Other censored artists include feminist artist Yolanda Lopez, queer artist Robert Mapother, photographer Lowie, painter Christ Off, photographers Sally Mann and Andres Serrano, printmaker Enrique Chagoya, muralist Noni Olaisi, writer Salman Rushdie, and four performance artists—Karen Finley, Tim Miller, John Fleck, and Holly Hughes—whose work was vetoed by chair of National Endowment for the Arts (NEA) in 1990 after they had successfully passed through NEA’s peer review process and who came to be known as N.E.A. Four. P/NP or letter grading.

M137. Lesbian, Gay, Bisexual, Transgender, and Queer Perspectives in Pop Music. (5) (Same as Musicology M137.) Lecture, four hours; discussion, one hour. Exploration of language, popular music, and music of the 20th century, with focus on lesbians, gay men, and members of other sexual minorities as creators, performers, and audience members. Lecture grading.

M141. African American Women’s History. (4) (Same as African American Studies M141.) Lecture, four hours. Historical examination of black women’s experiences in U.S. from antebellum era to present. By sit- ing black women’s experiences within major historical transitions in American history, exploration of key themes, including gender, family, religion, and education. Understanding of how intersectionality and overlapping ideologies of race and gender and ethnicity have intersected and have been impacted by racism in various historical lives? How is difference constructed through intersected and overlapping ideologies of race and gender? How do historically underrepresented women’s historical experiences differ from those who are not? What are the challenges to such dis- coveries? Examination of black women’s individual and collective struggles for freedom from racism, sexism, and heteropatriarchy, as well as black women’s role in protests and social movements, including suffrage, women’s liberation, civil rights, and black power. Investigation of black women’s role in the economy, including their cultural productions, Letting grade.

M142. Race, Gender, and Punishment. (4) (Same as African American Studies M142.) Seminar, four hours. Interdisciplinary examination of historical and contem- porary processes of modern prison industrial com- plex in U.S., with attention to impact of prison indus-

183. Variable Topics in Queer Subjectivities/Theo- ries/Histories. (4) Lecture. Four hours. Study of topics about queer subjectivities/theories/histories from lesbian, gay, bisexual, and transgender studies perspec- tive. May be repeated for credit with consent of instructor. P/NP or letter grading.

184. Variable Topics in Science, Health, and Genet- ics. (4) Lecture. Four hours. Study of science, health, and genetic topics from lesbian, gay, bisexual, and transgender studies perspective. May be repeated for credit with consent of instructor. P/NP or letter grading.

185. Selected Topics in Lesbian, Gay, Bisexual, and Transgender Studies. (2-4) Seminar, two hours. Study of selected topics in lesbian, gay, bisexual, and transgender studies. Consult Schedule of Classes for topics and instructors. May be repeated for credit with consent of instructor. P/NP or letter grading.

186. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu- dents. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. De- signed as adjunct to upper-division lecture course. In- dividual study with lecture course instructor to explore topics not covered by deeper or additional readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re- quire. Honors content noted on transcript. Letter grading.

191D. Topics in Queer Literatures and Cultures. (5) (Same as English M191D and Gender Studies M191D.) Seminar, three or four hours. Enforced requi- site: English Composition 3. Consult Schedule of Classes for topics and time periods, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

191E. Topics in Gender and Sexuality. (5) (Same as English M191E and Gender Studies M191E.) Seminar, three or four hours. Enforced requisite: English Com- position 3. Consult Schedule of Classes for topics, pe- riod, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

194. Research Group or Internship Seminars: Lesbi- an, Gay, Bisexual, and Transgender Studies. (2) Seminar, two hours. Preparation: completion of four courses toward minor. Consent of instructor. Core- quise: course 195. Designed for seniors who are doing internship in lesbian, gay, bisexual, or trans- gender organization. Discussion of organization theo- retical and practical issues in gay, lesbian, bisexual, and transgender studies course. Service-learning course that offers opportunity for students to work in lesbian, gay, bisexual, and transgender-related com- munity organizations, to reflect on political and theo- retical issues involved in such work and such organi- zations, and to draw ideas from various courses they have already taken and test them in settings outside UCLA. P/NP or letter grading.

180XP. Lesbian, Gay, Bisexual, and Transgender Institutions and Organizations. (4) (Formerly numbered 180SP.) Lecture, three hours; fieldwork, five hours. Preparation: one prior lesbian, gay, bisexual, and transgender studies course. Service-learning course that offers opportunity for students to work in lesbian, gay, bisexual, and transgender-related com- munity organizations, to reflect on political and theo- retical issues involved in such work and such organi- zations, and to draw ideas from various courses they have already taken and test them in settings outside UCLA. P/NP or letter grading.

181. Variable Topics in Queer Diversities. (4) Lecture, four hours. Study of topics about queer diversities from lesbian, gay, bisexual, and transgender studies perspective. May be repeated for credit with consent of instructor. P/NP or letter grading.

182. Variable Topics in Education, Law, and Public Policy. (4) Lecture, four hours. Study of law, educa- tion, and public policy topics from lesbian, gay, bi- sexual, and transgender studies perspective. May be repeated for credit with consent of instructor. P/NP or letter grading.

195. Community or Corporate Internships in Lesbian, Gay, Bisexual, and Transgender Studies. (2 to 4) Tu- torial, one hour. Preparation: course M114. Core- quise: course 194. Limited to seniors. Internship in supervised setting in lesbian, gay, bisexual, or trans- gender community organization. Students meet on regular basis with instructor and provide periodic re- ports of their experience. May be repeated for credit. Individual contract with supervising faculty member required. P/NP or letter grading.

LETTERS AND SCIENCE COLLEGEWIDE PROGRAMS
College of Letters and Science
A311 Murphy Hall
Box 951414
Los Angeles, CA 90095-1414
Honors Programs
310-825-1553

Overview
Highly motivated students who find that no single major accommodates their specific interest in a given subject may propose designing their own major. Proposals are prepared with faculty guidance and sponsorship and are thoroughly examined for cogency, completeness, and academic merit.

Undergraduate Majors

Individual Field of Concentration BA in Letters and Science
Highly motivated students who find that no single major accommodates their specific interest in a given subject may propose designing their own major. Proposals are prepared with faculty guidance and sponsorship and are thoroughly examined for cogency, completeness, and academic merit.

Learning Outcomes
The Individual Field of Concentration major has the following learning outcomes:

- Design of a course of study that shows a deep understanding of how the disparate disciplines are connected
- Demonstrated understanding of how the research and creative methodologies of different disciplines can interface with and illuminate the understanding of another
- Demonstrated ability to read in the scholarly discourse and style of different disciplines
- Development of a voice in written thesis for an interdisciplinary audience
- Written thesis that demonstrates mastery of diverse fields as a result of research sources and production of scholarly work outside of traditionally defined academic boundaries

Faculty Committee
Steven J. Bennoun, PhD (Psychology)
Siobhan A. Braybrook, PhD (Molecular, Cell, and Developmental Biology)
David A. Campbell, PhD (Microbiology, Immunology, and Molecular Genetics)
Yvonne Y. Chen, PhD (Microbiology, Immunology, and Molecular Genetics)
Daniel H. Cohn, PhD (Molecular, Cell, and Developmental Biology)
Ronald H. Cooper, PhD (Integrative Biology and Physiology)
Joseph Esdin, PhD (Integrative Biology and Physiology)
Alan Garfinkel, PhD (Integrative Biology and Physiology, Medicine)
Tonya L. Kane, PhD (Ecology and Evolutionary Biology)
Rachel L. Kennison, PhD (Ecology and Evolutionary Biology)
Colin T. Kremer, PhD (Ecology and Evolutionary Biology)
Frank A. Laski, PhD (Molecular, Cell, and Developmental Biology)
Jeffrey P. Maloy, PhD (Molecular, Cell, and Developmental Biology)
Jonathan D. Marcot, PhD (Ecology and Evolutionary Biology)
Megan M. McEvoy, PhD (Society and Genetics)
Rachel E. Prunier, PhD (Ecology and Evolutionary Biology)
Morgan W. Tingley, PhD (Ecology and Evolutionary Biology)

Faculty Roster

Professors
David A. Campbell, PhD
Daniel H. Cohn, PhD
Frank A. Laski, PhD
Megan M. McEvoy, PhD

Professor Emeritus
Alan Garfinkel, PhD

Associate Professors
Yvonne Y. Chen, PhD
Morgan W. Tingley, PhD

Assistant Professors
Siobhan A. Braybrook, PhD
Colin T. Kremer, PhD

Lecturers PSOE
Steven J. Bennoun, PhD
Jeffrey P. Maloy, PhD

Lecturers
Ronald H. Cooper, PhD
Joseph Esdin, PhD
Tonya L. Kane, PhD
Hung D. Pham, PhD

Adjunct Assistant Professors
Rachel L. Kennison, PhD
Jonathan D. Marcot, PhD
Rachel E. Prunier, PhD
Sharmila Venugopal, PhD

Academic Administrators
Kaitlin I. Dixie, PhD
Jukka P. M. Keranen, PhD
Rana R. Khan, PhD
Gaston M. U. Pfueg, PhD
John P. Phelan, PhD
Debra B. Pires, PhD
Shanna Shaked, PhD
Yegevnya Shevtsov, PhD

Overview
Students who wish to study life sciences have a choice of eight majors, all of which lead to a Bachelor of Science (BS) degree: Biology; Ecology, Behavior, and Evolution; and Marine Biology (Ecology and Evolutionary Biology Department); Microbiology, Immunology, and Molecular Genetics (Microbiology, Immunology, and Molecular Genetics Department); Molecular, Cell, and Developmental Biology (Molecular, Cell, and Developmental Biology Department); Neuroscience (Neuroscience Interdepartmental Program); Physiological Science (Integrative Biology and Physiology Department); and Psychobiology (Psychology Department). This choice reflects the diversity of undergraduate instruction in life sciences at UCLA. Despite this diversity, all of these majors require a common core of introductory courses that forms the foundation for any study of life sciences and that is required for more advanced courses in each major. The common core includes courses in chemistry, physics, and mathematics, as well as introductory courses in evolution...
and biodiversity, cellular and organismal biology, molecular biology, and genetics. During the first two years, students may also gain experience in a research laboratory through the Student Research Program. For more information on each major, see the individual departments in this chapter. For additional information on the Life Sciences core curriculum, see the curriculum website.

Students considering one of the life sciences majors are encouraged to declare a major as early as possible, even in their first year. In this way, they are identified by the life sciences advising offices and receive important curricular and other information. Because the core curriculum prepares them for any of the eight majors, they have the flexibility to switch to another life sciences major at any time during their progression through the core curriculum. Note: The Marine Biology and Psychobiology majors may require some courses in addition to the Life Sciences core curriculum as part of the preparation. Consult the course requirements for both majors.

Undergraduate Study

Life Sciences Core Curriculum

Required: Chemistry and Biochemistry 14A, 14B, 14BL, 14C, and 14D, or 20A, 20B, 20L, 30A, 30AL, and 30B; Life Sciences 7A, 7B, 7C, 23L, 107; Life Sciences 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, and 3C, or 31A, 31B, and 32A; Physics 1A, 1B, 1C, 4AL, and 4BL, or 5A, 5B, and 5C.

Each core curriculum course must be passed with a grade of C– or better, and all courses must be completed with an overall grade-point average of 2.0 or better. Students receiving a grade of D or F in two core curriculum courses, either in separate courses or replications of the same course, are subject to dismissal from the major.

Transfer Students

Transfer applicants with 90 or more units must transfer with a grade of D or F in two core curriculum courses, are subject to dismissal from the consortium. Each course must be taken for a letter grade. Students may participate in up to three terms of upper-division research in genes, genetics, and genomics. The upper-division courses—Biomedical Research 10H— which is limited to 30 students per term and is offered every term. After satisfactorily completing course 10H and with instructor consent, students may participate in up to three terms of upper-division research in genes, genetics, and genomics. The upper-division courses—Biomedical Research 100HA, 100HB, 100HC—do not involve pre-existing laboratory experiments. Syllabi for the courses are instead based on individual research projects whose outcomes students discover through the course of their studies. It is anticipated that only about one-third of the students who complete course 10H will subsequently enroll in course 100HA, and students are advised that they can benefit significantly from course 104H alone.

Each course must be taken for a letter grade. Under special circumstances, one course may be waived for students who have prior research experience in fields covered by the course. Students who complete the required courses receive a certificate of merit indicating their completion of the consortium. To participate, students must be accepted into the Undergraduate Research Consortium in Functional Genomics. Interested students should contact the URCFG coordinator in the Molecular, Cell, and Developmental Biology Student Affairs Office, 128A Hershey Hall, 310-825-7109, for information regarding admission and application. Applications are due no later than Friday of the fourth week of the term prior to the term in which students plan to enroll in course 104H.

Life Sciences

Lower-Division Courses

4H. Introduction to Molecular Biology (Honors). (5) Lecture, two and one half hours; discussion, 90 minutes; movie section, two and one half hours. Enforced prerequisites: course 2, and Chemistry 14C or 30A. Honors course parallel to course 3, but at a more advanced level. Letter grading.


7A. Cell and Molecular Biology. (5) Lecture, three hours; discussion, 75 minutes. Introduction to basic principles of cell structure and cell biology, biochemistry, and molecular biology. P/NP or letter grading.

7B. Genetics, Evolution, and Ecology. (5) Lecture, three hours: laboratory, 80 minutes. Enforced prerequisite: course 7A. Principles of Mendelian inheritance and population genetics. Introduction to principles and mechanisms of evolution by natural selection, population, behavioral, and molecular ecology, and biodiversity, including major taxa and their evolutionary, ecological, and physiological relationships. Letter grading.

7C. Physiology and Human Biology. (5) Lecture, three hours; discussion, 75 minutes. Enforced prerequisite: course 7B. Organization of cells into tissues and organs and principles of physiology of organ systems. Introduction to human genetics and genomics. Letter grading.

15. Life: Concepts and Issues. (5) Lecture, two and one half hours; discussion, 75 minutes. Introduction to important concepts and issues in the field for non-life sciences majors. Topics include chemistry of life, genetics, physiology, evolution, and ecology—all explored in lecture and debates, with writing component. P/NP or letter grading.

15L. Life: Concepts and Issues Laboratory. (2) Laboratory, two hours. Enforced prerequisite or corequisite: course 15. Broad introduction to biology, with focus on scientific literacy and thinking. Topics include scientific thinking and decision making, interpretation and analysis of data, evolution and genetics, physiology (chemistry, nutrition, reproduction, endocrinology, and neurobiology), and human behavioral biology. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20. Quantitative Concepts for Life Sciences. (5) Lecture, three hours; discussion, two hours. Preparation: three years of high school mathematics (to algebra II), some basic familiarity with computers. Introduction to variety of quantitative concepts that are relevant to biology. Designed to enhance quantitative skills that are essential for success in life sciences, chemistry, mathematics, and physics courses that make up core curriculum for life sciences majors at UCLA. Biological examples used throughout to gain appreciation of relevance of mathematics to biology. Letter grading.

23L. Introduction to Laboratory and Scientific Methodology. (3) Lecture, one hour; laboratory, three hours. Requisite: course 2 or 7B. Recommended to be taken concurrently with introductory life sciences laboratory designed for undergraduate students. Opportunity to conduct wet-laboratory and cutting-edge bioinformatics laboratory experiments. Students work in groups of three to conduct experiments in areas of physiology, metabolism, cell biology, molecular biology, genotyping, and bioinformatics. Letter grading.

30A. Mathematics for Life Scientists. (5) Lecture, three hours: laboratory, two hours. Preparation: three years of high school mathematics (to algebra II) some basic familiarity with computers. Mathematical modeling as tool for understanding dynamics of biological systems. Fundamental concepts of single-variable calculus and development of single- and multi-variable differential equation models of dynamical processes in ecology, physiology, and other subjects in which quantities change with time. Use of free computer program Sage for problem solving, plotting, and dynamical simulation in laboratory. Letter grading.

30B. Mathematics for Life Scientists. (5) Lecture, three hours: laboratory, two hours. Enforced prerequisite: course 30A. Introduction to concept of matrices and linear transformations to equip students with some basic tools to understand dynamics of multivariable nonlinear systems. Examples from ecological, physiological, chemical, and other systems. Letter grading.
M32. Essential Calculus for Mathematical Biologists. (4) (Same as Computational and Systems Biology M32) Lecture, three hours; discussion, one hour. Calculus for life-sciences students. Introduction to statistics with emphasis on computer simulation of chance probabilities as replacement for traditional formula-based approach. Simulations allow for deeper understanding of statistical concepts, and are applicable to wider class of distributions and estimators. Students learn simple programming language to carry out statistical simulations, and apply them to classic problems of biological and medical statistics. Letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

98HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

97. Variable Topics in Life Sciences. (1 to 4) Seminar, two to four hours. Current issues in research and/or development in life sciences. Consult Schedule of Classes for topics and instructors. May be repeated once for credit with consent of instructor. P/NP or letter grading.

98XA. PEERS Collaborative Learning Workshops for Life Sciences Majors. (1) Seminar, three hours. Corequisite: associated undergraduate lecture course in life sciences. Limited to Excellence in Education for Excellence in Education and Research in Science (PEERS) students. Development of intuition and problem-solving skills in collaborative learning environment. May be repeated three times, but only 1 unit may be applied toward graduation. P/NP grading.

98XB. PEERS Collaborative Learning Workshops for Life Sciences Majors. (1) Seminar, three hours. Corequisite: associated undergraduate lecture course in life sciences. Limited to Program for Excellence in Education and Research in Science (PEERS) students. Development of intuition and problem-solving skills in collaborative learning environment. May be repeated three times, but only 1 unit may be applied toward graduation. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week; clinic, one unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contracts required. Consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101. Understanding Scientific Literature and Content. (2 to 4) Seminar/discussion, one to two hours. Introduction to set of skills proven to help students read and understand scientific research papers. Offers opportunities to practice skills while interacting with scientists at UCLA. Reading and understanding scientific research papers is skill. It can develop quickly and be refined/practiced for rest of scientific journey. Uses CREATE learning framework. Consider, Read, Elucidate hypotheses, Analyze and interpret data, and Think of next experiment. At UCLA, CREATE has additional dimensions of final synthesis and social context. Students work within learning pod and are guided by lead instructors. P/NP or letter grading.

107. Genetics. (5) Lecture, three hours; discussion, 75 minutes; laboratory, two hours. Corequisite: course 1A (or 20A), 14C (or 30A). Not open for credit to students with credit for course 4. Advanced Mendelian genetics, recombination, biochemical genetics, mutation, DNA, genetic code, gene regulation, genes in populations. Letter grading.

110. Career Exploration in Life Sciences. (2) Seminar, two hours. Recommended for all students interested in exploring career options in life sciences, including income transfers. Designed to increase confidence and skills, and expand awareness through self-reflection and guest speakers. Networking, interviewing, resume, and cover letter building. P/NP grading.

130. Science Classroom Observation and Participation. (1) Seminar, one hour. Preparation: completion of three mathematics and/or science courses at level required of science majors. Observation, participation, and assignments in secondary/elementary, middle, and secondary schools. May be repeated for credit. P/NP grading.

M174. Health Disparities. (4) (Same as Psychology M174) Lecture, three hours. Examination of health disparities and ways in which societal responses to race and ethnicity in combination with variety of other factors create differential quality and access to health care resulting in poor health outcomes in racial/ethnic minorities. Basic foundation for critical thinking about assumptions that shape life sciences, medical research, clinical practice, and social and behavioral sciences. As relevant to racial and ethnic minority populations and to teach students to integrate concepts of culture and health disparities into other social, biological, political, psychological, genetic, and clinical health interests. P/NP, letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators, individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize syllabus, individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize syllabus, individual contract with faculty mentor required. May not be repeated. Letter grading.

188SD. Individual Studies for USIE Facilitators. (4) Tutorial, to be arranged. Enforced corequisite: course 188SC. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize syllabus, individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

192A. Introduction to Collaborative Learning Theory and Practice. (1) (Formerly numbered 192A) (Same as Atmospheric and Oceanic Sciences M192A, Chemistry M192E, Computer Science M192A, Mathematics M192A, and Physics M192S) Seminar, one hour. Training seminar for undergraduate students who are selected for learning assistant (LA) program. Exploration of current topics in pedagogy and education research focused on LA's and their practical application in small-group settings. Students practice communication skills with frequent assessment of and feedback on progress. Letter grading.

192B. Methods and Application of Collaborative Learning Theory in Life Sciences. (3) Seminar, one hour; clinic, six hours. Requisites: course 192A (may be taken concurrently) and at least one term of prior experience in same course in which collaborative learning theory is practiced and refined under supervision of instructors. With instructor guidance, students practice pedagogy-based principles on current education research, assist with development of innovative instructional materials, and receive frequent feedback on their progress. May be repeated three times for credit. Combination of courses 192B, 192C, 192D, and 192E may not be taken for more than total of 4 times or 4 courses. Letter grading.

192C. Methods and Application of Collaborative Learning Theory in Life Sciences. (4) Seminar, three hours; clinic, nine hours. Requisites: course 192A (may be taken concurrently) and at least one term of prior experience in same course in which collaborative learning theory is practiced and refined under supervision of instructors. With instructor guidance, students apply pedagogical principles based on current education research, assist with development of innovative instructional materials, and receive frequent feedback on their progress. May be repeated three times for credit. Combination of courses 192B, 192C, 192D, and 192E may not be taken for more than total of 4 times or 4 courses. Letter grading.

192D. Methods and Application of Collaborative Learning Theory in Life Sciences. (2) Seminar, three hours; clinic, four hours. Requisites: course 192A (may be taken concurrently) and at least one term of prior experience in same course in which collaborative learning theory is practiced and refined under supervision of instructors. With instructor guidance, students apply pedagogical principles based on current education research, assist with development of innovative instructional materials, and receive frequent feedback on their progress. May be repeated three times for credit. Combination of courses 192B, 192C, 192D, and 192E may not be taken for more than total of 4 times or 4 courses. Letter grading.

192E. Methods and Application of Collaborative Learning Theory in Life Sciences. (2) Seminar, three hours; clinic, four hours. Requisites: course 192A (may be taken concurrently) and at least one term of prior experience in same course in which collaborative learning theory is practiced and refined under supervision of instructors. With instructor guidance, students apply pedagogical principles based on current education research, assist with development of innovative instructional materials, and receive frequent feedback on their progress. May be repeated three times for credit. Combination of courses 192B, 192C, 192D, and 192E may not be taken for more than total of 4 times or 4 courses. Letter grading.

192F. Undergraduate Practicum in Life Sciences. (4) Seminar, two hours; clinic, nine hours. Requisite: one course from 1, 2, 5, 4, 7A, 7B, 7C, 20, 23L, 30A, 30B, 107, 110. Limited to sophomores/juniors/seniors. Advanced training and supervised practicum for experienced undergraduate students. Under guidance of faculty members, students develop professional skills and take leadership roles in mentoring students. May be repeated for credit. Letter grading.

192G. Collaborative Learning Theory and Practice: A Collaborative Research Group Discussion; discussion, one hour. Students engage in anti-racism discourse. Peers circulate through, engage, and reflect on various topics that target systemic racism surrounding our communities through proactive small-group conversation and weekly action plans. Peers
practice communication skills with frequent assessment and feedback with facilitators. May be repeated three times for credit. Letter grading.

199. Directed Research or Senior Project in Life Sciences. (2) Seminar, two hours. Enforced prerequisite: course 3. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper/project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Preparation for College-Level Teaching in Life Sciences. (2) Seminar, two hours. Corequisite: course 375. Designed for graduate students who are teaching assistants in Life Sciences Core Curriculum for first time and to be taken concurrently in term in which they teach. Prepares students for college-level teaching in large enrollment undergraduate courses, and provides professional development to support students pursuing diverse careers in life sciences. Study of inclusive, student-centered, and evidence-based teaching methodologies that include active learning, group work, formative assessment, backward course design, and reflective teaching practices that incorporate peer observations and constructive feedback. May not be repeated for credit. S/U grading.

LINGUISTICS

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Overview

The goal of the Department of Linguistics is the enrichment of knowledge about the nature, grammar, and history of human language. Linguistics is a theoretical discipline, akin to philosophy, anthropology, and cognitive psychology. It is important for prospective students to understand that studying linguistics is not a matter of learning to speak many languages. Linguistics courses draw examples from the grammars of a wide variety of languages, and the more languages linguists know about in depth (as distinct from possessing fluency in the use of them), the more likely they are to discover universal properties. It is also possible to pursue these universal aspects of human language through the intensive in-depth study of a single language. This accounts for the high proportion of examples from English and familiar European languages found in linguistics courses and research publications.

The core areas of linguistic theory are phonology, morphology, syntax, and semantics. A grammar is a system of rules that characterize the phonetics, phonology, morphology, syntax, and semantics of a natural language. The properties of grammars are the central focus of linguistic theory. Because language is central to all humanistic disciplines, as well as to several social sciences areas, it is studied from many points of view. Linguistics itself cannot be said to recognize a single optimal approach to the subject. Hence, the courses provide a variety of approaches that reflect the diversity of the field.

The Linguistics Department has consistently been ranked among the very best linguistics departments in the country. It offers programs leading to the Bachelor of Arts (BA), Master of Arts (MA), and Doctor of Philosophy (PhD) degrees.

Undergraduate Study

The undergraduate majors are of three types: (1) a major that concentrates entirely on general linguistics, (2) several majors that combine the basic courses of the general program with a language concentration or other related fields, and (3) a major in Applied Linguistics.

Graduate Study

The department offers MA and PhD degree programs in Linguistics, and its faculty participate in the programs for American Indian Studies, Computer Science, International Institute, Philosophy, and Psychology. Both the faculty and graduate program are internationally acclaimed, and attract some of the best and brightest graduate students from this country and abroad, with a current graduate student population of 40 students from 10 countries. The goal of the department’s graduate program is to train students as university teachers and as researchers in the major areas of linguistics.

Theoretical Orientation

Linguistics as an empirical science uses cross-linguistic evidence to develop and test theories of human language. In keeping with this goal, the program is committed to training graduate students to analyze primary data in the Field Methods sequence, in which the students work with a native speaker consultant of a little-studied language.

Substantial opportunities to develop fieldwork skills and to test theoretical ideas against novel data are provided, along with department funding for native speaker consultants. Several of the faculty have long experience in fieldwork and provide practical guidance to students embarking on their own field study. Los Angeles is probably the most linguistically diverse city in the U.S., thus providing a living laboratory for field work research.

Undergraduate Majors

Linguistics BA

Linguistics is the scientific study of languages as a general phenomenon. It aims to help answer broad questions concerning the nature of human cognition and communication. Students will learn about language universals as well as the ways in which languages differ from one another in terms of their sound patterns,
Syntax, and the way they encode meaning. They will also learn about the linguistic theories explaining and constraining linguistic knowledge, informed in part by experimental investigations of child language acquisition and adult language processing. Successful graduates will receive a cognitive science education with a focus on language; they will develop skills in data analysis, analytic reasoning, and experimental methods.

Learning Outcomes
The Linguistics major has the following learning outcomes:

- Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, semantics, and at least one other subfield
- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
- Ability to write technical material in linguistics, including language description and theory-based analysis
- Ability to access scholarly literature on language structure and use it in research

Entry to the Major
Transfer Students
Transfer applicants to the Linguistics major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one introduction to linguistics course, two courses from symbolic logic, introductory psychology or psychological statistics, or cultural anthropology, and two years of one foreign language or one year of two different foreign languages.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements
Preparation for the Major
Required: Linguistics 20; two of the following: Anthropology 4, Philosophy 31, Psychology 10 (or 100A); completion of the equivalent to the sixth level of one foreign language or the equivalent to the third level of two different foreign languages.

The Major
Required: Eleven upper-division or graduate courses including Linguistics 103, 120A, 120B, 120C, two courses from C104, 110, 130, or 132, and two courses from 165A, 165B, 165C (students may substitute courses 200A, 200B, and 200C for 165A, 165B, and 165C respectively if they receive grades of A in 120A, 120B, and 120C respectively and have consent of instructor); and three upper-division elective courses from the Linguistics Department (minimum 4 grade units each).

Honors Program
Departmental honors are awarded at graduation to those students who have a grade-point average of 3.6 or better in their junior and senior years and who have received a grade of A in Linguistics 198A and 198B or in 199. Qualified students may be proposed by any member of the faculty to the faculty as a whole for the award of highest honors on the basis of a piece of research in linguistics completed at UCLA.

Computing Specialization
Students may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major and (2) completing Program in Computing 10A and 10B and 10C (or Computer Science 31 and 32). Linguistics 185A, Mathematics 61, and one course selected from Linguistics C104, 127, 132, 165A, 165B, 165C, 180, 185B. Students graduate with a bachelor’s degree in their major and a specialization in Computing.

Policies
Preparation for the Major
Linguistics 20 must be passed with a letter grade of C or better prior to beginning upper-division coursework in the major.

Students who complete an advanced upper-division language course are considered to have completed the equivalent of whatever courses are requisite to that advanced language course (e.g., if students complete German 152, they have automatically satisfied the requirement of the sixth level of work in German).

The Major
No more than one course from 197, 198A, 198B, and 199 may be applied toward the major.

One linguistics-related course (minimum 4 graded units) offered by another department may be applied toward the elective in consultation with the Linguistics Department undergraduate student affairs officer.

A 2.0 grade-point average in linguistics courses is required for the major.

Applied Linguistics BA
The Applied Linguistics major investigates linguistic issues relevant to the everyday world, shedding light on the nature of language and language use. Students will learn linguistic theory, the study of the structure of human language generally. With its focus on service learning, students will also learn linguistic practice, engaging in the community, schools, and work places of our geographic setting. Successful graduates will be well acquainted with language use from a variety of perspectives and experiences, and will be able to apply this knowledge to a wide variety of practices including language teaching, speech pathology, and translation and interpretation.

Learning Outcomes
The Applied Linguistics major has the following learning outcomes:

- Ability to analyze technical material in linguistics, including language description and theory-based analysis
- Ability to access scholarly literature on language structure and use it in research

Entry to the Major
Transfer Students
Transfer applicants to the Applied Linguistics major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of one foreign language or one year of two different foreign languages, one introduction to linguistics course, one introduction to psychology course, and one introduction to linguistic anthropology course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements
Preparation for the Major
Required: Anthropology 4 or Psychology 10, Linguistics 20, and completion of the equivalent to the sixth level of one foreign language or the equivalent to the third level of two different foreign languages.

The Major
Required: Ten upper-division courses as follows: Linguistics 102 (or 103), 119A (or 120A), 120B, 130 or C140, three courses selected from Linguistics C104, 115, 120C, 130, C140, M141, 144, M146, 170, two upper-division elective courses taken in the Linguistics Department (minimum 4 graded units each), and one course selected from Anthropology 151, M152P, 152Q, 152R, 153, 154P, 154Q, M156, 159, Arabic 180, 181, Armenian 110, Chicana/o and Central American Studies 164XP, M167XP, M170XP, Communication 119, M125, M144A, French 105, German 140, Hebrew 180A, 180B, Iranian 131, Linguistics M116, M146, M176A, M176B, M177, M178, Portuguese 100A, 100B, Slavic CM114, Spanish 100A, 100B, 160, or a linguistics-related course (minimum 4 graded units) offered by another department in consultation with the Linguistics Department undergraduate student affairs officer.

Honors Program
Departmental honors are awarded at graduation to those students who have a grade-point average of 3.6 or better in their junior and senior years and who have received a grade of A in Linguistics 198A and 198B or in 199. Qualified students may be proposed by any member of the faculty to the faculty as a whole for the award of highest honors on the basis of a piece of research in linguistics completed at UCLA.

Computing Specialization
Students may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major and (2) completing Program in Computing 10A and 10B and 10C (or Computer Science 31 and 32), Linguistics 185A, Mathematics 61, and one course selected from Linguistics C104, 127,
132, 165A, 165B, 165C, 180, 185B. Students graduate with a bachelor’s degree in their major and a specialization in Computing.

Policies

Preparation for the Major

Linguistics 20 must be passed with a letter grade of C or better prior to beginning upper-division coursework in the major.

Students who complete an advanced upper-division language course are considered to have completed the equivalent of whatever courses are requisite to that advanced language course (e.g., if students complete German 152, they have automatically satisfied the requirement of the sixth level of work in German).

The Major

No more than one course from 197, 198A, 198B, and 199 may be applied toward the major.

A 2.0 grade-point average in linguistics courses is required for the major.

Linguistics and Anthropology BA

The Linguistics and Anthropology major combines the basic courses of the general linguistics program with that of anthropology, the study of humankind. Students will learn linguistic theory, the study of the structure of human language generally. They will also learn the many ways in which language affects human history, social identity, social interaction, and politics. Successful graduates will be well acquainted with linguistic structure, language diversity, and language typology, as well as the anthropological and social consequences of the nature of human language.

Learning Outcomes

The Linguistics and Anthropology major has the following learning outcomes:

- Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, and at least one other subfield
- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
- Ability to write technical material in linguistics, including language description and theory-based analysis
- Ability to access scholarly literature on language structure and linguistic anthropology, and use it in research

Entry to the Major

Transfer Students

Transfer applicants to the Linguistics and Anthropology major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one introduction to linguistics course and two years of one foreign language or one year of two different foreign languages. One cultural and communication course is strongly recommended.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Anthropology 4, Linguistics 20, and completion of the equivalent to the sixth level of one foreign language or the equivalent to the third level of two different foreign languages.

The Major

Required: Eleven upper-division courses as follows: Linguistics 102 (or 110), 110, 119A (or 120A), 120B or 127, M146 (or Anthropology M150); two courses from 114, 120C, 144, 160, 161, 170; one course from Anthropology 151 or Sociology CM124A (or Communication M144A); and three upper-division electives from the Anthropology 130 series (one course only), the 150 series (one course only), the 160 series (one course only), Sociology CM124A (or Communication M144A), CM125 (or Communication M125).

Honors Program

Departmental honors are awarded at graduation to those students who have a grade-point average of 3.6 or better in their junior and senior years and who have received a grade of A in Linguistics 198A and 198B or in 199. Qualified students may be proposed by any member of the faculty to the faculty as a whole for the award of highest honors on the basis of a piece of research in linguistics completed at UCLA.

Computing Specialization

Students may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major and (2) completing Program in Computing 10A and 10B and 10C (or Computer Science 31 and 32), Linguistics 185A, Mathematics 61, and one course selected from Linguistics C104, 127, 132, 165A, 165B, 165C, 180, 185B. Students graduate with a bachelor’s degree in their major and a specialization in Computing.

Linguistics and Asian Languages and Cultures BA

The major combines the basic courses of the general linguistics program with that of East Asian languages and cultures, focusing on one of the three language tracks (Chinese, Japanese, Korean). Students are able to study the civilizations of China, Korea, Japan, and India; and enrich their knowledge about the nature, grammar, and history of human language at the same time.

Learning Outcomes

The Linguistics and Asian Languages and Cultures major has the following learning outcomes:

- Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, and at least one other subfield
- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
- Ability to write technical material in linguistics, including language description and theory-based analysis
- Ability to access scholarly literature on language structure and use it in research

Entry to the Major

Transfer Students

Transfer applicants to the Linguistics and Asian Languages and Cultures major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of either Chinese, Japanese, or Korean, one introduction to linguistics course, one cultural anthropology course, one Chinese, Japanese, or Korean civilization course, and one year of a second foreign language.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Anthropology 4, Linguistics 20, and either Chinese 50, Japanese 50, or Korean 50, as appropriate; completion of the equivalent to the sixth level in either Chinese, Japanese, or Korean, and the equivalent to the third level of a second foreign language.

The Major

Required: Eleven upper-division courses as follows: Linguistics 103, 110, 120A, 120B, 165A (or 165B), one upper-division elective course in the Linguistics Department (minimum 4 graded units); for the Chinese track: Chinese 100A, 100B, 100C (or 100D, 100E, 100F, or 100G), two courses from Asian 104, Chinese 101A, 101B, 101C, 103, 110A, 110B, 110C, C120, 130A, 130B, 165; for the Japanese track: Japanese 100A, 100B, 100C (or 100S), two courses from Asian 104, Japanese 101A, 101B, 101C, 110A, 110B, M120, CM123 (or CM127), 130A, 130B; for the Korean track: Korean 100A, 100B,
The Linguistics and Computer Science major combines the basic courses of the general linguistics program with that of computer science, accommodating students who want professional preparation in computer science but do not necessarily have a strong interest in computer systems hardware. The goal of linguistics is the enrichment of knowledge about the nature, grammar, and history of human language. Linguistics is a theoretical discipline, akin to philosophy, anthropology, and cognitive psychology.

Learning Outcomes

The Linguistics and Computer Science major has the following learning outcomes:

- Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, and at least one other subfield
- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield

Entry to the Major

Transfer Students

Transfer applicants to the Linguistics and Computer Science major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one introduction to linguistics course, two calculus courses, four computer programming courses, and two years of one foreign language or one year in each of two foreign languages. One discrete structures course and one probability theory course are recommended. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Linguistics 20, Computer Science 31, 32, 33, 35L, Mathematics 31A or 31AL, 31B, 61, 70, completion of the third term in one foreign language.

The Major

Eleven upper-division courses as follows: Linguistics 102 (or 103), 119A (or 120A), 120B, 120C, 165A (or 165B or 165C), 185A, one course selected from Linguistics C104, 127, 132, 165A, 165B, 165C, 180, 185B; Computer Science 131, 132 or 161, 180, 181.

Honors Program

Departmental honors are awarded at graduation to those students who have a grade-point average of 3.6 or better in their junior and senior years and who have received a grade of A in Linguistics 198A and 198B or in 199. Qualified students may be proposed by any member of the faculty to the faculty as a whole for the award of highest honors on the basis of a piece of research in linguistics completed at UCLA.

Policies

Preparation for the Major

Linguistics 20 must be passed with a letter grade of C or better prior to beginning upper-division coursework in the major.

The Major

A 2.0 grade-point average in linguistics courses is required for the major.

Linguistics and Computer Science BA

The major combines the basic courses of the general linguistics program with that of computer science, accommodating students who want professional preparation in computer science but do not necessarily have a strong interest in computer systems hardware. The goal of linguistics is the enrichment of knowledge about the nature, grammar, and history of human language at the undergraduate and graduate levels.

Learning Outcomes

The Linguistics and Computer Science major has the following learning outcomes:

- Ability to write technical material in linguistics, including language description and theory-based analysis
- Ability to access scholarly literature on language structure and use it in research
- Understanding of human language systems as computational devices
- Understanding of fundamental concepts applicable to engineering problems in natural language processing

Entry to the Major

Transfer Students

Transfer applicants to the Linguistics and Computer Science major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one introduction to linguistics course, two calculus courses, four computer programming courses, and two years of one foreign language or one year in each of two foreign languages. One discrete structures course and one probability theory course are recommended. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Linguistics 20, Computer Science 31, 32, 33, 35L, Mathematics 31A or 31AL, 31B, 61, 70, completion of the third term in one foreign language.

The Major

Eleven upper-division courses as follows: Linguistics 102 (or 103), 119A (or 120A), 120B, 120C, 165A (or 165B or 165C), 185A, one course selected from Linguistics C104, 127, 132, 165A, 165B, 165C, 180, 185B; Computer Science 131, 132 or 161, 180, 181.

Honors Program

Departmental honors are awarded at graduation to those students who have a grade-point average of 3.6 or better in their junior and senior years and who have received a grade of A in Linguistics 198A and 198B or in 199. Qualified students may be proposed by any member of the faculty to the faculty as a whole for the award of highest honors on the basis of a piece of research in linguistics completed at UCLA.

Policies

Preparation for the Major

Linguistics 20 must be passed with a letter grade of C or better prior to beginning upper-division coursework in the major.

The Major

A 2.0 grade-point average in linguistics courses is required for the major.

Linguistics and English BA

The major combines the basic courses of the general linguistics program with that of English. Students are able to study the literatures and cultures of those parts of the world in which English is the primary language, the history and structure of the English language itself, and enrich their knowledge about the nature, grammar, and history of human language at the same time.

Learning Outcomes

The Linguistics and English major has the following learning outcomes:

- Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, and at least one other subfield
- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
- Ability to write technical material in linguistics, including language description and theory-based analysis
- Ability to access scholarly literature on language structure and use it in research

Entry to the Major

Transfer Students

Transfer applicants to the Linguistics and English major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one introduction to linguistics course, one critical reading and writing course, one year of English literature survey courses, and two years of one foreign language or one year of two different foreign languages. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Linguistics 20, English 4W (or 4HW), 10A, 10B, 10C, completion of the equivalent to the sixth level of one foreign language or the equivalent to the third level of two different foreign languages.

The Major

Eleven upper-division courses as follows: Linguistics 103, 110, 120A, 120B, 165A or 165B (or 200A or 200B with a grade of A in 120A or 120B respectively and consent of instructor), one upper-division elective in the Linguistics Department (minimum 4 graded units), two courses selected from English 113A, 120, 141B, or Linguistics 170, and three elective courses selected from English 113A, 120, 140A, 140B, 141B, 150A, 150B, 151, the 150 series (one course only), the 160 series (one course only), the 170 series (one course only).

Honors Program

Departmental honors are awarded at graduation to those students who have a grade-point average of 3.6 or better in their junior and senior years and who have received a grade of A in Linguistics 198A and 198B or in 199. Qualified students may be proposed by any member of the faculty to the faculty as a whole for the award of highest honors on the basis of a piece of research in linguistics completed at UCLA.
Transfer Students

Entry to the Major

The Linguistics and Philosophy major has the following Learning Outcomes:

- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
- Ability to write technical material in linguistics, including language description and theory-based analysis
- Ability to access scholarly literature on language structure and use it in research

Linguistics and Psychology BA

The major combines the basic courses of the general linguistics program with that of philosophy, for students who are reflective about their beliefs or who wish to become so. Students enrich their knowledge about the nature, grammar, and history of human language, and are given the opportunity to ponder the foundations of almost any other subject to which they are exposed—whether history, religion, government, law, or science.

Learning Outcomes

The Linguistics and Philosophy major has the following learning outcomes:

- Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, semantics, and at least one other subfield
- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
- Ability to write technical material in linguistics, including language description and theory-based analysis
- Ability to access scholarly literature on language structure and use it in research

Entry to the Major

Transfer Students

Transfer applicants to the Linguistics and Philosophy major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one introduction to linguistics course, one symbolic logic course and two courses from Philosophy 7, 8, 21, 23, M24 (or Linguistics M7), and completion of the equivalent to the sixth level of one foreign language or the equivalent to the third level of two different foreign languages.

Requirements

Preparation for the Major

Required: Linguistics 20, Philosophy 31, and two courses from Philosophy 7, 8, 21, 23, M24 (or Linguistics M7), and completion of the equivalent to the sixth level of one foreign language or the equivalent to the third level of two different foreign languages.

The Major

Required: Eleven upper-division courses as follows: Linguistics 102 (or 103), 119A (or 120A), 120B, 120C, 165B (or 165C or 180), one upper-division elective in the Linguistics Department (minimum 4 graded units); five upper-division philosophy courses in selected from Philosophy 124 through 135, 170, 172, 174, 180, 181, 184, of which at least two must be from C127A, C127B, 172.

Honors Program

Departmental honors are awarded at graduation to those students who have a grade-point average of 3.6 or better in their junior and senior years and who have received a grade of A in Linguistics 198A and 198B or in 199. Qualified students may be proposed by any member of the faculty to the faculty as a whole for the award of highest honors on the basis of a piece of research in linguistics completed at UCLA.

Computing Specialization

Students may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major and (2) completing Program in Computing 10A and 10B and 10C (or Computer Science 31 and 32), Linguistics 185A, Mathematics 61, and one course selected from Linguistics C104, 127, 132, 165A, 165B, 165C, 180, 185B. Students graduate with a bachelor’s degree in their major and a specialization in Computing.

Policies

Preparation for the Major

Linguistics 20 must be passed with a letter grade of C or better prior to beginning upper-division coursework in the major.

The Major

A 2.0 grade-point average in linguistics courses is required for the major.

Computing Specialization

Students may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major and (2) completing Program in Computing 10A and 10B and 10C (or Computer Science 31 and 32), Linguistics 185A, Mathematics 61, and one course selected from Linguistics C104, 127, 132, 165A, 165B, 165C, 180, 185B. Students graduate with a bachelor’s degree in their major and a specialization in Computing.

Linguistics and Philosophy BA

The major combines the basic courses of the general linguistics program with that of philosophy, Students are able to study and explain human and animal behavior, both normal and abnormal, as well as enrich their knowledge about the nature, grammar, and history of human language.

Learning Outcomes

The Linguistics and Psychology major has the following learning outcomes:

- Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, and at least one other subfield
- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
- Ability to write technical material in linguistics, including language description and theory-based analysis
- Ability to access scholarly literature on language structure and use it in research

Entry to the Major

Transfer Students

Transfer applicants to the Linguistics and Psychology major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one introduction to linguistics course, one introduction to psychology course, one introduction to cognitive science course, one psychological statistics course, one psychological research methods course, and two years of one foreign language or one year of two different foreign languages. One introduction to programming course is strongly recommended.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Linguistics 20, Psychology 10, 85, 100A, 100B, and completion of the equivalent to the sixth level of one foreign language or the equivalent to the third level of two different foreign languages. Program in Computing 10A is strongly recommended.

The Major

Required: Eleven upper-division courses (six in linguistics and five in psychology) as follows: Linguistics 102 (or 103), 119A (or 120A), 120B, two of 115, 130, 132, C135, or C140, and one upper-division elective course in the Linguistics Department (minimum 4 graded units; multiple-listed courses may not be applied), Linguistics 165A, 165B, and whichever of 130, 132, and C135 has not been used to satisfy the requirement, are strongly recommended. Also required are Psychology 120A, 121, one course selected from Psychology 130, 133B, or 133E, and two elective courses selected from Psychology 115, M116A, M117C, M118, M119L, 124A, 124C, 130, 133B, 133C, 133E, 133F, 186A, 186B.
Honors Program

Departmental honors are awarded at graduation to those students who have a grade-point average of 3.6 or better in their junior and senior years and who have received a grade of A in Linguistics 198A and 198B or in 199. Qualified students may be proposed by any member of the faculty to the faculty as a whole for the award of highest honors on the basis of a piece of research in linguistics completed at UCLA.

Computing Specialization

Students may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major and (2) completing Program in Computing 10A and 10B and 10C (or Computer Science 31 and 32), Linguistics 185A, Mathematics 61, and one course selected from Linguistics C104, 127, 132, 165A, 165B, 165C, 180, 185B. Students graduate with a bachelor’s degree in their major and a specialization in Computing.

Policies

Preparation for the Major

Linguistics 20 must be passed with a letter grade of C or better prior to beginning upper-division coursework in the major. Students who complete an advanced upper-division language course are considered to have completed the equivalent of whatever courses are requisite to that advanced language course (e.g., if students complete German 152, they have automatically satisfied the requirement of the sixth level of work in German).

The Major

A 2.0 grade-point average in linguistics courses is required for the major.

Linguistics and Spanish BA

The major combines the basic courses of the general linguistics program with that of Spanish. Students are able to study the Spanish language, literatures, and cultures of the Hispanic heritage, as well as enrich their knowledge about the nature, grammar, and history of human language.

Learning Outcomes

The Linguistics and Spanish major has the following learning outcomes:

- Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, and at least one other subfield
- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
- Ability to write technical material in linguistics, including language description and theory-based analysis
- Ability to access scholarly literature on language structure and use it in research

Entry to the Major

Transfer Students

Transfer applicants to the Linguistics and Spanish major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of Spanish; one Spanish composition course; one Spanish, Portuguese, and nature of language course; one Spanish civilization course or one Spanish American civilization course; one introduction to linguistics course; and one year of a second foreign language.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Linguistics 20, Spanish 25 (or 27), M35, 42 (or 44), and completion of the equivalent to the sixth level of work in German.

The Major

Required: Eleven upper-division courses as follows: Linguistics 103, 110, 120A, 120B, 165A (or 165B), one upper-division elective course in the Linguistics Department (minimum 4 graded units), Spanish 100A, 100B, 119, 160, and one additional upper-division Spanish course.

Honors Program

Departmental honors are awarded at graduation to those students who have a grade-point average of 3.6 or better in their junior and senior years and who have received a grade of A in Linguistics 198A and 198B or in 199. Qualified students may be proposed by any member of the faculty to the faculty as a whole for the award of highest honors on the basis of a piece of research in linguistics completed at UCLA.

Computing Specialization

Students may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major and (2) completing Program in Computing 10A and 10B and 10C (or Computer Science 31 and 32), Linguistics 185A, Mathematics 61, and one course selected from Linguistics C104, 127, 132, 165A, 165B, 165C, 180, 185B. Students graduate with a bachelor’s degree in their major and a specialization in Computing.

Policies

Preparation for the Major

Linguistics 20 must be passed with a letter grade of C or better prior to beginning upper-division coursework in the major. Students who plan to complete the 165 course series must first take the corresponding 120 course series.

The Minor

Required Lower-Division Course (5 units): Linguistics 20.

Required Upper-Division Courses (27 to 30 units): Six courses, which must include Linguistics 102 (or 103), 119A (or 120A), 120B, two elective courses selected from C104 through 185B, and an additional elective linguistics course, which may be upper- or lower-division.

Students who plan to complete the 165 course series must first take the corresponding 120 course series.

Policies

Linguistics 20 must be passed with a letter grade of C or better prior to beginning upper-division coursework in the minor. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Major

Linguistics MA, CPhil, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.
American Sign Language

Lower-Division Courses
7. Advanced Intermediate American Sign Language. (5) Lecture, four hours; discussion, one hour (when scheduled). Designed for students who have completed all American sign language courses and want to qualify for more advanced courses. Intensive elementary instruction in American sign language equivalent to courses 1, 2, and 3. Offered in summer only. P/NP or letter grading.
8. Intermediate American Sign Language. (5) Lecture, four hours; discussion, one hour (when scheduled). Designed as adjunct to upper-division lecture course. INP or letter grading.
9. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Discussion of critical and theoretical topics of American Sign Language. May be repeated with different topics. P/NP or letter grading.
10. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.
11. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses
M115. Enforcing Normalcy: Deaf and Disability Studies. (4) Same as Disability Studies M115.) Lecture, three hours. Exploration of historical, medical, social, political, philosophical, and cultural influences that have constructed categories of normalcy, disability, and deafness. Building on writing of Michel Foucault and critical work in field of disability studies, inquiry into institutions that have enforced standards of normalcy throughout 19th and 20th centuries to present. Examination of theories on language, nature, and race and implications for how we understand normalcy. P/NP or letter grading.
M120. History of Deaf Communities in America. (4) (Same as History M147E.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Study of history and culture of deaf communities in America (circa 1800 to present) by exploring major events impacting deaf people, including development of sign language, deaf education, autism, politics of deafness, eugenics, deaf revolution movements, and role of the Deaf community in development of American Sign Language. Historical change, growth, and survival of America’s deaf community and development of deaf identity over time. P/NP or letter grading.
121. History of Mass Media and Deaf Community. (4) Lecture, three hours. Historical survey of mass media (print, film, television, and Internet) as sources and interpreters of deafness and deaf people within context of U.S. history. Exploration of historical changes in products of mass media within deaf community and ways of critiquing media sources. P/NP or letter grading.
149. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated with different topics. Honors content noted on transcript. P/NP or letter grading.
189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students of College Honors Program. Designed as adjunct to upper-division lecture course. In- dividual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Linguistics

Lower-Division Courses
1. Introduction to Study of Language. (5) Lecture, three hours; discussion, one hour. Survey for general undergraduates of what is known about human language; biological basis of language; scientific study of language and human cognition; uniqueness of human language, its structure, universality, its diversity; language in social and cultural setting; language in relation to other aspects of human inquiry and knowledge. P/NP or letter grading.
4. Language and Evolution. (5) Same as Indo-European Studies M70.) Lecture, three hours; discussion, one hour. Homo Sapiens is only species on Earth with capacity to create infinite number of utterances from small inventory of speech sounds. How and why humans developed this ability is question of fundamental importance. How do we use language to project our own identity? How do we use it to perceive or shape identity of others? Introduction to speech act theory and various claims that speech act theory can account for systematic patterns of human behavior; labeling of racial minorities; and, in some cases, incitement to violence through hate speech. Provides foundation for students of linguistic theory, philosophy, sociolinguistics, anthropology, and communication studies. P/NP or letter grading.
5. World Languages. (5) Same as Philosophy M24.) Lecture, four hours; discussion, one hour (when scheduled). How children acquire language and the complex of human cognitive achievements. Look at amazing linguistic abilities of infants and their first perception and production of speech sounds, then investigation of how do we learn to learn? How do we develop our understanding of languages? Language acquisition in special populations such as children acquiring sign languages, bilingual children, and people acquiring language beyond critical period. Focus mainly on English, with consideration of other languages. Offered in summer only. P/NP or letter grading.
6. Out of Mouths of Babes. (4) Lecture, six hours. How children acquire language and the complex of human cognitive achievements. Look at amazing linguistic abilities of infants and their first perception and production of speech sounds, then investigation of how do we learn to learn? How do we develop our understanding of languages? Language acquisition in special populations such as children acquiring sign languages, bilingual children, and people acquiring language beyond critical period. Focus mainly on English, with consideration of other languages. Offered in summer only. P/NP or letter grading.
7. Language and Identity. (5) Same as Philosophy M24.) Lecture, four hours; discussion, one hour (when scheduled). How do we use language to project our own identity? How do we use it to perceive or shape identity of others? Introduction to speech act theory and various claims that speech act theory can account for systematic patterns of human behavior; labeling of racial minorities; and, in some cases, incitement to violence through hate speech. Provides foundation for students of linguistic theory, philosophy, sociolinguistics, anthropology, and communication studies. P/NP or letter grading.
8. Language in Context. (4) Lecture, four hours; discussion, one hour (when scheduled). How is meaning of language influenced by world around us? Introduction to pragmatics, speech acts, ordinary language philosophy, and linguistic relativity. Good foundation for students of linguistic theory, philosophy, sociology, anthropology, and communication studies. P/NP or letter grading.
9W. Linguistic Humor: Amusing and Abusing with Language. (5) Seminar, five hours. Requisite: English Composition 3. Study of how principles of science of linguistics are applied in analyzing language structure. Data from humor and other amusements, such as secret languages (Pig Latin and more). Introduction to basics of linguistics analysis, including language sound systems, syntactic structure, word structure, word meaning, and pragmatics. Focus on nature of language as innate part of human biology that allows people from all cultural and linguistic backgrounds to acquire knowledge for human use through the mechanism shaped by culture as to what counts as funny. Satisfies Writing II requirement. P/NP or letter grading.
13. Fluor Freshman Seminars. (1) Seminar, one hour. Discussion of critical and theoretical topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.
20. Introduction to Linguistic Analysis. (5) Lecture, four hours; discussion, one hour (when scheduled). Introduction to theory and methods of linguistics: universal properties of human language; phonetic, phonological, morphological, syntactic, and semantic structures and analysis; nature and form of grammar. P/NP or letter grading.
40W. Language and Gender: Introduction to Gender and Stereotypes. (5) Formerly numbered Applied Linguistics 40W.) Lecture, four hours; discussion, two hours. Enforced requisite: English Composition 3. Prior knowledge of foreign languages not required. Introduction to language from sociological perspective of gender. Use of research and examples in English and other languages to illustrate how male and female genders and gendered language, as reflected in lexicum, language behavior, phonetics and intonation, and language acquisition and linguistic change. Satisfies Writing II requirement. P/NP or letter grading.
88A-88B. Lower-Division Seminars. (4-4) Seminar, three hours. Limited to freshmen/sophomores. Variable topics; consult Schedule of Classes, College of Linguistics / 601
Letters and Science, or department for topics to be offered in specific term. May be repeated for credit. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 as an upper-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as an upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

97. Variable Topics in Linguistics. (1 to 4) Seminar, three hours; fieldwork, two hours. Variable topics offered by departmental faculty members. May be repeated for credit with topic change. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in course and excluding the course. Individual contract required; consult Undergraduate Research Center. May be repeated, P/NP grading.

Upper-Division Courses

102. Introduction to Applied Phonetics. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: course 20. Not open for credit to students with credit for course 103. Basics of articulation and acoustics of phonetic categories used in speech production in normal and disordered states. P/NP or letter grading.

110G. Introduction to Historical Linguistics for Graduate Students. (2) Lecture, four hours. Limited to and designed for entering linguistics graduate students. Enforced requisite: course C204. Aspects of the historical structure of French language, with emphasis on properties of construction not found in English. Concurrently scheduled with course C228A. P/NP or letter grading.

110R. Romance Syntax: French. (4) Lecture, four hours; discussion, one hour (when scheduled). Preparation: some knowledge of French (or one Romance language). Enforced requisite: course 121B. Course C110R covers aspects of syntactic structure of French language, with emphasis on properties of construction not found in English. Concurrently scheduled with course C228A. P/NP or letter grading.

112B. Romance Syntax: French. (4) Lecture, four hours. Preparation: some knowledge of French (or one Romance language). Enforced requisite: courses 120B, C128A. Aspects of structure of French language, with emphasis on properties of construction not found in English. Concurrently scheduled with course C228B. P/NP or letter grading.

130. Language Development. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 20, 119A or 119B, 119B or 120B. Survey of research and theoretical perspectives in language development in children. Discussion and examination of child language data from English and other languages. Emphasis on universals in acquisition. Topics include infant speech perception and production, development of phonology, morphology, syntax, and aspects of language development. Central issues in language comprehension and production, with emphasis on how theories inform processing models. Topics include word meaning (with emphasis on spoken language), parsing, anaphora and inferencing, speech error models of second language production, and computation of syntactic structure during production. P/NP or letter grading.

135. Neurolinguistics. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 20, 119A or 120A, 119B or 120B. Examination of relationship between brain, language, and linguistic theory, with evidence presented from atypical language development and language disorders in the mature brain. Topics include methodologies to investigate normal and atypical hemispheric specialization for language and children and adults with acquired and/or congenital language disorders. Concurrently scheduled with course C235. P/NP or letter grading.

140. Bilingualism and Second Language Acquisition. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 119A or 120A, 119B or 120B. Introduction to study of childhood bilingualism and adult second language L2 acquisition. Methods used to teach second languages, including (1) past and present methods used to teach second languages, (2) current theory and practice underlying skills-based instruction, with integrated approaches to second language acquisition and learning. Development of knowledge base and rational base for design, development, implementation, and evaluation of second language instruction programs. P/NP or letter grading.

141. Current Methods of Language Teaching. (5) Same as English Composition M141.) Lecture, four hours; discussion, one hour. Enforced requisite: course 20 or scheduled. Survey of theories and practices for teaching second languages, including (1) past and present methods used to teach second languages, (2) current practice and underlying skills-based instruction, with integrated approaches to second language acquisition and learning. Development of knowledge base and rational base for design, development, implementation, and evaluation of second language instruction programs. P/NP or letter grading.

144. Fundamentals of Translation and Interpreting. (5) Lecture, four hours; discussion, one hour. Recommended preparation: knowledge of English and at least one other language. Enforced requisite: course 20. Examination of salient lexical, structural, cultural, and social aspects of translating and interpreting between two languages or dialects. Survey of development of translation and interpreting. Requisite: C110R or letter grading.
M146. Language in Culture. (5) Same as Anthropology M150.) Lecture, three hours; discussion, one hour; fieldwork, two hours. Requisite: course 20 or Anthropology 250. Four-semester sequence. Conceptual analysis of grammatical structures of language, often in form of contrastive analysis of Japanese, English, and other languages. Letter grading.


M160. Field Methods. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: course 1 or 20. Indo-European languages (ancient and modern), including their relationships, characteristics, writings, systems, and sociology of reconstructed Indo-European proto-language and proto-culture. One or more Indo-European languages may be investigated in detail. P/NP or letter grading.

160. Field Methods. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 102 or 103, 119A or 120A, 119B or 120B. Analysis of language unknown to members of class from data elicited from native speaker of that language. P/NP or letter grading.

161. Language Documentation. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 20 (enforced), and 105 or 119A or 120A. Issues in language documentation, including collection of primary data using linguistic field methods, organizing data into documents (annotated texts, dictionaries, multimedia presentations, technical articles, audiotapes, document records, etc., using target languages, linguists, scholars outside linguistics, general public), presentation and storage of documents (paper publication, online publication, electronic and physical publication) in documenting endangered languages, and organizations and initiatives for documenting endangered languages. Presentations focus on case studies. Student projects in assembling primary data and creating annotated texts with commentary. P/NP or letter grading.

165A. Phonology II. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisite: course 120A. To be taken in term following completion of course 120A or as soon as possible thereafter. Further study in phonological theory and analysis: autosegmental theory, syllable structure, metrical theory, interface of phonology and grammar. P/NP or letter grading.

165C. Semantics II. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisite: course 120B. To be taken in term following completion of course 120B or as soon as possible thereafter. Recommended preparation: To do graduate work in linguistics. Form of grammars, word formation, formal and substantive universals in syntax, relation between syntax and semantics. P/NP or letter grading.

170. Language and Society: Introduction to Sociolinguistics. (5) Formerly numbered M170.) Lecture, four hours; discussion, one hour (when scheduled). Requisite: course 20. Study of patterned variation of language and society: social dialects and social styles in language; problems of multilingual societies. P/NP or letter grading.

175. Linguistic Change in English. (5) Lecture, four hours; requisites: courses 110, 120A, 120B. Principles of linguistic change as exemplified through detailed study of history of English pronunciation, lexicography, and syntax. P/NP or letter grading.


176C. Computational Linguistics I. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisite: course 120B, Program in Computing 10C (or Computer Science 32). Introduction and overview of formal computational ideas underlying kinds of grammars used in theoretical linguistics and psycholinguistics, and some connections to applications in natural language processing. Topics include recursion, relationships between probabilities and grammars, and parsing algorithms. P/NP or letter grading.

185A. Computational Linguistics II. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisite: course 120B, Program in Computing 10C (or Computer Science 32). Tutorial. Study in regularly scheduled meetings of grammatical structures of language, often in form of contrastive analysis of Japanese, English, and other languages. Letter grading.

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185B. Computational Linguistics II. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisite: course 185A, with emphasis on computational analysis of current tools and frameworks used in linguistic theory and their cognitive interpretations. P/NP or letter grading.

188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188B. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: course 188A. Extension of material in course 188A, with emphasis on computational analysis of current tools and frameworks used in linguistic theory and their cognitive interpretations. P/NP or letter grading.

188C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

191A. Variable Topics Research Seminars: Linguistics. (4) Seminar, three hours. Requisite: course 1 or 20. Research seminar on selected topics. Reading, discussion, and development of culminating project. May be repeated for credit with topic change. P/NP or letter grading.

191B. Variable Topics Research Seminars: Linguistics. (2 or 4) Seminar, three hours. Research seminar on selected topics. Reading, discussion, and development of culminating project. May be repeated for credit with topic change. P/NP or letter grading.

192A-192B. Undergraduate Practicum in Linguistics. (4-2) Seminar, seven hours (course 192A) and six hours (course 192B). Limited to junior/senior majors. Training and supervised practicum for advanced undergraduate students to assist in linguistics courses. Students assist in preparation of materials and development of innovative programs under guidance of faculty members and teaching assistants. May not be applied toward course requirements for any Linguistics Department major. Individual contract required. Information on practicum and mentoring obtained from Linguistics Department, P/NP grading.

194. Research Group Seminars: Laboratory Research in Linguistics. (1 to 2) Seminar, one hour; laboratory, two to six hours. Limited to juniors/seniors. Individual contract required. May be repeated for credit with topic change. Individual contract required. P/NP grading.

195. Community or Corporate Internships in Linguistics. (2 to 4) Tutorial, to be arranged. Preparation: 3.0 grade-point average in major. Limited to junior/senior majors. Internship in supervised setting in community agency or business related to linguistics and/or applied linguistics. Students meet on regular basis with instructor and provide students with opportunity to gain hands-on experience. Additional supervision to be provided by intern ship site supervisor. Individual contract with supervising faculty member required. P/NP grading.

197. Individual Studies in Linguistics. (2 to 4) Tutorial, four hours. Limited to seniors. Limited to juniors/seniors. Individual study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

198A. Honors Research in Linguistics I. (4) Tutorial, to be arranged. Preparation: 3.5 grade-point average. Requisite or corequisite: course 165A (or 200A) or 165B (or 200B). Recommended: completion of both courses 165A and 165B (or 200A and 200B) before or during term in which course 198A is taken. Limited to seniors. Development of honors thesis or comprehensive research project on linguistic topic selected by student under direct supervision of faculty mentor. Consult professor in charge to enroll. May be repeated for credit. Individual contract required. In Progress grading (credit to be given only on completion of course 198B).

198B. Honors Research in Linguistics II. (2) Tutorial, to be arranged. Requisite: course 198A. Limited to juniors/seniors. Completion of honors thesis or comprehensive research project begun in course 198A under direct supervision of faculty mentor. Consult professor in charge to enroll. May be repeated for credit. Individual contract required. Letter grading.
199. Directed Research or Senior Project in Linguistics. (4) Tutorial, to be arranged. Limited to senior Linguistics majors. Supervised individual research or investigation of linguistic topics selected by student under guidance of faculty mentor. Culminating paper required. Consult professor in charge to enroll. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses


200B. Syntactic Theory I. (4) Lecture, four hours. Preparation: graduate linguistics student or grade of A in course 120B or equivalent course in syntax. In-depth introduction to selected topics in theory of constituent structure and syntax of predicates, arguments, and grammatical relations. Topics include levels of representation, X-bar theory, case theory, thematic roles, and grammatical functions. Changing rules, head-complement relations. S/U or letter grading.

200C. Semantic Theory I. (4) Lecture, four hours. Overview of current research and development in linguistic semantics. Topics include generalized quantifiers and semantic universals, predicate argument structures, variable binding and pronominalization, formal semantic interpretation, syntax and LF, tense, ellipsis, and focus. Letter grading.

201A. Phonological Theory II. (2 or 4) Lecture, four hours. Requisite: course 200A. Continuation of course 200A. Second course in two-course survey of current research in phonological theory. Topics include autosegmentalism (tone, tiers, segment structure), feature theory, underspecification, prosodic morphology. S/U (2-unit course) and S/U or letter (4-unit course) grading.

201B. Syntactic Theory II. (2 or 4) Lecture, four hours. Requisite: course 200B. In-depth introduction to selected topics in theory of movement processes and topics selected from following areas: WH-movement and related rules, subjacency and other constraints on movement; ECP and related conditions on distribution of empty categories; resumptive pronoun constructions; parametric variation in movement constructions; LF WH-movement; filters; reconstruction; parasitic gaps; barriers theory; control theory; null subject parameter. S/ U (2-unit course) and S/U or letter (4-unit course) grading.

201C. Semantic Theory II. (2 or 4) Lecture, four hours. Requisite: course 200C. Survey of current approaches to model-theoretic semantics and its relation to current linguistic theory. Approaches include general categorial grammars, Montague grammar, Boolean-based systems, generalized quantifier theory, logical form. S/ U (2-unit course) and S/U or letter (4-unit course) grading.


203. Phonetic Theory. (4) Requisite: course 120A. Preliminaries to speech analysis. Functional anatomy of vocal organs; fundamental principles of acoustics and of acoustic theory of speech production; issues in perception of speech; nature and design of feature systems for phonetic and phonological analysis.

C204A. Experimental Phonetics. (B) Formerly numbered 204A. Lecture, four hours; discussion, one hour (when scheduled). Requisite: course 102 or 103. Survey of principal techniques of experimental phonetics. Use of laboratory equipment to investigate acoustic properties of speech. Topics include elementary acoustic theory, theoretical and experimental aspects of phonetics, computer-based processing and analysis. Concurrently scheduled with course C104. S/ U or letter grading.

204B. Speech Production. (4) Lecture, three hours; laboratory, one hour. Requisite: course 104 or 204A. Survey of topics in speech production research, especially related to older theories. Topics include physiological and psychological factors in phonation, vocal tract, speech motor control, methods of speech production and articulatory/acoustic relations. Emphasis on use of laboratory techniques such as aeroacoustic transducers, electroglottography, sphygmography, and electropalatography, effects of voice and nonvoiced speech, and imaging techniques. S/ U or letter grading.

204C. Speech Perception. (2 or 4) Lecture, four hours. Recommended requisite: course 104 or (204A or 111) (or 204B). Survey of topics in speech perception research. Topics include auditory physiology and psychophysics, categorical speech perception, and cross-linguistic speech perception. Special emphasis on effect of phonetic context. S/U or letter grading.


207. Pragmatic Theory. (2 or 4) Lecture, four hours. Requisites: courses 200C, 201C. Introduction to formal pragmatic theory. Topics include speech act theory, implicatures, and theories of speech acts; attitudinal at-issue and non-at-issue; restriction and other projective content; Gricean implicature, conversational implication, and local implicature; and formal treatments of discourse, including game-theoretic pragmatics. S/ U or letter grading.


209A. Computational Linguistics I. (5) Lecture, four hours; laboratory, one hour. Overview of formal computational ideas underlying kinds of grammars used in theoretical linguistics and psycholinguistics. Themes include role of recursion, relationship between structure and interpretation (both PF and LF), relationship between grammars and probabilities, and relationship between derivations and parsing. S/ U or letter grading.

209B. Computational Linguistics II. (5) Lecture, four hours; laboratory, one hour. Requisite: course 209A. Extensions of basic language processing techniques to natural language processing. Recent models of syntactic, semantic, and discourse analysis, with particular attention to the linguistic sophistication and psychological plausibility. S/ U or letter grading.

209C. Computational Semantics. (4) Lecture, four hours. Preparation: basic knowledge of semantics. Requisite: course 185A or 209A. Study of algorithms to compute and reason with meanings of sentences and texts. Phenomena such as anaphor resolution, presupposition projection, and tracking time, objects, and space. S/ U or letter grading.

210A. Field Methods I. (4) Lecture, four hours. Preparation: grade of B or better in course 103 or in examination on practical phonetics. Requisites: courses 200A, 200B. Analysis of a language unknown to members of class from data elicited from a native speaker of the language. Term papers to be relatively full descriptive sketches of the language. May be repeated for credit with topic change. S/ U or letter grading.

210B. Field Methods II. (4) Lecture, four hours. Requisite: course 210A. Survey of different languages are investigated in different years, course 210B can only be taken as direct continuation of course 210A. Survey of language from which the above representations, grammar of, and explanations for phonological theory, S/ U (2-unit course) or letter (4-unit course) grading.

211. Intonation. (Formerly numbered 211.) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 102 or 119A or 120A or 120B. Recommended requisite: course C204A. Survey of intonational theory for English and other languages, with particular emphasis on phonological models of intonation. Students learn to transcribe intonational elements. Concurrently scheduled with course C111. S/ U or letter grading.

212. Learnability Theory. (4) Lecture, four hours. Survey of some of most significant results on capabilities of learners, given precise assumptions about their memory, time, and computational power, and precise assumptions about information provided by environment. S/ U or letter grading.

213A. Grammatical Development. (4) Requisites: courses 200A, 200B. Recommended: courses 130 or 233. Survey of theoretical perspectives and contemporary empirical research in development of syntax and other components of grammar, with particular emphasis on acquisition theory, linguistic theory, and issues of learnability.


214. Survey of Current Syntactic Theories. (4) Lecture, four hours. Course 200B. Survey of several current syntactic theories, compared with one another and with theory discussed in course 201B, from point of view of theories’ relative descriptive and explanatory power. S/ U or letter grading.

215. Syntactic Typology. (2 or 4) Lecture, four hours. Requisite: course 200B. Current results in word-order universals; genetic classification of world’s languages; cross-linguistic properties of specific construction types, including relative clauses, passives, positive and negative coreference systems, agreement systems, deixis systems, and types of sentence complements. S/ U or letter grading.

217. Experimental Phonology. (4) Lecture, four hours. Requisite: course 200A. Survey of experimental work that bears on claims about speakers’ knowledge of phonology, including theories of lexicon, relation between perception and phonology, and universal markedness relations. Letter grading.

218. Mathematical Structures in Language II. (4) Lecture, four hours. In-depth study of generalized quantifier theory; selected topics from distinctive feature theory, formal syntax, partial orders and lattices, formal language theory, variable binding operators. May be repeated for credit with consent of instructor. S/ U or letter grading.

219. Phonological Theory III. (2 or 4) Lecture, four hours. Requisite: course 201A. Survey of current research and issues in phonological theory. Topics include structure of well-formed representations, architecture of grammar, and explanations for phonological theory, S/ U (2-unit course) or letter (4-unit course) grading.

220. Linguistic Areas. (4) Requisites: courses 120A, 120B, or 127. Recommended prerequisite: Emphasis on 205A or 200A, 165B or 200B. Analysis and classification of languages spoken in a particular area (e.g., Africa, the Balkans, South Asia, Southeast Asia, Australia, Ab...
original North America, Aboriginal South America, Far East, etc.). May be repeated for credit with topic change.

222. Semantic Theory III. (2 or 4 Lecture, four hours. Requires course 210C. Introduction to semantic theories.) Lecture, four hours. Directed reading in current topics and discussion of important issues in the study of semantics.

223. Language and Development. (5) Seminar, four hours; discussion, one hour (when scheduled). Preparatory: some knowledge of French (or one Romance language). Enforced requisites: course 120B. Course C223 is enforced requisite to C228B. Aspects of structure of French language, with emphasis on properties of construction not found in English. Concurrently scheduled with course C128B. S/U or letter grading.

228A. Romance Syntax / French. (4) Lecture, four hours; discussion, one hour (when scheduled). Preparations: some knowledge of French (or one Romance language). Enforced requisite: course 120B. Course C228A is enforced requisite to C228B. Aspects of structure of French language, with emphasis on properties of construction not found in English. Concurrently scheduled with course C128B. S/U or letter grading.

228B. Romance Syntax / French. (4) Lecture, four hours. Preparation: some knowledge of French (or one Romance language). Enforced requisite: courses 120B, C228A. Aspects of structure of French language, with emphasis on properties of construction not found in English. Concurrently scheduled with course C128B. S/U or letter grading.

229. History of Linguistics. (4) Requisites: courses 200A, 200B. Aspects of history of linguistics. Different course offerings may deal with different areas of linguistics (e.g., phonology, syntax) or with different historical periods. May be repeated for credit with topic change.

231. Language Processing. (5) Lecture, four hours; laboratory, one hour. Central issues in language comprehension and production, with emphasis on how theories in linguistics inform processing models. Topics include word understanding (with emphasis on spoken language), parsing, anaphora and inference, speech error models of sentence production, and computation of syntactic structure during production. S/U or letter grading.

232. Language and Evolution. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 200A, 120A, 120B. Survey of research and theoretical perspectives in language development in children. Discussion and examination of child language data from English and other languages. Emphasis on universals of language development. Topics include infant speech perception and production, development of phonology, morphology, syntax, and word formation. S/U or letter grading.

235. Neurolinguistics. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 200A, 119A or 120A, 119B or 120B. Examination of relationship between brain, language, and linguistic theory, with evidence presented from atypical language development and language disorders in the mature brain. Topics include methodologies to investigate normal and atypical hemispheric specialization for language in children and adults with acquired and/or congenital language disorders. Concurrently scheduled with course C135. Graduate students expected to read more advanced neurolinguistic literature and prepare research papers on greater depth than undergraduates. S/U or letter grading.

236. Computational Phonology. (4) Lecture, four hours. Introduction to computational models of phonology and phonological acquisition. Topics include finite state machines, automata, constraint-based over-constrained models, dynamic programming methods. Letter grading.

238. Analyzing Historical Texts. (4) (Same as History Major and Independent Studies M238) Seminar, four hours. Directed for graduate students. Analysis of linguistic structure and ethnohistorical context of legal and other documents written by native-speaking scribes and translators. Topics include paleographic technique and text analysis software. May be repeated for credit. S/U grading.

239. Research Design and Statistical Methods. (2 or 4 Lecture, four hours. Preparatory: courses 200A, 200B. Enforced requisite: course 238.) Lecture, four hours. Discussion, one hour (when scheduled). Requisites: courses 119A or 120A, 119B or 120B. Introduction to study of childhood bilingual adult and child second language of L2 and L1 acquisition, with focus on understanding nature of L2 grammar and grammatical processes underlying L2/bilingual acquisition. Discussion of neurolinguistic and social aspects of bilingualism. Concurrently scheduled with course C140. Graduate students expected to read more advanced literature, do in-class presentation, and submit graduate-level term paper. S/U or letter grading.

251A. Topics in Phonetics and Phonology. (4) Seminar, four hours. Requisite: course 200A. Course 201A, 203, or 204A may be required. Specialized topics in phonetics and phonology. Meets with course 251B. May be repeated for credit.

251B. Topics in Phonetics and Phonology. (2 or 4 Seminar, four hours. Requisite: course 200A. Course 201A, 203, or 204A may be required. Specialized topics in phonetics and phonology. Meets with course 251A. May be repeated for maximum of 8 units. S/U grading.

252A. Topics in Syntax and Semantics. (4) Seminar, four hours. Requisite: course 200B. Course 201B, 210C, 214, 215, or 216 may be required. Specialized topics in syntax and semantics. Meets with course 252B. May be repeated for credit. Letter grading.

252B. Topics in Syntax and Semantics. (2 or 4 Seminar, four hours. Enforced requisite: course 200B. Course 214, 215, or 216 may be required. Specialized topics in syntax and semantics. May not be applied toward MA degree requirements. Meets with course 252A. May be repeated for credit. S/U grading.

253A. Topics in Language Variation. (4) Seminar, four hours. Requisite: course 110. Course 202 may be required. Specialized topics in language variation. Meets with course 253B. May be repeated for credit. Letter grading.

253B. Topics in Language Variation. (2 or 4 Seminar, four hours. Requisite: course 110. Course 202 may be required. Specialized topics in language variation. May not be applied toward MA degree requirements. Meets with course 253A. May be repeated for credit. S/U grading.

254A. Topics in Linguistics. (4) Seminar, four hours. Requisites: courses 200A, 200B. Course 201A, 201B, 201C, 202, 203, 204A, 205, 208, 209A, 209B, 212, 213A, 213C, 214, 215, 216, or 218 may be required. Individual prosessimics on topics such as child language, sociolinguistics, neurolinguistics, computational linguistics, psycholinguistics, etc. Meets with course 254B. May be repeated for credit. Letter grading.

254B. Topics in Linguistics. (2 or 4 Seminar, four hours. Requisites: courses 200A, 200B. Course 201A, 201B, 201C, 202, 203, 204A, 205, 208, 209A, 209B, 212, 213A, 213C, 214, 215, 216, or 218 may be required. Individual prosessimics on topics such as child language, sociolinguistics, neurolinguistics, computational linguistics, psycholinguistics, etc. May not be applied toward MA degree requirements. Meets with course 254A. May be repeated for credit. S/U grading.

260A-260B-260C. Seminars: Phonetics. (2 or 4 each) Seminar, three hours. Each course may be taken independently for credit. May not be applied toward MA or PhD degree requirements when taken for 2 units. May be repeated for credit. S/U grading.

261A-261B-261C. Seminars: Phonology. (2 or 4 each) Seminar, three hours. Each course may be taken independently for credit. May not be applied toward MA or PhD degree requirements when taken for 2 units. May be repeated for credit. S/U grading.

262A-262B-262C. Syntax Seminar. (2 or 4 each) Seminar, three hours. Each course may be taken independently for credit. May not be applied toward MA or PhD degree requirements when taken for 2 units. May be repeated for credit. S/U grading.

263A-263B-263C. Syntax Seminar. (2 or 4 each) Seminar, two hours. Graduate students and faculty present ongoing work; review recent research in field; and collaborate on joint projects. Concurrently scheduled with course C140. S/U grading.

265A-265B-265C. American Indian Linguistics Seminar. (1 or 4 each) Seminar, two hours; fieldwork, four hours. Presentation of research on American Indian linguistics. Each course may be taken independently for credit. May not be applied toward MA or PhD degree requirements when taken for 1 unit. May be repeated for credit. S/U grading.

266. Seminar: Sociolinguistics. (2 or 4 Seminar, two hours. Graduate students, faculty, and visitors present ongoing work; review recent research in field; and prepare for conference. S/U grading.

275. Linguistics Colloquium. (4) Preparation: completion of MA requirements. Varied linguistic topics, generally presentations of new research by students, faculty, and visiting scholars. S/U grading.

276. Linguistics Colloquium. (No credit) Designed for graduate students. Same as course 275, but taken without credit by students not presenting a colloquium. S/U grading.

277. Teaching Apprentice Practicum. (1 to 4 Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.


411A-411B. Research Orientation. (2-Design) Designed for graduate students. Sequence of lectures by department faculty to acquaint graduate students with research directions and resources of department and elsewhere on campus. May not be applied toward MA or PhD degree requirements. S/U grading.

422. Practicum: Phonetic Data Analysis. (2) Designed for graduate students. Collection and analysis of phonetic data, such as sound spectrograms, oscillographic records, and computer output. May not be applied toward MA or PhD degree requirements. S/U grading.

444. MA Thesis Preparation Seminar. (4) Seminar, two hours. Regular student presentations of MA thesis topics and progress, with discussion and criticism by other students and faculty. Presentations by faculty and guest speakers on topics relevant to professional development, such as abstract writing and conference presentations, preparing manuscripts for publication, curriculum vitae and personal websites, academic and non-academic careers in linguistics. May not be applied toward MA or PhD degree requirements. S/U grading.

495. College Teaching of Linguistics. (2 Seminar, to be arranged. Designed for graduate students. Required of all new teaching assistants. Seminars, workshops, and apprentice teaching. Selected topics, including curriculum development, various teaching strategies and their effects, teaching evaluation, and other topics on college teaching. Students receive unit credit toward full-time equivalence but not toward any degree requirements. S/U grading.

501. Cooperative Program. (2 or 8) Preparation: consent of UCLA graduate adviser and graduate dean, and host campus instructor, department chair, and
graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC, S/U grading.

596A. Directed Studies. (1 to 8) Preparation: completion of all undergraduate deficiency courses. Directed individual study or research. May be applied toward MA course requirements. May be repeated for credit. S/U grading.

596B. Directed Linguistic Analysis. (1 to 8) Preparation: completion of MA degree requirements. Intensive work with native speakers by students individually. May be repeated for credit. S/U grading.

597. Preparation for MA Comprehensive and PhD Qualifying Examinations. (1 to 8) Preparation: at least six graduate linguistics courses. May be taken only in terms in which students expect to take comprehensive or qualifying examinations. May not be applied toward MA course requirements. May be repeated for credit. S/U grading.


599. Research for PhD Dissertation. (1 to 16) Preparation: advancement to PhD candidacy. May not be applied toward PhD course requirements. May be repeated for credit. S/U grading.

Lower-Division Courses


19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities. May be repeated for a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.


109HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.


108. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

MANAGEMENT

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Management

Sanjay Sood, PhD, Chair

Faculty Roster

Professors

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Corinne B. Bendersky, PhD
Daniel J. Benjamini, PhD
Antonio E. Bernardo, PhD (John E. Anderson Professor of Management)
Sushil Bikhchandani, PhD (Howard Noble Professor of Management)
Felipe Caro, PhD
Eugene M. Caruso, PhD
Judson A. Cuskey, PhD
M. Keith Chen, PhD (Bing '86 and Alice Liu Yang Endowed Term Professor of Management and Innovation)
Mihkhail Chernov, PhD (Warren C. Corder Professor of Money and Financial Markets)
Charles J. Corbett, PhD (IBM Professor of Management)
Samuel A. Culbert, PhD
Magali A. Delmas, PhD
Sanford E. DeVoe, PhD
Aimee L. Drolet Rossi, PhD (Marion Anderson Professor of Management)
Sebastian Edwards, PhD (Henry Ford II Professor of International Management)
Andrea L. Eisfeldt, PhD (Laurence D. and Lori W. Fink Endowed Professor of Finance)
Christopher L. Erickson, PhD
Craig R. Fox, PhD (Harold Williams Professor of Management)
Stuart A. Gabriel, PhD (Arden Realty Professor)
Mark J. Gertner, PhD
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Noah J. Goldstein, MA, PhD (Ho-Su Wu Professor of Management)
Carla Hayn, PhD (Ernst & Young Professor of Accounting)
Hal E. Hershfield, PhD
Catherine M. Holmes, PhD
Uday S. Karmarkar, PhD (Los Angeles Times Professor of Management and Policy)
Marvin B. Lieberman, PhD (Henry and Elsa Kunin Professor of Business and Society)
Lars A. Lochstoer, PhD
Elisa F. Long, PhD
Francis A. Longstaff, PhD (Allstate Professor of Insurance and Finance)
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Stavros Panageas, PhD (Robert D. Beyer '83 Term Professor of Management)
Kumar Rajaram, PhD (William E. Leonhard Professor of Management)
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Mariko Sakakibara, PhD (Sanford and Betty Sigoloff Professor of Corporate Renewal)
Rakesh K. Sarin, PhD (Paine Professor of Management)
Margaret J. Shih, PhD (Neil Jacoby Professor of Management)
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Christopher S. Tang, PhD (Edward W. Carter Professor of Business Administration)
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Miguel M. Unzueta, PhD
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Robert Zeithammer, PhD

Professors Emeriti

Shlomo Benartzi, PhD
Michael J. Brennan, PhD (Goldyne and Irwin Hearsh Professor Emeritus of Money and Banking)
Randolph E. Bucklin, PhD (Peter W. Mullin Professor Emeritus of Management)
Bhagwan Chowdhry, PhD
Leer E. Corbett, PhD
Bradford Cornell, PhD
Michael R. Darby, PhD (Warren C. Corder Professor Emeritus of Money and Financial Markets)
David K. Eiteman, PhD
Donald Erlenkovetter, PhD
Eric G. Flamholtz, PhD
Arthur M. Geoffrion, PhD
Robert L. Geske, PhD
Mark S. Grinblatt, PhD
Kumar Rajaram, PhD
Dominique M. Hanssens, PhD (Bud Knapp Marketing Professor Emeritus)
John S. Hughes, PhD (Ernst & Young Professor Emeritus of Accounting)
Sanford M. Jacoby, PhD (Howard Noble Professor Emeritus of Management)
Overview

The John E. Anderson Graduate School of Management at UCLA offers a variety of programs leading to graduate degrees at the master’s and doctoral levels. These include a professional Master of Business Administration (MBA), a Master of Financial Engineering (MFE), and a Master of Science (MS) in Business Analytics; as well as three MBA programs for working professionals including the Fully Employed MBA program for mid-level and emerging senior leaders, the 22-month Executive MBA program, and the UCLA-NUS Global Executive MBA program in partnership with the National University of Singapore (NUS) Business School, both designed for senior-level managers and executives. A PhD in Management is also offered (an MA degree may be earned in the process of completing PhD requirements). A certificate Executive Program, as well as research conferences and seminars for experienced managers, are also offered.

Undergraduate Study

The school offers an undergraduate minor in Accounting, and an interdisciplinary minor in Entrepreneurship in conjunction with the College of Letters and Science. Several undergraduate courses in management are also of graduate courses in management are also of interest, for those planning to pursue graduate study. The school offers a variety of programs leading to graduate degrees at the master’s and doctoral levels. These include a professional Master of Business Administration (MBA), a Master of Financial Engineering (MFE), and a Master of Science (MS) in Business Analytics; as well as three MBA programs for working professionals including the Fully Employed MBA program for mid-level and emerging senior leaders, the 22-month Executive MBA program, and the UCLA-NUS Global Executive MBA program in partnership with the National University of Singapore (NUS) Business School, both designed for senior-level managers and executives. A PhD in Management is also offered (an MA degree may be earned in the process of completing PhD requirements). A certificate Executive Program, as well as research conferences and seminars for experienced managers, are also offered.

Undergraduate Minors

Accounting Minor

The Accounting minor provides students with a comprehensive accounting background.

Admission

To enter the minor, students must (1) have a minimum cumulative UCLA grade-point average of 3.0, (2) complete all required pre-admission courses with a minimum course grade-point average of 3.0, and (3) receive grades of B or better in Management 1A and 1B. Repetition of more than one pre-admission course or of any pre-admission course more than once results in automatic denial of admission to the minor. Satisfying these requirements does not guarantee admission to the program, as only a limited number of students are admitted each year.

Applications are accepted in fall, winter, and spring quarters. Nontransfer students must apply subsequent to completing 90 units. Transfer students must apply after completing two academic quarters (excluding summer sessions) at UCLA. Decisions are made by the Anderson School Accounting Area.
Required Pre-admission Courses (31 units minimum): Economics 1, 2, any statistics course offered or considered transferable to UCLA, Management 1A and 1B (former course 100 taken at UCLA may be substituted), Mathematics 3A or 31A, 3B or 31B or 31E, one Writing II course, Interviewing Workshop Series. If Management 1A and/or 1B are not taken at UCLA, students must complete courses 120A and 122 prior to admission to the minor.

The Minor

Policies
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Transfer credit for any of the above courses is subject to department approval and is considered only for the pre-admission courses. Only one pre-admission and one upper-division course repeat are allowed.

Each pre-admission and upper-division course must be taken for a letter grade; if taken on a Passed/Not Passed basis, it cannot be applied toward the minor program. Each upper-division course must be completed at UCLA. All courses applied toward minor requirements must receive a grade of C or better. Successful completion of the minor is indicated on the transcript and diploma.

Entrepreneurship Minor
See the Entrepreneurship section for a description of the minor.

Graduate Majors
Business Analytics MS
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduation Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Executive Master of Business Administration
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduation Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Global Executive Master of Business Administration for Asia Pacific
The Anderson Graduate School of Management offers a dual degree program with the National University of Singapore Business School.

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduation Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Management MS, CPhil, PhD
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduation Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Master of Business Administration
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduation Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Concurrent Degree Programs
Concurrent degree programs allow students to reduce the number of courses required for two degrees, since some courses may apply to both degrees.

- Master of Business Administration/Computer Science MS
- Master of Business Administration/Doctor of Dental Surgery
- Master of Business Administration/Doctor of Medicine
- Master of Business Administration/Juris Doctor

- Master of Business Administration/Latin American Studies MA
- Master of Business Administration/Master of Library and Information Science
- Master of Business Administration/Master of Public Health
- Master of Business Administration/Master of Public Policy
- Master of Business Administration/Master of Science in Nursing
- Master of Business Administration/Master of Urban and Regional Planning

Master of Financial Engineering
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduation Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Management Lower-Division Courses
1A-1B. Principles of Accounting. (4-4) Lecture, three hours; discussion, one hour. Not open to freshmen. P/NP or letter grading. 1A. Introduction to financial accounting principles, including preparation and analysis of financial transactions and financial statements. Valuation and recording of asset-related transactions, including cash, receivables, marketable securities, inventories, and long-lived assets. Current liabilities. 1B. Required: course 1A. Completion of balance sheet with emphasis on debt and equity, including in-depth introduction to time value of money concepts. Introduction to partnership and individual income tax accounting.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

88. Lower-Division Seminar: Special Topics in Management. (1 to 4) Seminar, three hours; outside study, nine hours. Requisite: satisfaction of Entry-Level Writing requirement. Variable topics seminar that examines specific issues or problems and ways that professionals in management approach study of them. Students define, prepare, and present their own research projects with guidance of professional school faculty member. Letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

99HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors and departmental honors programs. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor.
Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses


121. Ethical Leadership in Accounting. (4) Lecture, seven and one half hours. Not open to freshmen. Review of range of ethical considerations in business decisions involving individuals, corporations, society, and international business. Analysis of cases for presentation and discussion. What is ethical dilemma posed? What is range of possible decisions and band of ethical choices supporting them? Offered in summer only. Letter grading.

122. Management Accounting. (4) Lecture, three hours. Requisites: course 1B, one statistics course. Nature, objectives, and procedures of cost accounting and control; job costing and process costing; accounting for manufacturing overhead; cost budgeting; cost reports; joint-product costing; distribution cost; standard costs; differential cost analysis; profit-volume relationship and break-even analysis. P/NP or letter grading.

123. Auditing. (4) Lecture, three hours. Requisite: course 120B. Comprehensive study of procedures used in verification of financial statements and related information. Legal, moral, and other professional issues. Auditing of a complete set of financial statements. P/NP or letter grading.


127A. Tax Principles and Policy. (4) Lecture, three hours. Requisite: course 1B. Study of fundamental income, estate, and gift tax concepts and other entities in analyzing business, investment, employment, and personal decisions. Special emphasis on role of tax rules in capital transactions and decision making. P/NP or letter grading.

127B. Corporate and Partnership Taxation. (4) Lecture, three hours. Requisite: course 1B. Recommended: course 127A. Study of tax issues arising in formation, operation of corporations and partnerships. Special emphasis on closely held enterprises, including S corporations. P/NP or letter grading.

127C. International Taxation. (4) Lecture, three hours. Requisites: course 127A. Analysis of two principle areas of international taxation from U.S. regulatory perspective: taxation of American citizens and companies conducting business in international arena (outbound transactions) and taxation of foreign nationals and companies who invest or conduct business in the U.S. (inbound transactions). P/NP or letter grading.


129. Basic Managerial Finance. (4) Lecture, four hours. Requisites: course 1B, one statistics course. Not open for credit to students with credit for Economics 106F. Study of financial decision making by business firms, with emphasis on applications of economic and accounting principles in financial analysis, planning, and control. Extensive use of problems and cases to illustrate analytical techniques employed in decision making. P/NP or letter grading.


142A. Analytics in Accounting I. (4) Lecture, three hours. Requisite: course 12A. Preparation: intermediate Excel user. Not open to first years. Topics include cleaning and analyzing data, and advanced dashboard techniques, to evaluate accounting data. All applications are related to accounting and finance. Includes developing analytics mindset, data scrubbing and preparation, and statistical analysis. Emphasis on graphical and written techniques to communicate results. Letter grading.

142B. Analytics in Accounting II. (4) Lecture, three hours. Requisite: course 142A. Preparation: intermediate Excel user. Not open to first years. Topics include cleaning and analyzing data, and advanced dashboard techniques, to evaluate accounting data. All applications are related to accounting and finance. Includes developing analytics mindset, data scrubbing and preparation, and data quality. Emphasis on graphical and written techniques to communicate results. Letter grading.

142C. Analytics in Accounting III. (4) Lecture, three hours. Preparation: course 142B. Preparation: intermediate Excel user. Not open to first years. Topics include cleaning and analyzing data, and advanced dashboard techniques, to evaluate accounting data. All applications are related to accounting and finance. Includes developing analytics mindset, data scrubbing and preparation, and data quality. Emphasis on graphical and written techniques to communicate results. Letter grading.

159. Foundations of Business and Entrepreneurship. (4) Lecture, three hours. Introductory overview of core areas of business and entrepreneurship including accounting, finance, marketing, operations, organization behavior, and leadership concepts in context of large existing organizations, small businesses, and new entrepreneurial ventures. Students gain solid foundational knowledge of components of business as well as how organizations are managed in increasingly competitive and global economy. Letter grading.

160. Entrepreneurship and Venture Initiation. (4) Lecture, three hours; credit/no credit. Preparation: introduction to key concepts of entrepreneurship, including new product development, finance, business plan development, and technology commercialization. Basic topics to include personal characteristics required for entrepreneurship. Terminology used by lawyers, accountants, venture capitalists, and other investors when forming and financing new companies to be developed. Offered in the fall only. P/NP grading.

161. Business Plan Development. (4) Lecture, three hours. Enforced requisite: course 160. Fundamentals of developing effective business plans, both in presentation and written form. Basic principles of designing and articulating plans for sales, marketing, product or service, operations, financials, management, and strategic operations of new venture. How to develop well-written investment-quality business plans and business plan presentations, understand various analytical processes required to produce such plans, improve student presentation and oral presentation skills, and formally present their business plans to audience of angel and venture capital investors. Letter grading.

162. Entrepreneurship and Technology Commercialization. (4) Lecture, three hours. Designed for juniors/seniors. Introduction to transformation of new knowledge and inventions into viable commercial products and services, with particular emphasis on technology being developed at major research universities like UCLA. Initial emphasis on assessment and protection of intellectual property and early evaluation of technology to determine potential for commercialization. How intellectual property in its various forms is protected and how rights to these assets are negotiated by parties involved. Examination of nature of contracts and negotiation between university technology transfer offices, researchers, technical experts, and early investors in commercialization space that might lead to patents, licenses, or new business development. Letter grading.

163. Entrepreneurship and New Product Development. (4) Lecture, three hours. Designed for juniors/seniors. Introduction to new product innovation and management. Students assume role of product manager, identifying, developing, and commercializing new products through cases, businesses currently in news, team project, and readings to develop critical thinking, decision-making skills, and creativity in launch of successful new product (team project). Letter grading.

164. Entrepreneurial Finance and Accounting. (4) Lecture, three hours. Designed for juniors/seniors. Introduction to fundamental concepts of financial management of early-stage companies, with particular emphasis on capital formation of new ventures. Relationship between entrepreneurs and investors and discussion of different goals of founders and investors, including nature of negotiation and relationship between parties over time. Letter grading.


167. Social Entrepreneurship. (4) Lecture, three hours. Designed for juniors/seniors. Examination of fundamental challenges and concepts of developing and managing enterprises with social missions. Use of framework to develop strategic implementation plan that incorporates external analysis, organizational assessment, strategy development, and related tools and techniques. Course steps and draws on expertise and experience of faculty members and alumni as well as experts in
fields of social entrepreneurship, nonprofit management, and strategic philanthropy who present select topics of interest, Letter grading.

168. Personal Financial Health: Theory and Practice. (4) Lecture, three hours; fieldwork, eight weeks. Enrollment by instructor consent. Capstone for undergraduate minor in Entrepreneurship. Application of critical thinking, research skills, and education to one of follow-up semester or summer years of entrepreneurial startup idea. Real-world experience supplemented with theoretical knowledge on entrepreneurial leadership, ethics, and professional branding. Letter grading.

170. Real Estate Finance and Investments. (4) Lecture, three hours. Exploration of fundamentals of residential and commercial real estate finance, investment, and development. Study of qualitative concepts and quantitative tools necessary to develop real estate decision-making skills. Analysis of variety of case studies of financial investment, and development projects from U.S., Europe, China, and Japan that highlight opportunities, risks, challenges, and solutions that were unique to each situation. Use of specially prepared case studies to help understand and discuss financial aspects of transactions, consideration of macroeconomic context, and discussion of its potential impact on real estate finance and investment decisions. P/NP or letter grading.

180. Special Topics in Management. (4) Lecture, four hours. Topics of special interest to undergraduate students. Specific subjects may vary each term depending on particular interest of instructors or students. May be repeated for credit. P/NP or letter grading.

182A. Principles and Practice. (4) Lecture, six hours. Proven methods for motivating, and inspiring best performance, persuading, and influencing others; leading high-performance teams; creativity and innovation; decision-making, and negotiating skills, both one-on-one and in groups. Organizational examples, simulations, and in-class exercises. P/NP or letter grading.

188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE Seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 885 course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as conduit to undergraduate lecture course. Exploration of topics in greater depth than in original papers or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors and departmental honors programs. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors contract note included in grade. P/NP or letter grading.

194. Anderson School of Management Research Group Seminar. (2) Seminar, two hours. Study and analysis of current topics in management and business. Discussion of current research and literature in research specialty of faculty instructor. P/NP grading.

195. Community or Corporate Internships in Management. (2 to 4) Tutorial, to be arranged. Limited to juniors/seniors. Internship in supervised setting in community agency or business. Students meet on regular basis with faculty mentor and provide periodic report of their experience. May be repeated for maximum of 8 units. Individual contract with supervising faculty member required. P/NP or letter grading.

199. Directed Research. (2 to 6) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation of selected research topic under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

201A. Business Forecasting: Turning Numbers into Knowledge. (4) Discussion, three hours. Preparation: familiarity with linear regression. Examination of one approach to analytical thinking—forcing numerical and textual data into carefully formulated alternative models. Data studied include macroeconomic variables (growth, inflation, unemployment, interest rates, and exchange rates), industry data, and firm data. Letter grading.


202B. Economic Consulting and Applied Managerial Economics. (4) Lecture, three hours. Requires courses 402, 405. Use of economic methods to analyze issues of intellectual property, environmental damage, trademark infringement, brand value, and consumer demand. Focus on econometric thinking and problem solving using case studies as basis for lectures and homework. S/U or letter grading.

203. Behavioral Economics. (4) Lecture, three hours. Behavioral economics provides insights from psychology (and other social sciences) to improve understanding of economic markets and decision making. By relaxing or replacing simplifying assumptions of standard economic models, behavioral economics aims to describe behavior with greater psychological realism and empirical accuracy. Overview of this rapidly developing field, and illustration of its implications for business and policy decisions across variety of contexts. Use of lectures, discussion, group interactions, and case studies to help students understand the forces driving behavior in the real world. Letter grading.


206. Global Trends. (4) Lecture, three hours. Exploration of recent global trends affecting business. Global trends are social, economic, and geopolitical evolutions that have first-order effects on management practices and business opportunities around world. Global managers need to develop keen sense of these evolutions in order to lead successful businesses that adapt to and take advantage of global trends. Student project will involve students in these trends to become better managers. Letter grading.

209A-209B. Managing Complex Business Deals. (4 or 6) Lecture, three hours. Preparation: familiarity with basic vocabulary and concepts, including basic principles of accounting and valuation. Course 209A is enforced requisite to 209B. Advanced course in business deals and examination of structure of business transactions and allocation of control, risk, and return. Topics include venture capital investments, debt and loan agreements, employment agreements, distribution and marketing agreements (including franchising), motion picture production/finance/distribution agreements, and joint ventures. Assigned reading and focus on documents that incorporate terms of business transactions of deals. Concurrently scheduled with Law 239. S/U or letter grading.

214. Managerial Decision Making. (4) Lecture, three hours. Development of decision-making skills and choice, common behavioral biases of managers and consumers, and cognitive tools and procedures, drawing heavily on disciplines of psychology and behavioral economics. Topics include decision structuring, chance processes, forecasting, confidence, likelihood judgment, risk perception and risk-taking, decision under uncertainty, multiattribute choice, framing and mental accounting, intertemporal choice, allocation decisions, organizational decision making, choice architecture, happiness, and well-being. S/U or letter grading.

215A. Negotiations Analysis. (4) Lecture, three hours. Series of negotiation exercises to foster development of students' negotiation skills and experience. Use of economic concepts and simple analyses in exercise debriefs to gain insight and to develop framework applicable to business negotiations. S/U or letter grading.


216. Decision Analysis. (4) Lecture, three hours. Requires: course 420. Managerial decision making occurs in presence of uncertainty which can be about events over which no individual has any control or it can be about what other individuals will do. Framework provided for structuring and analyzing such decisions, with application of framework to such scenarios as product development, litigation, business of treating, bidding, and bidding.

218. Tools and Analysis for Business Strategy. (4) Lecture, three hours. Goal is for students to become more comfortable with design, execution, and interpretation of data analysis that can meaningfully inform business strategy formulation. Knowledge and skills approach is firmly rooted in learning by doing. Use of variety of real-world examples to gain practice with quantitative
methods that can be deployed in business settings to analyze underlying predictors and causes of firm success. Letter grading.

220. Corporate Financial Reporting, (4) Lecture, three hours. In-depth treatment of corporate financial reporting to enhance understanding of financial statements and student ability to interpret and use information contained in these disclosures. Emphasis on economic substance of transactions. S/U or letter grading.

222. Corporate Decision Making and Incentives, (4) Lecture, three hours. Requisite: course 403. Use of basic microeconomics to answer what information is needed to make managerial decisions, what incentives are needed to motivate managers, and how information should be recorded to facilitate both. Essential for careers in consulting, private equity, and general management. S/U or letter grading.

223. Choice Architecture, (4) Lecture, three hours. Requisite: course 403. Use of behavioral science principles to solve real societal and policy problems. Through partnerships with health, government, and industry contacts, students and partners to identify behavioral problems within organizations; test and guide implementation of evidence-based solutions. Provides structured on-ramp to applied skill of behavioral insight in real-world contexts. Ideal for students who want to leverage rigorous behavioral insight into their emerging leadership style. Letter grading.

224. Business Law for Managers and Entrepreneurs, (4) Lecture, three hours. Introduction to the law that uses practical approach to teach students to recognize, understand, and manage legal issues. Topics include contract law, litigation and alternative dispute resolution, intellectual property law, business formation, corporate law, employment law, collateralized lending, and bankruptcy reorganizations. How to deal with potential legal issues before they become serious problems. S/U or letter grading.

M225. Law and Management of Nonprofit Organizations, (4) (Same as Public Policy M229) Lecture, three hours. Introduction to important legal, financial, and management issues confronting nonprofit organizations. Topics include how to start nonprofit tax-exempt organizations, qualifying and maintaining tax-exempt status under IRC Code Section 501(c)(3), corporate governance, political and legislative activity restrictions, and government programs. S/U or letter grading.


228. Financial Statement Analysis, (4) Lecture, three hours. Requisite: course 403. Preparation; course 220 (corporate financial reporting), or comfort with learning new concepts independently prior to covering in class. Development of skills and tools for using financial statements and other information to evaluate and value companies. Financial analysis segment covers use of financial statements for decision making, financial statement analysis, forecasting and valuation segment develops tools of techniques for estimating fundamental value of company, and evaluating estimates. Applied course with some valuable readings and weekly mandatory case reviews of accounting principles. S/U or letter grading.

231C. Corporate Valuation, (4) Lecture, three hours. Requisites: courses 408, 430. Lectures, discussions, and student presentations. Issues and analytical tools relevant for valuing projects, divisions, and corporations. Theories of discounted cash flow valuation (DCF) and relative valuation using market multiples. Theories of practice to value different projects, including IPO, mergers and acquisitions, divestitures, and private firms. Exploration of how real options affect investment decisions and how they can be identified and valued. Letter grading.

231D. Takeovers, Restructuring, and Corporate Governance, (4) Lecture, three hours. Requisites: courses 230 (or 430), 408. Process by which corporate control transactions take place; role of market for corporate control in leading to economic restructuring and shifts in resource allocation by corporations. Empirical evidence on how market for control transactions and reactions to control transactions and to defensive measures by management. Focus on interaction of strategic planning, firm value maximization, and investment decisions in life cycle of firm. S/U or letter grading.

231E. Managing Finance and Financing Emerging Enterprises, (4) Lecture, three hours. Requisites: courses 230 (or 430), 403, 408. Designed for second-year graduate students. Emphasis on financial, control, and investment issues confronting rapidly growing companies in entrepreneurial settings. Consideration and selection of financing vehicles that may be appropriate for companies' money requirements. S/U or letter grading.

232A. Investment Management, (4) Lecture, three hours. Requisites: courses 230 (or 430), 408, 403, 408. Designed for second-year graduate students. Introduction to fixed-income markets; valuation; fixed-income finance, money market; futures; arbitrage and hedging relationships, valuation of derivative trading strategies, and innovations in derivative markets. Students learn fundamentals of hedging and spreading by playing option trading game and writing term paper analyzing their strategies. S/U or letter grading.

232B. Market and Credit Risk Management, (4) Lecture, three hours. Requisites: courses 403, 430. Dissemination of key concepts, market and credit risk management, data necessary to manage these risks, types of models used for risk management, types of securities and techniques for hedging market and credit risks, performance measurement of risk management systems, and other risks of types that affect risk management, such as operation risk, liquidity risk, commodity risk, weather risk, and model risk. Letter grading.

232F. Behavioral Finance, (4) Lecture, three hours. Requisite: course 408. Introduction to and explanation of evidence of anomalous return behavior found in U.S. equity markets.ולד ponds management use of some paradoxes of stock price movements that are rooted in studies from psychology and explanation of trading activity in equity risk-return paradigm. Introduction to some psychological biases observed in financial market behavior which are inherent to investors. Employment of some results from psychology literature to explain irrationalities encountered in finance literature. Presentation of latest evidence on individual investors, market, and how individual and institutional investors form their portfolios. Letter grading.

234A. International Financial Markets, (4) Lecture, three hours. Enforced requisite: course 408. Conceptual understanding of foreign exchange market, Euro-currency market, international bond market, and equity markets in various countries. Emphasis on understanding economic principles, although where relevant, institutional features and valuation of foreign exchange market, Euro-currency market, international bond market, and equity markets in various countries. Emphasis on understanding economic principles, although where relevant, institutional features and valuation of foreign exchange market, Euro-currency market, international bond market, and equity markets in various countries. Emphasis on understanding economic principles, although where relevant, institutional features and valuation of foreign exchange market, Euro-currency market, international bond market, and equity markets in various countries. Emphasis on understanding economic principles, although where relevant, institutional features and valuation of foreign exchange market, Euro-currency market, international bond market, and equity markets in various countries. Emphasis on understanding economic principles, although where relevant, institutional features and valuation of foreign exchange market, Euro-currency market, international bond market, and equity markets in various countries. Emphasis on understanding economic principles, although where relevant, institutional features and valuation of foreign exchange market, Euro-currency market, international bond market, and equity markets in various countries. Emphasis on understanding economic principles, although where relevant, institutional features and valuation of foreign exchange market, Euro-currency market, international bond market, and equity markets in various countries. Emphasis on understanding economic principles, although where relevant, institutional features and valuation of foreign exchange market, Euro-currency market, international bond market, and equity markets in various countries. Emphasis on understanding economic principles, although where relevant, institutional features and valuation of foreign exchange market, Euro-currency market, international bond market, and equity markets in various countries. Emphasis on understanding economic principles, although where relevant, institutional features and valuation of foreign exchange market, Euro-currency market, international bond market, and equity markets in various countries. Emphasis on understanding economic principles, although where relevant, institutional features and valuation of foreign exchange market, Euro-currency market, international bond market, and equity markets in various countries. Emphasis on understanding economic principles, although where relevant, institutional features and valuation of foreign exchange market, Euro-currency market, international bond market, and equity markets in various countries. Emphasis on understanding economic principles, although where relevant, institutional features and valuation of foreign exchange market, Euro-currency market, international bond market, and equity markets in various countries.
tools to respond to emergent uncertainties and to address situations where intense pressures of time and cost are present. Letter grading.

252. Persuasion and Influence. (4) Lecture, three hours. Enforced requisite: course 409. Designed for individuals interested in improving their ability to persuade and influence others. Consideration of number of well-studied persuasion and influence strategies that result in greater buy-in for one’s ideas, initiatives, proposals, products, and requests. Letter grading.

254. Incentives and Motivation in Organizations. (4) Lecture, three hours. Course 254 is open to MBA, EMBA, and FEMBA students. Focus on strategic management of rewards and compensation practices to develop skills needed by employees and executives. Analysis of cases and interactions with human resource management and compensation practices to develop skills needed to design and implement optimal reward systems for organizations. S/U or letter grading.

256. Leadership and Ethics. (4) Lecture, three hours. Series of real-life business situations that pose complex problems of leadership and ethics, so students develop brainstorming and divergent thinking of how they can successfully address business situations that define their leadership and ethical positions. Letter grading.

259. Performance Management. (2) Lecture, three hours. Focus on tools and skills that allow students to excel in communicating their vision, inspiring and gaining commitment from stakeholders, and impressing interviewers and investors. Course materials are grounded in empirical research. Skills and techniques learned are broadly generalizable. Experiential exercises to enhance students’ abilities in oral and written communications. Letter grading.


261B. Global Marketing Management. (4) Lecture, three hours. Enforced requisite: course 411. Analysis of opportunities, distinctive characteristics, and emerging trends in foreign markets, including exploration of alternative methods and strategies for entering foreign markets; organizational planning and control; impact of social, cultural, economic, and political differences; and problems of adapting American marketing concepts and methods. Letter grading.


263A. Consumer Behavior. (4) Lecture, three hours. Enforced requisite: course 411. Study of nature and determinants of consumer behavior. Emphasis on influence of sociopsychological factors such as personality, small groups, demographic variables, social class, and culture on formation of consumers’ attitudes, consumptions, and purchasing behavior. S/U or letter grading.

264A. Market Research. (4) Lecture, three hours. Enforced requisite: course 411. Designed for prospective users of research results rather than for specialists in research. Marketing research is aid to management decision making. Development of problem-analysis skills, and descriptive and predictive methods of marketing research, with increased sensitivity to limitations of marketing data. Letter grading.

264B. Data Analytics for Marketing and Finance. (4) Lecture, three hours. Enforced requisite: course 402. How to fit predictive models and visualize multivariate data using examples and topics from marketing and finance. Topics include conditional prediction and predictive models, advanced treatment of regression, visualization and graphics, and selecting promising needs for which potential medtech solutions are explored. Students work in groups to expedite traditional research and development processes to invent and implement new med-tech devices that increase quality of clinical care and result in improved patient outcomes in hospital system. Introduction to intellectual property basics and various medtech business models. Letter grading.

M271B. Medtech Innovation II: Prototyping and New Venture Development. (Same as Bioengineering M233B.) Lecture, three hours; outside study, nine hours. Preparation of graduate and professional students in engineering, dentistry, design, law, management, and medicine. Development of medtech solutions for unmet clinical needs previously identified in courses M271A, letter grading.


274. Current Topics in Emerging Technologies and Markets. (2) Seminar, two hours. Designed for graduate students. Examination in depth of current issues in emerging technologies and related market developments. Topics vary. May be repeated for credit. S/U or letter grading.

277A-277B. Real Estate Finance Law. (1 to 8) (Same as Law M209.) Lecture, three hours. Concentrated study of real estate financing law. Issues from both national and California perspectives. Topics include California deed of trust, installment land contracts and other mortgageing substitutes, assignments of rents, receivership, prepayment, foreclosure, priorities, California antideficiency legislation, impact of borrower bankruptcy on mortgage lenders, construction lending, future advances lending, and secondary market. Concurrently scheduled with Law 209. In Progress (277A) and S/U or letter grading.

M277. Real Estate Finance Law. (1 to 8) (Same as Law M209.) Lecture, three hours. Concentrated study of law governing financing of land transactions from both national and California perspectives. Topics include California deed of trust, installment land contracts and other mortgageing substitutes, assignments of rents, receiverships, prepayment, foreclosure, priorities, California antideficiency legislation, impact of borrower bankruptcy on mortgage lenders, construction lending, future advances lending, and secondary market. In Progress (277A/B) and S/U or letter grading.

278A. Urban Real Estate Financing and Investing. (4) Lecture, three hours. Enforced requisite: courses 408, 430. Investor-oriented course in which real estate and business trends are evaluated to determine alternative real estate investment opportunities. Use of current financial, economic, and investment theories and techniques to real estate investment opportunities in case studies and short case problems. Letter or S/U grading.

278B. Cases in Real Estate Investments. (4) Lecture, three hours. Enforced requisite: courses 408, 430. Development of understanding of principal issues involved in real estate investment and finance. Topics include real estate financial analysis and valuation in variety of contexts (single and multifamily residential, commercial/industrial, shopping center, and hotel properties), real estate taxation, real estate development, real estate project process, securitization, REITs, and leasing and workout of troubled properties. S/U or letter grading.

279B. Entrepreneurial Real Estate Development. (4) Lecture, three hours. Enforced requisite: courses 278A (or 278B), 458, 430. Analysis of various aspects of real estate development from perspectives of entre-

M293C. Ethical Considerations in Business. (4) Lecture, three hours. Examination of ethical considerations in business decisions involving the individual, corporation, society, and international business. Analysis of cases for classroom presentation and discussion. S/U or letter grading.

M294. Law and Economics Workshop. (2 or 3) Seminar, two hours. Requisite: course 405 or Economics 201A. Knowledge of empirical methods and basic calculus required. Interdisciplinary speaker series bringing together outside speakers with scholars and students from UCLA Law School and academic departments. Topics include contracts, torts, intellectual property, and business law. Students write graded research papers. May be repeated for credit. Concurrently scheduled with Economics 206 and Law 648, S/U or letter grading.


M295B. Corporate Entrepreneurship. (4) Inquiry into nature of entrepreneurship and effective implementation of entrepreneurial strategies in large industrial enterprises. Emphasis primarily on managerial efforts aimed at identification, development, and exploitation of technical and organizational innovations, management of new product or process developments, and effective new venture management in a corporate context. S/U or letter grading.


M296D. Special Topics in Management. (4) Lecture, three hours. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. Letter grading.

M296E. Special Topics in Management. (2) Lecture, 90 minutes. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. Letter grading.

M296F. Special Topics in Management. (1) Lecture, one hour. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. Letter grading.

M296G. Special Topics in Management. (4) Lecture, three hours. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

M296H. Special Topics in Management. (2) Lecture, 90 minutes. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

M296I. Special Topics in Management. (1) Lecture, one hour. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.


M297C. International Business Law. (4) Requisite: courses 205A, 296A. Legal environments in which international business operates, with emphasis on client relationships and organizations; antitrust, taxation, transfer of capital, and technology regulations; patent, trademark, and copyright safeguards; arbitration of international business disputes. Focus on key aspects of foreign investments; international business and government relations. Letter grading.


M298A. Leadership, Motivation, and Power. (4) Discussion, three hours. Enforced requisite: courses 409, 414A. Optimization of team performance by diagnosing complex team dynamics and taking appropriate action to improve team functioning to help students strengthen their skills in ways that are proven to increase effectiveness and performance of teams. Letter grading.

M298B. Managerial Interpersonal Communication. (4) Discussion, three hours. Enforced requisite: courses 409, 414A. Optimization of team performance by diagnosing complex team dynamics and taking appropriate action to improve team functioning to help students strengthen their skills in ways that are proven to increase effectiveness and performance of teams. Letter grading.

M298C. Managing Entrepreneurial Organizations. (4) Lecture and discussion, three hours. Enforced requisite: courses 409, 414A. Optimization of team performance by diagnosing complex team dynamics and taking appropriate action to improve team functioning to help students strengthen their skills in ways that are proven to increase effectiveness and performance of teams. Letter grading.


M298E. Corporate Entrepreneurship. (4) Lecture, three hours. Opportunities offered to deepen understanding of one’s own communication styles and skills, considering verbal, nonverbal perceptual, and cross-cultural aspects. S/U or letter grading.


M298G. Corporate Entrepreneurship. (4) Inquiry into nature of entrepreneurship and effective implementation of entrepreneurial strategies in large industrial enterprises. Emphasis primarily on managerial efforts aimed at identification, development, and exploitation of technical and organizational innovations, management of new product or process developments, and effective new venture management in a corporate context. S/U or letter grading.


M298J. Special Topics in Management. (4) Lecture, three hours. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. Letter grading.

M298K. Special Topics in Management. (2) Lecture, 90 minutes. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. Letter grading.

M298L. Special Topics in Management. (1) Lecture, one hour. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

M298M. Special Topics in Management. (2) Lecture, 90 minutes. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

M298N. Special Topics in Management. (1) Lecture, one hour. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

M298O. Special Topics in Management. (2) Lecture, 90 minutes. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

M298P. Special Topics in Management. (1) Lecture, one hour. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

M298Q. Special Topics in Management. (2) Lecture, 90 minutes. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

M298R. Special Topics in Management. (1) Lecture, one hour. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

M298S. Special Topics in Management. (2) Lecture, 90 minutes. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

M298T. Special Topics in Management. (1) Lecture, one hour. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

M298U. Special Topics in Management. (2) Lecture, 90 minutes. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

M298V. Special Topics in Management. (1) Lecture, one hour. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

M298W. Special Topics in Management. (2) Lecture, 90 minutes. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

M298X. Special Topics in Management. (1) Lecture, one hour. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

M298Y. Special Topics in Management. (2) Lecture, 90 minutes. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

M298Z. Special Topics in Management. (1) Lecture, one hour. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

M306. Global Macroeconomy. (4) Lecture, three hours. Requisite: courses 402, 403, 405. Provides analytical framework required for understanding the workings of the global macroeconomy. Inflation, interest rates, exchange rate determination, global competitiveness, unemployment, and trade account. Provides skills to...
enable students to assess critically how developments in world economy affect particular industry environments. Letter grading.


422. Analysis and Communications. (4) Discussion, three hours. Designed for graduate students. Study and practice of business report and presentation, and uses of computer technology. Organized around writing and speaking exercises. Personal attention to students’ written communications and oral presentations.

424. Strategic Business Presenting. (2) Lecture, 90 minutes. Improvement of strategic business presenting skills such as presentation delivery techniques, visual and verbal persuasion principles, building arguments with supporting evidence, art of business storytelling, and other related topics, with focus on individual student presentations. Letter grading.

425. Leadership Communication. (4) Lecture, three hours. Studies center on communicative dimensions of leadership. Examines executive, persuasive, and persuasive frameworks. Allows for emerging and current leaders to excel in presenting sticky messages to investors, executives, boards, clients, and others. Hands-on nature of course ensures that students can consider communication practice. Student presentations are videotaped and analyzed. Topics include communicating with executive presence, strategic networking, designing compelling messages, and persuasive (and technical) information understandable, overcoming message resistance, and creating clear and concise messages. Also covered are question and answer methods, leadership storytelling, and ways to grab and keep attention. Examination of delivery variables such as verbal and non-verbal communication. Message topics can be generated from student needs (e.g., venture capital investors pitch, senior executives or client presentation). S/U or letter grading.

427. Global Access Program. (8) Fieldwork, 60 hours. Requisites: courses 402, 403, 405, 408, 409, 410, 411, 414A, 420. Limited to Fully Employed MBA program students. Fieldwork is offered in Summer and Fall Quarters of third year. Faculty-guided consulting project with international company or U.S. company with international project focus. Establishment of client relationships, interviews, or study of business practices in destination country. Topics vary but are tailored to MBA curriculum. S/U or letter grading.

457A. Fieldwork in Investment Management. (2) Seminar, two hours; fieldwork, one hour. Four-term course. Faculty-guided portfolio-management implementation. Back testing of investment strategy. Visits to portfolio management firms to gain expert guidance. In Progress grading (credit to be given only on completion of courses 457C, 457D, and 457E).

457B. Fieldwork in Investment Management. (2) Seminar, two hours; fieldwork, one hour. Four-term course. Faculty-guided portfolio-management implementation. Back testing of investment strategy. Visits to portfolio management firms to gain expert guidance. In Progress grading (credit to be given only on completion of courses 457C and 457D).

457C. Fieldwork in Investment Management. (2) Seminar, two hours; fieldwork, one hour. Four-term course. Faculty-guided portfolio-management implementation. Formal presentation of new strategy to incoming class and delivery of annual report. Training of incoming class with knowledge transfer before outgoing and incoming class leadership transition. In Progress grading (credit to be given only on completion of courses 457B, 457C, and 457D).

457D. Fieldwork in Investment Management. (2) Seminar, two hours, activity, one hour. Four-term course. Culmination and transition of portfolio management project. Formal presentation of new strategy to incoming class and delivery of annual report. Training of incoming class with knowledge transfer before outgoing and incoming class leadership transition. In Progress grading (credit to be given only on completion of course 457D).

457E. Global Immersion: Two-Quarter Plan. (2–2) Enrolled in 457A: lecture, three hours; presentations, sites visits, and discussion, 20 hours; for course 458B: fieldwork, three hours; presentations, sites visits, and discussion, 20 hours. Course 458A is enforced requisite to 458B. Taught in English. Designed for MBA, EMBA, FEMBA, and GEMBA students. Four on-campus academic sessions and one intensive week in another country for blend of lectures, guest speakers, panelists and Q&A, and field visits with focus on doing business in other countries. Exposure to economy, legal and political environment, major industries and businesses, local culture, key historical events, and many aspects of conducting business outside U.S. Taught by school faculty members in conjunction with lectures by faculty members from top institutional partners, as well as local and regional government officials and ministers, local business executives, and influential leaders from country of focus. May be repeated for credit based on program requirements. In Progress (458A) and letter (458B) grading.

458A–458B. Global Immersion: Two-Quarter Plan. (2–2) Lecture, 15 hours; discussion and assignments, up to 30 hours (2-2 unit course). Preparation: completion of first-year core courses. Taught in English. Open to EMBA and FEMBA students. Intensive one-week study at international destination for MBA students. Faculty members from partner institution in destination country. Topics vary but are tailored to MBA curriculum. S/U or letter grading.

460A-460B. Managing Finance and Financing Emerging Enterprises. (2–2) Lecture, three hours. Course 460A is enforced requisite to 460B. Designed for second-year graduate students. Emphasis on financial, control, and investment issues confronting rapidly growing companies in entrepreneurial settings. Consideration and selection of financing vehicles that may be appropriate to securing money requirements of organizations. In Progress (460A) and letter (460B) grading.

466B. Advanced Financial Policy for Managers. (4) Lecture, four hours. Limited to Executive MBA program students. Modern financial management deals with decision making for corporate financial management, portfolio investment decisions, financial institutions, and international financial management. Focus on learning sound theoretical tools and applications through case studies. S/U or letter grading.

468. Macroeconomics and Economic Forecasting. (4) Lecture, four hours. Limited to Executive MBA program students. Macroeconomic theory and its application in business forecasting. Major economic indicators, historical trends in the U.S. economy; theoretical tools that business economists use to analyze impacts of monetary and fiscal policy; macroeconomic techniques applicable to business decisions. S/U or letter grading.

472B. Customer Information Strategy. (4) Lecture, four hours. Limited to Executive MBA program students. Exploration of innovation and marketing of products and services to customers. Use of creativity tools, customer research, and marketing science to create value and allocate resources so as to maximize revenues and profits that result. S/U or letter grading.

479E. International Exchange: Executive MBA Program. (2–2) Lecture, three hours; discussion and site visits, 20 hours. Preparation: completion of first-year core courses in Executive MBA program. Intensive one-week program in one foreign country, with coursework taught by faculty from local institutions in destination country. Topics vary but are tailored to MBA curriculum, including but not limited to finance, marketing, global economics, strategy, human resources, operations, and technology management. Exposure to local business practices, company site visits, and exploration of local cultural and historical sites. S/U or letter grading.

481A-481B. Negotiations Behavior. (2–2) Lecture, three hours. Course 481A is enforced requisite to 481B. Limited to Global Executive MBA students. Presentation of theoretical principles and concepts from psychology, sociology, and economics through lectures and readings, with focus primarily on improving practical negotiating skills through experiential learning (i.e., negotiations simulations). Participants learn to enhance their individual abilities in dyadic and group settings and to arrive at agreements with the most effective application of these skills. In Progress (481A) and letter (481B) grading.

484A-484B. Management of Technology and Innovation. (2–2) Lecture, three hours. Course 484A is enforced requisite to 484B. Limited to Executive MBA students. Problems of managing technological innovation in Asia. Topics include incorporation of innovative considerations into strategy, adoption of technological innovation, promoting innovation through organizational design and leadership, e-business, and m-business. In Progress (484A) and letter (484B) grading.

485. Corporate Entrepreneurship. (4) Lecture, three hours. Managerial efforts aimed at identification, development, and exploitation of technical and organizational innovations, management of new product or process developments, and effective new venture management in context of large corporations in manufacturing and service industries. Development of awareness and understanding of range, scope, and utility of issues related to organizational environment that is supportive of entrepreneurial endeavors, and insight concerning effective implementation of technological and organizational innovations in corporate settings. S/U or letter grading.

488. Business Plan Development. (4) Lecture, four hours. Enforced requisites: courses 487A, 487B. Limited to Executive MBA program students. How to develop business plans, understanding of analytical processes required to produce plans, improvement of student writing and oral presentation skills, and review of business plans of other entities. Writing of one complete business plan and presentation of it to experienced investors. Letter grading.

489. Entrepreneurship and Venture Initiation. (4) Lecture, 90 minutes. Limited to Executive MBA program students. Introduction to basic tools and jargon needed for entrepreneurship or management of intellectual property. Terminology used by lawyers, accountants, venture capitalists, and other investors when forming and financing new companies. Assessment of feasibility of business concept and communication of concept to potential investors, employees, and business partners. S/U or letter grading.

495. Teaching Assistant Training Seminar. (4) Seminar, three hours. Prerequisite: as teaching assistant, associate, or fellow in Anderson-based course. Required of all new teaching assistants. Designed to prepare students for graduate-level teaching and provide professional development. Discussion of practical and theoretical issues about teaching in graduate business school. Emphasis on adult learning theory and pedagogy, theory versus practice in business, and electronic data interchange.
Management – Executive MBA

Graduate Courses


406. Financial Policy for Managers. (4) Lecture, four hours. Limited to Executive MBA program students. Modern financial management deals with decision making under uncertainty for corporate financial management, portfolio investment decisions, financial institutions, and international financial management. Focus on learning sound theoretical tools and applying them in coursework. S/U or letter grading.

409. Organizational Behavior. (4) Lecture, three hours. Limited to Executive MBA program students. Introduction to organizational behavior for executives, including but not limited to optimal decision making, fostering motivation, and other topics on psychology of leadership. Lecture, discussion, and experiential applications of course concepts. S/U or letter grading.

410. Operations and Technology Management: Systems, Strategies, and Policies. (4) Lecture, three hours. Limited to Executive MBA program students. Strategic marketing decisions, including development of marketing objectives and strategies and implementation of these strategies through pricing, channel, promotion, and new product decisions. S/U or letter grading.

411A. Leadership Foundations I. (2) Lecture, two hours. Limited to Executive MBA program students. Focus on individual problem-solving and decision-making skills. Alternative conceptual frameworks presented for augmenting diagnostic and decision-making skills of individuals. Lectures, decision simulations, and discussions to explore areas of charting job and career progress, working with others, and shaping work culture. S/U or letter grading.

411B. Leadership Foundations II. (1) Lecture, one hour. Limited to Executive MBA program students. Continuation of course 411A, with focus on development of self-assessment and self-reflection skills. Facilitation of self-evaluation of leadership strengths and weaknesses, with emphasis on individual peer coaching, conflict management, individual goal setting, and goal achievement. Readings, cases, decision simulations, peer coaching, and discussions. In Progress grading (credit to be given only on completion of course 411C).

414C. Leadership Foundations III. (1) Lecture, one hour. Limited to Executive MBA program students. Continuation of course 414B. Further exploration of leadership strengths and weaknesses, with emphasis on individual peer coaching, conflict management, individual goal setting, and goal achievement. Readings, cases, decision simulations, peer coaching, and discussions. In Progress grading (credit to be given only on completion of course 414E).

414E. Leadership Foundations III. (1) Lecture, one hour. Limited to Executive MBA program students. Continuation of course 414D. Further exploration of leadership strengths and weaknesses, with emphasis on individual leadership and organizational change. Readings, cases, decision simulations, peer coaching, and discussions. In Progress grading (credit to be given only on completion of course 414E).

420. Competitive Strategy and Business Policy. (4) Limited to Executive MBA program students. Study of general management data of forging a corporate competitive strategy. Emphasis on economics of business rivalry within a variety of industrial settings and implications of changing environments on business strategy.

421. International Business Residential. (4) Seminar, six hours. Limited to Executive MBA program students. Focuses on doing business globally. Includes pre- and post-campus sessions, a week of study in another country with lecturers, guest speakers, panel discussions, and company site visits. Exposure to economic, legal and political environments, major industries and businesses, local culture, key historical events, and many aspects of conducting business internationally. Taught by school faculty members in conjunction with lectures by faculty members from top institutional partners, as well as local and regional government officials and ministers, local business executives, and influential leaders from country of focus. S/U or letter grading.

422. Leadership in Practice. (4) Lecture, six hours. Limited to Executive MBA program students. Addresses practical decision-making challenges leaders face when confronting decisions alone and in groups. Students learn to recognize cognitive biases in themselves and others, and skills to re-calculate group dynamics in order to achieve better results. These skills are taught experientially through participatory simulations and post-hoc analyses. Letter grading.

422A-422B. Business Creation Capstone. (6-4) Lecture, three hours; fieldwork, three hours. Limited to Executive MBA program students. Designed for students interested in launching their own business. Student teams work on business idea and develop comprehensive strategy for launching that business. Fulfills MBA comprehensive examination requirement. In Progress (422A) and letter (422B) grading.

439. Selected Topics in Management. (4) Seminar, two hours. Limited to Executive MBA program students. Examination of selected problems and issues in area of current concern in management. Letter grading.

440. Selected Topics in Management. (4) Seminar, three hours. Limited to Executive MBA program students. Examination of selected problems and issues in area of current concern in management. Letter grading.

441. Selected Topics in Management. (1) Seminar, two hours. Limited to Executive MBA program students. Examination of selected problems and issues in area of current concern in management. S/U grading.

442. Selected Topics in Management. (4) Seminar, six hours. Limited to Executive MBA program students. Examination of selected problems and issues in area of current concern in management. S/U grading.

443. Selected Topics in Management. (2) Seminar, three hours. Limited to Executive MBA program students. Examination of selected problems and issues in area of current concern in management. S/U grading.

444. Selected Topics in Management. (1) Seminar, two hours. Limited to Executive MBA program students. Examination of selected problems and issues in area of current concern in management. S/U grading.

445A. Introduction to Strategic Management Research. (2) Fieldwork, two hours. Limited to Executive MBA program students. Methods of organizational and strategic analysis to determine relationship of organization with its environment. In Progress grading (credit to be given only on completion of courses 445B and 445C).

445B. Strategic Management Research. (4) Fieldwork, four hours. Limited to Executive MBA program students. Preparation of strategic overview of selected company enrolling collection and analysis of primary and secondary data, including (but not limited to) interviews of corporate executives, corporate financial and marketing data, industry reports, and customer and competitor interviews and/or surveys. In Progress grading (credit to be given only on completion of course 445C).

445C. Strategic Management Research. (4) Fieldwork, four hours. Limited to Executive MBA program students. Further research and analysis of one strategic issue facing selected company, and identified in course 445B. Presentation of final reports and evaluation of student efforts by corporate personnel. S/U or letter grading.

Management – Full-Time

Graduate Courses

401A-401B. Foundations of Inclusive Leadership. (1–4) Lecture, limited hours. Course 401A is requisite to 401B. Designed to enhance student knowledge of, and competency in, leadership. Conceptual framework is grounded in principles of individual, group, and organizational behavior. Offers different perspectives on topic of leadership, with emphasis on developmental skills that support effective leadership in diverse situations. Combination of readings, lectures, cases, experiential exercises, and class discussion allows entering MBA students to determine their own leadership strengths and limitations; and to develop plan for maintaining or improving their strengths and identifying potential challenges. In Progress (401A) and letter (401B) grading.

402. Data and Decisions. (4) Lecture, three hours. Topics include probabilities, random variables (expectation, variance, covariance, normal random variables, regression trees, regression problems testing, and multiple regression models. Emphasis on actual business problems and data. Letter grading.


408. Foundations of Finance. (4) Lecture, three hours. Introduction to managerial finance. Topics include time value of money, discounting and present values, valuation of bonds and stocks, risk and return, construction of optimal portfolios, capital budgeting, and weighted average cost of capital. Letter grading.


410. Operations Technology Management. (4) Lecture, three hours. Requisites: courses 402, 403. Principles and decision analysis related to effective utilization of factors of production in manufacturing and nonmanufacturing activities for both intermittent and continuous systems. Production organizations, analytical models and methods, facilities design, and design of control systems for production operations. Letter grading.


421A. Communication Development for Leaders. (2) Lecture, three hours. Course 421A is requisite to 421B. Focus on communication basics and tailored to student needs. Course content may include interpersonal communications, or public speaking. Students learn skills required to become successful presenter; how to present differing types of materials, apply communication theory and strategy to organize informative and persuasive messages; deliver presentations to varied audiences; how to apply visual and verbal messaging research and theory while analyzing audiences, organizing, and developing messages for maximum persuasive impact, and communicate these messages in persuasive manner. Letter grading.

421B. Communication Development for Leaders II. (2) Lecture, three hours. Requisite: course 421A. Focus on providing tools and skills that allow students to excel in communicating their vision, inspiring and gaining commitment from stakeholders, and impressing interviewers and investors. Course materials are grounded in empirical research. Skills and techniques learned are broadly generalizable. Experiential exercises to enhance students’ abilities in oral and written communications. Study builds on managerial communication skills provided in Communication Development for Leaders (course 421A). Letter grading.

422. Applied Management Research. (8) Fieldwork, eight hours. Must be taken in second year (or its equivalent for part-time students). Supervised study of an organization, institution or client/consultant relationships, identification of problems or strategic questions, design of study, collection and analysis of data, development and reporting of implementable recommendations. Letter grading.

423A. Introduction to Applied Management Research. (2) Lecture, two hours. Full-time MBA students need to complete one new business or (3) pursuit of one faculty-guided consulting project with private company; non MBA students interested in launching their own business. Students perform supervised practical experience or consultation on management issues; establishment of client relationships, identification of problems or strategic questions, design of study, collection and analysis of data, development and reporting of implementable recommendations. Letter grading.

423B–423C. Applied Management Research: Two-Quarter Plan. (4–4) Fieldwork, four hours. Limited to full-time MBA program students. Must be taken after completion of first year in program. Projects include: (1) faculty-guided consulting project with private company, nonprofit organizations, or government agencies; establishment of client relationships, identification of problems or strategic questions, design of study, collection and analysis of primary research data, development of comprehensive business plan, and formal presentation of findings and recommendations or (2) faculty-guided implementation of one new business or (3) pursuit of one faculty-led special research project worthy of publication in recognized academic research journal. In Progress (423B) and S/U or letter (423C) grading.

426. Fieldwork in Organizations. (4) Fieldwork, to be arranged. Preparation: completion of at least two terms of MBA program. Required of all full-time MBA students. Under direction of MBA program senior associate dean or other supervising faculty adviser, students perform supervised practical experience or fieldwork in organization as intern or fellow. Execution of predetermined assignment(s) pursuant to defined program of study that includes reporting and assessment of fieldwork experience through combination of written or oral presentations and may include preparation of evaluations or consulting report correlating to defined program of study. S/U grading.

428A–428B. Business Consulting Capstone. (4–4) Lecture, three hours; fieldwork, three hours. Limited to full-time MBA program students. Designed for students interested in launching their own business. Students perform supervised practical experience or consultation on management issues; establishment of client relationships, identification of problems or strategic questions, design of study, collection and analysis of data, development and reporting of implementable recommendations. Letter grading.

429A–429B. Business Management I. (4–4) Lecture, three hours; fieldwork, three hours. Limited to full-time MBA program students. Designed for students interested in launching their own business. Students perform supervised practical experience or consultation on management issues; establishment of client relationships, identification of problems or strategic questions, design of study, collection and analysis of data, development and reporting of implementable recommendations. Letter grading.

Management—Fully Employed MBA Graduate Courses

401. Leadership Foundations. (2) Lecture, three hours. Designed to enhance student knowledge of, and competency in, leadership. Conceptual framework is grounded in principles of individual, group, and organizational behavior. Offers different perspectives on topic of leaderships, with emphasis on development of skills that support effective leadership in diverse situations. Combination of readings, lectures, cases, experiential exercises, and class discussion allows entering MBA students to determine their own leader strengths and limitations; and to develop plan for maintaining or improving their strengths and identifying potential challenges. Letter grading.

402. Data and Decisions. (4) Lecture, three hours. Topics include probabilities, random variables (expectation, variance, covariance, normal random variables), decision trees, estimation, hypothesis testing, and multiple regression models. Emphasis on actual business problems and data. Letter grading.


405. Managerial Economics. (4) Lecture, three hours. Designed for graduate students. Introduction to fundamental financial accounting methods and procedures, with emphasis on financial statements. Provides basis for firm understanding of language of business—accounting. Letter grading.


410. Operations Technology Management. (4) Lecture, three hours. Requisite: courses 402, 403. Principles and decision analysis related to effective utilization of factors of production in manufacturing and nonmanufacturing activities for both intermittent and continuous systems. Production organizations, analytical models and methods, facilities design, and design of control systems for production operations. Letter grading.


422. Applied Management Research. (8) Fieldwork, eight hours. Must be taken in third year. Supervised study of an organization, institution or client/consultant relationships, identification of problems or strategic questions, design of study, collection and analysis of data, development and reporting of implementable recommendations. Letter grading.
426. Fieldwork in Organizations. (4) Fieldwork, to be arranged. Preparation: completion of at least three terms of FEMBA program. Under direction of FEMBA program senior associate dean or other supervising faculty adviser, students perform supervised practical experience or fieldwork in organization as intern or fellow. Execution of predetermined assignment(s) pursuant to defined program of study that includes reporting and assessment of fieldwork experience through combination of written or oral presentations and may include preparation of evaluations or consulting report correlating to defined program of study. S/U grading.

427A–427B. Global Access Program. (5–5) Fieldwork, 60 hours. Requisites: courses 401, 402, 403, 405, 408, 409, 410, 411, 420. Limited to Fully Em- ployed MBA program students. Design for students interested in launching their own business. Student teams work on business idea and develop comprehensive business plan, and formal presentation of findings and recommendations. In Progress (427A) and letter (427B) grading.

428A–428B. Business Creation Capstone. (6–4) Lecture, three hours; fieldwork, three hours. Limited to fully employed MBA program students. Must be taken in third year. Faculty-guided consulting project with international company or U.S. company with international project focus. Establishment of client relationships, identification of problems or strategic questions, design of study, collection and analysis of secondary and primary research data, development of comprehensive business plan, and formal presentation of findings and recommendations. In Progress (428A) and letter (428B) grading.

Management–Global Executive MBA Asia Pacific Graduate Courses


403. Financial Accounting. (4) Lecture, six hours. Limited to UCLA-NUS Executive MBA program students. Familiarizes the manager with functions of accounting by focusing on use of external financial reports for evaluating corporate profitability in dyadic and group situations and to analyze contexts for most effective application of these skills. Letter grading.

404. Negotiations Behavior. (4) Lecture, three hours. Presentation of theoretical principles and concepts from psychology, sociology, and economics through lectures and readings, with focus primarily on improving practical negotiating skills through experiential learning (i.e., negotiations simulations). Participants learn to enhance their individual abilities in dyadic and group situations and to analyze contexts for most effective application of these skills. Letter grading.

405. Computational Methods in Finance. (4) Lecture, three hours. Limited to Master of Financial Engineering program students. Essentials of asset pricing and interest rate modeling, including application software in exercises to estimate volatility and default probability. Credit is given only on completion of course 410B.

406. Strategic Leadership and Implementation. (4) (Formerly numbered 401.) Lecture, three hours. Designed to address several fundamental aspects of leading complex organizations, with emphasis on important tasks of developing well-aligned, high-performance organizations and on challenges of leading change in organizations. Enables students to develop organized point of view on strategic leadership and to increase their awareness of themselves as leaders. Letter grading.

407B. Entrepreneurship and Venture Initiation I, II. (2–2) Lecture, 90 minutes. Course 407A is requisite to 407B. Limited to UCLA-NUS Executive MBA program students. Introduction to basic tools and jargon of entrepreneurship that lead to new business formation and management or management of intellectual property. Terminology used by lawyers, accountants, venture capitalists, and other investors when forming and financing new companies. Examination of feasibility of business concept and communication of concept to potential investors, employees, and business partners. In Progress (407B) and letter (407B) grading.


410. Logistics and Operations Management. (2) (Formerly numbered 410.) Lecture, three hours. Limited to UCLA-NUS Executive MBA program students. Examination of strategic and operating policies and decisions for systems that produce goods and services. Examination of role of comprehensive planning, inven- tories, scheduling of resources, distribution systems, and system location. Comprehensive operating problems. Letter grading.

411. Management of Technology and Innovation. (4) Lecture, three hours. Problems of managing techno- logical innovation in Asia. Topics include incorporation of technological consideration into strategy, adoption of technological innovation through organizational design and leadership, e-business, and m-business. Letter grading.


414. Selected Topics in Management. (2) Seminar, three hours. Limited to UCLA-NUS Executive MBA program students. Examination of selected problems and issues in area of current concern in management. S/U grading.


416. Selected Topics in Management. (4) Lecture, two hours. Limited to UCLA-NUS Executive MBA program students. Examination of selected problems and issues in area of current concern in management. Letter grading.


418. Selected Topics in Management. (4) Lecture, two hours. Limited to UCLA-NUS Executive MBA program students. Examination of selected problems and issues in area of current concern in management. Letter grading.


421. Fieldwork in Organizations. (4) Fieldwork, to be arranged. Preparation: completion of at least three terms of FEMBA program. Under direction of FEMBA program senior associate dean or other supervising faculty adviser, students perform supervised practical experience or fieldwork in organization as intern or fellow. Execution of predetermined assignment(s) pursuant to defined program of study that includes reporting and assessment of fieldwork experience through combination of written or oral presentations and may include preparation of evaluations or consulting report correlating to defined program of study. S/U grading.

Management–Master of Financial Engineering Graduate Courses


405. Computational Methods in Finance. (4) Lecture, three hours. Limited to Master of Financial Engi- neering program students. Essentials of asset pricing and interest rate modeling, including application software in exercises to estimate volatility and default probability. Credit is given only on completion of course 410B.

406. Derivative Markets. (4) Lecture, three hours. Limited to Master of Financial Engineering program students. Introduction to derivative markets and basic concepts, models, analyses, and technical tools of quantitative finance used in these markets. Derivatives are both exchange traded and over-counter securities. Derivatives markets are world’s largest and most liquid. Organization and role of put and call option markets, futures and forward markets, and their interrelations, with emphasis on arbitrage relations, valuation, and hedging with derivatives. Implementation of deriva- tives trading strategies, perspective of corporate se- curities as derivatives, functions of derivatives in se- curities markets, and recent innovations in derivative markets. S/U or letter grading.


408. Fixed-Income Markets. (4) Lecture, three hours. Limited to Master of Financial Engineering program students. Quantitative approach to fixed-income se- curities and bond portfolio management, with focus on fixed-income security markets. Pricing of bonds and fixed-income derivatives, measurement and
hedging of interest rate risk, dynamic models of investor interests, and management of fixed-income portfolio risk. S/U or letter grading.


410. Applied Finance Project. (4) Fieldwork, four hours. Limited to Master of Financial Engineering program students. Applied quantitative finance project that explores one or more financial problems that might be encountered in practice and involves development or use of some tools developed in MFE program. S/U or letter grading.

411. Fieldwork/Research on Financial Engineering. (4) Fieldwork, to be arranged. Preparation: completion of one term of MFE program. Limited to Master of Financial Engineering program students. Supervised, nonpaid, or paid practical research experience or fieldwork experience as intern or fellow. Execution of predetermined assignment(s) pursuant to defined program of study that may include formal coursework. May not be applied toward MFE degree requirements. S/U grading.

412. Trading, Market Frictions, and FinTech. (4) Lecture, three hours. Examination of financial market infrastructure and mechanism of price formation and discovery; high frequency trading and alternative markets (e.g., bond market and cryptocurrency market). Letter grading.

415A-415B. Career Development Series. (2-2) Lecture, three hours. Preparation: career search process requires active engagement on part of job candidate. Preliminary action is self-assessment, recognizing and valuing one's own strengths and skills to present oneself to employers as top candidate for target roles. Students identify industry and employers that are aligned with their career goals and utilize career strategies covered, including presenting oneself professionally, networking, strong application documents (resume, cover letter, e-mail, etc.), and developing ability to communicate their value, during interview process. S/U grading.

431. Special Topics in Financial Engineering. (2 to 4) Lecture, three hours. Limited to Master of Financial Engineering program students. In-depth examination of problems or issues in one area of current concern in financial engineering. May be repeated for credit. S/U or letter grading.

Management—Master of Science in Business Analytics

Graduate Courses


402. SQL and Basic Data Management. (2) Lecture, three hours. Limited to Master of Science in Business Analytics students. Introduction to and practice in Structured Query Language and concepts and constructs pertaining to data definitions, data manipulation, and data controls in relational databases using MySQL; and important concepts of data management including data analysis and modeling for relational database management systems (RDBMSs). Letter grading.

403. Optimization. (2) Lecture, three hours. Limited to Master of Science in Business Analytics students. Introduction to optimization concepts, including model building and solution techniques using Excel-based solvers. Letter grading.


406. Prescriptive Models and Data Analytics. (4) Lecture, three hours. Limited to Master of Science in Business Analytics students. Fundamental tools in data analytics, including experimental design and analysis, regression analysis, and model design, and how to implement these approaches using statistical analysis package R. S/U or letter grading.


408. Operations Analytics. (4) Lecture, three hours. Limited to Master of Science in Business Analytics students. How business analytics can be used to optimize internal processes and resources. Applications and cases that illustrate quantitative techniques and show how to build operational competitive edge based on business analytics. S/U or letter grading.

409. Competitive Analytics. (4) Lecture, three hours. Limited to Master of Science in Business Analytics students. Application of data analytics to examine competitive conditions in industry or market. S/U or letter grading.


412. Business Analytics Supervised Project. (4) Fieldwork, three hours. Limited to Master of Science in Business Analytics students. Hands-on applied analytics project specifically tailored to career in quantitative analysis and data science by testing their ability to solve complex analytical business problems in real-world settings. Students hone their communication, teamwork, and presentation skills to the interest of internship employers. Students learn strategy, business consulting, entrepreneurship, business plan development, primary research collection and analysis, market assessment, financial analysis, and planning. Letter grading.

413. Industry Seminar II. (2) Seminar, 90 minutes to three hours. Required of Master of Science in Business Analytics students. Industry guest speaker presentations. S/U or letter grading.

414. Internet Customer Analytics. (4) Lecture, three hours (five weeks). Limited to Master of Science in Business Analytics students. Focuses on strategic and tactical issues that come up after foundational skills, specifically those related to customer acquisition and customer retention. Introduction of analytics frameworks, data structures, and models needed to support best practices across these issues. S/U or letter grading.

415. Customer Analytics. (4) Lecture, three hours (five weeks). Limited to Master of Science in Business Analytics students. Exploration of opportunities for improvement in design and management of health care systems and operations, using tools such as regression analysis, linear optimization, queueing theory, decision analysis, Monte Carlo simulation, and machine learning techniques. Identification of key operational challenges facing health care managers and techniques for improving efficiency in variety of health care settings, discussion of applications of data analytics and operations management in health care industry, and practical experience with one or more of state-of-the-art tools and empirical analyses. S/U or letter grading.

416. Entertainment Analytics. (2) Lecture, three hours (five weeks). Limited to Master of Science in Business Analytics students. Introduction to business analytics in entertainment industry: movies, TV studios, television, and online media. Entertainment and media executives have changed way they approach decision making as result of big data and analytics in last two years, including making greater use of specialized analytics tools; employing dedicated data insights teams to inform strategic decisions; and relying on enhanced data services such as sentiment analysis, predictive analytics. Examination of content as it is produced by studios and then goes from one stage to another, being shown in theater, broadcast on television, and Internet. Analytics of viewer preferences in looking both at investment needed to produce and disseminate content, and how revenues are being extracted covered at each stage. S/U or letter grading.


418. Data Visualization. (2) Lecture, three hours (five weeks). Limited to Master of Science in Business Analytics students. Offers solid basis for working with data as result of exploring discipline of data visualization, analysis, and processing of big data through lectures, case studies, and intensive class project. Tableau and Python are used. Addresses both theoretical underpinning of domain and intensive applied computing component. S/U or letter grading.

419. Fraud Analytics. (4) Lecture, three hours (five weeks). Limited to Master of Science in Business Analytics students. How to build analytics side of fraud detection model systems. Covers all algorithmic aspects of solving fraud problem, in particular how to approach and design algorithmic solution. Focus on data exploration and development, data cleaning, creating software engineering aspects of building and fielding fraud solution. Topics covered are background for building real-time fraud detection systems and forensic analysis. S/U or letter grading.

420. Forecasting and Time Series. (2) Lecture, three hours (five weeks). Limited to Master of Science in Business Analytics students. Covers principal methods of time series data analysis and forecasting that are applicable in many areas of business, including simple and multiple regression, seasonal decomposition, AutoRegressive Integrated Moving Average (ARIMA), vector autoregressive, dynamic linear model, error correction models. Use of R, R Studio and its various packages for regression and time series econometrics analysis and forecasting models. S/U or letter grading.
438. Sports Analytics. (2) Lecture, three hours. Preparation: programming experience (Python), basic statistics. Discussion of theory, development, and application of models. Study of applications of analytics in sports for purposes of in-game strategy, player performance, team management, sports operations, and fantasy competitions, among other topics. Lectures, laboratories, guest speakers from sports industry and academia, and culminating group project S/U or letter grading.

Management—PhD

Graduate Courses

200. Economics of Decision. (4) Discussion, three hours. Preparation: basic probability theory. Basics of single-person decision theory and introduction to non-cooperative game theory. Examination in some detail of von Neumann/Morgenstern expected utility theory. Other topics in decision theory include subjective expected utility theory and departures from expected utility behavior. S/U or letter grading.


201B. Theory and Application of Regression Analysis. (4) Lecture, three hours. Recommended requisite: course 201A. Designed for PhD students. Introduction to general regression analysis. Linear model, maximum likelihood and asymptotic tests, endogeneity, instrumental variables, differences-in-differences, regression-discontinuity design, propensity score matching, limited dependent variable models, introduction to panel data. S/U or letter grading.


202A-202B. Global Economics and Management Workshops. (1–1–2) Seminar, two hours. Designed for PhD students. Development of ability to critically evaluate research in fields relevant to study of economics. Papers presented in colloquium format by leading scholars in economics. Active participation and intellectual interchange that helps students gain richer perspective on field of practice. In Progress (202A, 202B) and S/U or letter (202C) grading.

203A-203B. Research Topics in Finance. (2–2) Seminar, three hours. Course 236A is required to 236B. Designed for PhD students in their second through fourth year. Intended to help students bridge gap between coursework and research. Students select academic paper subjects to write a paper, present, and critique in Progress (203A) and S/U or letter (203B) grading.

204A-204B-204C. Finance Workshops. (1–1–2) Lecture, 90 minutes. Designed for PhD students. Intended to develop ability to critically evaluate research in fields relevant to study of accounting. Papers presented in colloquium format by leading scholars in finance. Active participation and intellectual interchange encouraged through discussion of papers during colloquium. May be repeated for credit. S/U grading.

205A-205B. Seminar: Decisions, Operations, and Technology Management Systems. (1–1–2) Seminar, 90 minutes to three hours. Required of all PhD students in decisions, operations, and technology management. Student, faculty, and guest speaker presentations of ongoing research. May be repeated for credit. S/U or letter grading.

206A-206B-206C. Research Seminars: Management and Organizational Behavior. (1–1–2) Seminar, two hours. Designed for PhD students. Development of ability to critically evaluate research in fields relevant to study of problems or issues of current concern in management and organizational behavior. Papers presented in colloquium format by leading scholars in organizational behavior. Active participation and intellectual interchange that helps students gain richer perspective on field of practice. In Progress (206A, 206B) and S/U or letter (206C) grading.

207A-207B-207C. Workshops: Marketing. (1–1–2) Lecture, three hours. Preparation: doctoral standing. Required of all students during first two years of their PhD work. Series consists of number of leading scholars in marketing and related disciplines who make presentations to faculty and PhD students. Active participation and intellectual interchange that helps students gain richer perspective on field of practice. In Progress (207A, 207B) and S/U or letter (207C) grading.

208A-208B-208C. Global Economics and Management Workshops. (1–1–2) Seminar, two hours. Designed for PhD students. Development of ability to critically evaluate research in fields relevant to study of economics. Papers presented in colloquium format by leading scholars in economics. Active participation and intellectual interchange that helps students gain richer perspective on field of practice. In Progress (208A, 208B) and S/U or letter (208C) grading.

209A-209B-209C. Management Strategy and Policy Workshops. (1–1–2) Lecture, three hours. Designed for PhD students. Intended to develop ability to critically evaluate research in fields relevant to study of management and policy. Papers presented in colloquium format by leading scholars in management strategy and policy. Active participation and intellectual interchange encouraged through discussion of papers in sessions prior to workshop, as well as during colloquium. May be repeated for credit. S/U grading.

231. Network Flows and Integer Programming. (4) Lecture, three hours. Linear programming Survey course to (1) lay foundations for more advanced study of graphs, network flow models, and integer programming models and their applications, (2) establish connections between these technical foundations and real problems drawn from many areas of management, and (3) build professional skills needed to apply these tools. S/U or letter grading.


233. Introduction to Multivariate Analysis. (4) Lecture, three hours. Introduction to working knowledge of differential and integral calculus of several variables, basic probability theory, and univariate mathematical statistics. Introduction to use of multivariate models in management research to organize and represent information; interpretation of coefficients from multivariate exploratory models (e.g., principal axes and factor analysis models); survey of multivariate statistical procedures (e.g., multiple discriminant analysis, multivariate analysis of variance, canonical correlation, and confirmatory factor models). S/U or letter grading.

234. Special Topics in Accounting. (4) Lecture, three hours. Preparation: doctoral standing. Exploration of foundational research and current controversies in behavioral literature on judgment and decision making under uncertainty. S/U or letter grading.


242. Special Topics in Decisions, Operations, and Technology Management. (4) Lecture, three hours. Preparation: doctoral standing. Course 203A. Designed for MBA and PhD students. Studies of advanced subjects of current interest in decisions, operations, and technology management. Emphasis on recent developments and applications. Topics vary each term and have included strategy for information intensive industries, empirical research in operations management, analytical models of operation and control in management in information economy, and models for medical management. May be repeated for credit with topic change. S/U or letter grading.

243. Foundations of Organizational Behavior. (4) (Seminar: Psychology 22Z2E.) Lecture, three hours. Preparation: doctoral-level survey of classic and emerging theories and research in field of organizational behavior, with focus on micro-level topics related to individuals and interpersonal processes within organizations. Exploration of how individual behaviors, cognitions, and perceptions are affected by organizational context, structure, and culture. S/U or letter grading.

244. Advanced Studies in Organizational Behavior. (4) Lecture, three hours. Preparation: doctoral-level survey of classic and emerging theories and research in field of organizational behavior, with focus on micro-level topics related to individuals and interpersonal processes within organizations. Exploration of how individual behaviors, cognitions, and perceptions are affected by organizational context, structure, and culture. S/U or letter grading.

245. Research in Organizations. (4) Seminar, three hours. Preparation: doctoral-level survey of classic and emerging theories and research in field of organizational behavior, with focus on micro-level topics related to individuals and interpersonal processes within organizations. Exploration of how individual behaviors, cognitions, and perceptions are affected by organizational context, structure, and culture. S/U or letter grading.

246. Research in Organizations. (4) Seminar, three hours. Preparation: doctoral-level survey of classic and emerging theories and research in field of organizational behavior, with focus on micro-level topics related to individuals and interpersonal processes within organizations. Exploration of how individual behaviors, cognitions, and perceptions are affected by organizational context, structure, and culture. S/U or letter grading.
246. Theory in Marketing. (4) Lecture, three hours. Serves as mechanism to introduce students to development and marketing thought. Prepares students for conducting theoretically grounded research in marketing. S/U or letter grading.

247. Research in Marketing Management. (4) Lecture, three hours. Designed for PhD students. Study of research associated with marketing management decisions. Recent research in areas of strategic marketing, market segmentation, new product development and introduction, pricing strategies, channel policy, promotion decisions, and sales force management examined critically. Review of both quantitative and behavioral approaches to studying these issues. S/U or letter grading.

248. Quantitative Research in Marketing. (4) Lecture, three hours. Designed for PhD students in management and related fields. Students are assumed to have good background in marketing principles and to be familiar with probability, statistics, mathematical programming, and econometrics. Review of a range of quantitative models as applied in marketing research. S/U or letter grading.

249. Behavioral Research in Marketing. (4) Seminar, three hours. Designed for PhD students who are conducting research in consumer behavior or related areas. Empirical research in consumer behavior surveyed and critically evaluated from theoretical as well as practical perspectives. S/U or letter grading.

250. Special Research Topics in Marketing. (4) Lecture, three hours. Designed for PhD students. Advanced selected topics in marketing, with emphasis on thorough examination of one or two topics in current research and theory. May be repeated for credit. S/U or letter grading.

251. Research and Development Policy. (4) (Same as Public Policy M260A.) Lecture, three hours. Examination of research and development as process and as element of goal-oriented organization. Factors affecting invention and innovation; transfer of technology; organizational and behavioral considerations; coupling of science, technology, and organizational goals; assessing and forecasting technological futures. S/U or letter grading.

252. Special Topics in Management Theory. (4) Lecture, three hours. Designed for PhD students. Examination in depth of problems or issues of current concern in management theory. Emphasis on recent contributions to theory, research, and methodology. Of special interest to advanced PhD candidates, academic staff, or distinguished visiting faculty. May be repeated for credit. S/U or letter grading.

253. Field Research in Organizations and Management. (4) Seminar, three hours. Designed for PhD students. Immersion in discipline and practice of using field data to conduct management research. Students become more informed users and reviewers of variety of methodological approaches. Students gain familiarity with approaching companies to partner on research, gathering and preparing to analyze field data, and what to expect in review process for paper that uses field data. Content of research discussed could extend to other fields (e.g., strategy, psychology, judgment and decision making). S/U or letter grading.


256. Behavioral Economics: Individuals, Organizations, and Markets. (4) Lecture, three hours. Study of how predictions of behavior and optimal economic policy differ when traditional economic assumptions (often selfish, unbounded rationality) are replaced with more psychologically realistic assumptions drawn from lab and world. Special attention to the policy in which these modified assumptions can be incorporated into broadly applicable and parsimonious models of human behavior, and what they imply for markets, management, and public policy. Letter grading.

260. Behavioral Economics: Individuals, Organizations, and Markets. (4) Lecture, three hours. Study of how predictions of behavior and optimal economic policy differ when traditional economic assumptions (often selfish, unbounded rationality) are replaced with more psychologically realistic assumptions drawn from lab and world. Special attention to the policy in which these modified assumptions can be incorporated into broadly applicable and parsimonious models of human behavior, and what they imply for markets, management, and public policy. Letter grading.

Materials Science and Engineering

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Overview

At the heart of materials science and engineering is the understanding and control of the microstructure of solids. Microstructure is used broadly in reference to electronic and atomic structure of solids—and defects within them—at size scales ranging from atomic bond lengths to airplane wings. The structure of solids over this wide range dictates their structural, electrical, biological, and chemical properties. The phenomenological and mechanistic relationships between microstructure and the macroscopic properties of solids are, in essence, what materials science is all about.

Materials engineering builds on the foundation of materials science and is concerned with the design, fabrication, and optimal selection of engineering materials that must simultaneously fulfill dimensional, property, quality control, and economic requirements.
Materials Science and Engineering BS

The materials engineering program is designed for students who wish to pursue a professional career in the materials field and desire a broad understanding of the relationship between microstructure and properties of materials. Metals, ceramics, and polymers, as well as the design, fabrication, and testing of metallic and other materials such as oxides, glasses, and fiber-reinforced composites, are included in the course contents.

Students are introduced to the basic principles of metallurgy and ceramic and polymer science as part of the Materials Engineering major.

The department also has a program in electronic materials that provides a broad-based background in materials science, with opportunity to specialize in the study of those materials used for electronic and optoelectronic applications. The program incorporates several courses in electrical engineering in addition to those in the Materials Science curriculum.

The materials engineering program is accredited by the Engineering Accreditation Commission of ABET.

Capstone Major

The Materials Engineering major is a designated capstone major. Students undertake two individual projects involving materials selection, treatment, and serviceability. Successful completion requires working knowledge of physical properties of materials and strategies and methodologies of using materials properties in the materials selection process. Students learn and work independently and practice leadership and teamwork in and across disciplines. They are also expected to communicate effectively in oral, graphic, and written forms.

Learning Outcomes

The Materials Engineering major has the following learning outcomes:

- Application of knowledge of mathematics, natural science, and engineering to analysis of materials and other systems
- Learn and work independently
- Practice leadership and teamwork in and across disciplines
- Design of a system, component, or process to meet desired needs
- Effective oral, graphic, and written communication
- Identification, formulation, and solution of engineering problems

Requirements

Materials Engineering Option

Preparation for the Major

Required: Chemistry and Biochemistry 20A, 20B, 20L; Civil and Environmental Engineering M20 or Computer Science 31 or Mechanical and Aerospace Engineering M20; Materials Science and Engineering 10, 90L; Mathematics 31A, 31B, 32A, 32B, 33A, 33B (or Mechanical and Aerospace Engineering 82); Physics 1A, 1B, 1C.

The Major

Required: Civil and Environmental Engineering 91 (or Mechanical and Aerospace Engineering 101), 108, Electrical and Computer Engineering 190, Materials Science and Engineering 104, 110, 110L, 120, 130, 131L, 132, 143A, 150, 160; one upper-division mathematics course selected from Civil and Environmental Engineering 103, Electrical and Computer Engineering 102, Mathematics 132, Mechanical and Aerospace Engineering 182B, 182C; two laboratory courses (4 units) from Materials Science and Engineering 110L, 141L, 143L, 161L, or up to 2 units of 199; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; two capstone design courses (Materials Science and Engineering 140A and 140B); and two major field elective courses (8 units) from Chemical Engineering CM114, Civil and Environmental Engineering 130A, Electrical and Computer Engineering 2, 123A, 123B, Materials Science and Engineering 105, C111, C112, 121, 122, 151, 161, 162, Mechanical and Aerospace Engineering 156A, 166C, plus at least one elective course (4 units) from Chemistry and Biochemistry 30A, 30AL, Electrical and Computer Engineering 131A, Materials Science and Engineering 170, 171, Mathematics 170A, or Statistics 100A.

For information on UC, school, and general education requirements, see the Samueli school section in College and Schools.

Electronic Materials Option

Preparation for the Major

Required: Chemistry and Biochemistry 20A, 20B, 20L; Civil and Environmental Engineering M20 or Computer Science 31 or Mechanical and Aerospace Engineering M20; Materials Science and Engineering 10, 90L; Mathematics 31A, 31B, 32A, 32B, 33A, 33B (or Mechanical and Aerospace Engineering 82); Physics 1A, 1B, 1C.

The Major

Required: Electrical and Computer Engineering 100, 101A, 121B, Materials Science and Engineering 104, 110L, 120, 121L, 122, 130, 131, 131L, 132, Mechanical and Aerospace Engineering 101; one upper-division mathematics course selected from Civil and Environmental Engineering 103, Electrical and Computer Engineering 102, Mathematics 132, Mechanical and Aerospace Engineering 182B, 182C; either Materials Science and Engineering 150 or 160 and one course (4 units) from Electrical and Computer Engineering 123A, 123B, Materials Science and Engineering 150, 160; 4 laboratory units from Materials Science and Engineering 141L, 161L, or up to 2 units of 199; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; two capstone design courses (Materials Science and Engineering 140A and 140B); and one major field elective course (4 units) from Electrical and Computer Engineering 110, 131A, Materials Science and Engineering 105, C111, C112, 143A, or 162.

Materials Science and Engineering

Lower-Division Courses

10. Freshman Seminar: New Materials. (1) Seminar, one hour; outside study, two hours. Preparation: high school chemistry and physics. Not open to students with credit for course 104. Introduction to basic concepts of materials science and new materials vital to advanced technology. Microstructural analysis and various material properties discussed in conjunction with such applications as biomedical sensors, pollution control, and microelectronics. Letter grading.

13L. Cultural (Materials) Science Investigations in Art and Archaeology. (5) Laboratory, four hours; discussion, two hours; site visits, four hours; outside study, five hours. Focus on portable X-ray fluorescence (XRF) and other non-invasive (UV / Vis / NIRS) spectroscopy and forensic imaging, with emphasis on fundamentals of techniques, data collection and interpretation, and effects of weathering and post depositional and taphonomic processes to help answer questions related to ancient materials manufacturing technologies, materials variability, and human interaction with environment. Experimental techniques and analysis of materials through: X-ray fluorescence spectroscopy (XRF); fiber optic reflectance spectroscopy (FORS); and forensic multispectral imaging. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

33W. Materials Structure and Technology in Archaeology and Architecture. (5) Formerly numbered 33.) Seminar, three hours; laboratory, two hours; discussion, one hour; outside study, nine hours. Requisite: English Composition 3. Exploration of three classes of materials and composites, and relationships that exist between structural elements of materials and their properties: vitreous materials, building material binders, and pigments and colorants. Through study of ancient materials and technology in archaeology and architecture, exploration of relationships among processing, structure, properties, and performance for: vitreous materials—ceramics, frits, and glass; building material binders—aerial lime-based mortars, natural and artificial hydraulic lime/cements and concretes; and pigments and colorants (natural and synthetic organic, inorganic, and organic/inorganic hybrids). Through reverse engineering processing, ex-

For information on UC, school, and general education requirements, see the Samueli school section in College and Schools.
ploration of ancient engineering materials (their micro/nano structure and physical, chemical, and mechanical properties), and their durability and sustainability as time-processed science. Prin-1112. Cultural Materials Science II: Characterization methods and methods of materials characterization in con-110. Science of Engineering Materials. (4) Lecture, three hours; discussion, one hour; outside study, eight hours. Re-110L. Introduction to Materials Characterization A Laboratory. (2) Laboratory, four hours; outside study, study, eight hours. Re-120. Materials Selection and Engineering Design B. (3) Lecture, two hours; laboratory, two hours; outside study, five hours. Enforced requisite: course 140A. Explicit guidance among myriad materials available for design and fabrication; thin films of nonferrous alloys, polymer, ceramic, and composite materials, coatings. Materials selection, treatment, and serviceability emphasized as part of successful design. Design projects. Letter grading.

140B. Materials Selection and Engineering Design B. (3) Lecture, two hours; laboratory, two hours; outside study, five hours. Enforced requisite: course 140A. Explicit guidance among myriad materials available for design and fabrication; thin films of nonferrous alloys, polymer, ceramic, and composite materials, coatings. Materials selection, treatment, and serviceability emphasized as part of successful design. Design projects. Letter grading.

140L. Computer Methods and Instrumentation in Materials Science. (2) Laboratory, four hours. Preparation: knowledge of BASIC or C or assembly language. Limited to junior/senior Materials Science and Engineering majors. Interface and control techniques, real-time data acquisition and processing, computer-aided testing. Letter grading.

143A. Mechanical Behavior of Materials. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 104. Mechanical and Aerospace Engineering 101. Plastic flow of metals under simplex and combined loading, strain rate and temperature effects, dislocations, fracture, residual stress effects, metal forming and treatment of metal for engineering applications. Letter grading.

143L. Mechanical Behavior Laboratory. (2) Laboratory, two hours. Requisites: courses 104, 105 (may be taken concurrently). Methods of characterizing mechanical behavior of various materials; elastic and plastic deformation, fracture toughness, fatigue, and creep. Letter grading.

150. Introduction to Polymers. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Polymerization mechanisms, molecular weight and distribution, chemical structure and bonding, structure determination, and morphology and their effects on physical properties. Glassy polymers, springy polymers, elastomers, adhesives. Fiber forming polymers, polymer processing technology, plasticization. Letter grading.

151. Structure and Properties of Composite Materi-151L. Materials Science of Semiconductors Laboratory. (2) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 104. Discussion of principal alloys, recrystallization, and grain growth. Letter grading.

152. Physical Materials of Engineering. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: courses 104, 110 (or Chemistry 113A). Introduction to electrical, optical, and magnetic properties of solids. Feeble, introduces to band theory and Schrödinger wave equation. Crystal bonding and lattice vibrations. Mechanisms and characterization of electrical conductivity, optical absorption, magnetic behavior, dielectric properties, and p-n junctions. Letter grading.

153. Phase Relations in Solids. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. En-153L. Diffusion and Diffusion-Controlled Reactions Laboratory. (2) Laboratory, two hours; outside study, four hours. Enforced requisite: course 104. Summary of thermody-154. Diffusion and Diffusion-Controlled Reactions Laboratory. (2) Laboratory, two hours; outside study, four hours. Enforced requisite: course 104. Summary of thermody-155. Structure and Properties of Composite Materi-155L. Laboratory. (2) Laboratory, four hours; outside study, eight hours. Preparation: at least two courses from 132, 143A, 150, 160. Required requisite: course 104. Relationship between structure and mechanical behavior of composite materials with fiber and particulate reinforcement. Properties of fiber, matrix, and interfaces. Selection of mac-156. Processing of Ceramics and Glasses. (4) Lecture, four hours; discussion, one hour, Requisite: course 160. Study of processes used in fabrication of ceramics and glasses for structural applications, optics, and electronics. Processing operations, including powder formation technology: powder ware-156L. Laboratory in Ceramics. (2) Laboratory, four hours; outside study, eight hours. Required requisite: course 160. Recommended corequisite: course 161. Processing of common ceramics and glasses. Attainment of specific properties through process control for engineering applications. Quantitative characterization and selection of raw materials. Slip casting and extrusion of clay bodies. Sintering of pow-157. Electronic Ceramics. (4) Lecture, four hours; outside study, eight hours. Requisites: course 104, Physics 1C. Utilization of ceramics in microelectronics; thick film and thin film resistors, capacitors, and substrates; design and processing of electronic-158. Processing of Ceramics and Glasses. (4) Lecture, four hours; discussion, one hour, Requisite: course 160. Study of processes used in fabrication of ceramics and glasses for structural applications, optics, and electronics. Processing operations, including powder formation technology: powder ware-158L. Laboratory in Ceramics. (2) Laboratory, four hours; outside study, eight hours. Required requisite: course 160. Recommended corequisite: course 161. Processing of common ceramics and glasses. Attainment of specific properties through process control for engineering applications. Quantitative characterization and selection of raw materials. Slip casting and extrusion of clay bodies. Sintering of pow-159. Electronic Ceramics. (4) Lecture, four hours; outside study, eight hours. Requisites: course 104, Physics 1C. Utilization of ceramics in microelectronics; thick film and thin film resistors, capacitors, and substrates; design and processing of electronic-
ceramics and packaging; magnetic ceramics; ferroelectric ceramics and electro-optic devices; optical waveguide applications and designs. Letter grading.

CM163. Electrochemical Processes. (Same as Chemical Engineering CM114) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: courses 130 or (Mechanical and Aerospace Engineering 105A), Chemical Engineering 102B. Fundamentals of electrochemical processes and their applications to industrial electrochemical processes. Primary emphasis on fundamental approach to analyze electrochemical processes. Specific topics include electrode-reaction kinetics on metal and semiconductor electrodes, electrodeposition, electron transfer, electro-synthesis, fuel cells, aqueous and nonaqueous batteries, solid-state electrochemistry. May be corequisite and be concurrently scheduled with course CM363. Letter grading.

170. Engaging Elements of Communication: Oral Communication. (2) Lecture, one hour; discussion, one hour; outside study, four hours. Comprehensive oral presentation and communication skills provided by building on strengths of individual personal styles in creation of positive interpersonal relations. Skill set prepares students for different types of academic and professional presentations for a wide range of audiences. Learning environment is highly supportive and interactive as it helps students creatively develop and greatly expand effectiveness of their communication and presentation skills. Letter grading.

171. Engaging Elements of Communication: Writing for Technical Community. (2) Lecture, one hour; discussion, one hour; outside study, four hours. Comprehensive technical writing skills on subjects specific to field of materials science and engineering. Students write review term paper in selected subject field of materials science and engineering from given set of journal papers. Students are exposed to various aspects of writing through several crucial steps, including brainstorming, choosing title, coming up with outline, concise writing of abstract, conclusion, and final polishing. Other subjects include academic style, word choices, and grammar. Letter grading.

CM180. Introduction to Biomaterials. (4) (Same as Bioengineering CM178) Lecture, three hours; discussion, two hours; outside study, seven hours. Requisites: course 104, or Chemistry 20A, 20B, and 20L. Engineering materials used in medicine and dentistry for repair and/or restoration of damaged natural tissues. Topics include relationships between material properties and chemistry, surface chemistry and engineering applications and treatment methods, and biocompatibility. Concurrently scheduled with course CM280. Letter grading.

188. Special Courses in Materials Science and Engineering. (1) Seminar, four hours; outside study, eight hours. Special topics in materials science and engineering for undergraduate students taught on experimental or temporary basis, such as those taught by resident and visiting faculty members. May be repeated once for credit with topic or instructor change. Letter grading.

194. Research Group Seminars: Materials Science and Engineering. (Seminar, four hours; outside study, eight hours. Designed for all undergraduate students who are part of research group. Discussion of research methods and current literature in field of or related to research. Open to undergraduate students. May be repeated for credit. Letter grading.

199. Directed Research in Materials Science and Engineering. [2 to 8] Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. Occasional field trips may be arranged. May be repeated for credit with school approval. Individual contract required; enrollment guaranteed in Office of Academic and Student Affairs. Letter grading.

Graduate Courses

200. Principles of Materials Science I. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 120. Lattice dynamics and thermal properties of solids, classical and quantized free electron theory, electrons in a periodic potential, transport in semiconductors, dielectric and magnetic properties of solids. Letter grading.


C211. Introduction to Materials Characterization B (Electron Microscopy). (4) (Formerly numbered 211L) Lecture, four hours; outside study, eight hours. Introduction to characterization of microstructure and microchemistry of materials; transmission electron microscopy; reciprocal lattice, electron diffraction, stereographic projection, direct observation of defects in crystals, replicas; scanning electron microscopy; emissive and reflective modes; chemical analysis; electron optics of both instruments. Concurrently scheduled with course C111. Letter grading.


M213. Cultural Materials Science I: Analytical Imaging and Documentation in Conservation of Materials. (4) (Same as Conservation M215) Lecture, two hours; laboratory, two hours. Basic and advanced techniques on digital photography, computer-aided recording tools, and scientific imaging to determine and document condition (defects) and technological features. Archaeological and ethnographic materials. Emphasis on development of both theoretical knowledge on imaging and photonics technology and practical skills on conservation photo-documentation, analytical (for research purposes) and advanced imaging new technology. Letter grading.


224. Deposition Technologies and Their Applications. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Topics include electronic and physical vapor deposition methods used in high-technology applications. Theory and experimental details of physical vapor deposition (PVD), chemical vapor deposition (CVD), plasma-enhanced chemical vapor deposition processes. Letter grading.


226. Si-CMOS Technology: Selected Topics in Materials Science and Engineering. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 120. Study of major physical and chemical principles affecting properties and performance of semiconductor materials. Topics include bonding, carrier statistics, band-gap engineering, optical and transport physical, chemical, and device materials systems, and characterization. Letter grading.


228. Science of Electronic Materials. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: course 120. Study of major physical and chemical principles affecting properties and performance of semiconductor materials. Topics include bonding, carrier statistics, band-gap engineering, optical and transport physical, chemical, and device materials systems, and characterization. Letter grading.

229. Growth and Processing of Electronic Materials. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: courses 120, 130, 131. Fabrication, structure, and property correlations of thin films used in electronic and optical devices. Deposition techniques and characterization. Topics include film deposition, interfacial properties, stress and strain, electromigration, phase changes and kinetics, reliability. Letter grading.

233. Materials Science of Thin Films. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Examination of physics behind majority of modern thin film deposition technologies based on vapor phase transport. Basic vacuum technology and gas kinetics. Deposition methods used in high-technology applications. Theory and experimental details of physical vapor deposition (PVD), chemical vapor deposition (CVD), plasma-enhanced chemical vapor deposition processes. Letter grading.

242. Materials Science of Surfaces. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: courses 120, 130, 131. Conservation materials science from modern Si-CMOS technology, Rock Art, Wall Paintings, Mosaics. (2) (Formerly numbered M214) Lecture, three hours. Recommended prerequisite: introduction to general chemistry and materials science. Introduction to materials and techniques of rock art, wall paintings (including painted surfaces on cement and composite decorative architectural surfaces), and mosaics. Archaeological and ethnographic contexts, techniques, and materials. Pigments, colors, and binding media. Chemical, optical, and structural properties. Reassessment of ancient technologies, structure, and properties explained using basic concepts from physics and chemistry. Intrinsic attributes and resistance to weathering. Causes, sources, and mechanisms of deterioration (physical, chemical, and bio-chemical). Letter grading.

260. Si-CMOS Technology: Selected Topics in Materials Science and Engineering. (4) Lecture, four hours; discussion, one hour; outside study, eight hours. Recommended requisite: laboratory safety fundamental concepts course by Office of Environment, Health, and Safety. Introduction to physical, chemical, and mechanical properties of conservation materials (employed for preservation of archaeological and cultural materials) and their aging characteristics. Science and application methods of traditional organic and inorganic systems and introduction to novel technology based on biomimilation processes and nanostructured materials. Letter grading.
including technological challenges in high k/metal gate stacks, strained Si FETs, SOI and three-dimen-
sional FETs, source/drain engineering including tran-
sient-enhanced drift mobility, and metallization for ohmic contacts. Letter grading.

243A. Fracture of Structural Materials. (4) Lecture, four hours; laboratory, two hours; outside study, four hours. Requisite: course 143A. Engineering and scient-

243C. Dislocations and Strengthening Mechanisms in Solids. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 143A. Elastic and plastic behavior of crystals, geometry, mechanism of dislocation mechanisms of yielding, work hardening, and other strengthening. Letter grading.

246A. Mechanical Properties of Nonmetallic Crystalline Solids. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 160. Materials and environmental factors affecting mechanical properties of nonmetallic crystalline solids, including atomic bonding and structure, atomic-scale defects, structural phases, stead-
sial stresses, temperature, stress state, strain rate, size and surface conditions. Letter grading.

248B. Structure and Properties of Glass. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 160. Structure of amorphous solids and glasses. Conditions of glass formation and theories of glass structure. Mechanical, electrical, and optical properties of glass and relationship to struc-
ture. Letter grading.

245D. Electronic and Optical Properties of Ceramics. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 160. Prin-
ciples governing electronic properties of ceramic crystals and glasses and effects of processing and micro-
structure on these properties. Electronic conduc-
tion, ferroelectricity, and photochromism. Magnetic ceramics. Infrared, visible, and ultraviolet transmit-

247. Nanoscale Materials: Challenges and Opportu-
nities. (4) Lecture, four hours; discussion, eight hours. Limited to graduate students. Literature studies of up-
to-date subjects and potential applications in nanoscale materials and bio-
materials. Letter grading.

248. Materials and Physics of Solar Cells. (4) Lecture, four hours; discussion, one hour; outside study, nine hours. Comprehensive introduction to materials and physics of photovoltaic cell, covering basic physics of semiconductors in photovoltaic devices, physical mechanisms, characterization, and design of common types of solar cells, and ap-
proaches to increasing solar cell efficiency. Recent progress in solar cells, such as organic solar cell, thin-
film solar cells, and multiple junction solar cells pro-
vided to increase student knowledge. Tour of research laboratory included. Letter grading.

250B. Advanced Composite Materials. (4) Lecture, four hours; outside study, eight hours. Preparation: BS in Materials Science and Engineering. Requisite: course 151. Fabrication methods, structure and prop-
erties of advanced composite materials. Fibers; resin-
metal-, and ceramic-matrix composites. Physical, me-
chanical, and nondestructive characterization tech-
niques. Letter grading.

251. Chemistry of Soft Materials. (4) Lecture, four hours. Introduction to organic soft materials, including essen-
tial basic organic chemistry and polymer chemistry. Topics include, but are not limited to: categories of soft materials: organic molecules, synthetic polymers, and biomole-
cules and biomaterials. Extensive description and dis-
cussion of soft property relationship, spectro-
scopic and experimental techniques, and preparation methods for various soft materials. Letter grading.

252. Organic Polymer Electronic Materials. (4) Lec-
ture, four hours; discussion, one hour; outside study, seven hours. Preparation: knowledge of introductory organic chemistry and polymer science. Introduction to organic electronic materials with emphasis on ma-
terials chemistry and processing. Topics include con-
jugated polymers; highly doped, highly conducting polymers; application of porous polymer films in various electrical, optical, and electrochemical de-
VICES. Synthesis of semiconductor polymers for or-
ganic light-emitting diodes, solar cells, thin-film tran-
sistors. Introduction to emerging field of organic elec-
tronics. Letter grading.

253. Bioinspired Materials. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Broad overview of most recent advances in bioin-
spired materials, biomimicry, and bioinspired arti-
factual materials, with emphasis on synthesis, processing, hierar-
chical design, and assembly from nano-
macro scale. Letter grading.

261. Risk Analysis for Engineers and Scientists. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Topics include definition and fun-
damental concepts of risk, sociotechnical context of risk assessment and risk management, perception and reality of risk, risk-informed decision-making, do-
mains of application (safety, health, security, economy, and environment) and risk assessment. Prerequi-
tement, including overview of probability and statistics, how to identify risk scenarios, techniques modeling failures of complex systems (e.g., fault tree and event tree analysis), data analysis, model inte-
gration and computational algorithms for risk calcula-
tion and identification of risk drivers, simulation ap-
proach to risk modeling, uncertainty analysis, exam-
pl es of risk assessment of engineered systems (e.g.
sp ace and aviation, nuclear power, petrochemical plants), other applications (risk of medical procedures, financial risk, natural hazards risk). Letter grading.

CM263C. Electrochemical Processes. (4) Same as Chemical Engineering CM214C. Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 130 (or Mechanical and Aerospace Engineering 105SA) and 102TB. Funda-
amentals of electrochemistry and engineering appli-
cations to industrial electrochemical processes. Pri-
mary emphasis on fundamental approach to analyze electrochemical processes. Specific topics include electrochemical reactions on metal and semicon-
ductor surfaces, electrodeposition, electrolysis deposi-
tion, electrolysis, fuel cells, aqueous and non-
aqueous batteries, solid-state electrolytes. May be concurrently scheduled with course CM163. Letter grading.

270. Computer Simulations of Materials. (4) Lecture, four hours; outside study, eight hours. Introduction to modern methods and computer modeling in mate-
rials science. Topics include basic statistical me-
chanics, classical molecular dynamics, and Monte Carlo methods, with emphasis on understanding basic principles of computer simulation and design, and run, and analyze computer simulations of materials. Use of ex-
amples from current literature to show how these methods can be used to study interesting phenomena in ma-
terials science. Hands-on computer experi-
ments. Letter grading.

271. Electronic Structure of Materials. (4) Lecture, four hours; outside study, eight hours. Preparation: basic knowledge of quantum mechanics. Requi-
mented prerequisite: introduction to modern first-principles electronic structure calculations for var-
ious types of modern materials. Properties of elec-
trons and ionatomic binding in molecules, crystals, and liquids, with emphasis on practical methods for solving Schrödinger equation and using it to calculate physical properties such as elastic constants, equilib-
rium structures, binding energies, vibrational frequen-
cies, electronic band gaps and band structures, electric-
ities of defects, surfaces, interfaces, and magnetism. Extensive hands-on experience with modern density-

272. Theory of Nanomaterials. (4) Lecture, four hours; outside study, eight hours. Strongly recommended requisite: course 200. Introduction to properties and applications of nanoscale materials, with emphasis on understanding of basic principles that distinguish nanostructures (with feature sizes that distinguish nanostructures (with feature sizes below 100 nm) from more common microstructured materials. Explanation of new phenomena that emerge only in very small sys-
tems, using simple concepts from quantum me-
chanics and thermodynamics. Topics include struc-
ture of electronic properties such as quantum dots, wires, nanotubes, and multilayers, self-assembly on surfaces and in liquid solutions, mechanical properties of nano-
structured metamaterials, molecular electronics, spin-
tronics, and proposed realizations of quantum computing. Discussion of current and future direc-
tions of this rapidly growing field using examples from modern scientific literature.

CM290. Introduction to Biomaterials. (4) Same as Bioengineering CM274C. Lecture, three hours; discus-
sion, two hours; outside study, seven hours. Requi-
courses: course 104, or Chemistry 20A, 20B, and 20L. Engineering materials utilize unique characteristics for repair and/or restoration of damaged natural tis-
tues. Topics include relationships between material properties, suitability to task, surface chemistry, pro-
cessing, and interactions and biomaterials and biocompatibility. Concurrently scheduled with course CM180. Letter grading.

282. Exploration of Advanced Topics in Materials Science and Engineering. (2) Lecture, one hour; dis-
cussion, one hour; outside study, seven hours. Prep-
recourse to leading research institutions around the world deliver lectures on advanced research topics in materials science and engineering. Students prepare a summary previews of topics prior to lecture. Class discussions follow each presentation. May be repeated for credit. S/U grading.

296. Seminar: Advanced Topics in Materials Science and Engineering. (2) Seminars, two hours; outside study, four hours. Preparation: advanced study and analysis of cur-
rrent topics in materials science and engineering. Dis-
cussion of current research and literature in research specialty of faculty members teaching course. May be repeated for credit. S/U grading.

M297B. Material Processing in Manufacturing. (4) Same as Mechanical and Aerospace Engineering M297B. Lecture, four hours; outside study, eight hours. Enforced requisite: Mechanical and Aerospace Engineering 183A. Thermodynamics, principles of ma-

M297C. Composites Manufacturing. (4) Same as Mechanical and Aerospace Engineering M297C. Lec-
ture, four hours; outside study, eight hours. Preparation: course 151, Mechanical and Aerospace Engi-
nering 166C. Matrix materials, fibers, fiber preforms, ele-
ments of processing, autoclave/compression molding, filament winding, resin transfer molding, automation, material removal and assembly, metal and ceramic matrix composites, quality assur-
ance. Letter grading.

298. Seminar: Engineering. (2 to 4) Seminar, to be ar-
ranged. Limited to graduate materials science and en-
gineering students. Seminars may be organized in ad-
vanced technical fields. If appropriate, field trips may be arranged. May be repeated with topic change. Letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Semi-
inar, to be arranged. Preparation: apprentice per-
sonnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guid-
ance and supervision of regular faculty member re-
sponsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

596. Directed Individual or Tutorial Studies. (2 to 8) Tutorial, to be arranged. Limited to graduate materials science and engineering students. Petition forms to re-
quest enrollment may be obtained from assistant dean, Graduate Studies. Supervised investigation of advanced technical problems.

597A. Preparation for MS Comprehensive Examina-
tion. (2 to 12) Tutorial, to be arranged. Limited to graduate materials science and engineering students. Reading and preparation for MS comprehensive ex-
amination. S/U grading.
Mathematics
College of Letters and Science
6363 Mathematical Sciences
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Mathematics
310-825-4701

Chandrashekhar Khare, PhD, Chair
Inwon C. Kim, PhD, Graduate Vice Chair
Igor Pak, PhD, Administrative Vice Chair

Marcus L. Roper, PhD, Undergraduate Vice Chair
Michael J. Andrews, PhD, Director, Program in Computing
Andrea L. Bertozzi, PhD, Director, Applied Mathematics

Faculty Roster

Professors
Christopher R. Anderson, PhD
Paul Balmer, PhD
Jacob P. Bedrossian, PhD
Andrea L. Bertozzi, PhD (Betsy Wood Knapp Professor of Innovation and Creativity)
Marek Biskup, PhD
Don M. Blasius, PhD
Mario Bonk, PhD
Artur Czachor, PhD
Tom Chou, PhD
Lara Dolecek, PhD
Richard S. Elman, PhD
Guido F. Montúfar, PhD
Chenfanfu Jiang, PhD
Alyson K. Fletcher, PhD
James H. White, PhD
Masamichi Takesaki, PhD
Roberto H. Schonmann, PhD
Murray M. Schacher, PhD
James V. Ralston, Jr., PhD
Bruce N. Rothschild, PhD
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Chenfanfu Jiang, PhD
Georg Menz, PhD
Guido F. Montúfar, PhD

Assistant Professors
Pavel Galashin, PhD
Joaquín M. Moraga, PhD
Hong Wang, PhD

Senior Lecturer SOE
William J. Conley, PhD

Adjunct Professor
Christian Ratsch, PhD

Adjunct Assistant Professor
Mary P. Greene, MS

Overview

Gauss called mathematics the “queen of the sciences.” It has provided powerful intellectual tools that have made possible tremendous advances in modern science and technology. The Department of Mathematics offers courses of study that introduce students to the fundamentals of mathematics and allow them to master the most important parts of the subject, both pure and applied. It leads doctoral students to the frontiers of mathematical research, where they can begin to push back those frontiers.

Undergraduate Study

In addition to its seven majors, the department also hosts the Mathematics/Economics Interdepartmental Program, which offers a Mathematics/Economics major.

Undergraduate Policies

Preliminary Examination in Mathematics

If students wish to enroll in Mathematics 1, 3A, 31A, or 31AL, they must pass the Mathematics Diagnostic Test.

For specific information about the online test, refer to the Schedule of Classes or the department website; or contact the Mathematics Student Services Office, 6356 Mathematical Sciences.

Advanced Placement in Calculus

Students who have taken the Advanced Placement (AP) Calculus AB Test and obtained a score of 5 receive 4 units of credit and Mathematics 31A equivalency; those with a score of 4 receive 4 units of calculus and analytic geometry credit. They may petition for 31A equivalency, or they may take course 31A or 31AL at UCLA, although they must still satisfy the course requisites (Mathematics Diagnostic Test). Students who take the BC Test and obtain a score of 5 receive 8 units of credit and Mathematics 31A, 31B equivalency; those with a score of 4 receive 4 units of calculus and Mathematics 31A equivalency. They may petition for 31A, 31B equivalency, or they may take courses 31A or 31AL at UCLA, although they must still satisfy the course requisites (Mathematics Diagnostic Test). Students receiving a score of 4 or lower on the AP examination, or 3 or lower on the BC examination, should consult with the undergraduate mathematics counselor prior to enrolling in a calculus course at UCLA.

Credit Limitations

Credit is given for at most one course in each of the following groups: (1) 3A, 31A, 31AL; (2) 3B, 31B, 31E; (3) 110A, 117; (4) 170A, 170E.
Courses from only one of the following statistics sequences may be applied toward any mathematics major: (1) Statistics 100A (or Mathematics 170A or 170E), 100B (or Mathematics 170S), 100C or (2) former Statistics 110A, 110B.

Mathematics 132 is not open for credit to students with credit for Physics 132.

Mathematics 151A is not open for credit to students with credit for Electrical and Computer Engineering 133A.

Mathematics 170A, 170E, and Statistics 100A are not open for credit to students with credit for Electrical and Computer Engineering 131A.

Mathematics 170S is not open for credit to students with credit for Statistics 100B.

Mathematics 174E is not open for credit to students with credit for Economics 141.

For lower-division mathematics courses, students may not take or repeat a course for which they already have credit. This applies in particular to the repetition of courses (e.g., if students wish to repeat Mathematics 31B, they must do so before completing course 32B; if students wish to repeat Mathematics 3B or 31B or 32A, they must do so before completing course 33A).

For upper-division mathematics courses, students may not take or repeat a lower sequence course for credit if it is a requisite for a more advanced lower-division course for which they already have credit. This applies in particular to the repetition of courses (e.g., if students wish to repeat Mathematics 131A, they must do so before completing course 131B or 131Bh).

Students may not receive credit for both a course and the honors version of that course (e.g., they may not receive credit for both Mathematics 131A and 131AH).

Honors Courses
The department offers lower-division honors courses in calculus, and upper-division honors courses in algebra and analysis. The courses are intended for students (not necessarily mathematics majors) who desire a broad, comprehensive introduction to these topics.

Program in Computing Courses
Program in Computing 1 is designed for students who wish to know the basics of computers and computation, but who have no prior experience in computing.

Courses 10A, 10B, and 10C provide an extensive introduction to programming, using the C++ language. Courses 16A, 16B, 20A, and 40A cover Python, Java, and Internet programming. They are of interest to majors in many fields, including those completing a specialization in Computing. Students should consult with their major department regarding enrollment in these courses, their relevance to their program, and suitability for use in fulfilling requisites.

Subject Matter Preparation Program for Single-Subject Credential in Mathematics
Students interested in obtaining a single-subject secondary school credential in mathematics should consult with a departmental counselor regarding the requirements for a waiver from the Mathematics California Subject Examination for Teachers (CSET), which is required by the California Commission on Teacher Credentialing. Students should meet with a departmental counselor as early in their undergraduate careers as possible because the program does require additional courses beyond the major requirements. See the Curtis Center website for details on teaching credential requirements. For additional information, contact the Education Department credentialing specialist at 310-825-8328.

Undergraduate Majors
Mathematics BS
The Mathematics major is designed for students whose major interest is mathematics.

Learning Outcomes
The Mathematics major has the following learning outcomes:

- Strong mathematical content knowledge of single and multivariable differential and integral calculus, and differential equations
- Ability to synthesize material, solve problems, and think abstractly
- Familiarity with linear algebra, techniques of proof, and foundations of real analysis
- Ability to perform basic computer programming, especially in C++

Entry to the Major
Admission
Current UCLA students need to apply for the Mathematics major by filing a petition with the Student Services Office in 6356 Mathematical Sciences. All students are identified as Mathematics pre-majors until they satisfy the following minimum requirements for the major: (1) achieve grades of C or better in all pre-major mathematics sequenced courses (Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, and 33B), (2) achieve a minimum 2.5 grade-point average in the calculus sequence with no more than two repeats, (3) complete one 12-unit term in residence in regular session at UCLA, (4) be enrolled in UCLA regular session at the time of application, and (5) file a petition to declare the major before completing 160 quarter units.

Pre-major
Students entering UCLA directly from high school or first-term transfer students who want to declare the Mathematics pre-major at the time they apply for admission are automatically admitted to the pre-major.

First-Year Students
To enter the major, students must petition after they have completed the six sequenced courses with a 2.5 minimum overall grade-point average, have completed one 12-unit term in residence in regular session at UCLA, are enrolled in UCLA regular session at the time of application, and before completing 160 quarter units.

Transfer Students
Transfer applicants to the Mathematics major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of calculus for majors, one calculus-based physics (mechanics) course, one C++ programming course, and two courses from general chemistry for majors, economics, symbolic logic, and calculus-based physics.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

After satisfying the prerequisites for the major requirements, students need to petition to enter the major at the Student Services Office after completing one 12-unit term in residence in regular session at UCLA, and while enrolled in UCLA regular session at the time of application.

Requirements
Preparation for the Major

The Major
Required: Mathematics 110A, 110B, 115A, 120A, 131A, 131B, 132, and at least five elective courses from 106 through 199 and Statistics 100A through 102C.

Honors Program
The program entails taking a specified sequence of courses as part of the major requirements, completing an approved seminar offered by the Mathematics Department or submitting an original research project, and earning an overall GPA of at least 3.6 in approved upper-division and graduate mathematics courses.

Computing Specialization
Majors may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major and (2) completing Mathematics 61 or 180, Program in Computing 10A, 10B, two courses from 10C, 15, 16A, 20A, 40A, and at least two courses from Mathematics 149 through 159, with a minimum grade of C- in each course and a combined grade-point average of at least 2.0. Students must petition for admission to this program and are advised to do so after they complete Program in Computing 10B (petitions should be filed in the Student Services Office).
Students graduate with a bachelor’s degree in their major and a specialization in Computing.

Policies

Preparation for the Major

Each course must be taken for a letter grade. The mathematics sequenced courses (Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B) are calculated separately from the other preparation for the major courses and must be completed with a minimum overall 2.5 grade-point average and a grade of C- or better in each course. The other preparation courses must be completed with a minimum overall 2.0 grade-point average and a grade of C- or better in each course.

Repetition of more than two mathematics sequenced courses or of any mathematics sequenced course more than once results in automatic dismissal from the major.

The Major

Each course must be taken for a letter grade. The 12 courses must be completed with a minimum overall grade-point average of 2.0, with grades of C- or better in Mathematics 115A and 131A.

Honors Program

Students who wish to graduate with departmental honors should apply for admission to the honors program in the Student Services Office. They may apply any time after completing four courses from the calculus sequence or from upper-division mathematics courses with an overall grade-point average of 3.6 or better.

Students completing the program are awarded honors at graduation; if they demonstrate exceptional achievement (i.e., at least a 3.8 GPA in upper-division mathematics courses taken for the major), they are awarded highest honors. Contact the department for more information.

Applied Mathematics BS

The Applied Mathematics major concerns applications of mathematics to the sciences, including the life, social and physical sciences, and engineering.

Learning Outcomes

The Applied Mathematics major has the following learning outcomes:

- Strong mathematical content knowledge of single and multivariate differential and integral calculus, and differential equations
- Ability to synthesize material, solve problems, and think abstractly
- Familiarity with linear algebra, techniques of proof, and foundations of real analysis
- Ability to perform basic computer programming, especially in C++

Entry to the Major

Admission

Current UCLA students need to apply for the Applied Mathematics major by filing a petition with the Student Services Office in 6356 Mathematical Sciences. All students are identified as Applied Mathematics pre-majors until they satisfy the following minimum requirements for the major: (1) achieve grades of C or better in all pre-major mathematics sequenced courses (Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B), (2) achieve a minimum 2.5 grade-point average in the calculus sequence with no more than two repeats, (3) complete one 12-unit term in residence in regular session at UCLA, (4) be enrolled in UCLA regular session at the time of application, and (5) file a petition to declare the major before completing 160 quarter units.

Pre-major

Students entering UCLA directly from high school or first-term transfer students who want to declare the Applied Mathematics pre-major at the time they apply for admission are automatically admitted to the pre-major.

First-Year Students

To enter the major, students must petition after they have completed the six sequenced courses with a 2.5 minimum overall grade-point average, have completed one 12-unit term in residence in regular session at UCLA, are enrolled in UCLA regular session at the time of application, and before completing 160 quarter units.

Transfer Students

Transfer applicants to the Applied Mathematics major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of calculus for majors, two calculus-based physics courses, one C++ programming course, and one course from general chemistry for majors or calculus-based physics.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

After satisfying the preparation for the major requirements, students need to petition to enter the major at the Student Services Office after completing one 12-unit term in residence in regular session at UCLA, and while enrolled in UCLA regular session at the time of application.

Requirements

Preparation for the Major

Required: Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B, Physics 1A, 1B, Program in Computing 10A, and one course from Chemistry and Biochemistry 20A, 20B, Physics 1C.

The Major

Required: Mathematics 115A, 131A, either 131B or 132, 142; two term sequences from two of the following categories: numerical analysis—courses 151A and 151B, probability and statistics—courses 170A and 170B, or Statistics 100A and 100B, differential equations—courses 134 and 135; four courses from 106 through 199 and Statistics 100A through 102C (appropriate courses from other departments may be substituted for some of the additional courses provided departmental consent is given before such courses are taken).

Honors Program

The program entails taking a specified sequence of courses as part of the major requirements, completing an approved seminar offered by the Mathematics Department or submitting an original research project, and earning an overall GPA of at least 3.6 in approved upper-division and graduate mathematics courses.

Computing Specialization

Majors may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major and (2) completing Mathematics 61 or 180, Program in Computing 10A, 10B, two courses from 10C, 15, 16A, 20A, 40A, and at least two courses from Mathematics 149 through 159, with a minimum grade of C- in each course and a combined grade-point average of at least 2.0. Students must petition for admission to this program and are advised to do so after they complete Program in Computing 10B (petitions should be filed in the Student Services Office).

Students graduate with a bachelor’s degree in their major and a specialization in Computing.

Policies

Preparation for the Major

Each course must be taken for a letter grade. The mathematics sequenced courses (Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B) are calculated separately from the other preparation for the major courses and must be completed with a minimum overall 2.5 grade-point average and a grade of C- or better in each course.

Students completing the program are awarded honors at graduation; if they demonstrate exceptional achievement (i.e., at least a 3.8 GPA in upper-division mathematics courses taken for the major), they are awarded highest honors. Contact the department for more information.

The Major

Each course must be taken for a letter grade. The 12 courses must be completed with a minimum overall grade-point average of 2.0, with grades of C- or better in Mathematics 115A and 131A.
**Data Theory BS**

**Capstone Major**

The Data Theory major is a designated capstone major. Students work in small teams to solve a large, open-ended data science problem for community- or campus-based clients. Emphasis is placed on the development and theoretical support of a statistical model or algorithmic approach. Alternatively, students may undertake research on the foundations of data science, studying advanced topics and writing a senior thesis.

**Learning Outcomes**

The Data Theory major has the following learning outcomes:

- Understanding of mathematical and statistical bases of most common methods of data science
- Ability to explain in writing, with examples, how concepts of statistics and mathematics together solve real-world problems involving data
- Skillfully manage data
- Development, comparison, and testing of data-driven models to solve problems
- Understanding and explanation of variability when fitting and interpreting models of real-world systems
- Carrying out of reproducible data analysis using accepted practices of research community
- Written and verbal communication of findings of analyses
- Identification of areas of active research in data science
- Insightfully address problems concerning ethics of data use and storage, including data privacy and security
- Demonstrated mastery of concepts and skills of machine learning, modeling and supervised learning, dimension reduction and unsupervised learning, and deep learning
- Demonstrated familiarity with numerous software tools used in statistical and data science work and research
- Demonstrated knowledge of mathematical foundations, including pure and applied linear algebra, basic analysis, probability, and optimization theory
- Study and evaluation of proofs of mathematical and statistical results employed in data theory
- Work effectively in a team on a data science problem
- Demonstrated eligibility for graduate study in applied mathematical science or statistical science

**Entry to the Major**

**Pre-major**

Students entering UCLA directly from high school or first-term transfer students who want to declare the Data Theory pre-major at the time they apply for admission are automatically admitted to the pre-major. Students must visit the student services office of either the Mathematics Department or Statistics and Data Science Department in order to petition to enter the major. All students are identified as Data Theory pre-majors until they satisfy the following minimum requirements for the major.

**First-Year Students**

To enter the major, students must petition after they have completed the preparation for the major courses. Students who have an overall grade-point average (GPA) of at least 3.3 in the preparation for the major courses, and have completed all preparation for the major courses before the fall quarter of their third year at UCLA, will be admitted to the major.

Students whose overall GPA is between 2.7 and 3.3, or who fail to complete the preparation courses before the fall quarter of their third year, are admitted only if space is available. All students must petition before they have earned 160 units, or by the winter quarter of their junior year, whichever comes first. Only grades for courses that are taken at the University of California, including UC summer schools, are counted for this GPA computation.

**Transfer Students**

Transfer applicants to the Data Theory major are admitted to the pre-major. Applicants with 90 or more units must have completed the following by the end of the spring term prior to entry to UCLA: two years of calculus for physical science and/or engineering majors, one linear algebra course, one C++ programming course, one statistics course.

Transfer students must have completed all preparation for the major coursework, and must have passed Mathematics 42, 115A, and at least 4 units of upper-division coursework required for this major with at least a 3.3 GPA, in order to be eligible to petition to enter the major. Transfer students will be admitted to the major, if they satisfy these requirements. Transfer students who fail to meet these criteria for automatic admission will be admitted only if resources allow. Transfer students must petition to enter the major no later than the spring quarter of their first year at UCLA.

Refer to the **UCLA transfer admission guide** for up-to-date information regarding transfer selection for admission.

After satisfying the preparation for the major requirements, students must visit the student services office of either the Mathematics Department or Statistics and Data Science Department in order to petition to enter the major.

**Requirements**

**Preparation for the Major**

*Required:* Mathematics 31A, 31B, 32A, 32B, 33A, 42, 115A; Program in Computing 10A; one course selected from Statistics 10, 12, 13, 15; Statistics 20, 21.

**The Major**

*Required:* Mathematics 118, 131A, 135, Statistics 101A, 101C, 102A, 102B, 147, 184; one two-quarter sequence: Mathematics 170E and 170S, or Statistics 100A and 100B; one elective selected from Mathematics 151A, 151B, 164, 168, 171, 174E, 178A, 178B, 178C, 179 or 182; one elective selected from Statistics 100C, 101B, 102C, or C151 through 199 (except Statistics 182, 186, or 189); two additional electives from either of the above lists; a capstone course (Mathematics M148 or Statistics M148), to be taken during the final year.

**Policies**

**Preparation for the Major**

Each course must be completed with a grade of C or better and an overall grade-point average of at least 2.7. All students must take Mathematics 42 at UCLA. The major is limited in size according to available resources.

Repetition of more than two mathematics or statistics sequenced courses or of any mathematics or statistics sequenced course more than once results in automatic dismissal from the major.

**The Major**

Only 4 units of course 199 may be applied toward the major. Courses 189 and 189HC may not be applied toward any of the major requirements. Each major course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

**Financial Actuarial Mathematics BS**

The Financial Actuarial Mathematics major concerns the applications of mathematics to finance, the actuarial field, and related areas.

**Learning Outcomes**

The Financial Actuarial Mathematics major has the following learning outcomes:

- Strong mathematical content knowledge of single and multivariate differential and integral calculus, and differential equations
- Demonstrated knowledge of how to synthesize material, solve problems, and think abstractly
- Familiarity with linear algebra, techniques of proof, and foundations of real analysis
- Working knowledge of probability and financial and insurance mathematics at the level needed to pass of the first three preliminary actuarial examinations by the Society of Actuaries
- Strong content knowledge of the fourth and fifth preliminary examinations.
- Familiarity with basic statistical analysis including probability distributions, random variables, survey sampling, testing, data summary, sums of squares principle, testing general linear hypothesis in regression, and inference procedures
- Ability to perform basic computer programming, especially in C++

**Entry to the Major**

**Admission**

Current UCLA students need to apply for the Financial Actuarial Mathematics major by filing a petition with the Student Services Office in
6356 Mathematical Sciences. All students are identified as Financial Actuarial Mathematics pre-majors until they satisfy the following minimum requirements for the major: (1) achieve grades of C or better in all pre-major mathematics sequenced courses (Mathematics 31A, 31B, 32A, 32B, 33A, 33B, Program in Computing 10A) with a minimum 2.5 grade-point average and no more than two repeats, (2) achieve grades of C or better in all pre-major economics courses (Economics 1, 2, 11, Management 1A, 1B) with a minimum 2.5 grade-point average and no more than one repeat, (3) complete one 12-unit term in residence in regular session at UCLA, (4) be enrolled in UCLA regular session at the time of application, and (5) file a petition to declare the major before completing 160 quarter units.

Pre-major
Students entering UCLA directly from high school or first-term transfer students who want to declare the Financial Actuarial Mathematics pre-major at the time they apply for admission are automatically admitted to the pre-major.

First-Year Students
To enter the major, students must petition after they have completed the six sequenced courses with a 2.5 minimum overall grade-point average, have completed one 12-unit term in residence in regular session at UCLA, are enrolled in UCLA regular session at the time of application, and before completing 160 quarter units.

Transfer Students
Transfer applicants to the Financial Actuarial Mathematics major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of calculus for majors, one C++ programming course, one microeconomic theory course, one macroeconomics course, and two terms of accounting principle. Transfer credit for any of the above is subject to department approval; consult with an undergraduate counselor before enrolling in any courses for the major.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

After satisfying the preparation for the major requirements, students need to petition to enter the major at the Student Services Office after completing one 12-unit term in residence in regular session at UCLA, and while enrolled in UCLA regular session at the time of application.

Requirements

Preparation for the Major

Required: Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B, and one course selected from Mathematics 11N, 42, 61, 70; Economics 1, 2, 11, Management 1A, Program in Computing 10A, 10B or 16A.

The Major

Required: Ten mathematics/statistics courses, including Mathematics 115A, 131A, 170E, 170S, 174E (or Economics 141 or Statistics C183), 177, 178A, 178B, 178C, 179; and two courses from Economics 101 through 199B, Statistics 100C.

Computing Specialization

Majors may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major and (2) completing Mathematics 61 or 180, Program in Computing 10A, 10B, two courses from 10C, 15, 16A, 20A, 40A, and at least two courses from Mathematics 149 through 159, with a minimum grade of C– in each course and a combined grade-point average of at least 2.0. Students must petition for admission to this program and are advised to do so after they complete Program in Computing 10B (petitions should be filed in the Student Services Office). Students graduate with a bachelor’s degree in their major and a specialization in Computing.

Policies

Preparation for the Major

Each course must be taken for a letter grade. The economics preparation for the major courses (Economics 1, 2, 11, Management 1A) are calculated separately from the mathematics preparation for the major courses (Mathematics 11N or 42 or 61 or 70, 31A or 31AL, 31B, 32A, 32B, 33A, 33B, Program in Computing 10A, 10B or 16A). The economics preparation courses must be completed with a minimum overall 2.5 grade-point average and a grade of C or better in each course, as must the mathematics preparation courses.

Repetition of more than one economics preparation course, more than two mathematics preparation courses, or of any economics or mathematics preparation course more than once results in automatic dismissal from the major.

The Major

Each course must be taken for a letter grade. Transfer credit is subject to department approval; consult with an undergraduate counselor before enrolling in any courses for the major.

To graduate, the ten Mathematics Department courses must be completed with an overall grade-point average of 2.0, with grades of C– or better in Mathematics 115A and 131A, as must the two elective courses.

Mathematics of Computation BS

The Mathematics of Computation major is for mathematics students who have a secondary interest in computing.

Learning Outcomes

The Mathematics of Computation major has the following learning outcomes:

• Strong mathematical content knowledge of single and multivariate differential and integral calculus, and differential equations
• Ability to synthesize material, solve problems, and think abstractly
• Familiarity with linear algebra, techniques of proof, and foundations of real analysis
• Ability to perform basic computer programming, especially in C++

Entry to the Major

Admission

Current UCLA students need to apply for the Mathematics of Computation major by filing a petition with the Student Services Office in 6356 Mathematical Sciences. All students are identified as Mathematics of Computation pre-majors until they satisfy the following minimum requirements for the major: (1) achieve grades of C or better in all pre-major mathematics sequenced courses (Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B), (2) achieve a minimum 2.5 grade-point average in the calculus sequence with no more than two repeats, (3) complete one 12-unit term in residence in regular session at UCLA, (4) be enrolled in UCLA regular session at the time of application, and (5) file a petition to declare the major before completing 160 quarter units.

Pre-major

Students entering UCLA directly from high school or first-term transfer students who want to declare the Mathematics of Computation pre-major at the time they apply for admission are automatically admitted to the pre-major.

First-Year Students

To enter the major, students must petition after they have completed the six sequenced courses with a 2.5 minimum overall grade-point average, have completed one 12-unit term in residence in regular session at UCLA, are enrolled in UCLA regular session at the time of application, and before completing 160 quarter units.

Transfer Students

Transfer applicants to the Mathematics of Computation major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of calculus for majors, one discrete structures course, two calculus-based physics courses, three programming courses, and one course from general chemistry for majors or calculus-based physics.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

After satisfying the preparation for the major requirements, students need to petition to enter the major at the Student Services Office after completing one 12-unit term in residence in regular session at UCLA, and while enrolled in UCLA regular session at the time of application.

Requirements

Preparation for the Major

Required: Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B, and one course selected from Mathematics 11N, 42, 61, 70; Economics 1, 2, 11, Management 1A, Program in Computing 10A, 10B or 16A.
from Chemistry and Biochemistry 20A, 20B, Physics 1C.

The Major
Required: Eleven Mathematics Department courses, including Mathematics 115A, 131A, 131B or 132, 151A, 151B, and six courses from 106 through 199 and Statistics 100A through 101C; three upper-division computer science courses (12 units).

Honors Program
The program entails taking a specified sequence of courses as part of the major requirements, completing an approved seminar offered by the Mathematics Department or submitting an original research project, and earning an overall GPA of at least 3.8 in approved upper-division and graduate mathematics courses.

Policies
Preparation for the Major
Each course must be taken for a letter grade. The mathematics sequenced courses (Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B) are calculated separately from the other preparation for the major courses and must be completed with a minimum overall 2.5 grade-point average and a grade of C or better in each course. The other preparation courses must be completed with a minimum overall 2.0 grade-point average and a grade of C– or better in each course.

Repetition of more than two mathematics sequenced courses or of any mathematics sequenced course more than once results in automatic dismissal from the major.

The Major
Each course must be taken for a letter grade. The 14 courses must be completed with a minimum overall grade-point average of 2.0, with grades of C– or better in Mathematics 115A and 131A.

Honors Program
Students who wish to graduate with departmental honors should apply for admission to the honors program in the Student Services Office. They may apply any time after completing four courses from the calculus sequence or from upper-division mathematics courses with an overall grade-point average of 3.6 or better.

Students completing the program are awarded honors at graduation; if they demonstrate exceptional achievement (i.e., at least a 3.8 GPA in upper-division mathematics courses taken for the major), they are awarded highest honors. Contact the department for more information.

Mathematics/Applied Science BS
The Mathematics/Applied Science major is designed for students with a substantial interest in mathematics and its applications to a particular field. It is an individual major in that students, in consultation with a faculty adviser, design their own program. They may also select one of the established programs: mathematics/history of science plan or medical and life sciences plan. In the past, Mathematics/Applied Science majors have combined the study of mathematics with fields such as atmospheric and oceanic sciences, biochemistry, biology, chemistry, economics, geography, physics, psychology, and statistics.

Students interested in designing an individual program should meet with the undergraduate adviser, 6356 Mathematical Sciences, during their sophomore year. A proposed program is drawn up, then forwarded to the mathematics/applied science curriculum committee for approval. All programs must include the following preparation for the major and major courses.

Learning Outcomes
The Mathematics/Applied Science major has the following learning outcomes:

- Strong mathematical content knowledge of single and multivariate differential and integral calculus, and differential equations
- Familiarity with linear algebra, techniques of proof, and foundations of real analysis
- Ability to synthesize material, solve problems, and think abstractly
- Ability to perform basic computer programming, especially in C++
- Familiarity with basic statistical analysis including probability distributions, random variables, survey sampling, testing, data summary, sums of squares principle, testing general linear hypothesis in regression, and inference procedures

Entry to the Major
Admission
Current UCLA students need to apply for the Mathematics/Applied Science major by filing a petition with the Student Services Office in 6356 Mathematical Sciences. All students are identified as Mathematics/Applied Science pre-majors until they satisfy the following minimum requirements for the major: (1) achieve grades of C or better in all pre-major mathematics sequenced courses (Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B), (2) achieve a minimum 2.5 grade-point average in the calculus sequence with no more than two repeats, (3) complete one 12-unit term in residence in regular session at UCLA, (4) be enrolled in UCLA regular session at the time of application, and (5) file a petition to declare the major before completing 160 quarter units.

Pre-major
Students entering UCLA directly from high school or first-term transfer students who want to declare the Mathematics/Applied Science pre-major at the time they apply for admission are automatically admitted to the pre-major.

First-Year Students
To enter the major, students must petition after they have completed the six sequenced courses with a 2.5 minimum overall grade-point average, have completed one 12-unit term in residence in regular session at UCLA, are enrolled in UCLA regular session at the time of application, and before completing 160 quarter units.

Transfer Students
Transfer applicants to the Mathematics/Applied Science major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of calculus for majors and one C++ programming course. Additional courses are required for each concentration plan.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

After satisfying the preparation for the major requirements, students need to petition to enter the major at the Student Services Office after completing one 12-unit term in residence in regular session at UCLA, and while enrolled in UCLA regular session at the time of application.

Requirements
Preparation for the Major
Required: Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B, Program in Computing 10A. Additional preparation, varying with the individual program, may be required.

The Major
Required: Fourteen courses, seven in the Mathematics Department selected from Mathematics 106 through 199 and seven upper-division courses in a related field selected from one or two other departments.

Mathematics/History of Science Plan
Preparation for the Major
Required: Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B, Program in Computing 10A, and three courses from History 2B, 3A through 3D.

The Major
Required: Eight mathematics courses, including Mathematics 106, 115A, 131A, 134, 170A, and three courses from 110A through 199; six outside courses to be selected from History 1A through 4A, 107, and any upper-division Honors Collegium course with history of science/medicine content.

Medical and Life Sciences Plan
Preparation for the Major

The Major
Required: Seven mathematics courses, including Mathematics 115A, 131A, 134, 151A, 170A, 170B, and one course from 110A through 199 and Statistics 100B through 101C; six outside courses, including Neurosciences M101A, M101B, and M101C, and three courses from Biostatistics 100A, Chemistry and Biochemistry CM160A, Computer Science CM186, Ecology and Evolutionary Biology C119A, 133, C135, Life Sciences 107, Physiological Science 100, M135, and any additional upper-division course
from these fields with consent of the administering department and the Mathematics Department.

**Computing Specialization**

Majors may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major and (2) completing Mathematics 61 or 180, Program in Computing 10A, 10B, two courses from 10C, 15, 16A, 20A, 40A, and at least two courses from Mathematics 149 through 159, with a minimum grade of C– in each course and a combined grade-point average of at least 2.0. Students must petition for admission to this program and are advised to do so after they complete Program in Computing 10B (petitions should be filed in the Student Services Office). Students graduate with a bachelor’s degree in their major and a specialization in Computing.

**Policies**

**Preparation for the Major**

Each course must be taken for a letter grade. The mathematics sequenced courses (Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B) are calculated separately from the other preparation for the major courses and must be completed with a minimum overall 2.5 grade-point average and a grade of C or better in each course. The other preparation courses must be completed with a minimum overall 2.0 grade-point average and a grade of C– or better in each course.

Repetition of more than two mathematics sequenced courses or of any mathematics sequenced course more than once results in automatic dismissal from the major.

**History of Science Plan**

Each course must be taken for a letter grade. The mathematics sequenced courses must be completed with a minimum overall grade-point average of 2.0, with grades of C– or better in Mathematics 115A and 131A, as must the six outside courses from history, philosophy, or physiological science.

**Medical and Life Sciences Plan**

Each course must be taken for a letter grade. The seven Mathematics Department courses must be completed with a minimum overall grade-point average of 2.0, with grades of C– or better in Mathematics 115A and 131A, as must the six outside courses.

**Mathematics for Teaching BS**

The Mathematics for Teaching major is designed primarily for students planning to teach mathematics at the high school level. It provides exposure to a broad range of mathematical topics, especially those appropriate for the prospective teacher. Students planning to pursue graduate studies in mathematics or related fields are encouraged to enter the Mathematics, Applied Mathematics, or Mathematics of Computation major.

**Capstone Major**

The Mathematics for Teaching major is a designated capstone major. In their senior year students complete a year-long course sequence that culminates in a model lesson presentation, paper, and portfolio. Through their capstone work, students demonstrate their familiarity with research and current issues in mathematics education, as well as their capacities to problem solve; reason quantitatively, geometrically, and algebraically; construct viable arguments; critique others’ reasoning; and use tools strategically.

**Learning Outcomes**

The Mathematics for Teaching major has the following learning outcomes:

- Familiarity with pedagogical research and ability to apply it to classroom work
- Ability to effectively plan lessons
- Preparation and experience in different modes of instruction
- Ability to use mathematical sophistication to shape lessons

**Entry to the Major**

**Admission**

Current UCLA students need to apply for the Mathematics for Teaching major by filing a petition with the Student Services Office in 6356 Mathematical Sciences. All students are identified as Mathematics for Teaching pre-majors until they satisfy the following minimum requirements for the major: (1) achieve grades of C or better in all pre-major mathematics sequenced courses (Mathematics 31A, 31B, 32A, 32B, 33A, 33B), (2) achieve a minimum 2.5 grade-point average in the calculus sequence with no more than two repeats, (3) complete one 12-unit term in residence in regular session at UCLA, (4) be enrolled in UCLA regular session at the time of application, and (5) file a petition to declare the major before completing 160 quarter units.

**Pre-major**

Students entering UCLA directly from high school or first-term transfer students who want to declare the Mathematics for Teaching pre-major at the time they apply for admission are automatically admitted to the pre-major.

**First-Year Students**

To enter the major, students must petition after they have completed the six sequenced courses with a 2.5 minimum overall grade-point average, have completed one 12-unit term in residence in regular session at UCLA, are enrolled in UCLA regular session at the time of application, and before completing 160 quarter units.

**Transfer Students**

Transfer applicants to the Mathematics for Teaching major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of calculus for majors, one discrete structures course, one C++ programming course, and three courses from calculus-based physics, general chemistry for majors, and computing.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

After satisfying the preparation for the major requirements, students need to petition to enter the major at the Student Services Office after completing one 12-unit term in residence in regular session at UCLA, and while enrolled in UCLA regular session at the time of application.

**Requirements**

**Preparation for the Major**

*Required: Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B, 61, Physics 1A or 5A, Program*
The role of mathematics in various disciplines.

The Major

Required: Mathematics 106, 110A or 117, 115A, 120A or 123, 131A, 170A or Statistics 100A, Statistics 100B; one course from Mathematics 110B through 191H or Statistics 100C, one course from Mathematics 131B through 136, one course from 142 through 167, and a capstone series in the senior year (courses 105A, 105B, 105C).

Computing Specialization

Majors may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major and (2) completing Mathematics 61 or 180, Program in Computing 10A, 10B, two courses from 10C, 15, 16A, 20A, 40A, and at least two courses from Mathematics 149 through 159, with a minimum grade of C– in each course and a combined grade-point average of at least 2.0. Students must petition for admission to this program and are advised to do so after they complete Program in Computing 10B (petitions should be filed in the Student Services Office). Students graduate with a bachelor’s degree in their major and a specialization in Computing.

Policies

Preparation for the Major

Each course must be taken for a letter grade. The mathematics sequenced courses (Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B) are calculated separately from the other preparation for the major courses and must be completed with a minimum overall 2.5 grade-point average and a grade of C– or better in each course. The other preparation courses must be completed with a minimum overall 2.0 grade-point average and a grade of C– or better in each course.

Repetition of more than two mathematics sequenced courses or of any mathematics sequenced course more than once results in automatic dismissal from the major.

The Major

Each course must be taken for a letter grade. The 13 courses must be completed with an overall grade-point average of 2.0 or better and at least one upper-division mathematics course.

The Minor

Required Lower-Division Courses (12 units): Mathematics 32A, 33A, 33B.

Required Upper-Division Courses (20 units): At least five courses (20 units) selected from Mathematics 106 through 199.

Policies

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade. Students must complete all lower-division courses with grades of C– or better. Upper-division courses must have an overall grade-point average of 2.0 or better that is calculated separately from the lower-division courses. Successful completion of the minor is indicated on the transcript and diploma.

Mathematics for Teaching Minor

The Mathematics for Teaching minor is designed for students majoring in fields other than mathematics who plan to teach secondary mathematics after graduation. The minor recognizes completion of requisite coursework for the Joint Mathematics Education Program and also prepares students for the contents of the California Subject Examination for Teachers (CSET). Post-bachelor credentialing programs will see that students with this minor have taken coursework on secondary mathematics from an advanced standpoint that is recommended by the Conference Board of the Mathematical Sciences and the California Commission on Teacher Credentialing. This minor is not open to students in any Mathematics Department major.

Admission

To enter the minor, students must have completed Mathematics 115A with a grade of C– or better. If Mathematics 115A was not completed at UCLA, students must show proof that they completed an equivalent course with a grade of C– or better.

The Minor

Required Upper-Division Courses (29 units): Mathematics 105A, 105B, 105C, 110A or 117, 115A, 120A or 123, 131A.

Graduate Majors

Mathematics MA, CPhil, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Mathematics MAT

Requirements

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Mathematics

Lower-Division Courses

Lower-Division Courses


2A. Calculus for Life Sciences Students. (4) Lecture, three hours; discussion, one hour. Preparation: three and one half years of high school mathematics (including trigonometry). Required: successful completion of Mathematics Diagnostic Test (score of 48 or better) or course 1 with grade of C– or better. Not open for credit to students with credit in another calculus sequence. Modeling with functions, limits, derivatives, decisions and optimization in biology, and derivatives rules and tools. P/NP or letter grading.

2B. Calculus for Business Students. (4) Lecture, three hours; discussion, one hour. Preparation: course 3B with grade of C– or better. Not open for credit to students with credit for course 31B. Applications of differentiation, integration, differential equations, linear models in biology, phase lines and classifying equilibrium values, bifurcations. P/NP or letter grading.


11N. Gateway to Mathematics: Number Theory. (4) Lecture, three hours; discussion, one hour. Required: courses 111A, 111B. Introduction to number theory course for freshmen and sophomores. Topics include prime number theory and cryptographic applications, factorization theory (in integers and Gaussian integers), Pythagorean triples, Fermat descent (for sums of squares and Fermat quartic), Pell’s equation, and Diophantine approximation. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.
31A. Differential and Integral Calculus. (4) Lecture, three hours; discussion, one hour. Preparation: at least three and one half years of high school mathematics (including trigonometry and an introduction to analytic geometry). Requisite: successful completion of Mathematics Diagnostic Test or course 1 with grade of C– or better. Differential calculus and applications; introduction to integration. P/NP or letter grading.

31AL. Differential and Integral Calculus Laboratory. (2) Laboratory, one hour; discussion, one hour. Preparation: at least three and one half years of high school mathematics (including some co- ordinate geometry and trigonometry). Requisite: successful completion of Mathematics Diagnostic Test or course 1 with grade of C– or better. Not open for credit to students with credit for course 31A. Intended for students who still need to review precalculus material (laboratory) while starting calculus. Differential calculus and applications; introduction to integration. P/NP or letter grading.

31B. Integration and Infinite Series. (4) Lecture, three hours; discussion, one hour. Requisite: course 31A with grade of C– or better. Not open for credit to students with credit for course 3B. Transcendental functions; methods and applications of integration; sequences and series. P/NP or letter grading.

31BH. Integration and Infinite Series (Honors). (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 31A with grade of B or better. Honors course parallel to course 31B. P/NP or letter grading.

31C. Current Students, (4) Lecture, three hours; discussion, one hour. Requisite: course 31A with grade of C– or better. Not open for credit to students with credit for course 3B. 3C, or 31B. Calculus for applications to economics. Partial differentiation, implicit functions, exponential and logarithmic functions, extrema, optimization, constrained optimization. P/NP or letter grading.

32A. Calculus of Several Variables. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 31A with grade of C– or better. Introduction to differential calculus of several variables, vector field theory. P/NP or letter grading.

32AH-32BH. Calculus of Several Variables (Honors). (4-4) Lecture, three hours; discussion, one hour. Enforced requisite: course 32A with grade of B or better; for 32BH: courses 31B and 32A, with grades of B or better. Honors sequence parallel to courses 32A, 32B, P/NP or letter grading.

32B. Calculus of Several Variables. (4) Lecture, three hours; discussion, one hour. Requisite: courses 31B and 32A, with grades of C– or better. Introduction to calculus of several variables, line and surface integrals. P/NP or letter grading.

M32T. Essential Calculus for Mathematical Biologists. (4) Same as Computational and Systems Biology M32 and Life Sciences M32.) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 30A, 30B. Not open to students with credit for course 31A, 31B, 32A, or 32B. Designed for life sciences students. Methods and results of single and multivariable calculus essential for quantitative training in biology. Limits, differentiation (single and several variables), optimization, integration and methods of integration, Taylor polynomials and applications to approximation, Taylor series, other power series, vector valued functions, gradients, and Lagrange multipliers. P/NP or letter grading.

33A. Linear Algebra and Applications. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 3B or 31B or 32A with grade of C– or better. Introduction to linear algebra: systems of linear equations, matrix algebra, linear independence, subspaces, bases and dimension, orthogonality, least-squares approximation, determinants, eigenvalues and eigenvectors, matrix diagonalization, and symmetric matrices. P/NP or letter grading.

33AH. Linear Algebra and Applications (Honors). (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 3B or 31B or 32A with grade of B or better. Honors course parallel to course 33A. P/NP or letter grading.

33B. Differential Equations. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 31B with grade of C– or better. Highly recommended: Mathematics 1. For students who have studied second-order, linear differential equations with constant coefficients; power series solutions; linear systems. P/NP or letter grading.

42. Introduction to Data-Driven Mathematical Modeling (Honors). (4) Lecture, three hours; discussion, one hour. Requisites: courses 31A, 31B, 32A, 32B, 33A, one statistics course from Statistics 10A, 12, 13, one programming course from Computer Engineering 10A, Computing 20A, Statistics 20. Introduction to data-driven mathematical modeling combining data analysis with mechanistic modeling of phenomena from various applications. Topics include formulation of data visualization, nondimensionalization and order-of-magnitude physics, introduction to discrete and continuous dynamical systems, and introduction to discrete and continuous stochastic models. Examples drawn from many fields and practice problems from Mathematical Contest in Modeling. P/NP or letter grading.

61. Introduction to Discrete Structures. (4) Lecture, three hours; discussion, one hour. Requisites: courses 31A, 31B, 32A, or 32B with grade of C– or better. Not open for credit to course 180 or 184. Discrete structures commonly used in computer science and mathematics, including sets and relations, permutations and combinations, graphs and trees, and formal language. May be repeated for credit.

70. Introduction to Probability. (4) Lecture, three hours; discussion, one hour. Requisites: courses 31A, 31B, 32A, or 32B with grade of C– or better. Not open for credit to students with credit for course 2C. Introduction to probability through applications and examples. Topics include laws of large numbers, statistical inference, Bayes’ rule, continuous and discrete random variables, jointly distributed random variables, multivariate normal and conditional distributions. In-depth discussion of betting schemes in gambling, occurrence of rare events, coincidences, and statistical predictions. P/NP or letter grading.

73XP. Key Issues in K-12 Mathematics. (3) (Formerly numbered 73SXL) Seminar, two hours; fieldwork, two hours. Introduction to K-12 mathematics activity in U.S. Cultivation of interest in teaching through exploration of sequences of mathematical content and habits of mind taught in K-12. Analysis of sequences of topics in current California State Standards in Mathematics (CCSS-M), mathematical structures that underlie these sequences, and cognitive aspects of learning mathematics with pedagogical and mathematician’s habits of mind outlined in CCSS-M (including proof and mathematical modeling), and effective strategies for teaching mathematics to diverse student groups. A mathematics classroom room arranged as Cal Teach program. P/NP grading.

74XP. Mathematics and Pedagogy for Teaching Elementary Mathematics. (3) (Formerly numbered 74SXL) Seminar, two hours; fieldwork, two hours. Development of professional mathematical and pedagogical understandings required to teach California’s K-5 mathematics curriculum. Exploration of K-5 mathematics, practice of effective teaching strategies for all learners, and discussion of current research and standards in mathematics education. Fieldwork in local mathematics classrooms (observation and presenting lesson plan) arranged by Cal Teach program. P/NP grading.

75XP. Mathematics and Pedagogy for Teaching Middle School Mathematics. (3) Seminar, two hours; off-campus classroom observation and participation, two hours. Focused development of professional mathematical and pedagogical understandings required to teach California middle school mathematics curriculum. Exploration of topics in grades six through eight, current content, pedagogical perspective, practice with effective teaching strategies for all learners, and discussion of current research and standards in mathematics education. Clinical practice in local classrooms arranged by Cal Teach program. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designated as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

90. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grade only.

94. Mathematical Outreach: Explorations of Mathematics in the Physical World. (6) Lecture, twelve hours; discussion one hour. Preparation: three years of high school mathematics (to algebra II), some basic familiarity with computers. Uses inquiry-based mathematical modeling as a tool for understanding dynamics of physical systems and chemical processes. Fundamental concepts of single-variable calculus and models of dynamical processes in physics, chemistry, and other subjects in which quantities change with time. Use of computer program C++ for problem solving, plotting, and dynamical simulation in the laboratory. Exploration of order of magnitude physics, introduction to discrete and continuous dynamical systems and methods of solving problems in small-group settings. Students practice communication skills with frequent assessment and feedback on progress. P/NP or letter grading.

95. Transition to Upper-Division Mathematics. (4) Lecture, three hours; discussion, one hour. Enforced requisites: courses 31A, 32A, 32B. Not open for credit to students with credit for course 131A or 132. Introduction to rigorous methods of proof-based upper-division mathematics courses. Basic logic; structure of mathematical proofs; sets, functions, and cardinality; natural numbers and induction; construction of real numbers; topology of real numbers; sequences and convergence; continuity. May not be applied toward major requirements. P/NP or letter grading.

97. Variable Topics in Mathematics. (4) Lecture, three hours; discussion, one hour. Study of selected topics in mathematics at introductory level. P/NP or letter grading.

98X. PEERS Collaborative Learning Workshops for Physical Sciences and Engineering Majors. (1) Laboratory, three hours. Corequisite: associated undergraduate lecture course in mathematics for life sciences majors. Limited to Program for Excellence in Education and Research in Science (PEERS) students. Development of intuition and problem-solving skills in collaborative learning environment. May be repeated four times, but only 1 unit may be applied toward graduation. P/NP grading.

98Y. PEERS Collaborative Learning Workshops for Life Sciences Majors. (1) Laboratory, three hours. Corequisite: associated undergraduate lecture course in mathematics for life sciences majors. Limited to Program for Excellence in Education and Research in Science (PEERS) students. Development of intuition and problem-solving skills in collaborative learning environment. May be repeated four times, but only 1 unit may be applied toward graduation. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

General and Teacher Training

100. Problem Solving. (4) Lecture, three hours. Requires prerequisite: course 31B with grade of C– or better. Problem-solving techniques and mathematical topics useful as preparation for Putnam Examination and similar competitions. Continued fractions, inequalities, modular arithmetic, closed form evaluation of sums and products.
Algebra, Number Theory, and Logic
110A-110B. Algebra. (4–4) Lecture, three hours; discussion, one hour. P/NP or letter grading. 110A. Requisite: course 115A. Not open for credit to students with credit for course 117. Rings of integers, integral domains, fields, polynomial rings, unique factorization. 110B. Requisite: course 110A or 117. Groups, structure of finite groups.
110AH-110BH. Algebra (Honors). (4–4) Lecture, three hours; discussion, one hour. Honors sequence parallel to courses 110A, 110B.
110C. Algebra. (4–4) Lecture, three hours; discussion, one hour. Requisites: courses 110A, 110B. Field extensions, Galois theory, applications to geometric constructions, and solvability by radicals.
111. Theory of Numbers. (4) Lecture, three hours; discussion, one hour. Requisite: courses 110A. Algebraic number theory (including prime ideal theory), cyclotomic fields and reciprocity laws, Diophantine equations (especially quadratic forms, elliptic curves), equations over finite fields, topics in theory of primes, including prime number theorem and Dirichlet’s theorem. P/NP or letter grading.
114C. Computability Theory. (4) Lecture, three hours; discussion, one hour. Requisites: courses 110A or 113A or Philosophy 135. Effectively calculable, Turing computable, and recursive functions; Church/Turing thesis. Normal form theorem; universal functions; unsolvability and non-computability of recursively enumerable sets; relative recursiveness, polynomial-time computability. Arithmetical hierarchy. P/NP or letter grading.
114L. Mathematical Logic. (4) Lecture, three hours; discussion, one hour. Requisite: course 110A or 113A or Philosophy 135. Introduction to mathematical logic—aiming primarily at completeness and incompleteness theorems of Gödel. Propositional and predicate logic; syntax and semantics; formal deduction; completeness, compactness, and Lowenheim/Skolem theorems. Formal number theory: nonstandard models; Gödel incompleteness theorem. P/NP or letter grading.
M114S. Introduction to Set Theory. (Same as Philosophy M134.) Lecture, three hours; discussion, one hour. Requisite: course 110A or 113A or Philosophy 135. Axiomatic set theory as framework for mathematical concepts; relations and functions, numbers, cardinality, axiom of choice, transfinite numbers. P/NP or letter grading.
115A-115B. Linear Algebra. (5–4) P/NP or letter grading. (Same as Mathematics 115.) Lecture, three hours; discussion, two hours. Requisite: course 33A. Techniques of proof, abstract vector spaces, linear transformations, and matrices; determinants; inner product spaces; eigenvalues, eigenvectors, diagonalization; discussion, one hour. Requisite: course 115A. Linear transformations, conjugate spaces, duality; theory of a single linear transformation, Jordan normal form; bilinear forms, quadratic forms; Euclidean and unitary spaces, symmetric skew and orthogonal linear transformations, polar decomposition.
115AH. Linear Algebra (Honors). (5) Lecture, three hours; discussion, two hours. Requisite: course 33A with grades of C– or better. Credit for course 115A or M115A. Course 115A is requisite to 115B. Requisite: courses 110A or 113A, with grades of B– or better. Course 115A is requisite to 103B, which is enforced requisite in 103C. Facilitates student development in mathematical and pedagogical understandings required to teach middle school mathematics curriculum. Exploration of California’s grades 6 through 8 mathematics from professional perspective, practice with effective teaching strategies, and discussion of current research and standards in mathematics education with fieldwork in local mathematics classrooms. P/NP (undergraduates) or S/U (graduates) grading.
103B. Observation and Participation: Mathematics Instruction. (2) Seminar; one hour; fieldwork (classroom observation and participation), two hours. Enforced requisite: course 103A. Observation, participation, or tutoring in mathematics classes at middle school and secondary levels. May be repeated for credit. P/NP (undergraduates) or S/U (graduates) grading.
103C. Observation and Participation: Mathematics Instruction. (2) Seminar; one hour; fieldwork (classroom observation and participation), two hours. Enforced requisite: course 103A. Observation, participation, or tutoring in mathematics classes at middle school and secondary levels. May be repeated for credit. P/NP (undergraduates) or S/U (graduates) grading.
105A. Mathematics and Pedagogy for Teaching Secondary School Mathematics. (4) Lecture, four hours; fieldwork, 30 minutes. Requisites: courses 105A, 110A (or 117), 120A (or 123), and 131A, with grades of C– or better. Course 105A is requisite to 105B, which is requisite to 105C. Mathematical knowledge and research-based pedagogy needed for teaching key polynomial, rational, and transcendental functions and related equations in secondary school; professional standards and current research for teaching secondary school mathematics. Letter grading.
105B. Mathematics and Pedagogy for Teaching Secondary School Mathematics. (4) Lecture, four hours; fieldwork, 30 minutes. Requisites: courses 105A, 110A (or 117), 120A (or 123), and 131A, with grades of C– or better. Mathematical knowledge and research-based pedagogy needed for teaching key geometry topics in secondary school, including axiomatic systems, measure, and geometric transformations. Introduction to professional standards and current research in teaching secondary school mathematics. Letter grading.
105C. Mathematics and Pedagogy for Teaching Secondary School Mathematics. (4) Lecture, four hours; fieldwork, 30 minutes. Requisites: courses 105A, 105B, 110A (or 117), 120A (or 123), and 131A, with grades of C– or better. Mathematical knowledge and research-based pedagogy needed for teaching key geometry topics in secondary school, including axiomatic systems, measure, and geometric transformations. Introduction to professional standards and current research in teaching secondary school mathematics. Letter grading.
106. History of Mathematics. (4) Lecture, three hours; discussion, one hour. Requisites: courses 31A, 31B, 32A. Roots of modern mathematics in ancient Babylonia and Greece, including place value number systems and proof. Development of algebra through Middle Ages to Fermat and Abel, invention of analytic geometry and calculus. Selected topics. P/NP or letter grading.
118. Mathematical Methods of Data Theory. (4) Lecture, three hours; discussion, one hour. Requisites: courses 42, 115A. Introduction to computational methods for data problems with focus on linear algebra and optimization. Matrix and tensor factorization, PageRank, assorted other topics in matrices, linear programming, unconstrained optimization, constrained optimization, integer optimization, dynamic programming, and stochastic optimization. P/NP or letter grading.
Geometry and Topology
120A-120B. Differential Geometry. (4–4) Lecture, three hours; discussion, one hour. Requisites: courses 32B, 33B, 115A, 131A. Course 120A is requisite to 120B. Curves in 3-space, Frenet formulas, surfaces in 3-space, normal curvature, Gaussian curvature, congruence of surfaces, isometries, geodesics, Gauss/Bonnet theorem. P/NP or letter grading.
121. Introduction to Topology. (4) Requisite: course 131A. Metric and topological spaces, completeness, compactness, connectedness, functions, continuity, homeomorphisms, topological properties.
123. Foundations of Geometry. (4) Lecture, three hours; discussion, one hour. Requisite: course 115A. Axioms and models; Euclidean geometry; Hilbert axioms, neutral (absolute) geometry, hyperbolic geometry. Poincaré model, independence of parallel postulate.
Analysis
131A-131B. Analysis. (4–4) Lecture, three hours; discussion, one hour. P/NP or letter grading. 131A. Requisites: courses 32B, 33B. Recommended: course 115A. Rigorous introduction to foundations of real analysis; real numbers, point set topology in Euclidean space, functions, continuity. 131B. Requisites: courses 33B, 115A, 131A. Derivatives, Riemann integral, sequences and series of functions, power series, Fourier series.
131AH-131BH. Analysis (Honors). (4–4) Lecture, three hours; discussion, one hour. Requisites for course 131AH: courses 32B and 33B, with grades of B or better. Recommended: course 115A. Honors sequence parallel to courses 131A, 131B. P/NP or letter grading.
131C. Topics in Analysis. (4) Lecture, three hours; discussion, one hour. Requisites: courses 131A, 131B. Advanced topics in analysis; materials vary; for students who have strong commitment to pursue graduate studies in mathematics. Introduction to complex analysis, with more emphasis on proofs. Honors course parallel to course 132. P/NP or letter grading.
132. Complex Analysis for Applications. (4) Lecture, three hours; discussion, one hour. Requisites: courses 32B, 33B. Introduction to basic formulas and calculation procedures of complex analysis of one variable relevant to applications. Topics include Cauchy/Riemann equations, Cauchy integral formula, power series expansion, contour integrals, residue calculus.
132H. Complex Analysis (Honors). (4) Lecture, three hours; discussion, one hour. Requisites: courses 32B, 33B, and 131A, with grades of B or better. Specifically designed for students who have strong commitment to pursue graduate studies in mathematics. Introduction to complex analysis, with more emphasis on proofs. Honors course parallel to course 132. P/NP or letter grading.

136. Partial Differential Equations. (4) Lecture, three hours; discussion, one hour. Requisites: courses 33A, 33B. Linear partial differential equations, boundary and initial value problems; wave equation, heat equation, and Laplace equation; separation of variables; Green’s functions; selected topics, as method of characteristics for nonlinear equations.

Applied Mathematics

142. Mathematical Modeling. (4) Lecture, three hours; discussion, one hour. Requisites: courses 32B, 33B. Introduction to fundamental principles and spirit of applied mathematics. Emphasis on manner in which mathematical models are constructed for physical problems. Illustrations from many fields of endeavor, such as physical sciences, biology, economics, and traffic dynamics.

146. Methods of Applied Mathematics. (4) Lecture, three hours; discussion, one hour. Requisites: courses 32B, 33B, 135. Fourier series, integral equations, Green’s function, and calculus of variations. Selected applications from control theory, optics, dynamical systems, and other engineering disciplines.

M148. Experience of Data Science. (4) Same as Statistics M148. Lecture, four hours. Requisites: courses 118A, 131A, 156 or Statistics 101C, 170S or Statistics 100B, Statistics 101A. Students solve real data science problems for community- or campus-based clients. Students work in small groups with faculty member and client to frame client’s question in data science context, develop mathematical models, analyze data, and report results. Students may elect to undertake research on foundations of data science, studying advanced topics and writing senior thesis with discussion of findings or survey of literature on chosen foundational topic. Development of collaborative skills, communication principles, and discussion of ethical issues. Letter grading.


151AH. Numerical Analysis Part 1 (Honors). (4) Lecture, three hours; discussion, one hour. Requisites: courses 32B, 33B, 115A, 131A, Computer Science 31 or Programming in Computing 10A or equivalent, with grades of B or better. Not open for credit to students with credit for course 151A. Rigorous introduction to numerical algorithms including necessary skills to apply algorithms in statistics, imaging, data science, engineering, and related fields. Root finding, solving linear systems, interpolation, quadrature, and finding eigenvalues. MATLAB programming. P/N or letter grading.

151BH. Numerical Analysis Part 2 (Honors). (4) Lecture, three hours; discussion, one hour. Requisites: courses 115A or 115AH, 131A or 131AH, 151A or 151AH, Computer Science 31 or Programming in Computing 10A, with grades of B or better. Rigorous introduction to numerical algorithms including necessary skills to apply algorithms in statistics, imaging, data science, engineering, and related fields. Root finding, solving linear systems, interpolation, quadrature, and finding eigenvalues. MATLAB programming. P/N or letter grading.


156. Machine Learning. (4) Lecture, three hours; discussion, one hour. Requisites: courses 115A, 164, 170E or 170S or Statistics 100A. Introduction to statistical learning and pattern recognition problems, including classification and clustering, regression, kernel methods, artificial neural networks, hidden Markov models, and Markov random fields. Projects in MATLAB to be part of final project presented in class. P/N or letter grading.


167. Mathematical Game Theory. (4) Lecture, three hours; discussion, one hour. Requisite: course 115A. Quantitative modeling of strategic interaction. Topics include extensive and normal form games, backgammon, probability, lotteries, mixed strategies, pure and mixed Nash equilibria and refinements, bargaining; emphasis on economic examples. Optional topics include repeated games and evolutionary game theory. P/N or letter grading.

168. Introduction to Networks. (4) Lecture, three hours; discussion, one hour. Requisites: courses 115A, 170E or 170A or Electrical and Computer Engineering 131A or Statistics 100A. Introduction to network science (including theory, computation, and applications), which can be used to study complex systems of interacting agents. Study of networks in technology, social, information, biological, and mathematical networks involving basic structure and networks, generative models of networks, network summary statistics, centrality, random graphs, clustering, and dynamical processes on networks. Introduction to advanced topics as time permits. P/N or letter grading.

Probability

170A. Probability Theory I. (4) Lecture, three hours; discussion, one hour. Requisites: courses 32B, 33A, 131A. Not open to students with credit for course 210E. Introduction to probability, basic and conditional independence, Bayes’ rule, discrete and continuous random variables and their distributions, expectation, moments, variance, conditional distribution and expectation, weak and strong laws of large numbers, central limit theorem, and convergence in distribution; branching processes; random walks; Poisson and other random processes in continuous time. Advanced topics to be determined by letter grading.

170B. Probability Theory II. (4) Lecture, three hours; discussion, one hour. Enforced requisites: courses 131A, 170A. Continuation of rigorous presentation of probability theory based on real analysis. Moments and generating functions; laws of large numbers, central limit theorem, and convergence in distribution; branching processes; random walks; Poisson and other random processes in continuous time. Advanced topics to be determined by letter grading.

170E. Introduction to Probability and Statistics 1: Probability. (4) Lecture, three hours; discussion, one hour. Requisites: courses 32A, 31B. Not open to students with course 170E. Introduction to probability and statistics. P/N or letter grading.

170F. Introduction to Probability and Statistics 2: Statistics. (4) Lecture, three hours; discussion, one hour. Requisites: courses 31A, 31B, and 170A or 170E or Statistics 100A. Not open to students with credit for Statistics 100B. Introduction to statistics. Topics include sampling, estimation (maximum likelihood and Bayesian), properties of estimators, regression, confidence intervals, hypotheses testing, analysis of variance, P/N or letter grading.

171. Stochastic Processes. (4) Lecture, three hours; discussion, one hour. Requisites: courses 33A, 170E or (170A or Statistics 100A). Discrete Markov chains, continuous-time Markov chains, renewal theory. P/N or letter grading.

174E. Mathematics of Finance for Mathematics/Economics Students. (4) Lecture, three hours; discussion, one hour. Enforced requisites: courses 33A, and either course 170E or Statistics 100A. Not open for credit to students with credit for course 174A. Economics 141, or Statistics C183/C283. Mathematical modeling of financial securities in discrete and continuous time. Forwards, futures, hedging, swaps, uses and abuses (three modern mathematical models of European and American options, Greeks and numerical methods. P/N or letter grading.

177. Theory of Interest and Applications. (4) Lecture, three hours; discussion, one hour. Requisite: course 32B. Types of interest, time value of money, annuities and similar contracts, loans, bonds, portfolios and general cash flows, rate of return, term structure, interest rates, duration, convexity and immunization, interest rate swaps, financial derivatives, forwards, futures, and options. Letter grading.


Discrete Mathematics


182. Algorithms. (4) Lecture, three hours; discussion, one hour. Requisite: course 3C or 32A, and 61. Not open for credit to students with credit for Computer
Science 180. Graphs, greedy algorithms, divide and conquer algorithms, dynamic programming, network flow. Emphasis on designing efficient algorithms useful in diverse areas such as bioinformatics and allocation of resources. P/NP or letter grading.


Special Studies

188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate upper-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.


191. Variable Topics Research Seminars: Mathematics. (4) Seminar, three hours. Variable topics research course in mathematics that covers material not covered in regular mathematics upper-division curriculum. Reading, discussion, and development of culminating project. May be repeated for credit with topic and/or instructor change. P/NP or letter grading.

191H. Honors Research Seminars: Mathematics. (4) Seminar, one hour. Variable topics research seminar on advanced topics in mathematics. Content varies from year to year. May be repeated for credit by petition. P/NP or letter grading.

192A. Introduction to Collaborative Learning Theory and Practice. (1) Formerly numbered 192A. (Same as Atmospheric and Oceanic Sciences M192A, Chemistry M192E, Computer Science M192A, Life Sciences M192A, and Physics M192S.) Seminar, one hour. Training seminar for undergraduate students who are selected for learning assistant (LA) program. Exploration of current topics in pedagogy and education research focused on methods of learning and their implementations. Students and LA's practice communication skills with frequent assessment of and feedback on progress. Letter grading.

192B. Collaborative Learning Theory and Practice. (2 to 4) Seminar, two to four hours. Requisites: course M192A (may be taken concurrently). Limited to students serving as learning assistants. Further exploration of current topics in pedagogy and education research focused on methods of learning in small groups and their practical application to supervising learning in UCLA courses. With instructor’s guidance, students examine teaching strategies based on current research, and develop of innovative instructional materials, and reflect on and gain feedback on their activities. May be repeated three times for credit. May not be used to fulfill elective requirement for any mathematics major. Letter grading.

197. Individual Studies in Mathematics. (2 to 4) Tutorial, three hours per week per unit. Limited to juniors/seniors. At discretion of chair and subject to availability of staff, individual intensive study of topics suitable for undergraduate course credit but not specifically offered as separate courses. Limited to juniors/seniors. Individual study of topics not covered in regular mathematics upper-division courses. May be repeated for maximum of 12 units, but no more than one 197 or 199 course may be applied toward upper-division courses required for majors offered by Mathematics Department. Individual contract required. P/NP or letter grading.

199. Directed Research or Senior Project in Mathematics. (2 or 4) Tutorial, three hours per week per unit. Limited to juniors/seniors. Supervised individual research under guided supervision. Individual study of topics not covered in regular mathematics upper-division courses. May be repeated for maximum of 12 units, but no more than one 197 or 199 course may be applied toward upper-division courses required for majors offered by Mathematics Department. Individual contract required. P/NP or letter grading.

Graduate Courses

Teacher Preparation

201A-201B. Topics in Algebra and Analysis. (4-4) Preparation: bachelor’s degree in mathematics. Designed for mathematics/education program graduate students. Important ideas of algebra, geometry, and calculus leading effectively from elementary to modern mathematics. Approaches to number system, point sets, geometric interpretations of algebra and analysis, integration, differentiation, series and analytic functions. May not be applied toward MA degree requirements.

202A-202B. Mathematical Models and Applications. (4-4) Preparation: bachelor’s degree in mathematics. Designed for mathematics/education program students. Development of mathematical theories describing various empirical situations. Basic characterizing principles; development of a logical structure of theorems. Modern topics such as operations research, linear programming, game theory, learning models, models in social and life sciences. May not be applied toward MA degree requirements.

203. Master’s Linear Algebra. (4) Lecture, four hours; discussion, one hour. Rigorous treatment of fundamental results of pure and applied linear algebra over various sets. Applications to computer science, and preparation for linear algebra portion of UCLA Mathematics Basic Examination that is required of MA and PhD students. S/U or letter grading.

204. Master’s Analysis. (4) Lecture, four hours; discussion, one hour. Rigorous treatment of fundamental theorems of analysis. Applications to contemporary research. Preparation for analysis portion of UCLA Mathematics Basic Examination that is required of MA and PhD students. S/U or letter grading.

Number Theory

205A-205B-205C. Number Theory. (4-4-4) Lecture, three hours. Requisites: courses 210A, 246A. Algebraic number theory, including ideal theory, valuations, local fields, cyclotomic fields. Introduction to class field theory, analytic number theory, L-functions and class number formulas, and modular forms. S/U or letter grading.


207A-207B-207C. Topics in Number Theory. (4-4-4) Lecture, three hours. Advanced analysis on GL(1) and GL(2), especially Tate thesis and Hecke theory, automorphic representations. Special values of L-functions and p-adic L-functions, arithmetic theory of modular forms, advanced topics in analytic number theory, Arithmetic geometry, especially of modular curves. S/U or letter grading.


M209. Cryptography. (4) (Same as Computer Science M282A) Lecture, four hours; outside study, eight hours. Introduction to theory of cryptography, stressing rigorous definitions and proofs of security. Topics include notions of hardness and security, one-way functions, hard-core bits, pseudorandom generators, pseudorandom functions and pseudorandom permutations, semantic security, public-key and private-key encryption, secret-sharing, message authentication, digital signatures, interactive proofs, zero-knowledge proofs, collision-resistant hash functions, commitment protocols, key-agreement, contract signing, and two-party secure computation with static security. Letter grading.

M209B. Cryptographic Protocols. (4) (Same as Computer Science M282B) Lecture, four hours. Requisite: course M209A. Consideration of advanced cryptographic protocol design and implementation. Protocol design includes interactive noninteractive zero-knowledge proofs; zero-knowledge arguments; concurrent and non-black-box zero-knowledge; IP-PIE/PCP; zero-knowledge proofs of security for public-key encryption, including chosen-ciphertext security; secure multi-party computation; dealing with dynamic adversary; nonmalleability and composability of secure protocols; software protection; threshold cryptography; identity-based cryptography; private information retrieval; protection against man-in-middle attacks; voting protocols; identification protocols; digital cash schemes, protocols for construction of cryptographic primitives, software obfuscation. May be repeated for credit with topic change. Letter grading.
Algebra

210A-210B-210C. Algebra. (4–4–4) Requisite: courses 110A, 110B, 110C. Students with credit for courses 110B and/or 110C cannot receive MA degree credit for courses 210B and/or 210C. Group theory, including the theorems of Sylow and Jordan/Herstein/Ringrose; fields and rings; ideals, factorization theory in integral domains, modules over principal ideal rings, Galois theory of fields, multilinear algebra, structure of algebras.

211. Structure of Rings. (4) Requisite: course 210A. Radical, irreducible modules and primitive rings, rings and algebras with minimum condition. Radical, irreducible modules and primitive rings, rings and algebras with minimum condition. Radical, irreducible modules and primitive rings, rings and algebras with minimum condition.

212A. Homological Algebra. (4) Lecture, three hours. Requisite: courses 210A, 210B, 210C, 212A. Advanced topics in modern homological algebra, such as triangulated categories, differential graded algebras as dg-categories, tilting theory and applications of group cohomology to representation theory, stack categories and modular representation theory, and other current topics. S/U or letter grading.


213A-213B. Theory of Groups. (4–4) Requisite: course 210A. Topics include representation theory, transfer to abelian groups, free products and presentations of groups, soluble and nilpotent groups, classical groups, algebraic groups.


M217. Geometry and Physics. (4) (Same as Physics M236.) Lecture, three hours. Interdisciplinary course on topology and geometry at a high level of sophistication. Topics include number theory, Seiberg-Witten theory, conformal field theory, Calabi/ Yau manifolds, mirror symmetry, and duality, Integrable systems. S/U grading.


218C. Topics in Discrete Mathematics. (4) Lecture, three hours. Emphasis on recent results of discrete mathematics, approaches, and techniques that were developed in last 30 years in discrete mathematics. Topics may include extremal problems for graphs and set systems, Ramsey theory, probabilistic methods, random graphs, random walks, Erdos-Szemeredi, extremal hypergraph theory, Ramsey theory, topological methods in combinatorics, entropy and other tools from information theory, discrete harmonic analysis and its applications to combinatorics and theoretical computer science, and related results from quantum computing. May be repeated for credit with consent of instructor. S/U or letter grading.

Mathematics / 637

219. Logic and Foundations

220A-220B-220C. Mathematical Logic. (4–4–4) Lecture, three hours. Requisite: course M114S. Fundamental methods and results in mathematical logic, using mathematical methods to reason about existence or nonexistence of proofs and computations in many different settings. Topics include compactness theorem, saturation of models, completeness and in- completeness theorems of Gödel, Turing computability and degrees, recursion in Baire space, Zermelo-Fraenkel axioms, universe of con- structible sets, and related equiconsistency results in set theory. S/U or letter grading.

222A-222B. Lattice Theory and Algebraic Systems. (4–4) Lecture, three hours. Requisite: course 210A. Partially ordered sets, lattices, distributivity, modu- larly; completeness; interaction with combinatorics, topology, and logic; algebraic systems, congruence lattices, subdirect decomposition, congruence lattices, equationale bases, applications to lattices.

223C. Topics in Computability Theory. (6) Lecture, three hours. Requisites: courses 220A, 220B. Degrees of unsolvability, recursively enumerable sets, undecid- able theories; inductive definitions, admissible sets and ordinals; recursion in higher types. May be repeated for credit with consent of instructor. S/U or letter grading.

223D. Topics in Descriptive Set Theory. (4) Lecture, three hours. Requisites: courses 220A, 220B. Degrees of unsolvability, recursively enumerable sets, undecid- able theories; inductive definitions, admissible sets and ordinals; recursion in higher types. May be repeated for credit with consent of instructor. S/U or letter grading.

224A. Introduction to Algebraic Geometry. (4) Lecture, three hours. Requisite: course 210A. Algebraic geometry. Topics include the study of algebraic varieties, families of curves, and the theory of schemes. S/U or letter grading.


### Analysis and Differential Equations


250C. Advanced Topics in Ordinary Differential Equations. (4) Requisites: courses 250A, 250B. Selected topics such as boundary theory or ordinary differential operators, nonlinear boundary value problems, celestial mechanics, approximation of solutions, and Volterra equations.


251B-251C. Topics in Partial Differential Equations. (4–4) In-depth introduction to topics of current interest in partial differential equations or their applications.


### Functional Analysis


255B-255C. Topics in Functional Analysis. (4) Requisite: course 255A. Topics include Banach algebras, operators on Banach spaces and Hilbert space, semigroups of operators, linear topological vector spaces, and other advanced topics.


### Applied Mathematics


266D-266E. Applied Differential Equations. (4) Requisites: courses 266A, 266B, 266C. Advanced topics in linear and nonlinear partial differential equations, with emphasis on energy estimates, numerical methods, and applications to fluid mechanics. Additional topics include dispersive waves, systems with multiple time scales, and applications to fluid mechanics, beams, and plates.


271A. Tensor Analysis. (4) Requisite: course 131A. Algebra of tensors, linear transformations, linear manifolds. Curvilinear coordinates and coordinate-free methods. Covariant differentiation. Green/Stokes theorem for differential forms. Applications to topics such as continuum and particle mechanics.


271D. Wave Mechanics. (4) General concepts of mechanical systems (states, space-time, logic, etc.). Classical and quantum examples. Correspondence principle. 30 pages.


272B. Mathematical Aspects of Fluid Mechanics. (4) Lecture, three hours. Review of basic theory of moving continua, fluid equations, similarity solutions. WKB theory created by slowly moving bodies, flows where viscosity is negligible, vortices, boundary layers and their separation, water waves, ship waves, compressional waves, shock waves, turbulence theory (overview).


273C. Optimization and Calculus of Variations: Numerical Optimization. (4) Lecture, three hours. Derivation, analysis, and implementation of numerical methods for constrained and unconstrained optimization problems of variety of types and with data at different scales. S/U or letter grading.


274B-274C. Perturbation Methods. (4-4) Lecture, three hours. Requisite: course 266A. Boundary layer theory, boundary layer expansions, WKB theory. Problems with several time scales: Poincaré method, averaging techniques, multiple-scale analysis. Application to eigenvalue problems, nonlinear oscillations, wave propagation problems, perturbation techniques from various fields of science and engineering.

275A-275B. Probability Theory. (4-4) Lecture, three courses; discussion, one hour. Connection between probability theory and real analysis. Weak and strong laws of large numbers, central limit theorem, conditioning, ergodic theory, martingale theory; S/U or letter grading.


275E. Stochastic Particle Systems. (4) Lecture, three hours. Requisite: course 275C. Interacting particle systems, including contact process, stochastic Ising model, and exclusion processes; percolation theory. S/U or letter grading.

276. Topics in Network Science. (4) Lecture, three hours. Requisites: courses 115A, 170A. Interesting and popular areas of network science. Topics vary from year to year and may include dynamical processes on networks, interacting particle systems, time-dependent networks, multilayer networks, applications of networks, data analysis in networks, spatial networks, and others. Discussion of recent review articles and some presentations by students. Joint project on topic in network science possibly leading to publication. S/U or letter grading.

Special Studies

280. Programming++ for Mathematics Graduate Students. (4) Lecture, three hours. Preparation: program in at least one programming language. Students gain knowledge of core programming language concepts, core operating system constructs, and core computational hardware constructs in order to become proficient in object-oriented software construction and design in compiled language, and be able to rapidly learn new programming language for future activities. Students go beyond writing short programs or scripts that invoke preexisting high-level functionality to capability of creating any high-level functionality using object oriented software constructs and techniques. Emphasis on practice of programming rather than problems solving algorithms. Emphasis on programming environment details, both software and hardware. S/U grading.

285A-285N. Seminars. (4 each) Tutorial, to be arranged. Supervised individual reading and study on project approved by a faculty member, which may be preparation for MA examination. May be repeated for credit, but only two 596 courses (8 units) may be applied toward MA degree unless departmental consent is obtained. S/U or letter grading.

290L. Advanced Seminar in Mathematics. (4) Tutorial, to be arranged. Preparation: advancement to PhD candidacy. Study and research for PhD dissertation. May be repeated for credit. S/U grading.

Program in Computing

Lower-Division Courses

10A. Introduction to Programming. (5) Lecture, three hours; discussion, two hours; laboratory, eight hours. No prior programming experience assumed. Basic principles of programming, using C++; algorithmic, procedural problem solving; program design and development; basic data types, control structures and functions; functional arrays and pointers; introduction to classes for programmer-defined data types. P/NP or letter grading.

10B. Intermediate Programming. (5) Lecture, three hours; discussion; two hours; laboratory, eight hours. Requisite: course 10A or Computer Science 31. Abstraction data types and their use in solving problems using C++; emphasis on algorithm efficiency; advanced features of C++, such as inheritance and virtual functions; graph algorithms. P/NP or letter grading.
Introduction to Lisp and Symbolic Computation. (5) Lecture, three hours; discussion, two hours; laboratory, eight hours. Enforced requisite: course 10A. Introduction to symbolic computation using Lisp programming language. Basics: list structures, recursion, function abstraction. Advanced topics: knowledge representation, higher-order functions, problem-solving algorithms and heuristics. P/NP or letter grading.

Upper-Division Courses

110. Parallel and Distributed Computing. (5) Lecture, three hours; discussion, two hours; laboratory, eight hours. Requisite: course 10B or equivalent familiarity with programming in C or C++ language. Introduction to programming of parallel computers. Shared and distributed memory parallel architectures; currently available parallel machines; parallel algorithms and program development; estimation of algorithmic performance; distributed computing; selected advanced topics. P/NP or letter grading.

130. Cryptography. (4) Lecture, three hours; discussion, one hour; laboratory, three hours. Requisites: course 10B, Mathematics 115A. Design and analysis of cryptosystems for confidentiality and authentication. Classical cryptosystems and their security, modern private-key cryptosystems and applications, public-key cryptography and applications; generating prime numbers, factoring integers, discrete logarithms, digital signatures, perfect secrecy. P/NP or letter grading.

187. Advanced Variable Topics in Programming. (4) Lecture, three hours; discussion, one hour. Variable topics in programming and mathematics of programming not covered in regular program in computing courses. May be repeated for credit with topic change. P/NP or letter grading.

Graduate Courses


296. Participating Seminar: Logic and Theory of Computation. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

Learning Outcomes

The Mathematics/Economics major has the following learning outcomes:

- Strong mathematical content knowledge of single and multivariable differential and integral calculus and differential equations
- Familiarity with linear algebra, techniques of proof, and the foundations of real analysis
- Ability to synthesize material, problem solve, and think abstractly
- Ability to perform basic computer programming, especially in C++
- Familiarity with various principles of macro- and microeconomics (analysis, institutions, policy)
Entry to the Major

Admission
Current UCLA students need to apply for the Mathematics/Economics major by filing a petition with the Student Services Office in 6356 Mathematical Sciences. All students are identified as Mathematics/Economics pre-majors until they satisfy the following minimum requirements for the major: (1) achieve grades of C or better in all pre-major mathematics sequenced courses (Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B, 61, Program in Computing 10A) with a minimum 2.7 grade-point average and no more than two repeats, (2) achieve grades of C or better in all pre-major economics courses (Economics 1, 2, 11) with a minimum 2.7 grade-point average and no more than one repeat, (3) complete one 12-unit term in residence in regular session at UCLA, (4) be enrolled in UCLA regular session at the time of application, and (5) file a petition to declare the major before completing 160 quarter units.

Pre-major
Students entering UCLA directly from high school or first-term transfer students who want to declare the Mathematics/Economics pre-major at the time they apply for admission are automatically admitted to the pre-major.

First-Year Students
To enter the major, students must petition after they have completed the six sequenced courses with a 2.7 minimum overall grade-point average and no more than two repeats, (2) achieve grades of C or better in all pre-major economics courses (Economics 1, 2, 11) with a minimum 2.7 grade-point average and no more than one repeat, (3) complete one 12-unit term in residence in regular session at UCLA, (4) be enrolled in UCLA regular session at the time of application, and (5) file a petition to declare the major before completing 160 quarter units.

Transfer Students
Transfer applicants to the Mathematics/Economics major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of calculus for majors, one introduction to discrete structures course, one microeconomics theory course, one macroeconomics course, and one C++ programming course.

Transfer credit for any of the above is subject to department approval; consult with an undergraduate counselor before enrolling in any courses for the major.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

After satisfying the preparation for the major requirements, students need to petition to enter the major at the Student Services Office after completing one 12-unit term in residence in regular session at UCLA, and while enrolled in UCLA regular session at the time of application.

Requirements

Preparation for the Major
Required: Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B, 61, Economics 1, 2, 11, Program in Computing 10A, one Writing II course.

The Major
Required: Eight mathematics courses, including Mathematics 115A, 131A, 131B, 164, 170E, 170S, 174E (or Economics 141 or Statistics C183), and one elective course from Mathematics 134, 135, 136, or 171; six economics courses, including Economics 101, 102, 103, 103L, and two additional courses from 106E through 199E.

Honors Program
To qualify for honors at graduation, students must (1) complete Mathematics 115AH, 131AH, and 131BH, (2) complete Economics 198A and 198B (the thesis process requires enrollment in a two-semester sequence for economics courses), (3) present the thesis in Economics 198B, and (4) complete the major requirements with a minimum 3.5 grade-point average in both the upper-division economics and mathematics courses.

Computing Specialization
 Majors in Mathematics/Economics may select a Computing specialization by (1) satisfying all the requirements for a bachelor’s degree in the major; and (2) completing Mathematics 61 or 180, Program in Computing 10A, 10B, two courses from 10C, 15, 16A, 20A, 40A, and at least two courses from Mathematics 149 through 159, with a minimum grade of C– in each course and a combined grade-point average of at least 2.0. Students must petition for admission to the program and are advised to do so after they complete Program in Computing 10B (petitions should be filed in the Mathematics Department Student Services Office). Students graduate with a bachelor’s degree in mathematics/economics and a specialization in Computing.

Policies

Preparation for the Major
Each course must be taken for a letter grade. The economics preparation for the major courses (Economics 1, 2, 11) are calculated separately from the mathematics preparation for the major courses (Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B, 61, Program in Computing 10A). The economics preparation courses must be completed with a minimum overall 2.7 grade-point average and a grade of C or better in each course, as must the mathematics preparation courses. Students must receive a grade of C or better in the Writing II course.

Repetition of more than one economics preparation course, more than two mathematics preparation courses, or of any economics or mathematics preparation course more than once results in automatic dismissal from the major.

The Major
Each course must be taken for a letter grade. Transfer credit is subject to department approval; consult with an undergraduate counselor before enrolling in any courses for the major.

To qualify for honors, the eight Mathematics Department courses must be completed with an overall grade-point average of 2.0, with grades of C– or better in Mathematics 115A and 131A, as must the five courses from the Economics Department, with grades of C– or better in Economics 101 and 102.

Honors Program
Students who wish to graduate with departmental honors should apply for admission to the honors program in the Mathematics Department Student Services Office. They may apply any time after completing the preparation for the major courses and meeting the following requirements: (1) be officially enrolled in the Mathematics/Economics major; (2) complete all the preparation for the major courses; (3) achieve a minimum 3.5 grade-point average in the mathematics preparation for the major courses; (4) achieve a minimum 3.5 grade-point average in the economics preparation for the major courses; and (5) achieve a minimum 3.5 grade-point average in Economics 11, 101, and 102.

Highest honors are awarded at the discretion of the departmental honors committee based on grade-point average and quality of the senior thesis.
Adjunct Professors
Portonovo S. Ayaswamy, PhD
S. Amir Faghri, PhD
Dan M. Goebel, PhD
Vinay K. Goyal, PhD
Wilbur J. Marner, PhD

Adjunct Associate Professors
Audrey P. O’Neal, PhD
Abdon E. Sepulveda, PhD

Overview
The Department of Mechanical and Aerospace Engineering offers curricula in Aerospace Engineering and Mechanical Engineering at both the undergraduate and graduate levels. The scope of the departmental research and teaching program is broad, encompassing design, robotics, and manufacturing; fluid mechanics; micro-nano engineering; structural and solid mechanics; systems control; and thermal science and engineering. The applications of mechanical and aerospace engineering are quite diverse, including aircraft, spacecraft, automobiles, energy and propulsion systems, robotics, machinery, manufacturing and materials processing, microelectronics, biological systems, and more.

Undergraduate Majors
Aerospace Engineering BS
The aerospace engineering program is concerned with the design and construction of various types of fixed-wing and rotary-wing (helicopters) aircraft used for air transportation and national defense. It is also concerned with the design and construction of spacecraft, the exploration and utilization of space, and related technological fields.

Aerospace engineering is characterized by a very high level of technology. The aerospace engineer is likely to operate at the forefront of scientific discoveries, often stimulating these discoveries and providing the inspiration for the creation of new scientific concepts. Meeting these demands requires the imaginative use of many disciplines, including fluid mechanics and aerodynamics, structural mechanics, materials and aeroelasticity, dynamics, control and guidance, propulsion, and energy conversion.

The aerospace engineering program is accredited by the Engineering Accreditation Commission of ABET.
The mechanical engineering program is accredited by the Engineering Accreditation Commission of ABET.

Capstone Major
The Mechanical Engineering major is a designated capstone major. Within their capstone courses, Mechanical Engineering students work in teams to propose, design, analyze, and build a mechanical or electromechanical device. Graduates should be able to apply their knowledge of mathematics, science, and engineering in technical systems; design a system, component, or process to meet desired needs; function as productive members of a team; identify, formulate, and solve engineering problems; and communicate effectively, both orally and in writing.

Learning Outcomes
The Mechanical Engineering major has the following learning outcomes:

- Application of knowledge of mathematics, science, and engineering
- Function as a productive member of a team that considers multiple aspects of an engineering problem
- Design of a system, component, or process to meet desired needs
- Effective oral and written communication
- Identification, formulation, and solution of engineering problems

Requirements
Preparation for the Major
Required: Chemistry and Biochemistry 20A, 20B, 20L; Mathematics 31A, 31B, 32A, 32B, 33A; Mechanical and Aerospace Engineering M20 (or Computer Science 31), 82, 94; Physics 1A, 1B, 1C, 4AL, 4BL.

The Major
Required: Electrical and Computer Engineering 110L, Mechanical and Aerospace Engineering 101, 102, 103, 105A, 105D, 107, 131A or 133A, 156A, 157, 162A, 171A, 183A (or M183B); two departmental breadth courses (Electrical and Computer Engineering 100 and Materials Science and Engineering 104—if one or both of these courses are taken as part of the technical breadth requirement, students must select a replacement upper-division course or courses from the department except for Mechanical and Aerospace Engineering 166A—or, by petition, from outside the department); three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; two capstone design courses (Mechanical and Aerospace Engineering 162D, 162E); and two major field elective courses (8 units) from Mechanical and Aerospace Engineering 131A (unless taken as a required course), C131G, 133A (unless taken as a required course), 135, C136, C137, C138, CM140, 150A, 150B, 150C, 150G, 150P, C150R, 154B, 154S, 155, C156B, 157A, 161A, 161B, 161C, 162B, C163A, C163B, C163C, 166C, M168, 169A, 171B, 172, 174, C175A, 181A, 182B, 182C, 183A (unless taken as a required course), M183B (unless taken as a required course), C183C, 185, C186, C187L.

For information on UC, school, and general education requirements, see the Samueli school section in College and Schools.

Graduate Majors
Aerospace Engineering MS, PhD
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Manufacturing Engineering MS
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Mechanical Engineering MS, PhD
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Mechanical and Aerospace Engineering Lower-Division Courses
1. Undergraduate Seminar. (1) Seminar, one hour; outside study, two hours. Introduction by faculty members and industry lecturers to mechanical and aerospace engineering disciplines through current and emerging applications in aerospace, medical instrumentation, automotive, entertainment, energy, and manufacturing industries. P/NP grading.
2. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.
3. Introduction to Computer Programming with MATLAB. (4) Same as Civil Engineering M20. Lecture, two hours; discussion, two hours; laboratory, two hours; outside study, six hours. Requisite: Mathematics 33A. Fundamentals of computer programming taught in context of MATLAB computing environment.

5. Introduction to Computer-Aided Design and Drafting. (4) Lecture, two hours; laboratory, four hours. Fundamentals of computer graphics and two- and three-dimensional modeling on computer-aided design systems. Students use one or more online computer systems to design and display various objects. Letter grading.

Upper-Division Courses
102. Dynamics of Particles and Rigid Bodies. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: course 101, Mathematics 33A, Physics 1A. Fundamental concepts of Newtonian mechanics, Lagrange’s equations, kinematics and dynamics of particles and rigid bodies in two and three dimensions. Impulse-momentum and work-energy relationships. Applications. Letter grading.
103. Elementary Fluid Mechanics. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: Mathematics 32B, 33A, Physics 1B. Introductory course dealing with application of principles of mechanics to flow of compressible and incompressible fluids. Letter grading.
105A. Introduction to Engineering Thermodynamics. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: Chemistry 20B, Mathematics 32B. Phenomenological thermodynamics. Concepts of equilibrium, temperature, and reversibility. First law and concept of energy; second law and concept of entropy. Equations of state and thermodynamic properties. Engineering applications of these principles in analysis and design of closed and open systems. Letter grading.
105D. Transport Phenomena. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 82, 103, 105A. Transport phenomena; heat conduction, mass species diffusion, convective heat and mass transfer, and radiation. Engineering applications in thermal and environmental control. Letter grading.
107. Introduction to Modeling and Analysis of Dynamic Systems. (4) Lecture, four hours; discussion, one hour; laboratory, two hours; outside study, five hours. Enforced requisites: courses M20 (or Computer


133A. Engineering Thermodynamics. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 103, 105A. Applications of thermodynamics to engineering processes. Energy conversion systems. Rankine cycle and other cycles, refrigeration, psychrometry, reactive and non- reactive fluid flow systems. Elements of thermodynamic design. Letter grading.

135. Fundamentals of Nuclear Science and Engi neering. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: course 82, Chemistry 20A. Review of nuclear physics, radioac- tivity and decay, and radiation interaction with matter. Nuclear fission and fusion processes and mass defect, chain reactions, criticality, neutron diffusion and multiplication, heat transfer issues, and applications. Introduction to the design of plants for commercial electricity production, space power, spacecraft propul- sion, nuclear fusion, and nuclear science for medical uses. Letter grading.

C136. Energy and Environment. (4) (Formerly num- bered 136E) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 105A or equivalent. Global energy use and supply, electrical power generation, fossil fuel and nuclear power plants, renewable energy such as hydropower, biomass, geothermal, solar, wind, and ocean, fuel cells, transportation, energy conservation, air and water pollution, global warming. Concurrently sched- uled with course C236. Letter grading.

C137. Design and Analysis of Smart Grids. (4) Le cture, four hours; outside study, eight hours. Demand response; transactional/price-based load control; home- area network, smart home profile; advanced metering infrastructure; renewable energy integration; solar and wind generation intermittency and corre- cion; microgrids; grid stability; energy storage and electric vehicle monitoring; distribution and transmission grids; consumer-centric technolo- gies; sensors, communications, and computing; wire- less, wireline, and powerline communications for smart grid; grid parallel and distributed control; and grid energy regulation; ancillary services; wide-area situational awareness, phasor measure- ments; analytical methods and tools for monitoring and control. Concurrently scheduled with course C237. Letter grading.

C138. Introduction to Statistical Thermodynamics. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 105A, 105D. Introduction to basic concepts and tools of statistical thermodynamics. Ab- stract concepts of entropy, temperature, and chemical potential are explained by developing these concepts from ground up using only mechanical and statistical principles. Focus on equilibrium properties of thermodynamic systems and associated distributions. Provides sound foundation for further studies in trans- port phenomena, plasma, chemical kinetics, micro/nano- scale science and technology, and other related subjects. Concurrently scheduled with course C238. Letter grading.

CM140. Introduction to Biomechanics. (4) Same as Biomedical Engineering CM140.) Lecture, four hours; discus- sion, two hours; outside study, six hours. Requisites: courses 101, 102, and 156A or 166A. Introduction to mechanical functions of human body; skeletal adapta- tions to optimize load transfer, mobility, and function. Dynamics of muscle, joints, connective tissues, and mechanics applica- tions. Heat and mass transfer. Power generation. Lab- oratory simulations and tests. Concurrently scheduled with course CM240. Letter grading.


150B. Aerodynamics. (4) Lecture, four hours; discus- sion, two hours; outside study, six hours. Requisites: courses 103, 105A. Advanced aspects of potential flow theory. Incompressible flow around thin airfoils (lift and moment coefficients) and wings (lift, induced drag). Shock waves, supersonic flow and transonic flow. Turbulent flow in pipes and boundary layers. Compressible flow: normal shocks, channel flow with friction or heat addition. Letter grading.


C150G. Fluid Dynamics of Biological Systems. (4) Lecture, four hours; outside study, eight hours. Requir- site: course 103. Mechanics of aquatic locomotion; in- sect and bird flight aerodynamics; pulsatile flow in circ- ular syste; rheology of blood; transport in micro- circulatory bed, role of cerebrospinal fluid in diseases and traumatic brain injuries. Concurrently scheduled with course C250G. Letter grading.

C150P. Aircraft Propulsion Systems. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 103, 105A, 156A. Thermodynamic properties of gases, aircraft jet engine cycle analysis and component performance, component matching, advanced aircraft engine. Concurrently sched- uled with course C250P. Letter grading.

C150R. Rocket Propulsion Systems. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisites: courses 103, 105A, Rocket propul- sion concepts, including chemical rockets (liquid, gas, and solid propellants), hybrid rocket engines, electric (ion, plasma) rockets, nuclear rockets, and solar-powered vehicles. Current issues in launch ve- hicle technology. Concurrently scheduled with course C250R. Letter grading.

154A. Preliminary Design of Aircraft. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 154S. Classical pre- liminary design of aircraft, configuration aerodynamics, large signal response complexity, and control consider- ation. Term assignment consists of preliminary design of low-speed aircraft. Letter grading.


154S. Flight Mechanics, Stability, and Control of Air- craft. (4) Lecture, four hours; discussion, two hours; outside study, seven hours. Requisites: courses 150A, 150B. Aircraft performance, flight mechanics, stability, and control; some basic ingredients needed for design of control surfaces. Some flexibility on stability de- rivatives. Letter grading.

155. Intermediate Dynamics. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requir- site: course 102. Axioms of Newtonian mechanics, generalized coordinates, Lagrange equation, varia- tional principles; central force motion; kinematics and dynamics of rigid bodies. Euler equations, motion of rotating bodies, oscillatory motion, normal coordi- nates, and orthogonality relations. Letter grading.


157. Basic Mechanical and Aerospace Engineering Laboratory. (4) Laboratory, eight hours; outside study, four hours. Requisites: courses 101, 102, 103, 105A, 105D, Electrical and Computer Engineering 100. Methods of measurement of basic quantities and per- formance of basic experiments in fluid mechanics, structures, and thermodynamics. Primary sensors, transducers, recording equipment, signal processing, and data analysis. Letter grading.

157A. Aerospace Design Laboratory. (4) Lecture, two hours; laboratory, six hours; outside study, four hours. Requisites: courses 150A, 157. Recommended: 150B, C150R. Experimental Illustration of important physical phenomena in area of fluid mechanics/aerodynamics, as well as hands-on experience with design of experi- mental programs and use of modern experimental techniques and tools. Letter grading.

161A. Introduction to Aeronautics. (4) Lecture, four hours; discussion; two hours; outside study, six hours. Enforced requisite: course 102. Recommended: course 82. Spaceflight, including two-body and three- body problem, Kepler laws, and Keplerian orbits. Ground track and taxonomy of common orbits. Orbital and transfer maneuvers, patched conics, perturbation theory, theory of thrust, propulsion, spacecraft pointing, and spacecraft attitude control. Space mission de- sign, space environment, rendezvous, reentry, and launch. Letter grading.

161B. Introduction to Space Technology. (4) Lecture, four hours; discussion, two hours; outside study, eight hours. Recommended preparation: courses 102, 161A. Spacecraft systems and dynamics, including spacecraft power, instruments, communications, spacecraft systems, the spacecraft orbit determination and control. Space mission de- sign, launch vehicles/considerations, space propul- sion. Letter grading.

161C. Spacecraft Design. (4) Lecture, four hours; outside study, eight hours. Enforced requisite: course 161B. Preliminary design and analysis by students of Earth-orbiting or interplanetary space missions and spacecraft. Students work in groups of three or four, with each student responsible primarily for one sub- system and for integration with whole. Letter grading.

C162B. Compliant Mechanism Design. (4) Lecture, four hours; outside study, eight hours. Requisite: Linear algebra. Kinematics and mechanisms: synthesis approaches, modeling techniques, and optimization tools. Fundamentals of flexible constraint theory, principles of constraint-based design, projective geometry, synthesis of freedom and constraint topologies. Applications: precision motion stages, general purpose flexure bearings, microstructural architectures, MEMs, optical mounts, and nanoscale positioning systems. Hands-on exercises include build-your-own flexure kits, CAD and FEA simulations, and term project. Concurrently scheduled with course C194A. Letter grading.

C162D. Design of Composite Structures. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisites: courses 156A or 166A, 162A (or 171A). Limited to seniors. First of two mechanical engineering capstone design courses. Students form groups, design, manufacture, test, and fabricate composite structural components. Letter grading.

C163A. Kinematics of Robotic Systems. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course C162D. Limited to seniors. Second of two mechanical engineering capstone design courses. Students groups continue design project begun in C162D, making use of CAD design laboratory, CAD analysis laboratory, and mechatronics laboratory. Design theory, design tools, economics, marketing, manufacturability, quality, intellectual property, and design for safety and reliability. Students conduct hands-on design, fabrication, and testing. Culminating project demonstration. Letter grading.

C163B. Dynamics of Robotic Systems. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course C163A. Dynamics models of serial and parallel robotic manipulators, including spatial descriptions and transformations (Euler angles, Denavit-Hartenberg/ DH parameters, equivalent and non-equivalent frames), trajectory generation procedure, direct kinematics, inverse kinematics (geometric and algebraic approaches), mechanical design topics. Concurrently scheduled with course C263A. Letter grading.

C163C. Control of Robotic Systems. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course C163B. Sensors, actuators, and control schemes for robotic systems, including computer architecture, feedback control, impedance and force feedback control, and advanced control topics from nonlinear and adaptive control, hybrid control, nonholonomic systems, vision-based control, and perception. Concurrently scheduled with course C263C. Letter grading.

166A. Analysis of Aerospace Structures. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses B2, 101. Not open to students who have already received credit for course 156A. Introduction to two-dimensional elasticity, stress-strain laws, yield and failure; bending of beams; torsion of beams; warping; torsion of thin-walled cross sections; shear flow, shear-lag; combined bending torsion of thin-walled, stressed, and damaged beam elements; elements of plate theory; buckling of columns. Letter grading.

166C. Design of Composite Structures. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 156A or 166A. History of composites, stress-strain relations for composite materials, bending and extension of symmetric laminates, design examples, and design studies, buckling of composite components, non-symmetric laminates, micromechanics of composites. Letter grading.

M168. Introduction to Finite Element Methods. (4) Same as Engineering M139C.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 156A or 166A or Civil Engineering 130. Introduction to basic concepts of finite elements, their applications to structural and solid mechanics and heat transfer. Direct matrix structural analysis; weighted residual, least squares, and Ritz approximation methods; shape functions; convergence criteria; geometric and material nonlinearity; multimodal dimensionless flow and elasticity; numerical integration. Practical use of FEM software; geometric and analytical modeling; preprocessing and postprocessing techniques; term projects with computers. Letter grading.


171A. Introduction to Feedback and Control Systems. (4) Same as Engineering M139C.) Lecture, four hours; discussion, two hours; outside study, ten hours. Requisite: course 107. Introduction to feedback principles, control systems design, and system stability. Modeling of physical systems in engineering and other fields, root locus, control systems design using Nyquist, Bode, and root locus methods; compensation; computer-aided analysis and design. Letter grading.


172. Control Systems Laboratory. (4) Lecture, four hours; laboratory, two hours; outside study. Enforced requisite: course 171A. Introduction to loop shaping controller design with application to feedback control systems. Power spectrum models of noise and disturbances, and performance trade-offs imposed by conflicting requirements. Constraints on sensitivity function and complement to loop shaping controller design. Use of Green's function and transform methods. Letter grading.

174. Probability and Its Applications to Risk, Reliability, and Quality Control. (4) Lecture, four hours; discussion, two hours; outside study. Requisite: Mathematics 33A. Introduction to probability theory; random variables, distributions, functions of random variables, models of failure of components, reliability, redundancy, complex systems, stress-strength models, fault tree analysis, statistical quality control by variables and by attributes, acceptance sampling. Letter grading.


C175B. Complex Analysis and Integral Transforms. (4) Lecture, four hours; outside study. Enforced requisite: course 82. Complex variables, analytic functions, conformal mapping, contour integrals, singularities, residues, Cauchy integrals, Laplace transform; properties, convolution, inversion; Fourier transform: properties, convolution, FFT, applications in dynamics, vibrations, structures, and heat conduction. Letter grading.


C183A. Introduction to Manufacturing Processes. (4) Lecture, three hours; laboratory, four hours; outside study, five hours. Enforced requisite: Materials Science 104. Introduction to general manufacturing methods, mechanisms, and nanotechnology. Letter grading.

M183B. Introduction to Microscale and Nanoscale Manufacturing. (4) Same as Bioengineering M153, Chemical Engineering M153, and Electrical and Computer Engineering M153.) Lecture, three hours; laboratory, four hours; outside study, five hours. Enforced requisite: Chemistry 20A, Physics 1A, 1B, 1C, 4AL. Letter grading.

C183C. Rapid Prototyping and Manufacturing. (4) Lecture, four hours; laboratory, two hours; outside study, six hours. Enforced requisite: course 183A. Rapid prototyping (RP), solid freeform fabrication, or additive manufacturing has emerged as popular manufacturing technology to accelerate product creation in less than two decades. Machine for layered manufacturing builds parts directly from CAD models. This novel manufacturing technology enables building of parts that have traditionally been impossible to fabricate, particularly those with variety in materials. In analogy to speed and flexibility of desktop publishing, rapid prototyping is also called desktop manufacturing, with actual three-dimensional solid objects instead of mere two-dimensional images.
Methodology of rapid prototyping has also been extended to meso-/micro-/nano-scale to produce three-dimensional functional miniature components. Concurrently scheduled with course C287A. Letter grading.

185. Introduction to Radio Frequency Identification and Its Application in Manufacturing and Supply Chain. (4) Lecture, four hours; discussion, two hours; outside study, four hours. Enforced requisite: courses M20 or Civil Engineering M20 or Computer Science 31. Manufacturing today requires assembling of individual components into assembled products, shipping of such products, use, manufacture, and recycling of such products. Radio frequency identification (RFID) chips installed on components, subassemblies, and assemblies of products allow them to be tracked and efficiently monitored through manufacturing supply chain. RFID tags have memory and small CPU that allows information about product status to be written, stored, and transmitted wirelessly. Tag data can then be forwarded by enterprise software by way of RFID middleware layer. Study of how RFID is being utilized in manufacturing, enterprise software by way of RFID middleware layer. Letter grading.

194. Research Group Seminars: Mechanical and Aerospace Engineering. (2 to 8) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit with student approval. Individual contract required; enrollment petitions available in Office of Academic and Student Affairs. Letter grading.

Graduate Courses


231B. Radiation Heat Transfer. (4) Lecture, four hours; outside study, eight hours. Requisite: course 105D. Radiative properties of materials and radiative energy transfer. Emphasis on fundamental concepts, including energy levels and electromagnetic waves as well as analytical methods for calculating radiative properties and radiation transfer in absorbing, emitting, and scattering media. Applications cover laser-matter interactions, and various radiative areas such as combustion and thermal insulation. Letter grading.


231G. Microscopic Energy Transport. (4) Lecture, four hours; outside study, eight hours. Requisite: course 105D. Exploration of basic principles of transport of energy in quantized and fabricated structures by three carriers: electrons, phonons, and molecules. Study of statistical properties of heat carriers, common Landauer framework for heat flow, scattering and propagation of heat carriers, derivation of classical laws from microscopic transport equations, and deviation from classical laws at small scale. Term project. Concurrently scheduled with course C131G. Letter grading.

233. Nanoscience for Energy Technologies. (4) Lecture, four hours; outside study, eight hours. Introduction to fundamental principles of energy transport, conversion, and storage at nanoscale, and recent developments for the realization of nanotechnology. Focus on basics of thermal science, solid state, quantum mechanics, electromagnetics, and statistical physics. Topic discussions given for examples that connect nanotechnology application, fundamental challenge, and scientific-solution-based nano-technology to improve device performance and energy efficiency. Letter grading.

235A. Nuclear Reactor Theory. (4) Lecture, four hours; outside study, eight hours. Underlying physics and mathematics of nuclear reactor (fission) core design. Diffusion theory, reactor kinetics, slowing down and thermalization, multigroup methods, introduction to transport theory. Letter grading.

236. Energy and Environment. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 105A or equivalent. Global energy use and supply, electrical power generation, fossil fuel and nuclear power plants, renewable energy such as hydropower, biomass, geothermal, solar, wind, and ocean; fuel cells, transmission and energy conservation, air and water pollution, global warming. Concurrently scheduled with course C136. Letter grading.

C237. Design and Analysis of Smart Grids. (4) Lecture, four hours; outside study, six hours. Design and analysis of software, control and feedback response, transactive/price-based load control; home-area network, smart energy profile; advanced metering infrastructure; renewable energy integration; storage and generation integration; demand response; microgrids; grid stability; energy storage and electric vehicles-simulation; monitoring; distribution and transmission grids; consumer-centric technologies; sensors, communications, and computing; wireless, wireline, and powerline communications for smart grids; grid modeling, stability, and control; frequency and voltage regulation; ancillary services; wide-area situational awareness, phaser measurements; analytical methods and tools for monitoring and control. Concurrently scheduled with course C137. Letter grading.


C238. Introduction to Statistical Thermodynamics. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 105A, 105D. Introduction to basic concepts and tools of statistical thermodynamics. Abstract concepts of entropy, temperature, and chemical potential are explained by developing these concepts from the bottom-up using fundamental thermodynamic principles. Discussion of equilibrium properties of thermodynamic systems and associated distributions. Provides sound foundation for further studies in transport phenomena, plasma science, micro/nano-scale science and technology, and other related subjects. Concurrently scheduled with course C138. Letter grading.

239B. Seminar: Current Topics in Transport Phenomena. (2 to 4) Seminar, two to four hours; outside study, four to eight hours. Designed for graduate mechanical and aerospace engineering students. Lectures, discussions, student presentations, and projects in areas of current interest in transport phenomena. May be repeated for credit. S/U grading.

239F. Special Topics in Transport Phenomena. (2 to 4) Lecture, two to four hours; outside study, four to eight hours. Designed for graduate mechanical and aerospace engineering students. Advanced and current study of one or more aspects of heat and mass transfer, such as turbulence, stability and transition, heat exchanger effects, variational methods, and measure- ment techniques. May be repeated for credit with topic change. S/U grading.

239G. Special Topics in Nuclear Engineering. (2 to 4) Lecture, two to four hours; outside study, four to eight hours. Designed for graduate mechanical and aerospace engineering students. Advanced and current study of one or more aspects of heat and mass transfer, such as turbulence, stability and transition, heat exchanger effects, variational methods, and measurement techniques. May be repeated for credit with topic change. S/U grading.
239H. Special Topics in Fusion Physics, Engineering, and Technology. (2 to 4) Seminar, two to four ing, and Technology. (2 to 4) hours; outside study, four to eight hours. Recommended: courses 101, 102, and 156A or 166A. Introduction to mechanical functions of human body; skeletal adapta- tions to optimize load transfer, mobility, and function. Lecture, four hours; outside study, six hours. Requisites: (Same as Earth, Plane
M257A. Elastodynamics. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 150A, 150B, 152, 102, 150A, 182B. Neutral and charged particle motion, magnetohydrodynamics, two-fluid plasma processes, ion and electron diffusion, gas diffusion, Child/Langmuir law, basic plasma devices, electron emission and work function, thermal distributions, vacuum and vacuum systems, space-charge, particle collisions and ionization, plasma discharges, sheaths, and electric arcs. Letter grading.

255A. Advanced Dynamics. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 155, 169A. Variational principles and Lagrange equations. Kinematics and dynamics of rigid bodies; procession and precession of axis of inertia. Requisites: courses 156A or 166A. Linear

250C. Compressible Flows. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 105A, 150A. Thermodynamic properties of gases, aircraft jet engine cycle analysis, component performance, component matching, advanced aircraft engine topics. Concurrently sched- uled with course C150P. Letter grading.

250D. Computational Fluid Dynamics for Incom- pressible Flows. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 150A, 150B. Neutral and charged particle motion, magnetohydrodynamics, two-fluid plasma processes, ion and electron diffusion, gas diffusion, Child/Langmuir law, basic plasma devices, electron emission and work function, thermal distributions, vacuum and vacuum systems, space-charge, particle collisions and ionization, plasma discharges, sheaths, and electric arcs. Letter grading.

255B. Mathematical Methods in Dynamics. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 255A. Concepts of stability; state-space inter- pretations; stability determination by simulation, linearization, and Lyapunov direct method; the Hamiltonian as a Lyapunov function; nonautonomous systems; av- eraging and perturbation methods of nonlinear anal- ysis; independent excitation, resonance. Application to mechanical systems. Letter grading.

255A. Advanced Dynamics. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 155, 169A. Variational principles and Lagrange equations. Kinematics and dynamics of rigid bodies; procession and precession of axis of inertia. Requisites: courses 156A or 166A. Linear

M256A. Linear Elasticity. (4) (Same as Civil Engi- neering M230A.) Lecture, four hours; outside study, eight hours. Requisites: course 150A or 150B. Linear elasto-plastic. Cartesian tensors; infinitesimal strain tensor; Cauchy stress tensor; strain energy; equilib- rium equations; linear constitutive relations; plane elasto-plastic problems, holes, corners, inclusions, cracks; three-dimensional problems of Kelvin, Boussinesq, and Cerutti. Introduction to boundary integral equation method. Letter grading.

256B. Nonlinear Elasticity. (4) (Same as Civil Engi- neering M230B.) Lecture, four hours; outside study, eight hours. Requisites: course 150A or 150B. Linear elasto-plastic. Cartesian tensors; infinitesimal strain tensor; Cauchy stress tensor; strain energy; equilib- rium equations; linear constitutive relations; plane elasto-plastic problems, holes, corners, inclusions, cracks; three-dimensional problems of Kelvin, Boussinesq, and Cerutti. Introduction to boundary integral equation method. Letter grading.

M256C. Plasticity. (4) (Same as Civil Engineering M230C.) Lecture, four hours; outside study, eight hours. Requisites: courses 256A, 256B. Classical rater-dependent plasticity, reiteration of field equations, damage: deformation, material and spatial coordinates, defor- mation gradient tensor, nonlinear and linear strain ten- sors, displacement and angular displacements, balance laws, Cauchy and Piola-Kirchho tensors, Cauchy stress, strain energy, stiffness, balance of energy, stored energy; constitutive rela- tions, elasticity, hyperelasticity, thermoelasticity; lin- earization of field equations; solution of selected prob- lems. Letter grading.

255C. Plasticity. (4) (Same as Civil Engineering M230C.) Lecture, four hours; outside study, eight hours. Requisites: courses 256A, 256B. Classical rater-dependent plasticity, reiteration of field equations, damage: deformation, material and spatial coordinates, defor- mation gradient tensor, nonlinear and linear strain ten- sors, displacement and angular displacements, balance laws, Cauchy and Piola-Kirchho tensors, Cauchy stress, strain energy, stiffness, balance of energy, stored energy; constitutive rela- tions, elasticity, hyperelasticity, thermoelasticity; lin- earization of field equations; solution of selected prob- lems. Letter grading.


M257A. Elastodynamics. (4) (Same as Earth, Planetary, and Space Sciences M224A.) Lecture, four hours; outside study, eight hours. Requisites: courses M256A, M256B. Equations of linear elasticit, Cauchy equation of motion, constitutive relations, boundary and initial conditions, principle of energy. Sources and
waves in unbounded isotropic, anisotropic, and dissipative solids. Half-space problems. Guided waves in layered media. Applications to dynamic fracture, non-destructive evaluation (NDE), and mechanics of earth sciences. Outside study, eight hours. Enforced requisite: course 260A. Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 260A. Presentation of field of aeroelasticity from unified viewpoint applicable to flight structures, suspension bridges, buildings, and other structures. Determination of stability and loadings from governing variational principles. Flow induced instability and response of structural systems. Letter grading.

M270A. Linear Dynamic Systems. (Same as Chemical Engineering M280C and Electrical and Computer Engineering M240A.) Lecture, four hours; outside study, eight hours. Enforced requisite: course 217A or Electrical and Computer Engineering 141. State-space description of linear time-invariant (LTI) systems in continuous and discrete time. Linear algebra concepts such as eigenvectors and eigenvalues, singular values, Cayley/Hamilton theorem, Jordan form; solution of state equations; stability, controllability, observability, realizability, and minimality. Stabilization design via state feedback and observers; separation principle. Connections with transfer functions and state variables. Letter grading.

270B. Linear Optimal Control. (4) Lecture, four hours; outside study, eight hours. Enforced requisite: course M270A or Electrical Engineering M240A. Existence and uniqueness of optimal quadratic (LQ) optimal control problems for continuous-time and discrete-time systems, finite-time and infinite-time problems; Hamiltonian systems and optimal control; algebraic and differential Riccati equations; implications of controllability, stabilizability, observability, and detectability solutions. Letter grading.


C271A. Probability and Stochastic Processes in Dynamical Systems. (4) Lecture, four hours; outside study, eight hours. Enforced requisite: courses 220, 107. Probability spaces, random variables, stochastic processes and processes, expectation, conditional expectation, Gaussian/Markov sequences, and minimum variance unbiased estimator (Kalman filter) with applications. Letter grading.

C271B. Stochastic Estimation. (4) Lecture, four hours; outside study, eight hours. Enforced requisite: course C271A. Linear and nonlinear estimation theory, orthogonal projection lemma, Bayesian filtering theory, conditional mean and risk estimators. Letter grading.


271D. Seminar: Special Topics in Dynamical Systems Control. (4) Seminar, four hours; outside study, eight hours. Seminar on current research topics in dynamic systems modeling, control, and applications. Topics selected from process control, differential games, nonlinear estimation, adaptive filtering, industrial and aerospace applications, etc. Letter grading.

273A. Robust Control System Analysis and Design. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 171A, M270A. Graduate-level introduction to analysis and design of multivariable control systems. Multivariable loop-shaping, performance requirements, model uncertainty representations, and robustness covered in detail from frequency domain perspective. Structured singular value and its application to robustness testing. Letter grading.

275A. System Identification. (4) Lecture, four hours; outside study, eight hours. Methods for identification of dynamical systems from input/output data, with emphasis on identification of discrete-time, (discrete) models of sampled-data systems. Coverage of conversion to continuous-time models. Models identified include transfer functions and state-space models. Discussion of techniques used in mechanical, aerospace, and space engineering, including identification of flexible structures, microelectromechanical systems (MEMS) devices, and acoustic ducts. Letter grading.


279. Dynamics and Control of Biological Oscillations. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 107, M270A. Analysis and design of dynamical mechanisms underlying biological and ecological systems using deterministic approaches. Topics include neuronal information processing through action potentials (spike train), central pattern generator, coupled nonlinear oscillators, optimal gait (periodic solutions) for animal locomotion, and entrainment to natural oscillations via feedback control. Letter grading.


M280B. Microelectromechanical Systems (MEMS) Fabrication. (4) Same as Bioengineering M252B and Electrical and Computer Engineering M252B. Lecture, four hours; discussion, one hour; outside study, eight hours. Enforced requisite: course M183B. Advanced discussion of micromachining processes used to construct MEMS devices. Analytical and numerical techniques to design and etching processes, as well as their combination in process integration. Materials issues such as chemical resistance, corrosion, mechanical properties, and reliability. Letter grading.

281. Microsciences. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 102, 103, 105D. Fundamental issues of being in microscopic world and mechanical engineering of micrometer scale devices. Topics include scale issues, surface tension, superhydrophobic surfaces and applications, and electrowetting and applications. Letter grading.

M282. Microelectromechanical Systems (MEMS) Device Physics and Design. (4) Same as Bioengineering M252 and Electrical and Computer Engineering M252.) Lecture, four hours; discussion, one hour; outside study, seven hours. Introduction to MEMS design rules (MEMS), actuation mechanisms, microactuators, and micro-actuators. Designing MEMS to be produced with both foundry and nonfoundry processes. Computer-aided design for MEMS. Design project required. Letter grading.

284. Sensors, Actuators, and Signal Processing. (4) Lecture, four hours; outside study, eight hours. Prerequisites and performance of micro transducers. Applications of using unique properties of micro transducers for distributed and real-time control of engineering problems. Associated signal processing requirements for these applications. Letter grading.

285. Interfacial Phenomena. (4) Lecture, four hours; outside study, eight hours. Requisites: course 82, 103, 105A, 105D. Introduction to fundamental physical phenomena occurring at interfaces and application of their knowledge to engineering problems. Fundamental concepts of interfacial phenomena, including surface tension, surfactants, interfacial thermodynamics, interfacial forces, interfacial hydrodynamics, and dynamic properties of interfacial layer vibrations (applications, including wetting, change of phase boiling and condensation), forms and emulsions, microelectromechanical systems, and biological systems. Letter grading.


M287. Nanoscience and Technology. (4) Same as Electrical and Computer Engineering M287L. Lecture, four hours; outside study, eight hours. Introduction to fundamentals of nanoscale science and technology. Basic physical principles, quantum mechanics, chemical bonding and nanoscale properties. Top-down and bottom-up (self-assembly) nanofabrication; nanocharacterization; nanomaterials, nanoelectronics, and nanobiotechnology. Introduction to new scientific principles behind nanotechnology and inspire students to create new ideas in multidisciplinary nanio-particles. Letter grading.

289. Characterization, and Biodetection Laboratory. (4) Lecture, two hours; laboratory, three hours; outside study, seven hours. Multidisciplinary course that introduces laboratory techniques for detection and characterization, and biodetection. Basic physical, chemical, and biological principles related to these techniques, top-down and bottom-up (self-assembly) nanofabrication, nanocharacterization, and biodection. Letter grading.


C297A. Rapid Prototyping and Manufacturing. (4) Lecture, four hours; laboratory, two hours; outside study, eight hours. Preparation: courses 156A or 166A. Requisite: level of knowledge in manufacturing equivalent to course 183A and CAD capability. Rapid prototyping (RP), solid freeform fabrication, or additive manufacturing has become a popular manufacturing technology to accelerate product creation in the past two decades. Machine for layered manufacturing builds parts directly from CAD models. This novel manufacturing technology enables building objects that have traditionally been impossible to fabricate because of their complex shapes or of variety in materials. In analog to speed and flexibility of desktop publishing, rapid prototyping is also called desktop manufacturing, with actual three-dimensional solid objects instead of mere two-dimensional images. Methodology of rapid prototyping has also been extended into meso-/micro-/ nano-scale to produce three-dimensional functional or micro-structure components. Concurrently scheduled with course C183C. Letter grading.


298. Seminar: Engineering. (2 to 4) Seminar, to be arranged. Limited to graduate mechanical and aerospace engineering students. Seminars may be organized in areas of technical fields. If appropriate, field trips may be arranged. May be repeated with topic change. Letter grading.

M299A. Seminar: Systems, Dynamics, and Control Topics. (2) Same as Chemical Engineering M297 and Electrical and Computer Engineering M245B. Seminar, two hours; outside study, six hours. Limited to graduate engineering students. Presentations of research topics by leading academic researchers from fields of systems, dynamics, and control. Students who work in these fields present their papers and results. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Teaching Assistant Training Seminar. (2) Seminar, two hours; outside study, four hours. Preparation: appointment as teaching assistant in department. Seminar on communication of mechanical and aerospace engineering principles, concepts, and methods; teaching assistant preparation, organization, and presentation of material, including use of visual aids; grading, advising, and rapport with students. S/U grading.

596. Directed Individual or Tutorial Studies. (2 to 8) Tutorial, to be arranged. Limited to graduate mechanical and aerospace engineering students. Petition forms to request enrollment may be obtained from assistant dean, Graduate Studies. Supervised investigation of advanced technical problems. S/U grading.

597A. Preparation for MS Comprehensive Examination. (2 to 12) Tutorial, to be arranged. Limited to graduate mechanical and aerospace engineering students. Reading and preparation for MS comprehensive examination. S/U grading.

597B. Preparation for PhD Preliminary Examinations. (2 to 16) Tutorial, to be arranged. Limited to graduate mechanical and aerospace engineering students. Reading and preparation for PhD preliminary examinations. S/U grading.

597C. Preparation for PhD Oral Qualifying Examination. (2 to 16) Tutorial, to be arranged. Limited to graduate mechanical and aerospace engineering students. Preparation for oral qualifying examination, including preliminary research on dissertation. S/U grading.

598. Research for and Preparation of MS Thesis. (2 to 12) Tutorial, to be arranged. Limited to graduate mechanical and aerospace engineering students. Supervised independent research for MS candidates, including thesis prospectus. S/U grading.

599. Research for and Preparation of PhD Dissertation. (2 to 16) Tutorial, to be arranged. Limited to graduate mechanical and aerospace engineering students. Usually taken after students have been advanced to candidacy. S/U grading.

MEDICINE
Data Geffen School of Medicine
37-121 Center for Health Sciences
Box 951736
Los Angeles, CA 90095-1736

Medicine
310-267-3144
E. Dale Abel, MD, PhD, Chair and Executive Medical Director
José J. Escarce, MD, PhD, Executive Vice Chair, Academic Affairs

Gregory A. Brent, MD, Senior Vice Chair, Academic Affairs
Tisha S. Wang, MD, Senior Vice Chair, Clinical Services
Jodi L. Friedman, MD, Vice Chair, Education

Overview
The principal goal of the Department of Medicine is to educate students in the expert diagnosis and compassionate management of human illness. Building on the biochemical, physiological, and behavioral foundations of the preclinical experience, students are taught information acquisition through history taking, physical examination, and laboratory evaluation; information synthesis through achieving a differential diagnosis and evaluative plan; and medical decision making for continued evaluation and therapy. Students are encouraged and guided in developing a caring physician/patient relationship.

Institution in the department is provided in all four years of medical school, with the third and fourth years constituting a continuum of clinical experience. Students become integrated into a ward team and have significant ambulatory care experiences. They apply and extend their clinical skills, medical knowledge, and judgment in the care of patients assigned to them under the immediate supervision of house officers and attending staff.

The department offers a broad range of advanced clinical clerkships in general and subspecialty ambulatory and hospital-based internal medicine at all the major affiliated centers.

For more details on the Department of Medicine and courses offered, see the department website.

Medicine faculty information is available from the department.

Medicine
Lower-Division Courses
19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in a minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses
160C. Health Outreach and Education to At-Risk Populations. (4) Seminar, two hours; fieldwork, six to eight hours. Requisites: courses M160A, M160B. Processes involved with designing, delivering, and assessing community health education programs, under supervision of professional staff. S/NP or letter grading.

180. Special Topics in Medicine. (4) Lecture, four hours; discussion, one hour. Medical topics of special interest to undergraduate students. Specific subjects may vary each term depending on particular interest of instructors and students. Topics may include East/West medicine and global medicine. May be repeated for credit with topic or instructor change. P/NP or letter grading.

185. Integrative East-West Medicine for Health and Wellness. (5) Lecture, five hours. Introduction to integrative health care and wellness, particularly therapeutic approaches originating from traditional Chinese medicine. Study of theoretical and practical aspects of integrative medicine and traditional Chinese medicine, management of personal well-being through experiential learning of various therapeutic modalities, and evidence and clinical applications of integrative medicine. Topics include integrative East-West medicine and its role in prevention and health promotion; herbs, diet, and nutritional supplements; pain management using acupuncture, acupressure, massage, and other self-help techniques; integrative medicine research and evidence-based modalities; chronic stress and implications on sleep, inflammation, and maintenance of health. Incorporates hands-on practice and interactive sessions. P/NP or letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Colloquium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Enforced corequisite: Honors Colloquium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

199. Directed Research in Medicine. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

M256. Interdisciplinary Response to Infectious Disease Emergencies: Medicine Perspective. (4) (Same as Community Health Sciences M256, Nursing M298, and Oral Biology M256.) Lecture, three hours; discussion, one hour. Designed to instill in professional students ideas of common emergency health problems and coordinated response, with specific attention to bioterrorism. Examination of tools to help students prevent, detect, and intervene in infectious disease emergencies. Interdisciplinary sessions also attended by students in Schools of Dentistry, Nursing, and Public Health during weeks two through five. Letter grading.
M260A-M260B. Methodology in Clinical Research I, II, (4-4) (Same as Biomathematics M260A-M260B.) Lecture, four hours. Recommended preparation: MD, PhD, or dental degree. Requisite: Biomathematics 170A, 268A. Course M260A is requisite to M260B. Presentation of principles and practices of major disciplines underlying clinical research methodology, such as biostatistics, epidemiology, pharmacokinetics. S/U or letter grading.

M260C. Methodology in Clinical Research III. (4) (Same as Biomathematics M260C.) Discussion, four hours. Recommended preparation: MD, PhD, or dental degree. Presentation of principles and practices of major disciplines underlying clinical research methodology, such as biostatistics, epidemiology, pharmacokinetics. S/U or letter grading.

M261. Responsible Conduct of Research Involving Humans. (2) (Same as Biomathematics M261.) Lecture, two hours; discussion, two hours. Preparation: completion of one basic course in protection of human research subjects through Collaborative Institutional Training Initiative. Discussion of current issues in responsible conduct of clinical research, including reporting of research, basis for authorship, issues in genetic research, principles and practice of research on human subjects, conflicts of interest, Institutional Review Board (IRB), and related topics. S/U or letter grading.

M263. Clinical Pharmacology. (2) (Same as Biomathematics M263 and Psychiatry M263.) Lecture, two hours. Preparation: completion of professional health sciences degree (MD, DDS, DSc, or PhD). Overview of principles of clinical pharmacology, especially as they relate to clinical and translational medicine and to advances in contemporary medicine such as targeting, gene therapy, and genomics. Letter grading.

M270C. Advanced Modeling Methodology for Dynamic Biomedical Systems. (4) (Same as Bioengineering M270A and Computer Science M270A.) Lecture, four hours; outside study, eight hours. Requisite: Electrical Engineering 141 or 142 or Mathematics 115A or Mechanical and Aerospace Engineering 171A. Development of dynamic systems modeling methodology for physiological, biomedical, pharmacological, chemical, and related systems. Control system, multicompartimental, noncompartimental, and input/output models, linear and nonlinear. Emphasis on model applications, limitations, and relevance in biomedical sciences and other limited data environments. Problem solving in PC laboratory. Letter grading.

M270D. Optimal Parameter Estimation and Experimental Design for Biomedical Systems. (4) (Same as Bioengineering M296B, Biomathematics M270, and Computer Science M296B.) Lecture, four hours; outside study, eight hours. Requisite: course M270C or Bioengineering CM296B or Biomathematics 220. Estimation methodology and parameter optimization estimation algorithms for fitting dynamic system models to biomedical data. Model discrimination methods. Theory and algorithms for designing optimal experiments for developing and quantifying models, with special focus on experimental design. Exploration of PC software for model building and optimal experimental design via applications in physiology and pharmacology. Letter grading.


Microbiology, Immunology, and Molecular Genetics

Microbiology, Immunology, and Molecular Genetics

College of Letters and Science and David Geffen School of Medicine

1602 Molecular Sciences

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Los Angeles, CA 90095-1489

Microbiology, Immunology, and Molecular Genetics

310-825-8482

Jerome A. Zack, PhD, Chair

Douglas L. Black, PhD, Vice Chair, Academic Personnel

Elissa A. Hallem, PhD, Vice Chair, Graduate Affairs

April D. Pyle, PhD, Vice Chair, Undergraduate Education

Faculty Roster

Professors

Frank U. Alber, PhD

Steven J. Bensinger, VMD, PhD (Sherie and Donald Morrison Professor of Immunology)

Douglas L. Black, PhD

Peter J. Bradley, PhD

Manish J. Butte, MD, PhD (E. Richard Stehm Endowed Professor of Pediatric Allergy, Immunology, and Rheumatology)

Irvin S.Y. Chen, PhD

Genhong Cheng, PhD

James S. Economou, MD, PhD (Louis D. Beaumont Professor of Surgery)

Elissa A. Hallem, PhD

Kent L. Hill, PhD

Alexander Hoffmann, PhD (Thomas M. Asher Endowed Professor of Microbiology)

Marcus A. Horwitz, MD

Patricia J. Johnson, PhD

Donald B. Kohn, MD

Aldons J. Lusis, PhD

Otoniel M. Martinez-Maza, PhD

Megan M. McEvoy, PhD

M. Carrie Misceli, PhD

Jeffery F. Miller, PhD (Fred Kavli Professor of Nanosystems Sciences)

Robert L. Modlin, MD (Arnold W. Klein, MD Professor of Dermatology)

Manuel L. Penichet, MD, PhD

April D. Pyle, PhD (George and Nouhad Ayoub Professor of Life Science Innovation)

Stephen T. Smale, PhD (Sherie L. and Donald G. Morrison Professor of Molecular Immunology)

Maureen A. Su, MD

Owen N. Witte, MD, (University Professor, President’s Professor of Developmental Immunology)

Gerard C.L. Wong, PhD

Otto O. Yang, MD

Jerome A. Zack, PhD (M. Philip Davis Professor of Microbiology and Immunology)

Z. Hong Zhou, PhD

Professors Emeriti

Arnold J. Berk, MD (Presidental Professor Emeritus of Molecular Cell Biology)

Benjamin E. Bonavida, PhD

David A. Campbell, PhD

Asim Dasgupta, PhD

Frederick A. Eiserling, PhD

Lawrence T. Feldman, PhD

C. Fred Fox, PhD

Robert P. Gunsalus, PhD

Rafael J. Martinez, PhD

James N. Miller, PhD

Jeffrey H. Miller, PhD

Sherie L. Morrison, PhD

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Larry Simpson, PhD

Ronald H. Stevens, PhD

Fuyuhiko Tamanoi, PhD

Christel H. Uittenbogaart, MD

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Felix O. Wettstein, PhD

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Associate Professors

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Beth A. Lazazzera, PhD

Lili Yang, PhD

Assistant Professors

Anthony J. Covarrubias, PhD

Oliver I. Fregoso, PhD

Melody Man Hing Li, PhD

Theodore S. Nowicki, MD, PhD, in Residence

Timothy E. O’Sullivan, PhD

Adjunct Associate Professor

Irmke Schroeder, PhD

Adjunct Assistant Professors

Andrey N. Damianov, PhD

Zulema Romero Garcia, PhD

Jing Wen, PhD

Overview

Microbiology at UCLA is a diverse science that includes bacteriology, virology, immunology, genetics, molecular biology, and the study of single cells. The science has its roots in the fundamental human needs of health, nutrition, and environmental control, and it provides students with opportunities for study in the basic biological fields of genetics and cellular and molecular biology.

Undergraduate Major

Microbiology, Immunology, and Molecular Genetics BS

Undergraduate students majoring in Microbiology, Immunology, and Molecular Genetics prepare for careers in biomedical research, medicine, dentistry, or other health professions, bio-
technology and genetic engineering, industrial microbiology, agricultural or environmental sciences, public health, and law or bioethics, among others. The courses presented by the department lead to a Bachelor of Science degree and depend heavily on preparation in the biological sciences, chemistry, physics, and mathematics.

Learning Outcomes

The Microbiology, Immunology, and Molecular Genetics major has the following learning outcomes:

- Demonstrated knowledge of key disciplinary concepts
- Address scientific questions or solve problems using quantitative, computational, and inquiry-related skills, including developing hypotheses, designing and performing experiments, analyzing data, and interpreting results
- Execution of database searches for scientific literature and bioinformatics data related to investigatory tasks
- Reading, analysis, and use of scientific papers in the development of research projects, in discussions with peers and mentors, and as evidence to substantiate conclusions in written assignments
- Effective written and oral communication skills
- Work effectively in individual and collaborative contexts
- Value research and its relevance to one's own life and society

Entry to the Major

Transfer Students

Transfer applicants to the Microbiology, Immunology, and Molecular Genetics major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general biology with laboratory for majors, preferably equivalent to Life Sciences 7A, 7B, and 7C; one year of calculus; one year of general chemistry with laboratory for majors; and one semester of organic chemistry with laboratory. A second semester of organic chemistry or one year of calculus-based physics is strongly recommended but not required for admission.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Students intending to major in Microbiology, Immunology, and Molecular Genetics may seek counseling and petition to enter the major in the Student Affairs Office, 1602B Molecular Sciences.

Requirements

Preparation for the Major

Life Sciences Core Curriculum


Physics 1A, 1B, 1C, 4AL, and 4BL, or 5A, 5B, and 5C.

The Major

Two plans are offered by the department.

Plan I—Research Immersion Laboratory

Required: Ten courses as follows: (1) Five foundation courses: Chemistry and Biochemistry 153A, 153B or Microbiology, Immunology, and Molecular Genetics 132, Life Sciences 107, Microbiology, Immunology, and Molecular Genetics 101, C185A, (2) two courses from one of the following groups: (a) Microbiology, Immunology, and Molecular Genetics 103AL and 103BL or (b) 108AL and 108BL, (3) two focus elective courses selected from Chemistry and Biochemistry 153L, Microbiology, Immunology, and Molecular Genetics 102, 105, 106, 107, 132, CM156, 158, 168, CM256, Molecular Cell, and Developmental Biology 138, 165A, and (4) one general elective course selected from any course under item 3 above, Bioengineering 100, CM145, CM178, Biostatistics 100A, Chemistry and Biochemistry 103, 110A, M117, 136, C140, 153B, 153C, 153L, 154, 156, CM160A, 171, C172, C181, Computer Science CM121, C122, CM124, Ecology and Evolutionary Biology 121, C135, 137, 162, Epidemiology 100, Human Genetics C144, Microbiology, Immunology, and Molecular Genetics C122, 174, C185B, 191H, 198C, 199 (may be taken once), Molecular, Cell, and Developmental Biology 100, 104AL, 138, C140, 141, 143, 144, 150, 165A, 168, 172, M175A, M175B, M175C, 187AL, Neuroscience M101A, M101B, M101C, Physiological Science 121, 124, 125, 128, Statistics 100A, 100B.

Plan II—Advanced Independent Research

Required: Twelve courses as follows: (1) five foundation courses: Chemistry and Biochemistry 153A, 153B or Microbiology, Immunology, and Molecular Genetics 132, Life Sciences 107, Microbiology, Immunology, and Molecular Genetics 101, C185A, (2) Microbiology, Immunology, and Molecular Genetics 196A, 196B or Molecular Cell, and Developmental Biology 196A, 196B, (3) Microbiology, Immunology, and Molecular Genetics 180A, 180B or Molecular Cell, and Developmental Biology 180A, 180B, (4) two focus elective courses selected from Chemistry and Biochemistry 153L, Microbiology, Immunology, and Molecular Genetics 102, 105, 106, 107, 132, CM156, 158, 168, CM256, Molecular Cell, and Developmental Biology 138, 165A, and (5) one general elective course selected from any course under item 3 above, Bioengineering 100, CM145, CM178, Biostatistics 100A, Chemistry and Biochemistry 103, 110A, M117, 136, C140, 153B, 153C, 156, CM160A, 171, C172, C181, Computer Science CM121, C122, CM124, Ecology and Evolutionary Biology 121, C135, 137, 162, Epidemiology 100, Human Genetics C144, Microbiology, Immunology, and Molecular Genetics 103AL, 103BL, 109AL, 109BL, C122, 174, C185B, 191H, 198C, 199, Molecular Cell, and Developmental Biology 100, 104AL, 138, M140, C141, 143, 144, C150, 165A, 168, 172, M175A, M175B, M175C, 187AL, Neuroscience M101A, M101B, M101C, Physiological Science 121, 124, 125, 128, Statistics 100A, 100B.

Honors Program

The core of the program consists of Microbiology, Immunology, and Molecular Genetics 198A, 198B, and 198C research, culminating in a thesis.

Policies

Preparation for the Major

Each core curriculum course must be passed with a grade of C– or better, and all courses must be completed with an overall grade-point average of 2.0 or better. Students receiving a grade of D or lower in two core curriculum courses, either in separate courses or repetitions of the same course, are subject to dismissal from the major.

The Major

Each major course must be taken for a letter grade of C– or better, and students must have a minimum overall grade-point average of 2.0 or better in the major. Students receiving a grade of D or below in two major courses, either in separate courses or repetitions of the same course, are subject to dismissal from the major.

Plan I

No more than 4 units of course 199 or a combination of 198C and 199 may be applied toward the general electives under Plan I.

Plan II

No more than 4 units of course 198C or 199 may be applied toward the general electives under Plan II.

Plan II requires submission and approval of an admissions application. Detailed information may be obtained at the Student Affairs Office, 1602B Molecular Sciences.

Honors Program

Overall grade-point averages of 3.2 and 3.5 in the preparation for the major and major respectively are required to apply for departmental honors. In addition students must have junior standing and the sponsorship of a faculty advisor from the department. If the thesis is accepted by the honors committee and students complete all major requirements with a GPA of at least 3.5, they are awarded the bachelor’s degree with departmental honors. The department also offers an honors seminar course each winter quarter that is required for the honors program. For more information, contact the Student Affairs Office, 1602B Molecular Sciences.

Graduate Major

Microbiology, Immunology, and Molecular Genetics MS, PhD

The graduate program emphasizes the areas of molecular genetics, cell biology, immunology, cell and virus structure and morphogenesis, animal virology, general bacteriology and physiology, host/parasite relationships, medical mi-
Microbiology, Immunology, and Molecular Genetics

Lower-Division Courses

5. Science of Memory and Learning. (4) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 3 or 7A, 7B, and 23L with grades of C– or better. Biological properties of bacterial and animal viruses, replication, methods of detection, interactions with host cells and multicellular hosts. Lecture grading.

10. Medical Microbiology for Nursing Students. (4) Lecture, three hours; discussion, one hour. Requisite: Life Sciences 3A or 3B or Mathematics 3A or 31A. Limited to nursing majors. Introduction to biology of microbial pathogens, their role in development of human immune response, and presentation of symptoms and disease caused by microbial infections. Letter grading.

15. Nanoscale Microscopy Laboratory Lecture, 26 hours; laboratory, nine hours. Recommended requisites: high school biology, chemistry, and physics. Described as one-week summer course for high school students. Expository introduction to three key microscopy techniques for nanoscience research: fluorescence microscopy, scanning probe microscopy, and electron microscopy. Nanoscale is a umbrella term that encompasses one diverse interdisciplinary branch of modern science research, including molecular sciences, biotechnology, material science, chemistry, biochemistry, and various fields of engineering. Offered in summer only. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor.

Microbiology, Immunology, and Molecular Genetics / 653

May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial. Supervised research work. Browsing hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100L. Microbiology Laboratory for Professional Schools. (3) Lecture, two hours; laboratory, four hours. Requisites: course 101, Life Sciences 3, 7A, 7B, and 23L with grades of C– or better. Recommended corequisite: course 101. Limited to nonmajors. Experimental techniques of microbiology, with emphasis on cultivation, identification, and physiology of bacteria. Laboratory exercises include light microscopy, quantitative techniques, and identification methods. Students learn to work effectively in groups to perform experiments, record observations, and analyze results. Letter grading.

101. Introductory Microbiology. (4) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 3 and 4, or 7A, 7B, and 23L. Historical foundations of microbiology, introduction to bacteriology, physiology, biochemistry, genetics, and ecology. Letter grading.

102. Introductory Virology. (4) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 3, or 7A, 7B, and 23L with grades of C– or better. Biological properties of bacterial and animal viruses, replication, methods of detection, interactions with host cells and multicellular hosts. Letter grading.

103AL. Research Immersion Laboratory in Virology. (8) Lecture, two and one half hours; laboratory, eight hours. Requisites: course 101, Life Sciences 3, 4, and 23L, or 7A, 7B, and 23L. Course 103AL is requisite to 103BL. Limited to Microbiology, Immunology, and Molecular Genetics majors. Research-oriented laboratory experience designed to promote discovery of novel viral pathogens. Working in teams, students conduct research projects that incorporate techniques in microbiology and molecular biology and involve use of bioinformatics tools and computational analysis software. Emphasis on reading and understanding scientific literature as well as improving critical thinking skills such as ability to evaluate hypotheses or experimentally address scientific questions. Critical aspects of research process, including record keeping, ethics, laboratory safety and citizen, mechanics of scientific writing, and project responsibilities and ownership. Letter grading.

103BL. Advanced Research Analysis in Virology. (4) Laboratory, six hours. Requisites: course 103AL, and Life Sciences 40 or Statistics 13. Limited to Microbiology, Immunology, and Molecular Genetics majors. Designed to provide students authentic, discovery-based research experience in life sciences. Investigation to be primarily computational in nature whereby students use bioinformatics or mathematical modeling software to interpret, expand, or refine datasets. Use of graphics software to prepare figures and illustrations for presentations, posters, and websites (database entries). Research accomplishments discussed in seminar-style meetings in which student groups create PowerPoint slides and formally present results to class. Production of team poster and final report describing entire research project required. P/NP grading.

C122. Mouse Molecular Genetics. (2) Seminar, two hours. Requisite: Life Sciences 4, or 7A, 7B, and 7C. Designed for students doing research with mice. During past 25 years, molecular revolution has greatly increased power and scope of mouse genetics, and today mouse is primary experimental model in virtually all fields of biology and biomedicine. Seminar forum for in-depth discussion of tools and technologies of mouse genetics and their application to functional genomics, complex traits, stem cell biology, developmental biology, epigenetics, and genetic dissection of diseases. Concurrently scheduled with course C222. P/NP or letter grading.

123. Advanced Annotation and Comparative Genomics. (4) Lecture, two and one half hours; computer laboratory, six hours. Requisite: course 103AL or Molecular, Cell, and Developmental Biology 187AL with grade of B– or better. Participation in discovery-
based research experience, working as research team to analyze microbial genomes using bioinformatics techniques involving variety of online databases. Investigating the role of drugs and structures as means to discover novel genes and unusual variations in classical systems. Results of high-quality annotation efforts may lead to publication in peer-reviewed science journal. Part of DOE Joint Genome Institute Undergraduate Research in Microbial Genome Education program. Offered in summer only. Letter grading.


C134. Ethics and Accountability in Biomedical Research. (2) Seminar, two hours. Designed for graduate students and undergraduates who have credit for life sciences or biomedical individual studies 199 course. Responsibilities: research, data management, mentorship, grant applications, and publications. Responsibilities to peers, sponsoring institutions, and society. Conflicts of interest, disclosure of benefits, rights and responsibilities, and areas in which investigational goals and certain societal values may conflict. Currently scheduled with course C234. P/NP grading.

CM156. Human Genomics and Biotechnology. (Same as Molecular, Cell, and Developmental Biology CM156.) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 3, 4, and 23L, or 7A, 7B, and 7C. Application of genetic principles in human populations, with emphasis on genomics, family studies, positional cloning, Mendelian and common diseases, cancer genetics, animal models, cytogenetics, pharmacogenetics, professional issues, and genetics and genomics. Letter grading.

158. Microbial Genomics. (4) Lecture, three hours; discussion, one hour. Requisites: course 101, Chemistry 153A. Evolution, biodiversity, and sequencing of genomes, microbial genomics, proteomics, and genome biology. Application of in-depth breadth and knowledge about student research projects, importance of oral and written communication skills, and full appreciation of process of doing good science and becoming skilled researchers. Letter grading.

180B. Scientific Analysis and Communication II. (2) Seminar, two hours. Enforced requisite: course 180A and Life Sciences 40 or Statistics 13. Enforced corequisite: course 180A or 198B. Students present seminar and discuss scientific articles, giving critical analysis of methods, results, and conclusions. How to communicate with presenters, including introductions, conclusions, and question periods. Letter grading.


C185B. Advanced Immunology and Applications. (2) Lecture, three hours; discussion, one hour. Requisites: Chemistry 153A; Life Sciences 3, 4, or 23L, or 7A, 7B, 7C, and 23L. Survey of parasitic protozoa not only as parasites that interact with host, but also as model systems for basic biological and biomedical phenomena such as gene regulation, molecular development, cell-cell interactions, molecular evolution, and new biochemical pathways. Letter grading.

170. Cell and Gene Therapy. (4) Lecture, three hours; one half hour: discussion, one hour. Requisites: Chemistry 153A, Life Sciences 107. State-of-art study of stem cells and gene therapy, and approaches to treat congenital/ genetic defects, diseases, or injuries in humans. Review of current knowledge of human stem cells and viral and non-viral gene delivery strategies, and how they can be safely evaluated in animal models of disease. Letter grade. Directed study of specific topics includes innovative mock company team pitches to venture capitalists to learn how to raise capital for their new inventions based on what they have learned. Letter grading.

174. Advanced Topics in Molecular Parasitology. (2) Lecture, two hours. Requisites: course 168, Life Sciences 3 and 4 or 7A, 7B, and 23L. Examination of recent advances in molecular biology of parasites and host/parasite relationship. Specific topics include parasite development, antigenic variation in trypanosomes, RNA editing, prospects for parasitic vaccines. Letter grading.

M178. Quantitative Regulatory Biology and Signal Transduction. (4) (Same as Computational and Systems Biology M178 and Physiological Science M178.) Lecture, two hours; laboratory, one hour. Requisites: Life Sciences 7A, 7B, 7C, 30A, 30B. Introduction to key biological regulatory circuit motifs and systems biology concepts that are critical to understanding how cellular responses are controlled. Letter grading.

180C. Scientific Analysis and Communication I. (2) Seminar, two hours. Enforced corequisite: course 196A or 196A. Students read and discuss scientific articles and give presentations, introducing research topics to student audience. Critical aspects of research process, including record keeping, ethics, laboratory safety and citizenry, mechanics of scientific writing, diverse approaches to research, and project responsibilities and ownership. Acquisition of in-depth breadth and knowledge about student research projects, importance of oral and written communication skills, and full appreciation of process of doing good science and becoming skilled researchers. Letter grading.

180D. Seminar in Microbial Parasitology. (4) Lecture, two hours. Enforced requisite: course 196B or 198A or 198C. Limited to senior microbiology, immunology, and molecular genetics honors program students. Discussion of current research literature, with focus on thesis topics/areas that students are working on as part of departmental honors requirements. One-hour presentation of student thesis research and current literature associated with it required. May be repeated for credit. Letter grading.

196A. Research Apprenticeship I in Microbiology, Immunology, and Molecular Genetics. (2) Seminar, two hours. Enforced prerequisite or corequisite: course 180A or 198A or 198B. Limited to senior microbiology, immunology, and molecular genetics honors program students. Discussion of current research literature, with focus on thesis topics/areas that students are working on as part of departmental honors requirements. One-hour presentation of student thesis research and current literature associated with it required. May be repeated for credit. Letter grading.

196B. Seminar in Microbial Parasitology. (2) Seminar, two hours. Enforced prerequisite or corequisite: course 196A or 198A. Limited to senior microbiology, immunology, and molecular genetics honors program students. Limited to graduate students. Honors content noted on transcript. P/NP or letter grading.

198A. Scientific Analysis and Communication I. (2) Seminar, two hours. Enforced requisite: course 180A or 198B or 198C. Limited to senior microbiology, immunology, and molecular genetics honors program students. Discussion of current research literature, with focus on thesis topics/areas that students are working on as part of departmental honors requirements. One-hour presentation of student thesis research and current literature associated with it required. May be repeated for credit. Letter grading.

198B. Scientific Analysis and Communication II. (2) Seminar, two hours. Enforced requisite: course 180A or 198B or 198C. Limited to senior microbiology, immunology, and molecular genetics honors program students. Discussion of current research literature, with focus on thesis topics/areas that students are working on as part of departmental honors requirements. One-hour presentation of student thesis research and current literature associated with it required. May be repeated for credit. Letter grading.

199. Honors Research Seminars. (2) Seminar, three hours. Limited to students in College Honors Program. Design for graduate student to opt to take upper division undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

199HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Design for graduate student to opt to take upper division undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191H. Honors Research Seminars: Microbiology, Immunology, and Molecular Genetics. (2) Seminar, two hours. Requisite: course 191 or 191A or 191B or 198A or 198B or 198C. Limited to senior microbiology, immunology, and molecular genetics honors program students. Discussion of current research literature, with focus on thesis topics/areas that students are working on as part of departmental honors requirements. One-hour presentation of student thesis research and current literature associated with it required. May be repeated for credit. Letter grading.

192. Undergraduate Practicum in Microbiology, Immunology, and Molecular Genetics. (2) Seminar, six hours. Limited to junior/senior departmental majors. Training and supervised practicum for advanced undergraduate students. Students assist in preparation of materials and development of innovative programs under guidance of faculty members in small course settings. Consult Student Affairs Office for further information. May not be applied toward course requirements for departmental majors. May be repeated for credit. P/NP or letter grading.

193A. Journal Club Seminars: Microbiology, Immunology, and Molecular Genetics. (1) Seminar, one hour. Limited to undergraduate students. Discussion of readings selected from current literature in microbiology, immunology, and molecular genetics field. P/NP or letter grading.

193B. Journal Club Seminars: Microbiology, Immunology, and Molecular Genetics. (1) Seminar, one hour. Limited to undergraduate students. Discussion of readings selected from current literature in microbiology, immunology, and molecular genetics field. P/NP or letter grading.

194A. Research Group Seminars: Microbiology, Immunology, and Molecular Genetics. (1) Seminar, one hour. Limited for undergraduate students who are part of research group in department faculty laboratory. Discussion of research methods and current literature in field or of research of faculty members or student research groups. Letter grading.

194B. Research Group Seminars: UC LEADS and NIH/MARC. (2) Seminar, two hours. Limited to students in UC LEADS and NIH/MARC programs. Analysis, review, and critique of current papers in biomedical sciences disciplines, using skills necessary for effective oral communication and effective use of software such as PowerPoint for oral presentations. May be repeated for credit. Letter grading.

196A. Research Apprenticeship I in Microbiology, Immunology, and Molecular Genetics. (2) Tutorial, 12 hours. Requisites: Life Sciences 3, 4, or 7A, 7B, or 23L, or 30A, 30B, 30C, or 30D, 30E. Enforced prerequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topics, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

1885C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 1885B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

C222. Mouse Molecular Genetics. (2) Tutorial, 12 hours. Enforced prerequisite: course 196A. Enforced corequisite: course 180B. Expansion of scope, increasing depth, and implementation of independence in research to be performed in same laboratory as course 180A for formal training and implementation of goals stated previously. Technical aspects vary depending on specific laboratory; however, all students use scientific method learned in course 196A and continue same experimental scope proposed, but with additional degree of independence in technical and intellectual aspects of research. Letter grading.

196B. Research Apprenticeship II in Microbiology, Immunology, and Molecular Genetics. (4) Tutorial, four hours. Limited to individual intensive study with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

198A-198B-198C. Honors Research in Microbiology, Immunology, and Molecular Genetics. (4-4-4) Tutorial, 12 hours. Course 198A is requisite to 198B, which is requisite to 198C. Limited to junior/senior microbiology, immunology, and molecular genetics honors program students. Directed individual research for departmental credit. Students must have a faculty sponsor. Progress report must be submitted to faculty sponsor at end of each of first two terms, with honors thesis submitted at end of final term. Maximum of 8 units may be applied toward B.S. degree. Individual contract required. Letter grading.

199. Directed Research in Microbiology, Immunology, and Molecular Genetics. (4) Tutorial, 12 hours. Preparation: minimum 2.5 grade-point average in major and major. Supervised individual research project under guidance of departmental faculty mentor. Copy of report describing research must be filed with student Affairs Office by end of term. May be repeated for credit. Individual contract required. Letter grading.

Graduate Courses

C222. Mouse Molecular Genetics. (2) Seminar, two hours. Requirement: Life Sciences 4, or 7A, 7B, and 7C. Designed for students doing research with mice. During past 25 years, molecular revolution has greatly increased power and scope of mouse genetics, and today mouse is primary experimental model in virtually all fields of biology and biomedicine. Seminar forum for in-depth discussion of tools and technologies of mouse genetics and their application to functional genomics, complex traits, stem cell biology, development, organogenesis, cancer genetics, and genetic dissection of diseases. Concurrently scheduled with course C212, S/U or letter grading.

M229. Molecular Mechanisms of Host/Pathogen Interaction. (4) (Same as Pathology M229) Lecture, two hours; Lab, three hours. Enforced prerequisites: Molecular Biology 254A through 254D. Molecular mechanisms of microbial interactions with eukaryotic host cells that result in disease or pathogen survival. Topics include: interaction of common viruses, bacteria, fungi, and parasites, basis of toxin-mediated cellular damage, and immune suppression of microbial tissue damage. Letter grading.

C234. Ethics and Accountability in Biomedical Research. (2) Seminar, two hours. Designed for graduate students and undergraduates who have credit for life sciences or biomedical individual studies 199 course. Responsibilities and ethical conduct of investigators in research, data management, mentorship, grant appli- cations, and publications. Responsibilities to peers, sponsoring institutions, and society. Conflicts of interest, disclosure, animal subject welfare, human subject protection, in-depth discussion of tools and technologies of mouse genetics and methodologies appropriate to answer such questions. Concurrently scheduled with course CM156. Independent research project required of graduate students. Letter grading.

261. Molecular and Cellular Immunology. (4) Lecture, four hours. Strongly recommended requisites: Molecular Biology 254A through 254D. Limited to graduate students. Comprehensive course for graduate students interested in cellular and molecular aspects of immunity and inflammation and in the immune response. Topics will include immune system biology and function, immune cell phenotypes, and their role in normal immune responses as well as in allergy, infection, inflammation, and cancer. Letter grading.

261A-261B. Seminars: Current Topics in Immunology of Cancer. (2–2) Seminar, one hour per week for 16 weeks. Designed for graduate students (or undergraduate students with consent of instructor). Review of recent developments in tumor immunology, oncology, and genomics, gene expression, and promoter interaction. (Same as Pathology M229.) Letter grading.

C283. Immunology. (3) Lecture, three hours; discussion, 90 minutes. Requirement: Chemistry 153A, Life Sciences 3, 4, and 23L, or 7A, 7B, 7C, and 23L. Not open for credit to students with credit for course 261. Comprehensive study of experimental immunobiology and immunochemistry; cellular and molecular aspects of humoral and cellular immune reactions. Concurrently scheduled with course C185A. Letter grading.

C185B. Advanced Immunology and Applications. (2) Lecture, 90 minutes. Preparation: one course in immunology. Covers similarities and differences between host immune reactions to bacterial and viral infections, and malignancies. Basic concepts and principles of tumor specific antigens, and new techniques. Discussion of reports on scientific meetings. Each course may be repeated for credit. S/U or letter grading.


296. Seminar. Research Topics in Microbiology, Immunology, and Molecular Genetics. (1 to 4) Seminar, two hours; research group meeting, one hour. Limited to departmental graduate students. Advanced study and analysis of current topics in microbiology, immunology, and molecular genetics. Discussion of current research and literature in research specialty of faculty member teaching course. S/U grading.

298. Current Topics in Microbiology, Immunology, and Molecular Genetics. (2) Seminar, two hours. Preparation: student oral critiques and participation in discussions on assigned topics. May be repeated for credit. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495A. Preparation for Teaching Microbiology in Higher Education I. (2) Seminar, two hours. Designed for graduate students. Study of problems and methodologies in teaching microbiology, including work shops, seminars, apprentice teaching, and peer observation. S/U grading.

495B. Preparation for Teaching Microbiology in Higher Education II. (1) Seminar, one hour. Requisite or corequisite: course 495A. Designed for first-time teaching assistants and to be taken in term in which they teach. In odd weeks, discussion of developments in student classes, with instruction on digital pedagogy and evaluation of student teaching. In even weeks, participation in online discussion forum case studies. S/U grading.


Students may select a branch of the Army in which to be commissioned from 16 specialty fields, including military intelligence, aviation, signal communications, finance, logistics, nursing, and engineering. Prior to completion of the ROTC program, students may request to go on active duty or serve part-time in the Army Reserve or National Guard.

Undergraduate Study

Students aspiring to become Army officers follow prescribed course sequences with the Military Science Department and a physical fitness program. Generally, the courses consist of one 2- to 4-unit course per term and physical fitness sessions one to three times per week, depending on the participation-level requirements.

The military science curriculum is divided into two parts: (1) the Basic Course, two years of lower-division study during which students must complete six military science courses and (2) the Advanced Course, two years of upper-division study consisting of six military science courses, one military history course, and a five-week summer camp.

Army ROTC students must satisfy the military history requirement by completing Military Science 110 or another history course approved by the chair.

Transfer students and others who were unable to enroll in the Basic Course can receive equivalent credit in several different ways (see Two-Year Program below).

Admission to the Advanced Course is limited to selected students who meet all academic and physical requirements. Students in this course receive a subsistence allowance of $420 per month for 10 months during each of the two academic years, plus military science uniforms. After completion of the Advanced Course and graduation, students have the opportunity to be commissioned as second lieutenants in one of the Army’s 16 specialty areas in either the Army National Guard, Reserves, or Active Army. Students’ preferences are a major factor in determining which specialty is awarded.

Students selected for Advanced ROTC must attend a five-week leadership development and assessment course between their Military Science III and IV years. Cadets receive an allowance for travel expenses and are paid for attendance.

The active duty obligation for those students selected to enter the Reserves or National Guard is for initial training, and only for a period of several months. The active duty obligation for those students commissioned into the Active Army is three years. Students who accept ROTC scholarships and enter the Active Army serve one additional year. ROTC students wishing to obtain certain advanced degrees may be granted a delay in reporting to their initial assignment.

Four-Year Program

Students are enrolled in the Basic Course (freshman and sophomore years) on a voluntary basis. After completion of the Basic Course and before entrance into the Advanced Course (junior and senior years), students are required to execute a contract with the Department of the Army agreeing to complete the Advanced Course and accept a commission if offered.

Two-Year Program

The two-year program is designed for students who receive placement credit for two years of ROTC and directly enter the Advanced Course. Placement credit may be given for completing three years of high school Junior ROTC, attending a paid ROTC Leader’s Training Course, membership in the Army Reserves or National Guard, completing two years of college-level Air Force or Navy ROTC, or previous active duty military service. The Army also allows enrollment in the two-year program while students attend graduate school.

Commissioning

Successful completion of the Advanced Course program and a bachelor’s degree may lead to a commission as a second lieutenant in the Army Reserves, National Guard, or Active Army.

Military Science

Lower-Division Courses

2. Leadership Laboratory. (No credit) Laboratory, three hours (lower-division cadets) or four hours (upper-division cadets). All cadets must be concurrently enrolled in a military science course; upper-division cadets must also be under a contract obligation with department. Designed to allow cadets to apply leadership techniques and military skills taught in classroom and to develop their confidence as future military officers. No grading.

11. Foundations of Officership. (2) Lecture, one hour. Introduction to issues and competencies that are central to commissioned officer’s responsibilities. Framework established to understand officership, leadership, military customs, briefings, and life skills such as physical fitness, nutrition, and time management. P/NP or letter grading.

12. Basic Military Leadership. (2) Lecture, one hour. Requisite: course 11. Introduction to fundamentals of leadership, Army leadership values, ethics, and counseling techniques. Foundation of basic leadership fundamentals central to commissioned officer’s responsibilities established. P/NP or letter grading.


19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

21. Individual Leadership Development. (3) Lecture, two hours. Introduction to various individual leadership personality types, in combined lecture, discussion, and experiential learning, to assist students in development of their own individual leadership style. Additional emphasis on military factors and principles of leadership, goal setting, basic communication, and consideration of others. P/NP or letter grading.

22. Leadership Development and Military Planning. (3) Lecture, two hours. Requisite: course 21. Discussion of various methods of communication, planning, and decision making, through combined lecture, discussion, and experiential learning, with focus on written communication and group communication es-
sential for leadership development. Introduction to and application of military planning process in developing operations orders. P/NP or letter grading.

23. Subordinate Development and Army Organization. (2) Lecture, two hours; laboratory, four hours. Examination of process through which subordinate development, through combined lecture, discussion, and experiential learning, with additional focus on commissioned officer, branches, and Army organization. Application of counseling techniques, motivation, and consideration of ethics and values for modern leaders. P/NP or letter grading.

Upper-Division Courses

110. U.S. Military History. (3) Lecture; three hours; discussion, one hour. Survey of American military history from 1860 to the present. Causes of war, strategy, tactics, and technological developments set against economic, political, and diplomatic concerns. Impact of warfare on society.

131. Tactical Planning and Analysis. (4) Lecture, three hours; laboratory, four hours. Introduction to leadership development process used to evaluate military leadership performance. Examination of how to conduct individual and small unit training as well as introduction to basic principles of tactics. Emphasis on study of reasoning skills, troop leading procedures, and military orders process. P/NP or letter grading.

132. Army Officerhood and Communication. (4) Lecture, three hours; laboratory, four hours. Examination of officerhood that culminates in detailed case study. Interpersonal communication, with focus on general communication theory as well as written and spoken communication skills. Presentation of information briefing to receive feedback from both instructor and fellow students. P/NP or letter grading.

133. Leadership and Problem Solving. (4) Lecture, three hours; laboratory, four hours. Examination of role communications, values, and ethics play in effective leadership, including ethical decision making, consideration of others, transactional and transformational leadership, and survey of Army leadership doctrine. Emphasis on improving oral and written communication abilities and leadership development and assessment. P/NP or letter grading.

141. Leadership and Management. (4) Lecture, three hours; laboratory, four hours. Interactive course to develop student proficiency in planning and executing complex training operations. Counseling techniques and development of skills needed to lead various organizations. Exploration of training management, leadership skills, and developmental counseling techniques. P/NP or letter grading.

142. Leadership, Ethics, and Military Law. (4) Lecture, three hours; laboratory, four hours. Interactive course to enhance student understanding of organizational culture, leadership, and ethics. Understanding and enhancement of leader-member relations, assessment of organizational culture and ethical climate, and how to effect change in organizations. Exploration of foundations of military law and law of war. P/NP or letter grading.

143. Officerhood: Professional Military Leadership. (4) Lecture, three hours; laboratory, four hours. Capstone curricula leadership course to prepare students for challenges of being commissioned officers in U.S. Army by discussing various leadership challenges and case studies. Study of military units, with specific emphasis on joint operations involving Army, Navy, Air Force, and Marine Corps assets, military operations other than war, and global war on terror. Other topics include personnel administration, maintenance management, and financial planning. P/NP or letter grading.


188BSC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88SB. Individual contract with faculty mentor required. May not be repeated. Letter grading.

197. Individual Studies in Military Science. (2 to 4) Tutorial, four hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Molecular and Medical Pharmacology

David Geffen School of Medicine

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Department e-mail

Stephen C. Cannon, MD, PhD, Interim Chair
Johannes Czernin, MD, Vice Chair, Ahmanson Translational Imaging Division
R. Michael van Dam, PhD, Vice Chair, Crump Institute
Lily Wu, MD, PhD Vice Chair, Equity, Diversity, and Inclusion
Ting-Ting Wu, PhD, Vice Chair, Education

Faculty Roster

Professors

Steven J. Bensinger, VMD, PhD (Sherie and Donald Morrison Professor of Immunology)
Dale E. Bredesen, MD, in Residence
Samson A. Chow, PhD
Timothy F. Cloughey, MD
Johannes Czernin, MD
Magnus Dahlbom, PhD, in Residence
Timothy R. Donahue, MD (Gary Shandling Professor of Pancreatic Surgery)
Steven M. Dubinett, MD
James S. Economou, MD, PhD (Louis D. Beaumont Professor of Surgery)
Frederick (Fritz) C. Eibler, MD
Thomas G. Graeber, PhD
Ming Guo, MD, PhD (Laurie and Steven C. Gordon Professor of Neurosciences)
Anion F. Hadjioannou, PhD
Jing Huang, PhD

Michael E. Jung, PhD (Walter and Shirley Wang Endowed Professor of Medicinal Drug Discovery)
Daniel L. Kaufman, PhD
Donald B. Kohn, MD
Harley I. Kornblum, MD, PhD, in Residence
Paul A. Krogtad, MD, PhD
Raphael D. Levine, PhD
Linda M. Liu, MD, MBA, PhD (W. Eugene Stern Professor of Neurosurgery)
Gerald S. Lipshtutz, MD, in Residence (Joan S. and Ralph N. Goldwyn Endowed Professor of Immunobiology and Transplantation Research)
Roger S. Lo, MD, PhD
Eydythe D. London, PhD, in Residence (Thomas P. and Katherine K. Pike Professor of Addictive Studies)
John C. Marron, MD, PhD
Robert M. Prins, PhD
Caius G. Radu, MD
Srinivasa T. Reddy, PhD, in Residence
Antoni Ribas, MD
Oriam Shirihai, MD, PhD
Desmond J. Smith, MD, PhD
Hsian-Rong Tseng, PhD
R. Michael van Dam, PhD
Owen N. Witte, MD (University Professor, President’s Professor of Developmental Immunology)
Lily Wu, MD, PhD
Xia Yang, PhD

Professors Emeriti

Jorge R. Barrio, PhD
Arthur K. Cho, PhD
Cameron B. Gundersen, PhD
Sherrel G. Howard, PhD
Sung-Cheng (Henry) Huang, DSc
Louis J. Ignarro, PhD (Nobel laureate, Jerome J. Belzer Professor Emeritus of Medical Research)
William P. Melega, PhD
Richard W. Olsen, PhD
Nagichettiar Satyamurthy, PhD
Heinrich R. Schelbert, MD, PhD
Ren Sun, PhD
Anna M. Wu, PhD

Associate Professors

Vatche G. Agopian, MD, in Residence
Heather R. Christofk, PhD
Peter M. Clark, PhD
Huifying Li, PhD
Jennifer M. Murphy, PhD
David A. Nathanson, PhD
S. Saman Sadeghi, PhD, in Residence
Tanya I. Stoyanova, PhD
Ting-Ting Wu, PhD, in Residence

Assistant Professors

Ajit S. Divakaruni, PhD
Tikvah K. Hayes, PhD
Oluwatayo Ikotun, PhD
Tarae T. Slaa, PhD
Hans David S. Ulmert, MD, PhD, in Residence

Adjunct Professors

Vathilingara Arumugaswami, PhD
Robert D. Daroioseaux, PhD

Adjunct Associate Professors

Linsey Stiles, PhD
Graduate Major
Molecular and Medical Pharmacology MS, PhD

The Department of Molecular and Medical Pharmacology offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Molecular and Medical Pharmacology, but does not admit applicants who seek only an MS degree.

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Molecular and Medical Pharmacology

Lower-Division Courses

19. Fiat Lux Freshman Seminars, (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

98. Student Research Program, (1 to 3) Tutorial, supervised research or other scholarly work, three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

194. Group Seminars and Discussions: Cross-Disciplinary Scholars in Science and Technology Project, (1) Seminar, two hours; discussion, two hours. Limited to Cross-Disciplinary Scholars in Science and Technology (CSST) students. Communication and collaboration skills, specifically in interdisciplinary settings and introduction to research project design and proposal process. Students submit written CSST project proposal and give oral presentations of scientific proposals. May be repeated for credit. Letter grading.

199. Directed Research in Molecular and Medical Pharmacology, (2 to 8) Tutorial, three hours per week per unit. Limited to juniors/seniors, supervised individual research under guidance of faculty mentor. Special studies in pharmacology, including either reading assignments or laboratory work or both, designed for proper training of students. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200. Introduction to Laboratory Research, (8) Laboratory, eight to 20 hours. Individual projects in laboratory research for beginning graduate students. At end of each term students submit to their supervisor reports covering research performed. Pharmacology graduate students must take this course three times during their first two years in residence. Letter grading.

M205A. Introduction to Chemistry of Biology, (4) (Same as Chemistry CM205A.) Lecture, three hours; discussion, one hour. Introduction to chemical biology. Topics include computational chemical biology, utility of synthesis in biochemical research, peptidomimetics, designed reagents for cellular imaging, natural product biosynthesis, protein engineering and directed evolution, cell biology of metal ions, imaging metal ions in cells, metal-containing drugs. Letter grading.

M205B. Issues on Chemistry/Biology Interface, (2) (Same as Chemistry CM205B.) Seminar, one hour. Required: course M205A. Selected talks and papers presented by faculty on solving problems and utilizing tools in chemistry and molecular biology on chemistry/biology interface (CBI). S/U grading.

237. Research Frontiers in Cellular and Molecular Pharmacology, (6) Lecture, six hours; laboratory, five hours total. Detailed examination of principles of pharmacology and mechanisms of drug action on organel, tissue, cellular, and molecular levels, with emphasis on receptors, receptor/effector coupling, neurotransmitters, cardiovascular pharmacology, autonomic and central nervous system pharmacology. Letter grading.

M248. Introduction to Molecular Imaging, (4) (Same as Bioengineering IM248 and Physics and Biology in Medicine M248.) Lecture, three hours; laboratory, one hour; outside study, seven hours. Exploration of role of molecular imaging in modern biology and medicine, including imaging physics, instrumentation, image processing, and applications of imaging for range of modalities. Practical experience provided through series of imaging laboratories. Letter grading.

251. Seminar: Pharmacology, (2) Seminar, two hours. Required of all first- and second-year students. Presentation and discussion of graduate student research progress. Letter grading.

M257. Introduction to Toxicology, (4) (Same as Pathology M257.) Required: course M241. Biochemical and systemic toxicology, basic mechanisms of toxicology, and interaction of toxic agents with specific organ systems. S/U or letter grading.

M258. Pathologic Changes in Toxicology, (4) (Same as Pathology M258.) Designed to give students experience in learning normal histology and identification of major targets of toxin and the range of pathologic changes that occur in these tissues (liver, bladder, lung, kidney, nervous system, and vascular system). S/U or letter grading.

266. Business of Science: Exploring Entrepreneurship Seminar, (1) Seminar, one hour. Limited to graduate students. Further exploration of topics discussed in course 287, allowing students to interact with speakers and bring their individual concerns to table. Past and present students encouraged to enroll. S/U grading.

287. Business of Science, (2) Lecture, two hours. Designed graduate students. Undergraduate students may enroll with consent of instructor. Introduction to principles of business and entrepreneurship in technology sectors. Basic business skills taught to effectively perform in commercial environment and within academic environment. Application of course material by performing feasibility studies that have potential to receive funding and become actual companies. Exploration of entrepreneurship, particularly formation and operation of new business ventures. Presentations by and questioning of successful technology entrepreneurs, identifying and evaluating new venture opportunities, development of financing, and entry and exit strategies. S/U or letter grading.

288. Gene Therapy, (4) Lecture, three hours; discussion, one hour. Introduction to basic concepts of gene therapy, wherein treatment of human disease is based on transfer of genetic material into an individual. Discussion of molecular basis of disease, gene delivery vectors, and animal models. Letter grading.

291. Special Topics in Pharmacology, (4) Lecture, four hours. Examination of current importance in pharmacology. Emphasis on recent contributions of special interest to advanced PhD candidates and faculty. Letter grading.

292. Research Projects, Proposals, and Presentations, (8) Lecture, four hours; discussion, four hours. Limited to departmental majors. Introduction to format and requirements of research proposals, so students can critically read primary papers and give formal scientific presentations, ask new questions, formulate

Institutes and Centers

Overview
The Department of Molecular and Medical Pharmacology offers an opportunity for gifted students to work with accomplished faculty members toward making novel discoveries in basic and clinical research.

Departmental research interests span a broad range of studies by integrating biological, physical, engineering, and medical sciences to explore mechanisms of disease in biological systems from in silico through a single cell to the whole organism level, while encompassing patient studies. Faculty members strive to understand basic biological systems and disease states and, where appropriate, to use these observations to develop both new molecular diagnostic technologies and new molecular therapeutics.

Graduate Study

The department also offers two MD/PhD programs concurrently with the Geffen School of Medicine. One is the Medical Scientist Training Program (MSTP) in which candidates are medical students that have been accepted into MSTP by the School of Medicine in order to qualify. The second is the Specialty Training and Advanced Research (STAR) program in which candidates are post-MD house-staff (interns, residents, or fellows) who have been accepted into the STAR Program by its selection committee in order to qualify.

The department, together with the Division of Laboratory Animal Medicine, offers PhD or postdoctoral training combined with residency training for veterinarians (with DVM or DVM/PhD degrees) in the Veterinary Investigator in Scientific Training and Advancement (VISTA) program.

Note: There is no degree program in pharmacy at UCLA.

Institutes and Centers

With the department as home to the Crump Institute for Molecular Imaging; and the Ahmanson Translational Imaging Division—with its nuclear medicine and positron emission tomography (PET) imaging research and clinical service—students have access to state-of-the-art science and technology, and the opportunity to make a direct impact on patient care. In addition, the department is home to the Business of Science Center. This program supplies education, experience, and industry mentorship to graduate students in the department and in other academic programs to prepare them for professional careers.
new hypotheses, and construct research projects, under-stand balance of importance, novelty, and feasibility, and develop ability to think independently, creatively, and comprehensively. Letter grading.  


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Faculty Committee  
Hilary A. Coller, PhD (Molecular, Cell, and Developmental Biology)  
Feng Guo, PhD (Biological Chemistry)  
Elissa A. Hallerm, PhD (Microbiology, Immunology, and Molecular Genetics)  
Alvaro Sagasti, PhD (Molecular, Cell, and Developmental Biology)  
Thomas A. Vailim, PhD (Biological Chemistry, Medicine-Cardiology)  

Overview  
The Doctor of Philosophy (PhD) in Molecular Biology is offered under the supervision of an interdepartmental committee. The Molecular Biology Institute serves this committee and the various departments concerned in support of faculty research and teaching associated with the PhD program. Staff members are from participating departments and from the Molecular Biology Institute. Areas for study include cell biology, developmental biology and neurobiology, nucleic acid biochemistry, gene regulation, immunobiology, microbiology/virology and pathogenesis, molecular evolution and paleobiology, oncogenes and signal transduction, plant molecular biology, protein and enzyme structure and function, genomics, bioinformat-ics, and structural biology.  

Graduate Major  
Molecular Biology MS, PhD  
Requirements  
Official, specific degree requirements are de-tailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more de-tailed guidelines may be outlined in announce-ments, other publications, and websites of the schools, departments, and programs.  

Molecular Biology  
Lower-Division Courses  
19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.  

99. Student Research Program. (1 to 2) Tutorial (su-pervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-divi-sion students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.  

Graduate Courses  
M202. Advanced Topics in Cryogenic Electron Mi-croscopy. (3) (Same as Biological Chemistry M202.) Lecture, two hours; discussion, one hour. Students master advanced topics in membrane protein biology, and learn both theory and practice of cryogenic electron microscopy (cryo-EM) as emerging technology in structural biology. Cryo-EM methodologies covered include cryotomography, single particle reconstruc-tion, electron crystallography, and microcrystal elec-tron diffraction. Letter grading.  

235. Rigor and Reproducibility. (2) Lecture, one hour; discussion, one hour. Two cornerstones of science advancement are rigor in designing and performing sci-entific research and ability to reproduce biomedical re-search findings. Applications of rigor ensure robust and unbiased experimental design, methodology, analysis, interpretation, and reporting of results. When results can be reproduced by multiple scientists, it val-idates original results and readiness to progress to next phase of research. Scientific rigor is strict appli-cation of scientific method to ensure unbiased and wel-controlled experimental design, methodology, analysis, interpretation, and reporting of results. Covers literature and videos on rigor and reproducibility in biomedical research. Discussion of issues raised by lecture, or case-studies, with training pro-gram faculty. Students learn that reproducibility is a common problem in biomedical research and how to improve it. S/U grading.  

252. Writing for Science (1) Seminar, one hour. Core-quisite: Biological Chemistry 251A or 251B or 251C. Limited to first-year Molecular Biology PhD students. Development of specific skills in scientific writing within context of one advanced course on mechanics of gene transcription. Letter grading.  

254A. Concepts in Molecular Biosciences. (3) Lecture, three hours; discussion, two hours. Limited to human genetics and molecular biology graduate stu-dents. Five-week course covering four basic experi-mental approaches of biochemistry and molecular bi-ology in context of various specific topics, including (1) structural biology, with protein and nucleic acid structure and molecular recognition, (2) use of cell-free and purified in vitro systems to dissect reaction mech-anism, (3) biochemical approaches to dissecting complex reactions/pathways in cells, and (4) enzy-mology and protein chemistry. Letter grading.  

254B. Concepts in Molecular Biosciences. (3) Five-week course. Lecture, three hours; discussion, two hours. Enforced requisite: course 254A. Important bio-logical problems that have been genetically analyzed in different organisms or small number of related prob-lems. Major genetic approaches used in relevant or-ganisms, including both forward and reverse genetic approaches, genetic interactions between genes (ge-netic enhancers and suppressors), transgenic tech-nology, and systematic genomic strategies. Letter grading.  

254C. Concepts in Molecular Biosciences. (3) Five-week course. Lecture, three hours; discussion, two hours. Enforced requisites: courses 254A, 254B. Mo-lecular mechanisms underlying complex problems in cell biology. Experimental approaches used to define mechanisms involved in protein targeting, cell struc-ture and subcellular organization, cell communication, and intracellular signaling. Analysis of pathways that connect these cellular processes. Letter grading.  

254D. Concepts in Molecular Biosciences. (3) Five-week course. Lecture, three hours; discussion, two hours. Enforced requisites: courses 254A, 254B, 254C. Application of biochemical, molecular biological, genetic, and cell biological approaches to under-stand specialized topics in life and biomedical sci-ences, including developmental disease, stem cell bi-ology, synaptic transmission in nervous system, cancer, and heart disease. Letter grading.  

255. Scientific Writing. (3) Lecture, two hours; discus-sion, one hour. Limited to first-year Molecular Biology PhD students. Improvement of academic literacy through development of specific skills in scientific writing. Review of principles of effective writing using practical examples and exercises. Topics include prin-ciples of good writing, tricks for writing faster and with less anxiety, format of scientific manuscripts, art of editing, and issues in publication and peer review. Letter grading.  

256. Current Topics in Molecular Biology. (2) Student presentation/seminar, two hours. Students present oral critiques and participate in discussions on as-signed topics. S/U grading.  

300. Entering Mentoring Training Program. (1) Sem-inar/discussion, 90 minutes. Limited to 25 graduate students. Offers formal training on effective mentoring of undergraduate students in science laboratories. Pri-ority given to those who either have prior experience as mentor or are currently mentoring undergraduates; however, all are encouraged. Exploration of mentoring strategies through lecture, collaborative learning, and case studies. Topics include maintaining effective communication, aligning expectations, addressing eq-uity and inclusion, fostering independence, cultivating ethical behavior, and articulating mentoring philos-ophy. S/U grading.  


596. Directed Individual Studies. (2 to 12) Tutorial, to be arranged. Directed individual research or study. May be repeated for maximum of 12 units. S/U grading.  

599. PhD Dissertation Research and Writing. (2 to 12) Tutorial, to be arranged. Directed individual studies for students who have advanced to candidacy. May be repeated for maximum of 12 units. S/U grading.
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Faculty Roster

Professors
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Utpal Banerjee, PhD (Irving and Jean Stone Professor)
Jau-Nian Chen, PhD
Amanda T. Clark, PhD
Hanna K.A. Mikkola, MD, PhD
Karen M. Lyons, PhD
William E. Lowry, PhD
Jeffrey A. Long, PhD
Tracy L. Johnson, PhD
Steven E. Jacobsen, PhD
Volker Hartenstein, PhD
Robert B. Goldberg, PhD
Daniel H. Cohn, PhD
Amander T. Clark, PhD
Jesse R. Zamudio, PhD
Amjad Askary, PhD
Andrew S. Goldstein, PhD
Siobhan A. Braybrook, PhD
Winston A. Salser, PhD
Paul H. O’Lague, PhD
Frank A. Laski, PhD
James A. Lake, PhD
Harumi Kasamatsu, PhD
Atsushi Nakano, MD, PhD
Hanna K.A. Mikkola, MD, PhD
Thomas A. Rando, MD, PhD
Karen E. Sears, PhD

Professors Emeriti
William R. Clark, PhD
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Harumi Kasamatsu, PhD
James A. Lake, PhD
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Elaine M. Tobin, PhD

Associate Professors
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Andrew S. Goldstein, PhD

Assistant Professors
Amjad Askary, PhD
Jesse R. Zamudio, PhD

Lecturers
Katie J. Gallagher, PhD
Pei-Yun Lee, PhD

Adjunct Professors
M. Luisa Iruea-Aríspe, PhD
D. Leanne Jones, PhD

Adjunct Assistant Professor
Ira E. Clark, PhD

Overview
The revolution in modern biology that began with the elucidation of the structure of DNA by Watson and Crick in the 1950s has had a profound effect not only on biological research, but on the way biology is taught as a subject. The field of biology spawned by this discovery, generally called molecular biology, has provided an entirely new framework within which to approach questions in cell and developmental biology. The specializations, both technical and conceptual, demanded by this field have led to the growth of molecular biology and its related disciplines into an essentially separate branch of scientific inquiry.

Students who complete the requirements for the Bachelor of Science (BS) degree in the Department of Molecular, Cell, and Developmental Biology are exceptionally well prepared to pursue careers in cellular and subcellular biological research, biomedical research, or medicine or allied health fields. The degree combines essential background studies in mathematics, chemistry, and physics with a general introduction to all of the biological subjects, as well as an-depth exposure to key topics in molecular, cell, and developmental biology. The PhD degree offers opportunity for advanced concentrated study and requires independent and innovative research that ultimately results in publishable dissertation materials.

Undergraduate Major

Molecular, Cell, and Developmental Biology BS

The Bachelor of Science degree in Molecular, Cell, and Developmental Biology (MCDB) is designed especially for students who intend to go on to postgraduate work in biology or medicine and for students aiming for entry-level positions in biotechnology-related fields. Students are exposed to basic biological and molecular concepts underlying recent technical advances in molecular, cell, and developmental biology of animals and plants. Areas of emphasis include cell biology, immunology, molecular biology, plant biology, developmental biology, and neurobiology, among others.

Learning Outcomes
The Molecular, Cell, and Developmental Biology major has the following learning outcomes:

• Broad knowledge of the fundamental tenets of molecular, cell, and developmental processes
• Through use of the scientific method, demonstrated ability to test questions and solve problems using quantitative and inquiry-related skills
• Demonstrated ability to ask questions about primary scientific literature within the discipline
• Demonstrated analytical skills to evaluate primary scientific literature within the discipline
• Effective written and oral communication of laboratory findings
• Demonstrated appropriate awareness of issues associated with responsible conduct of research

Entry to the Major

Transfer Students
Transfer applicants to the Molecular, Cell, and Developmental Biology major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general biology with laboratory for majors, preferably equivalent to Life Sciences 7A, 7B, 7C, one year of calculus, one year of general chemistry with laboratory for majors, and one semester of organic chemistry with laboratory. A second semester of organic chemistry or one year of calculus-based physics is strongly recommended but not required for admission.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Life Sciences Core Curriculum

Required:
- Chemistry and Biochemistry 14A, 14B, 14BL, 14C, and 14D, or 20A, 20B, 20L, 30A, 30AL, and 30B; Life Sciences 7A, 7B, 7C, 23L; Life Sciences 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, and 3C, or 31A, 31B, and 32A; Physics 1A, 1B, 1C, 4AL, and 4BL, or 5A, 5B, and 5C.

The Major

Required Courses: Chemistry and Biochemistry 153A, Life Sciences 107, Molecular, Cell, and Developmental Biology 138, 144, 165A, and one laboratory course from Molecular, Cell, and Developmental Biology 104AL, 150AL, 187AL, or 198B. Students completing the Biomedical Research minor may satisfy the laboratory requirement with Molecular, Cell, and Developmental Biology 198C.

Electives: A total of 20 upper-division elective units must be completed. At least 10 units must be taken from molecular, cell, and developmental biology (except 100, 104AL, 138, 144, 145AL, 165A, 187AL, 192A, 192B, 193, 194A, 194B, or 199), Chemistry and Biochemistry C100, 153C, 153L, C159, CM160A, Computer Science CM124, CM186, Microbiology, Immunology, and Molecular Genetics 100L, 101, 102, 105, 158, 168, 174, C185A, Physical Science 121, 125, or 174, of which at least 5 units must be molecular, cell, and developmental biology courses. The remaining 10 units may be taken from the above courses or from Biostatistics 100A or Statistics 100A, Ecology and Evolutionary Biology 110, 121, 162, Human Genetics C144, or Physiological Science 166.
Honors Program
The core of the program consists of at least one approved undergraduate seminar course from Molecular, Cell, and Developmental Biology 145, 180A, 180B, 191, Biomedical Research 193H, or 194H, and three research courses (12 units minimum) from Molecular, Cell, and Developmental Biology 198A, 198B, and 198C, culminating in a thesis. Biomedical Research 193H and 194H are not accepted as electives for the major.

Computing Specialization
Majors in Molecular, Cell, and Developmental Biology may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the major, (2) completing Program in Computing 10A, 10B, 10C, 16A, and Life Sciences 40 or Statistics 13, and (3) completing one course from Computer Science CM124, CM168, Chemistry and Biochemistry C100, CM160A, Molecular, Cell, and Developmental Biology 187AL, or Physiological Science 125. A grade of C or better is required in each course, with a combined grade-point average in the specialization of at least 2.0. Students must petition for admission to the program and are advised to do so after completing Program in Computing 10B (petitions should be filed in the Student Affairs Office). Students graduate with a bachelor’s degree in their major and a specialization in Computing.

Policies
Preparation for the Major
Each core curriculum course must be passed with a grade of C- or better, and all courses must be completed with an overall grade-point average of 2.0 or better. Students receiving grades below C- in two core curriculum courses, either in separate courses or repetitions of the same course, are subject to dismissal from the major.

The Major
Credit for a maximum of two upper-division development biology courses from Molecular, Cell, and Developmental Biology 138, C141, and 143 may be applied toward the major.

Graduate Majors

Molecular, Cell, and Developmental Biology MS
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Molecular, Cell, and Developmental Biology CPhil, PhD
Applicants interested in studying with faculty in the department are encouraged to apply to an appropriate home area in Graduate Programs in Bioscience.

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Molecular, Cell, and Developmental Biology

Lower-Division Courses
19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

30H. Collaborative Undergraduate Research Laboratory in Yeast, Genetics, and Molecular Biology. (5) Lecture, two hours; laboratory, six hours. Limited to 24 students in Collaborative Undergraduate Research Laboratory (CURL), sponsored by Howard Hughes Medical Institute Professors Program. Basic training in biological research, covering topics in molecular genetics, molecular biology, model organism biology, and data analysis. Letter grading.

50. Stem Cell Biology, Politics, and Ethics: Teasing Apart Issues. (5) Lecture, three and one half hours; discussion, 90 minutes. Developmental biology of various types of human stem cells. Important functional differences between embryonic, hematopoietic, and adult stem cells, as well as differences in their biomedical potentials. Discussion of history of debate surrounding embryos, as well as various social, ethical, political, and economic aspects of stem cell research. P/NP or letter grading.

60. Biomedical Ethics. (5) Lecture, three hours; discussion, one hour. Examination of importance of ethics in research and exploration of how and why bioethics is relevant to reproductive screening, policy formation, public regulation, and law. Provides foundation in traditional ethics, consideration of subcategories of bioethics, neuroethics, and eugenics, and how to apply ethics to contemporary issues in research and technology. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

90. Human Stem Cells and Medicine. (5) Lecture, three and one half hours; discussion 90 minutes. Stem cells have potential to revolutionize medicine is practiced today. Some stem cell therapies are already used successfully to treat thousands of people worldwide. Other stem cell therapies are considered experimental; therefore treatments must be monitored by Food and Drug Administration to ensure safety and efficacy. Some stem cell therapies are offered with minimal scientific justification, relying on hope and hype rather than scientific fact. Exploration of use of stem cells in modern medicine to take close look at science behind some of today’s most famous and infamous stem cell medical applications. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.
Upper-Division Courses

100. Introduction to Cell Biology. (5) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 3, 4, and 23L, or 7A, 7B, 7C, and 23L. Not open for credit to Developmental Biology majors or to students with credit for course 165A. Analysis of cell organization, structure, and function at molecular level. Cell membranes and organelles, membrane transport, signaling mechanisms, and cell movement, intracellular trafficking, cell energetics. Letter grading.

104AL. Research Immersion Laboratory in Developmental Biology. (5) Lecture, two hours; laboratory, eight hours. Requisites: Life Sciences 3, 4, and 23L, or 7A, 7B, 7C, 23L, and 107. Course 104AL is required to complete 104BL. Limited to Molecular, Cell, and Developmental Biology and Microbiology, Immunology, and Molecular Genetics majors. Discovery-based research using sea urchins as model system. Students determine expression of unstudied sea urchin genes using combination of molecular biology and computation techniques. May not be repeated for credit. Letter grading.

104BL. Advanced Research Analysis in Developmental Biology. (5) Laboratory, six hours. Enforced requisite: course 104AL. Limited to Molecular, Cell, and Developmental Biology majors. Investigation is to be primarily computational in nature whereby students use bioinformatics or mathematical modeling software to interpret, expand, or refine datasets. Use of graphics software to prepare figures and illustrations for presentations, posters, reports, and websites (database entry). Research accomplishments discussed in weekly seminar-style meetings in which student groups present results of analysis and present results to class. Production of team poster and final report describing entire research project required. Letter grading.

M130. Fundamentals of Digital Imaging and Image Processing for Life and Biological Sciences (Crosslisted with Computational and Systems Biology M130L). Lecture, three hours; laboratory, two hours. Requisites: Life Sciences 7A, 7B, 7C, and Life Sciences 30A, 30B, or 40 or Statistics 13, or Mathematics 3A, 3B, or Mathematics 31A, 31B, or 32A or 32A. Digital imaging has become integral tool to our everyday lives and to nearly every field of life sciences. Quantitative approach to learning about basic properties of digital images and surveying fundamental methods for processing and analyzing images. Letter grading.

138. Developmental Biology. (5) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 3, 4, and 23L, and 107. Developmental understanding of fundamental molecular mechanisms and cellular activities guiding formation of complex organism from single fertilized egg. Development of model organism to understand conserved nature of developmental decisions across animal kingdom, distinct features that lead to diversification of animal shape and form during evolution. Origin and roles of stem and progenitor cells in development and maintenance of specific organ systems. Roles of cell shape change, cell death, proliferation, and migration in generating shape of embryo, organs, and tissues. Mechanisms by which cells become different from and communicate with one another to coordinate their activities in time and space in embryo. Special emphasis on experimental approaches used to address these fundamental questions and how model organisms and model systems and organs are formed and maintained throughout life of organism. Letter grading.

M140. Cancer Cell Biology. (5) Same as Biological Chemistry M140L. Lecture, three hours; discussion, one hour. Requisite: course 165A. Cancer causes and genetics. Effects of cell transformation on cell growth and metabolism. Altered cell cycle, metabolism, and differentiation pathways in cancer cells. Tumor microenvironment contributions to cancer malignancy, including angiogenesis, metastasis, and immune system evasion. Letter grading.

C141. Molecular Basis of Plant Differentiation and Development. (5) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 3, 3, 4, and 23L, or 7A, 7B, 7C, 23L, and 107. In-depth study of basic processes of growth differentiation and development in plants and molecular mechanisms underlying these processes. Discussion of variety of plant systems, with focus on developing critical understanding of current experimental research in this area. Corequisite: course C129. Letter grading.

143. Developmental Biology: Genetic Control of Organogenesis. (5) Lecture, three hours; discussion, one hour. Requisites: course 138, Life Sciences 3, 4, and 23L, or 7A, 7B, 7C, 23L, and 107. Not open for credit to students with credit for Chemistry 153B. Developmental understanding of fundamentals of modern molecular biology both from perspective of known molecular mechanisms for regulating fundamental processes in cells and from theoretical applied perspective for using molecular biology as laboratory tool. Special emphasis on molecular mechanisms that relate to chromatin and histone modifications, DNA replication and recombination, transcriptional, and translational mechanisms, and splicing. Application of molecular biology as tool to understand embryonic development, reprogramming, cancer, and stem cells. Development of sophisticated understanding of genes as well as specificity of designing experiments to address fundamental questions in biology and interpreting experimental data. Letter grading.


146. Metabolism and Disease. (5) Lecture, three hours; discussion, one hour. Requisites: course 165A and Life Sciences 3, 4, and 23L, or 7A, 7B, 7C, 23L, and 107. Most people think of plants as static organisms, yet they live in a world of symbiosis and community. Plants change at apace, enrich soil, and communicate with insects, bacteria, and each other—Earth’s ultimate symbiote. Just as science has revealed over time misconceptions about how things work at deeper level, scientists and economists now recognize that beyond obvious use of growth above-ground biomass for fuel production, we must better understand how to make that biomass in sustainable manner. Introductory course in chemical ecology and how natural compounds affect gene expression. Emphasis on role of natural compounds in plant/plant, plant/animal, and plant/human interactions; synopsis of principles of plant defense mechanisms and responses to microbial infections. Concurrently scheduled with course C250. P/NP or letter grading.


CM156. Human Genetics and Genomics. (5) (Same as Microbiology CM156E). Lecture, three hours; discussion, one hour. Requisites: Life Sciences 3, 4, and 23L, or 7A, 7B, and 7C. Application of genetic principles in human populations, with focus on genetics of human diseases, family studies, positional cloning, Mendelian and common diseases, cancer genetics, animal models, cytogenetics, pharmacogenetics, population genetics, genetic counseling. Letter grading. Study of human biology, with focus on current questions in fields of medical and human genetics and methodologies appropriate to answer such questions currently scheduled with course CM256. Letter grading.

160. Principles of Light Microscopy. (4) Lecture, three hours; laboratory, two hours. Requisites: Life Sciences 7A, 7B, 7C, 23L. Over last two decades, there has been explosion of new techniques in light microscopy which has provided us with invaluable tools for biological research. Study of light microscopy techniques currently used in research laboratories. May not be repeated for credit. Letter grading.

165A. Biology of Cells. (5) Lecture, three hours; discussion, one hour. Requisites: Chemistry 14D or 30B, Life Sciences 3, 7A, 7B, and 7C. Not open for credit to students with credit for course 70 or Honors Collegium 70A. Introduction to cell biology of eukaryotic cell nucleus, with focus on structure, organization, replication, and repair of eukaryotic genome; eukaryotic gene expression, including transcription and translation, and interactions of genetic engineering with emphasis on social, legal, and ethical issues. Letter grading.


168. Genetic Engineering: History, Science, and Applications in Medicine, Agriculture, and Law. (5) Lecture four hours; discussion two hours. Requisites: Life Sciences 7A, 7B. Not open for credit to students with credit for course 70 or Honors Collegium 70A Provides historical and scientific perspective on field of genetic engineering with emphasis on social, legal, and ethical issues that arise from emerging new genetic technologies. Provides fundamental background for field of genetic engineering, and puts genetic engineering into historical and social perspective so that students can make objective decisions about how this technology should be used. Highly interactive, team-oriented, problem-based, and teaches students how to think critically about experimental science, societal issues raised by advances in genetic engineering, genome modification, and recent advances in cell biology research. Exposure in discussions to current literature that directly relates to information examined in lectures. Letter grading.
and mouse embryonic stem cells and how they develop into various tissue types. Discussion of adult stem cells in hematopoietic, nervous, and other organ systems to provide examples of tissue-specific stem cells and their impact in human disease. Examination of various model organisms as examples of how model organisms have helped to discover fundamental principles in stem cell biology. How advances in cell biology, genetics and tissue engineering can be applied to use of stem cells in regenerative medicine. Ethical and legal issues related to stem cell research. Letter grading.


172. Genomics and Bioinformatics. (5) Lecture, three hours; discussion, one hour. Requisite: course 144 or 165B or Chemistry 153B or Microbiology 132. Genomics is study of complete repertoire of molecules in cells. Transcriptome and proteome data from different genetic approaches to study function of individual genes, fundamental bioinformatics algorithms used to study relationship between nucleotide and protein sequences, especially in eukaryotes. Production of genome sequences by next-generation sequencing platforms and microarray technologies to measure changes in gene expression, analysis of microarray data including clustering and promoter analysis, proteomics including protein expression and interactions, epigenomic study of DNA methylation and chromatin modification, and systems biology, or computational approaches to integrating varied genomic data to gain more complex understanding of cellular biology. Letter grading.

C174A. Advanced Topics in Cell and Molecular Biology: Molecular Evolution. (2) Lecture, two hours. Requisites: courses 100 or 165A, 144, Life Sciences 4 or 107. Recent developments in fields of molecular, cell, and developmental biology. Current developments in field of molecular evolution. Constructing evolutionary trees at molecular level; formal testing of evolutionary hypotheses using sequencing data. Concurrency scheduled with course C222A. Letter grading.


M175A. Neuroscience: From Molecules to Mind—Cellular and Systems Neuroscience. (5) (Same as Neuroscience M101A, Physiological Science M180A, and Psychology M112B.) Lecture, four hours; discussion, 90 minutes. Requisites: Chemistry 14C or 30A (14C may be taken concurrently), Life Sciences 7C, Physics 1B or 1BH or 5C or 6B. Students must receive grade of C- or better in prerequisite course to next course in series. Cellular neurophysiology, membrane potential, action potentials, and synaptic transmission. Sensory systems and motor system; how assemblies of neurons process complex information and control movement. P/NP or letter grading.

M175B. Neuroscience: From Molecules to Mind—Molecular and Developmental Neuroscience. (5) (Same as Neuroscience M101B, Physiological Science M180B, and Psychology M112B.) Lecture, four hours; discussion, 90 minutes. Requisites: course M175A (with grade of C- or better), Life Sciences 7C. Molecular biology of channels and receptors; focus on voltage dependent channels and neurotransmitter receptors. Fundamental mechanisms of synaptic transmission, axonal transport, cyto-skeleton, and muscle. Classical experiments and modern molecular approaches in developmental neurobiology. P/NP or letter grading.

M175C. Neuroscience: From Molecules to Mind—Behavioral and Cognitive Neuroscience. (5) (Same as Neuroscience M101C, Physiological Science M180C, and Psychology M112C.) Lecture, four hours; discussion, 90 minutes. Requisite: course M175A with grade of C- or better. Neural mechanisms underlying motivation, learning, and cognition. P/NP or letter grading.

180A. Scientific Analysis and Communication I. (2) Seminar, two hours. Enforced corequisite: course 196A. Students read and discuss scientific articles and give presentations, introducing research topics using research papers and topical aspects of research process, including record keeping, ethics, laboratory safety and citizenry, mechanics of scientific writing, diverse approaches to research, and project proposal. Development of presentation and argumentation of in-depth and broad knowledge about student research projects, improvement of written communication skills, and appreciation of process of doing good science and becoming skilled researchers. Letter grading.

180B. Scientific Analysis and Communication II. (2) Seminar, two hours. Enforced corequisites: courses 180A, 196A. Enforced corequisite: course 196B. Students give presentations similar to laboratory meeting or research symposium talk in which speakers discuss project goals, methodological approaches, results, and conclusions. Students write research papers as well as prepare and present scientific posters. Production of deliverables that demonstrate research achievements and creation of sense of pride for work accomplished as skilled researchers. Letter grading.

187AL. Research Immersion Laboratory in Genomic Biology. (5) Lecture, three hours; laboratory, six hours. Requisites: Life Sciences 4 or 107, 23L. Course 187AL is requisite to 187BL. Limited to Molecular, Cell, and Developmental Biology majors. Training and supervised practicum for advanced undergraduate students. Students assist in preparation of materials and development of innovative programs under guidance of faculty members in small course settings. Consult Undergraduate Office for further information. May not be applied toward course requirements for Molecular, Cell, and Developmental Biology major. May be repeated once for credit. P/NP or letter grading.

189A. Undergraduate Practicum in Molecular, Cell, and Developmental Biology. (3) Lecture, three hours. Enforced corequisite: course 196B. Limited to junior/senior Molecular, Cell, and Developmental Biology majors. Training and supervised practicum for advanced undergraduate students. Students assist in preparation of materials and development of innovative programs under guidance of faculty members in small course settings. Consult Undergraduate Office for further information. May be applied toward course requirements for Molecular, Cell, and Developmental Biology major. May be repeated once for credit. P/NP or letter grading.

192B. Undergraduate Practicum: CityLab. (2) Seminar, two hours. Limited to juniors/seniors in any life sciences major. CityLab training and supervised practicum for advanced undergraduate students. Students assist in preparation of materials and development of innovative programs under guidance of faculty members in small course settings. Consult Undergraduate Office for further information. May be applied toward course requirements for Molecular, Cell, and Developmental Biology major. May be repeated once for credit. P/NP or letter grading.

193. Journal Club Seminars: Molecular, Cell, and Developmental Biology. (2) Lecture, two hours. Requisites: course 187A 198A or 198B or 198C or 199 or 199A or 199B or 199C. Limited to juniors/seniors. Development of in-depth understanding of and ability to discuss current literature and student’s own research. May be repeated for credit. P/NP grading.

194A. Research Group Seminars: Current Topics in Biomedical Sciences. (2) Seminar, two hours. Recommended: course 187A or 198A or 198B or 198C or 199 or 199A or 199B or 199C. Limited to juniors/seniors. Involvement in laboratory’s weekly research group meetings to encourage student participation in research and to stimulate progress in specific research areas. Discussion of use of specific research methods and current literature in field of research of faculty members or students. May be repeated for credit. P/NP grading.

194B. Research Group Seminars: Current Topics in Biomedical Sciences. (2) Seminar, two hours. Limited to juniors/seniors in research traineeships or those who have strong commitment to pursue graduate studies in molecular, physiological, or biomedical fields. Weekly presentation and discussion of paper selected from current literature. May be repeated for credit. P/NP grading.

196A. Research Apprenticeship I in Molecular, Cell, and Developmental Biology. (4) Tutorial, 12 hours. Corequisites: course 187A or 198A or 198B or 198C or 199 or 199A or 199B or 199C. Limited to juniors/seniors. Enrolled as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated once for credit. A student may obtain a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. P/NP or letter grading.

196HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for credit. A student may obtain a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191. Variable Topics Research Seminars: Molecular, Cell, and Developmental Biology. (2) Seminar, two hours. Limited to 20 students. Designed as adjunct to upper-division course. Intended for students with strong commitment to pursue graduate studies in molecular, biochemical, physiological, and biomedical fields. Weekly variable topics to include with research discussion, and presentation of paper selected from current literature. May be repeated once for credit. P/NP or letter grading.

192A. Undergraduate Practicum in Molecular, Cell, and Developmental Biology. (3) Lecture, three hours. Enforced corequisite: course 196B. Limited to junior/senior Molecular, Cell, and Developmental Biology majors. Training and supervised practicum for advanced undergraduate students. Students assist in preparation of materials and development of innovative programs under guidance of faculty members in small course settings. Consult Undergraduate Office for further information. May not be applied toward course requirements for Molecular, Cell, and Developmental Biology major. May be repeated once for credit. P/NP or letter grading.

Molecular, Cell, and Developmental Biology / 663

M175A. Neuroscience: From Molecules to Mind—Cellular and Systems Neuroscience. (5) (Same as Neuroscience M101A, Physiological Science M180A, and Psychology M112B.) Lecture, four hours; discussion, 90 minutes. Requisites: Chemistry 14C or 30A (14C may be taken concurrently), Life Sciences 7C, Physics 1B or 1BH or 5C or 6B. Students must receive grade of C- or better in prerequisite course to next course in series. Cellular neurophysiology, membrane potential, action potentials, and synaptic transmission. Sensory systems and motor system; how assemblies of neurons process complex information and control movement. P/NP or letter grading.
664 / Molecular, Cell, and Developmental Biology

developmental biology and hypothesis-driven research experience in labora-
tory of department or preapproved faculty mentor. Guided research course to be taken in conjunction with course 180A, followed by continuation research course 198B. Technical aspects vary depending on specific laboratory; however, all students learn how to apply scientific method learned in course 196A and continue same experimental scope proposed, but with additional degree of independence in technical and intellectual aspects of research. Letter grading.

198A. Honors Research in Molecular, Cell, and Developmental Biology. (4) Tutorial, 12 hours. Requisites: courses 180A, 196A. Honors credit. Enrolled students must meet with department faculty sponsor to broaden and deepen students' knowledge of some phase of molecular, cell, and developmental biology. Must be taken for at least two terms and for total of at least 8 units. Students may elect to enroll in additional research through courses 198C and 199D. Report on progress to department each term 198A through 199D is taken. Individual contract required. Letter grading.

Graduate Courses


224. Molecular Basis of Vascular Biology. (4) Lecture, four hours. Requisites: Life Sciences 3, 4, Developmental and pathological aspects of vascular biology: Presentation and discussion of key questions of vascular biology with mechanistic viewpoint. Major emphasis on experimental and recent research in field. Introduction to several model systems along with presentation of specific topic. Basic information provided as to how this knowledge is obtained and how it is used to develop experimental approaches and model organisms. Letter grading.


M230B. Structural Molecular Biology. (4) (Same as Chemistry M230B.) Lecture, three hours; discussion, one hour. Requisites: Mathematics 3C, Physics 6C. Selected topics from principles of biological structure; structures of globular proteins and RNAs; structures of fibrous proteins, nucleic acids, and polysaccharides; principles of electron, neutron, and X-ray diffraction; optical and computer filtering; three-dimensional reconstruction. S/U or letter grading.

M230D. Structural Molecular Biology Laboratory. (4) (Same as Chemistry M230D.) Laboratory, 10 hours. Corequisite: course M230B. Methods in structural molecular biology, including experiments utilizing single crystal X-ray diffraction, low angle X-ray diffraction, electron diffraction, optical and computer filtering, three-dimensional reconstruction from electron micrographs, and model building. S/U or letter grading.

M234. Genetic Control of Development. (4) (Same as Biological Chemistry M234.) Lecture, four hours. Topics in the front of molecular cell and developmental biology, including problems in oogenesis and early embryogenesis, pattern formation, axis determination,
nervous system development, cellular morphogenesis, and cell-cell and cell-matrix interactions. S/U or letter grading.

C239. Molecular Basis of Plant Differentiation and Development (5) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 1.5, 1.6, 2.4, 17A, 23L, or 107. In-depth study of basic processes of growth differentiation and development in plants and molecular mechanisms underlying these processes. Discussion of various aspects of plant systems, with focus on developing critical understanding of current experimental basis of research in this field. Concurrently scheduled with course C141, Preparation and presentation of term paper, in addition to other coursework, required of graduate students. Letter grading.

242. Topics in Neurobiology. (4) Lecture, three hours. Requisite: course 171. Selected current problems in neurobiology discussed in depth, with emphasis on analysis of original papers. May be repeated for credit. Letter grading.

C250. Plant Communication. (4) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 3.4, 23L, or 17A, 7B, 7C, 23L, and 107. Most people think of plants as static organisms, yet they live in world of symbiosis and community. Plants change atmosphere, enrich soil, and communicate with insects, bacteria, and each other—Earth’s ultimate symbiote. Just as science has revealed over time misconceptions about animal systems, at deeper level, scientists and economists now recognize that beyond obvious need to grow above-ground biomass for fuel production, we must better understand how to make that biomass in sustainable manner. Introductory course in chemical ecology and how natural compounds affect gene expression. Emphasis on role of natural compounds in plant/microbe, plant/plant, and plant/herbivore interactions; synthesis and role of principles of plant defense mechanisms and responses to microbial infections. Concurrently scheduled with course C150. S/U or letter grading.


255. RNA Editing. (4) Lecture, two hours; discussion, one hour. Preparation: knowledge of molecular biology and molecular genetics. Discussion of diverse set of novel RNA modification phenomena known as RNA editing. Topics include U insertion/deletion type of editing in trypanosome mitochondria, C to U substitution editing in apo B mRNA and plant mitochondria, C insertion editing in Physarum mitochondria, etc. Discussion of mechanisms, function, and evolution of these phenomena. S/U grading.

CM256. Human Genetics and Genomics. (5) [Same as Microbiology CM256] Lecture, three hours; discussion, one hour. Requisites: Life Sciences 3.4, 23L, or 17A, 7B, 7C, and 7. Application of genetic principles in human populations, with emphasis on genomics, family studies, positional cloning, Mendelian and common diseases, cancer genetics, animal models, cytogenetics, pharmacogenetics, population genetics, and genetic counseling. Lectures and readings in literature, with focus on current questions in fields of medical and human genetics and methodologies appropriate to answer such questions. Concurrently scheduled with course CM156. Independent research project required of graduate students. Letter grading.

260A-260B-260C. Seminars: Development, Stem Cells, and Disease Mechanisms. (2-2-2) Seminar, two hours. Limited to graduate students. Advanced courses based on research papers on fundamental cellular mechanisms governing development and disease. Emphasis on genetically determined or acquired deficits in cell and molecular processes; analysis of these processes in context of normal development indicates ways of dealing with corresponding disease. S/U or letter grading.

M272. Stem Cell Biology and Regenerative Medicine. (4) [Same as Pathology M272] Lecture, two hours; discussion, two hours. Designed for graduate students. Presentation of current knowledge of embryonic and adult stem cells and factors that regulate their growth and development. Major emphasis on how advances in cell and molecular biology and tissue engineering can be applied to use of stem cells in regenerative medicine. Bioethical and legal issues related to stem cell research. S/U or letter grading.

276. Seminar: Molecular Genetics. (2) Seminar, two hours. Topics vary each term. S/U or letter grading.


278. Seminar: Molecular Genetics of Development. (2) Seminar, two hours. Designed for graduate students. Topics vary from fall to spring, with focus on establishment of position and pattern during embryogenesis by interaction of signal transduction systems and transcription factors. S/U or letter grading.


283. Seminar: Topics in Cell Biology. (2) Seminar, two hours. Discussion of various topics on biology of eukaryotic cells. Topics vary from fall to spring and include bioenergetics, motility, organelle DNA, membrane structure and function, oncogenic transformation, nuclear organization and function. S/U or letter grading.

284. Seminar: Structural Macromolecules. (2) Seminar, one hour; discussion, three hours. Preparation and discussion of current topics in extracellular active structural macromolecules—their synthesis, structure, and roles in cell and developmental biology. Letter grading.

286. Seminar: Plant Development. (2) Seminar, one hour; discussion, two hours. Preparation: one plant physiology course and at least one advanced undergraduate or graduate plant development or biochemistry course. Seminar on specific topics in plant development. Content varies each term. S/U grading.

296. Current Topics in Plant Molecular Biology. (2) Discussion, one hour. Recent research developments in field of plant molecular biology. Opportunities for graduate students to discuss individual research work. S/U grading.


299. Seminar: Molecular, Cell, and Developmental Biology. (2) Seminar, two hours. In-depth surveys of recent developments in molecular, cell, and developmental biology research. Reading and presentation of primary research articles to learn to critically evaluate research papers and to organize and present seminars on specific research topics. S/U or letter grading.

299A. Advanced Topics in Molecular, Cellular, and Developmental Biology. (3) Seminar, three hours. Advanced study and analysis of current topics in cell, molecular, and developmental biology. Discussion of current research and literature in research specialty of faculty member teaching course. S/U grading.

299B. Advances in Molecular Analysis of Plant Development and Plant/Microbe Interactions. (2) Discussion, two hours. Recent advances in plant molecular biology, with emphasis on control of gene expression both during plant development and in plant/microbe interactions. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice person employment as teaching assistant, associate, or fellow. Teaching apprenticeship under appropriate guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Preparation for Teaching Molecular, Cell, and Developmental Biology in Higher Education. (2) Seminar, two hours. Preparation for graduate students. Study of problems and methodologies in teaching molecular, cell, and developmental biology, including workshops, seminars, apprentice teaching, and peer observation. S/U grading.


597. Preparation for MA Comprehensive Examination of PhD Qualifying Examinations. (2 to 12) Tutorial, to be arranged. May not be applied toward MA or PhD course requirements. S/U grading.

598. MA Research and Writing. (2 to 12) Tutorial, to be arranged. S/U grading.


Molecular, Cellular, and Integrative Physiology

Interdepartmental Program
College of Letters and Science and David Geffen School of Medicine

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Molecular, Cellular, and Integrative Physiology
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Thomas M. Vondriska, PhD (Anesthesiology, Integrative Medicine, Physiology)
Xia Yang, PhD (Integrative Biology and Physiology, Molecular and Medical Pharmacology)

Overview

Physiology is the study of the functional processes that collectively constitute life. The studies usually employ quantitative analyses of normal life processes, of pathological defects in normal life processes, of model systems to clarify and test basic physiological principles, and of functional specializations of organisms that have evolved under the influence of differing selective forces. Thus, physiology contributes importantly to advances in knowledge both in the basic biological sciences and in bio-medical sciences; and provides an essential foundation for the practice of medicine.

The primary objective of the interdepartmental Molecular, Cellular, and Integrative Physiology program is to train a new generation of physiologists who apply modern knowledge in molecular and cellular biology and systems physiology to important questions in organismic function. Students learn to conceptualize...
physiological questions across several levels of organization and to understand how research strategies incorporating each of the levels of analysis can be formulated. This approach to physiology education is responsive to the need for physiologists who can intellectually and technically span disciplines related to physiology that are typically separated.

Coursework consists of formal instruction in the most current information in molecular biology, cell biology, and the molecular and cellular foundations of physiology. In addition, students identify an area of emphasis in biophysics, cellular and molecular biology, or integrative/comparative physiology in which additional studies are pursued. The heart of the program, however, is the research that leads to the dissertation, which is performed under the guidance of a faculty mentor. The program faculty includes more than 115 professors in the Geffen School of Medicine and College of Letters and Science. Collectively they have been recently ranked by the National Research Council in the top five in the U.S. for their quality as an academic faculty.

Graduate Major
Molecular, Cellular, and Integrative Physiology PhD

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Molecular, Cellular, and Integrative Physiology

Lower-Division Courses
19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Graduate Courses
214. Research Grant Writing in Biomedical Sciences. (4) Lecture, three hours. Designed for Molecular, Cellular, and Integrative Physiology program students. Training in designing, writing, and evaluating research projects and fellowship grants. How grant applications are structured and what features contribute to grant application success. How individual research project grants (RO1) and exploratory/development research grants (R21) to National Institutes of Health (NIH) are structured and differ. How applications for predoctoral fellowships from NIH (F31) and American Heart Association (AHA) are organized. Development and writing of students’ own RO1, R21, F31, or AHA grant application. Letter grading.


249. Seminar: Pathogenic Mechanisms in Muscle Disease. (2) Seminar, two hours. Recent advances have been made in genetic identification of molecular basis of muscle disease, and some mechanisms involved have been elucidated. Focus on muscle diseases in which substantial mechanistic information has been obtained, including particular cellular locations and diseases associated with those locations. Topics include Duchenne muscular dystrophy, congenital muscular dystrophy, limb girdle dystrophy, Ullrich myopathy, and other forms of genetically inherited muscle disease. S/U grading.

250. Current Topics in Molecular, Cellular, and Integrative Physiology. (2) Seminar, two hours. Designed for molecular, cellular, and integrative physiology students. Reading, analysis, critique, and discussion of current research literature in field of molecular, cellular and integrative physiology. Student presentation of assigned paper. Variable topics. May be repeated for credit. S/U grading.

251. Integrative Genomics for Studying Complex Diseases. (2) Seminar, two hours. Requisite: course 252A. Lectures and supervised student presentations to offer graduate students opportunity to acquire deep understanding of advanced integrative genomic approaches and how these approaches can be applied to help understand molecular basis of diverse complex diseases. Topics include transcriptomics, genetics, functional genomics, network biology, and high-level integration. Letter grading.

252. Molecular Mechanisms of Human Diseases I. (6) Lecture, four hours; discussion, two hours. Preparation: prior satisfactory molecular and cell biology coursework. Fundamental concepts and methodologies in modern biology and medicine, with emphasis on systems-based research and mechanistic understanding of human diseases and therapies. Topics include neural, immune, cardiovascular, and metabolic systems. Reading, review, and discussion of primary research literature addressing fundamental concepts and methodologies in related topic areas of human biology and diseases. Emphasis on development of scientific skills in critical analysis, knowledge acquisition and self-learning, as well as effective articulation in scientific debate and exchange. Letter grading.

262. Molecular Mechanisms of Human Diseases II. (6) Lecture, four hours; discussion, two hours. Preparation: prior satisfactory molecular biology coursework. Requisite: course 252. Fundamental concepts and methodologies in modern biology and medicine, with emphasis on systems-based research and mechanistic understanding of human diseases and therapies as they apply to neural, immune, cardiovascular, and metabolic systems. Reading, review, and discussion of primary research literature addressing fundamental concepts and methodologies in related topic areas of human biology and diseases. Emphasis on development of scientific skills in critical analysis, knowledge acquisition and self-learning, and effective articulation in scientific debate and exchange. Letter grading.

290A-290B-290C. Tutorials. (4–4–4) Tutorial, to be arranged. Preparation: apprentice performance under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May not be applied toward PhD course requirements. May be repeated for credit. S/U grading.

296. Research Seminar. (2) Seminar, to be arranged. Review of literature, discussion of original research, and analysis of current topics in molecular, cellular, and integrative physiology. May not be applied toward PhD course requirements. May be repeated for credit. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May not be applied toward PhD course requirements. May be repeated for credit. S/U grading.

Molecular Toxicology

Interdepartmental Program
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Molecular Toxicology
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Michael D. Collins, PhD (Environmental Health Sciences)
Oliver Hankinson, PhD (Pathology and Laboratory Medicine)
Shaily Mahendra, PhD (Civil and Environmental Engineering)
Xia Yang, PhD (Integrative Biology and Physiology, Molecular and Medical Pharmacology)

Overview
Faculty from 19 departments from six schools at UCLA, including chemistry and biochemistry, environmental health sciences, epidemiology, medicine, molecular and medical pharmacology, and pathology and laboratory medicine, have joined forces to create an interdisciplinary PhD program in Molecular Toxicology that is administered through the Fielding School of Public Health.

Specialties within the program include, but are not limited to, neurotoxicology, developmental toxicology, genetic toxicology, and carcinogenesis. There is a particular emphasis on mechanisms of toxicity, since it is now widely accepted that understanding mechanisms will provide the means for accurately determining risk.

New chemicals have been the basis for most of the technological developments during the past century, and there is no question that soci-
Graduate Major

Molecular Toxicology PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Molecular Toxicology

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Course

197. Individual Studies in Molecular Toxicology. (2 to 4) Tutorial, four hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

211A-211B-211C. Molecular Toxicology Seminars. (1–1–1) Seminar, one hour twice per semester. Participation in symposia which alternate between professional seminars and student presentations of papers selected by instructor on various aspects of toxic mechanisms, including free radical generation, oxidative stress and adaptive pathways, mechanisms of cell death, inflammation and fibrosis, autophagy and diseases, metal toxicity and homeostasis, carcinogenesis, DNA damage and repair, cancer and gene environmental interactions, toxicity testing and radiation carcinogenesis, toxicology of major pollutants including air pollution, persistent organic pollutants and dioxins, toxicology of major organ including liver, kidney, immune, reproductive and nervous system, and nanotoxicology. Discussion of various papers. Letter grading.

M247. Advanced Concepts in Gene-Environment Interactions. (4) Same as Environmental Health Sciences M241. Lecture, three hours; discussion, one hour. Comprehensive and practical examination of emerging science of gene-environment interaction. Discussion of primary components of field, including role of metabolic pathways in modifying environmental responses and importance of environmental influences in human disease. Exploration of selected hot topics in field, such as importance of epigenetics and of microbiome. S/U or letter grading.

296B-296F. Research Topics in Molecular Toxicology. (2–2) Research group meeting, two hours. Advanced study and analysis of current topics in molecular toxicology. Discussion of current research and literature in research specialty of faculty member teaching course. S/U grading: 296B. Molecular Carcinogenesis. 296F. Genetic Toxicology.

596. Directed Individual Study or Research. (2 to 12) Tutorial, to be arranged. Individual guided studies under direct faculty supervision. May not be applied toward degree course requirements. May be repeated for credit. S/U or letter grading.

597. Preparation for PhD Qualifying Examinations. (2 to 12) Tutorial, four hours. May not be applied toward degree course requirements. May be repeated for credit. S/U grading.

599. PhD Dissertation Research. (8 to 12) Tutorial, to be arranged. May not be applied toward degree course requirements. May be repeated for credit. S/U grading.

Music

Herb Alpert School of Music

2539 Schoenberg Music Building
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Los Angeles, CA 90095-1616

Music

310-825-4761

James K. Bass, DMA, Chair

Faculty Roster

Professors

Jan N. Baker, DM
James K. Bass, DMA
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Che-Yen B. Chen, MM
Lily Chen-Hatteck, PhD
Vladimir Chernov, MM
Travis J. Cross, DM
Richard D. Danielpour, DMA (Susan G. and Mitchell D. Covel, MD Professor of Music)
Michael E. Dean, MM
Inna Falliks, DMA
Juliana K. Gondek, MM
Peter H. Gazsaras, JD
William A. Kinderman, PhD (Leo M. Klein and Elaine Krown Klein Endowed Professor of Performance Studies)

Music / 667

ian Krouse, DMA
David S. Lefkowitz, PhD
Jens H. Lindemann, MM
Antonio Lylys, PDip
Arturo O’Farrill, MM
Movses Pogossian, DMA
Neal H. Stulberg, MA

Professors Emeriti

Roger Bourland, PhD
Kenneth E. Burrell, BA
Paul S. Chihara, PhD
Maurice Gerow, Ph.D
Frederick F. Hammond, PhD
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Frank Heuser, PhD
Mark Kaplan, BA
D. Thomas Lee, DMA
Elisabeth C. Le Guin, PhD
Susan K. McClary, PhD
Donald Neuen, MA
James W. Newton, BM
Walter Ponce, DMA
Paul V. Reale, Ph.D
Jon Robertson, DMA
Robert Walser, PhD
Robert S. Winter, PhD (Presidential Professor Emeritus of Music and Interactive Arts)

Assistant Professors

Johanna S. Gamboa-Kroesen, EdD
Jocelyn H. Ho, DMA
David J. Kaplan, DMA (Shapiro Family Professor of Piano Performance)
Kay K. Rhie, DMA

Senior Lecturer SOE

John L. Hall, MM, Emeritus

Lecturer SOE

Maureen D. Hooper, EdD, Emerita

Lecturers

Boris V. Allakhverdyyan, MM
Ji Young An, DMA
Sumner M. Arano, MM
Jonathan R. Beard, MM
Denis Bouriakov, PG Dip
Erin Bouriakov, PG Dip
David A. Brennan, DMA
Wendy L. Caldwell, BM
Jonathan D. Davis, DMA
Nick J. De Pinna, MM
Dante L. De Silva, PhD
Theresa A. Dimond, DMA
Cheryl L. Fielding, DMA
Aubrey D. Foard, MD
Peter R. Golub, PhD
Gregory S. Goodall, MFA
Rakefet R. Hak, MM
K. Noel Hearn, MA
Victoria H. Kirsch, MA
James D. Lent, DMA
Iris Malkin, MM
Varty H. Manouelian, MM
Brendan M. McBrien, MA
Noah G. Meltes, DMA
Dwayne S. Milburn, PhD
James T. Miller, MM
Lou Anne Neill, MA
Hitomi M. Oba, MA
Joshua H. Ranz, MM

Faculty Roster

Professors

Jan N. Baker, DM
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Peter H. Gazsaras, JD
William A. Kinderman, PhD (Leo M. Klein and Elaine Krown Klein Endowed Professor of Performance Studies)
Undergraduate Majors

Music BA

Capstone Major
The Music major is a designated capstone major. Through preparation for and execution of their senior capstone projects or recitals, students demonstrate mastery of program learning outcomes as well as a level of proficiency appropriate for their role in the recitals and their understanding of performance practices appropriate to the repertory being performed, as acquired in previous coursework and through research. Students also display their ability to assemble an effective program in terms of pacing and variety and demonstrate requisite stage presence along with an ability to communicate with their audience in performance.

Learning Outcomes
The Music major has the following learning outcomes:

- Proficiency appropriate for role in the recital
- Understanding of performance practices, as acquired through coursework and research, appropriate to the repertory being performed
- Ability to assemble an effective program in terms of pacing and variety
- Requisite stage presence and ability to communicate with audience in performance

Entry to the Major
Admission
Applications for the Music BA are not being accepted at this time.

Requirements
Preparation for the Major
**Required:** Music M6A, M6B, M6C, with grades of C– or better, 20A, 20B, 20C, with grades of C or better, 12 units from courses 60A through 61A, and two years (12 units) of performance organizations utilizing students’ major instrument, as assigned by the chair or designated faculty member.

The Major
**Required:** Music 120A, 120B, 120C, 140A, 140B, 140C, with grades of C or better, and six theory courses selected in consultation with a faculty adviser.

Policies
Preparation for the Major
All entering first years are required to take the Music Theory Assessment Examination either during New Student Sessions or during zero week of fall quarter. The examination score is used to determine eligibility and placement in first-year music core courses (Music M6A, M6B, M6C and 20A, 20B, 20C). Examination results may require enrollment in Music 3 as a requisite to both courses M6A and 20A. Entering transfer students with fewer than 15 units of prior music theory must take the Music Theory Assessment Examination.

Music Composition BA

Capstone Major
The Music Composition major is a designated capstone major. Through preparation for and execution of their senior capstone projects or recitals, students demonstrate mastery of program learning outcomes; as well as a level of proficiency appropriate for their role in the recitals and their understanding of performance practices appropriate to the repertory being performed, as acquired in previous coursework and through research. Students also display their ability to assemble an effective program in terms of pacing and variety, and demonstrate requisite stage presence along with an ability to communicate with their audience in performance.

Learning Outcomes
The Music Composition major has the following learning outcomes:

- Demonstrated artistic proficiency on a primary instrument or in voice
- Demonstrated excellent aural musicianship skills and a working knowledge of music theory and music history
- Composition of vocal, instrumental, and/or electronic music in varied genres and forms
- Demonstrated knowledge and application of vocal, instrumental, and electronic performance techniques and acoustical properties to scoring and orchestration, including proficiency with notation and sequencing software
- Demonstrated knowledge of counterpoint and polyphonic styles and textures in Renaissance, Baroque, Classical-Romantic, and/or contemporary practice
- Demonstrated fundamentals of conducting an ensemble, including basic patterns and gestural principles, scores analysis skills, and rehearsal techniques
- Composition of at least one substantial piece of music and presentation of it in a concert setting, such as a senior recital

Entry to the Major
Admission
For new and change-of-major applicants, students must submit a portfolio of compositions prior to the required audition and interview with the composition faculty.

Requirements
Preparation for the Major
**Required:** (1) **Musicianship**—Music M6A, M6B, M6C, with grades of C– or better; (2) **Theory**—Music 20A, 20B, 20C, with grades of C or better; (3) **Instrumental studio**—12 units from Music 60A through 60U in one instrument; (4) **Composition studio**—6 units of Music 66; (5) **Large conducted ensembles**—12 units from Music C185A through 185H using the student’s major instrument, as assigned by the chair or designated faculty member.
The Major
Required: (1) Theory—Music 120A, 120B, 120C, with grades of C or better; (2) History—Musicology 125A 125B, 125C, with grades of C or better; (3) Advanced composition studio—10 units of Music 166; (4) Advanced composition concepts and techniques—Music 104A or 104B, 106A, 106B, 116, 124A or 124B or 124C, C176; (5) Electives—at least 4 units selected from all upper-division ethnomusicology, global jazz studies, music, music industry, or musicology courses; (6) Capstone composition recital—Music 169. In senior year, each student must present a senior recital as part of the capstone course to be preceded by a scoring course (Music 124A or 124B or 124C); the 30-minute recital includes a printed program with notes. All recitals are videotaped and archived. Performances are evaluated by a jury.

Policies
Preparation for the Major
All entering first years are required to take the Music Theory Assessment Examination either during New Student Sessions or during zero week of fall quarter. The examination score is used to determine eligibility and placement in first-year music core courses (Music M6A, M6B, M6C and 20A, 20B, 20C). Examination results may require enrollment in Music 3 as a requisite to both courses M6A and 20A. Entering transfer students must take the Music Theory Assessment Examination to determine placement in the appropriate music theory sequence.

Music Education BA
Capstone Major
The Music Education major is a designated capstone major. Through preparation for and execution of their senior capstone projects or recitals, students demonstrate mastery of program learning outcomes; as well as a level of proficiency appropriate for their role in the recitals and their understanding of performance practices appropriate to the repertory being performed, as acquired in previous coursework and through research. Students also display their ability to assemble an effective program in terms of pacing and variety, and demonstrate requisite stage presence along with an ability to communicate with their audience in performance.

Learning Outcomes
The Music Education major has the following learning outcomes:

• Demonstrated artistic proficiency on a primary instrument or in voice
• Demonstrated excellent aural musicianship skills and a working knowledge of music theory and music history
• Demonstrated knowledge of a varied repertoire of music that includes Western, non-Western, and contemporary genres
• Development of pedagogical skills, assessment strategies, and musical leadership abilities in classroom, instrumental, and choral settings
• Demonstrated basic skills in secondary performance areas and music technology
• Identification and description of major concepts and theories of educational psychology
• Development of the flexibility necessary to teach music in traditional and non-traditional settings

Entry to the Major
Admission
Applicants are required to audition in their primary performance medium and interview with the music education faculty.

Requirements
Preparation for the Major
Required: (1) Musicianship—Music M6A, M6B, M6C, with grades of C– or better; (2) Theory—one of the following series approved by the division chair: Music 20A, 20B, and 20C, or 21A, 21B, and 21C with grades of C or better; (3) Instrumental or vocal studio—12 units from Music 60A through 60U for instrumentalists or 15 units of Music 61A and 61C for vocalists; (4) Large conducted ensembles—18 units from Music C165A through 185H, as assigned by the chair or music education faculty member.

The Major
Required: (1) Musicianship—Music 102A, 102B, with grades of C or better; (2) Theory—Music 111A, 111B, 111C, with grades of C or better; (3) History—Musicology 125A, 125B, 125C, with grades of C or better; (4) Music education—Music 110A, 110B, 110C, 110D, 114A, 114B, 114C, 114D, 114J, 115A, 115A, 115B, 115C, 116, 117; (5) Advanced instrumental or vocal studio—4 units from Music 160A through 160U for instrumentalists or 5 units of Music 161A and 161C for vocalists; (6) Public recital—2 units from Music 163A through 163V (vocalists must also enroll in Music 161C as co-requisite to 163V) taken in the primary performance area; students must consult and receive approval from the education faculty member before scheduling recital, which may be scheduled as early as fall quarter of the junior year; and (7) Capstone project—Music 110D. All capstone projects in music education take the form of an electronic portfolio demonstrating mastery of program learning outcomes. The student’s portfolio must be submitted before Music 110D is completed.

Policies
Preparation for the Major
All entering first years are required to take the Music Theory Assessment Examination either during New Student Sessions or during zero week of fall quarter. The examination score is used to determine eligibility and placement in first-year music core courses (Music M6A, M6B, M6C, and 20A, 20B, and 20C or 21A, 21B, and 21C). Examination results may require enrollment in Music 3 as a requisite to both courses M6A and 20A/21A. Entering transfer students must take the Music Theory Assessment Examination to determine placement in the appropriate music theory sequence.

Music Performance BM
Capstone Major
The Music Performance major is a designated capstone major. Through preparation for and execution of their senior capstone projects or recitals, students demonstrate mastery of program learning outcomes; as well as a level of proficiency appropriate for their role in the recitals and their understanding of performance practices appropriate to the repertory being performed, as acquired in previous coursework and through research. Students also display their ability to assemble an effective program in terms of pacing and variety, and demonstrate requisite stage presence along with an ability to communicate with their audience in performance.

Learning Outcomes
The Music Performance major has the following learning outcomes:

• Demonstrated artistic proficiency on a primary instrument or in voice
• Demonstrated excellent aural musicianship skills and a working knowledge of music theory and music history
• Demonstrated artistic proficiency and flexibility as performer and collaborator in varied settings, including chamber ensembles and large conducted ensembles
• Demonstrated knowledge of history and performance repertoire for a primary instrument or voice and representative works for chamber and large conducted ensembles from the majors periods of Western classical music, including contemporary compositions
• Demonstrated ability to apply knowledge of compositional form, historical context, performance practices, extended techniques, non-traditional notation, and current issues to performance of Western classical music
• Demonstrated knowledge about genres other than Western classic music or the scholarly study of music and/or the business practices associated with the music industry
• Conception, preparation, and performance of a public solo recital of Western classical music, including a printed program and program notes

Entry to the Major
Admission
Applicants are required to audition in their principal performance medium and interview with the music performance faculty.

Requirements
Preparation for the Major
Required: (1) Musicianship—Music M6A, M6B, M6C, with grades of C– or better; (2) Theory—one of the following series approved by the division chair: Music 20A, 20B, and 20C, or 21A, 21B, and 21C with grades of C or better.
Based on instrument or voice, one concentration selected below:

Brass, percussion, and woodwinds: (1) Instrumental studio—12 units from Music 60A through 60J; (2) Chamber ensembles—4 units from Music C175A through C175G; (3) Large conducted ensembles—12 units from Music C185D through 185H.

Keyboard: (1) Instrumental studio—12 units from Music 60S, 60T, or 60U; (2) Chamber ensembles, keyboard literature, and accompanying—8 units from Music C171, C175A through C175G, or C186A; (3) Large conducted ensembles—6 units from Music C185A through 185H.

Voice: (1) Voice studio and voice coaching—18 units of Music 61A and 61B; (2) Singing diction—Music 74A, 74B, 74C; (3) Large conducted ensembles—12 units from Music C185A through C185C; (4) Language—one college year—or at least one course at level three—of French, German, Italian, or Spanish, which may be used to fulfill the school language requirement.

The Major

Required: (1) Theory/Musicianship—Select one series approved by the area head/division chair: Music 102A, 102B, and 102C, or 120A, 120B, and 120C, with grades of C or better; (2) History—Music 140A, 140B, 140C, with grades of C or better.

Based on instrument or voice, one concentration selected below:

Brass, percussion, and woodwinds: (1) Advanced instrumental studio—10 units from Music 160A through 160J; (2) Chamber ensembles—4 units from Music C175A through C175G; (3) Large conducted ensembles—12 units from Music C185D through 185H; (4) Electives—at least 8 units of upper-division electives from ethnomusicology, global jazz studies, music, music industry, or musicology; (5) Capstone instrumental recital—one course from Music 167A through 167J. In senior year, each student must present a senior recital as part of the capstone course; the 45–55-minute recital will include a printed program with notes.

Strings: (1) Advanced instrumental studio—10 units from Music 160K through 160R; (2) Chamber ensembles—6 units from Music C175A through C175G; (3) Large conducted ensembles—12 units from Music C185D or C185E; (4) Electives—at least 8 units of upper-division electives from ethnomusicology, global jazz studies, music, music industry, or musicology; (5) Capstone instrumental recital—one course from Music 167K through 167R. In senior year, each student must present a senior recital as part of the capstone course; the 45–55-minute recital will include a printed program with notes.

Policies

Preparation for the Major

All entering first years are required to take the Music Theory Assessment Examination either during New Student Sessions or during zero week of fall quarter. The examination score is used to determine eligibility and placement in first-year music core courses (Music M6A, M6B, M6C, and 20A, 20B, and 20C, or 21A, 21B, and 21C). Examination results may require enrollment in Music 3 as a requisite to both courses M6A and 20A/21A. Entering transfer students must take the Music Theory Assessment Examination to determine placement in the appropriate music theory sequence. Choice of theory course series to be approved by area head/division chair.

Strings

For classical guitar, harp, and string bass, students may petition to substitute alternative courses if there are no suitable chamber ensembles offered during the academic year. For classical guitar, students may petition to substitute Music C185A, C185B, or appropriate ethnomusicology ensembles.

The Major

All recitals are videotaped and archived; performances are evaluated by a jury.

Music MA, CPhil, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Music DMA

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Music Lower-Division Courses

3. Preparatory Music Theory. (4) Lecture, four hours; laboratory, one hour. Course in music fundamentals, including musicianship, theory, and terminology. Letter grading.

M6A-M6B-M6C. Introduction to Musicianship. (2-2-2) (Same as Ethnomusicology M6A-M6B-M6C and Musicology M6A-M6B-M6C.) Laboratory, four hours. Preparation: placement examination. Course M6A is enforced requisite to M6B, which is enforced requisite to M6C. Students must receive grade of C– or better to proceed to next course in sequence. Introduction to musicianship through in-depth exploration of basic common musical elements and training in aural recognition, sight singing, dictation, and keyboard skills. Focus on topics such as tonal and modal harmony, rhythm, improvisation, composition, notation, and ear training to prepare students for later theory courses, participation in music ensembles, advanced study in music, and professional careers. Letter grading.

7. Understanding Movie Music. (4) Lecture, four hours; outside study, eight hours. Musical experience helpful, but not required. Brief historical survey of film music, with strong emphasis on recent development: Japanese animation, advertising, and MTV, as well as computer tools and digital scoring methods. Designed to inspire and inform those interested in movie music. Offered in summer only. P/NP or letter grading.

M14. Introduction to Classical Music. (3) (Same as Musicology M3.) Lecture, four hours; discussion, one hour. Survey of music of Western classical tradition, with emphasis on historical context, musical meanings, and creation of tradition itself. P/NP or letter grading.
15. Art of Listening. (5) Lecture, three hours; discussion, one hour; outside study, 11 hours. Acquisition of listening skills through direct interaction with live performers, composers, and composers. Relationship of listening to theoretical, analytical, historical, and cultural frameworks. Music as aesthetic experience and cultural practice. P/NP or letter grading.


19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members of diverse disciplines. Emphasis on the development of critical thinking and the sharing of many paths of discovery at UCLA. P/NP grading.

20A. Music Theory I. (3) Lecture, four hours. Preparation: passing departmental examination. Course 20B, with enrollment restricted to 20B, is an enforced requisite to 20C. Students must receive grade of C or better to proceed to next course in sequence. Theory: species counterpoint through fifth species; description of triads and inversions. P/NP or letter grading.

20B. Music Theory II. (3) Lecture, four hours. Enforced requisite: course 20A with grade of C or better. Theory: diatonic harmony through secondary dominants and chromatic modulation; major and relative keys; writing of four-part chorales; style composition in baroque dance forms; introduction to figured bass notation. P/NP or letter grading.

20C. Music Theory III. (3) Lecture, four hours. Enforced requisite: course 20B with grade of C or better. Theory: chromatic harmony including development of tonality, 1800 to 1850; appropriate analysis and style composition. P/NP or letter grading.

21A-21B-21C. Project Approach to Music Theory I, II, III. (3–3–3) Lecture, 11 hours; hours. Preparation: passing departmental examination. Course 21A is an enforced requisite to 21B, which is an enforced requisite to 21C. Students must receive grade of C or better to proceed to next course in sequence. Theory fundamentals through project approach. Letter grading.

30A-30B. History, Listening, and Survey of Piano Literature I, II. (2–2) Seminar, two hours. Strongly recommended for undergraduate piano and music education majors with piano as their main instrument. Survey course covering standard piano literature and composers through listening and reading. Letter grading. P/NP or letter grading.

50. Alexander Technique. (2) Lecture, four hours; outside preparation and practice, two hours. Limited to Ethnomusicology, Music, and Musicology majors. Introduction to the techniques of Alexander technique. Study of musician's postural attitude at instrument, including physical movement as application of theory. Designed to help instrumentalists and vocalists prevent injuries and improve personal technique. May be repeated with consent of instructor. Letter grading.

60A-60U. Instrumental Studio. (2 each) Studio, one hour; outside practice, six to eight hours. Limited to fresman/sophomore Music Performance majors and junior and senior Music Composition majors. Students must perform in one practicum during academic year. Grades are assigned by applied instructor in studio and courses each semester. Laboratory, five hours; preparation/practice, seven hours. Introduction to the techniques of Alexander technique. Study of musician's postural attitude at instrument, including physical movement as application of theory. Designed to help instrumentalists and vocalists prevent injuries and improve personal technique. May be repeated with consent of instructor. Letter grading.

60A. Studio, one hour; outside practice, six to eight hours. Limited to freshman/sophomore Music Performance majors and junior and senior Music Composition majors. Students must perform in one practicum during academic year. Grades are assigned by applied instructor in studio and courses each semester. Laboratory, five hours; preparation/practice, seven hours. Introduction to the techniques of Alexander technique. Study of musician's postural attitude at instrument, including physical movement as application of theory. Designed to help instrumentalists and vocalists prevent injuries and improve personal technique. May be repeated with consent of instructor. Letter grading.

60B. Flute; 60C. Oboe; 60D. Bassoon; 60E. Clarinet; 60F. Saxophone; 60G. FRENCH HORN; 60H. TRUMPET; 60I. Trombone; 60J. Tuba; 60K. PERCUSSION; 60L. Alto; 60M. Cello; 60N. STRING BASS; 60O. Harp; 60P. Guitar; 60Q. Lute; 60R. Viola da Gamba; 60S. Flute; 60T. Organ; 60U. HARP; 60V. HUSBAND. Letter grading.

61A. Voice Studio. (2) Studio, one hour; outside practice, six to eight hours. Corequisite: course 61B or 61C. Limited to lower-division Music Performance majors specializing in voice and Music Education majors. Emphasis on repertoire and improving vocal technique. Grades are assigned by studio instructor in conjunction with student's vocal coach for fall and winter quarters and by jury examination in spring quarter. May be repeated for maximum of 12 units. P/NP or letter grading.

61B. Voice Coaching. (1) Studio, one hour; outside practice, three hours. Corequisite: course 61A. Limited to lower-division Music Performance majors specializing in voice and Music Education majors. Emphasis on repertoire and improving vocal technique. Grades are assigned by studio instructor in conjunction with student's vocal coach for fall and winter quarters and by jury examination in spring quarter. May be repeated for maximum of 12 units. P/NP or letter grading.

61C. Voice Coaching for Music Education Specialists. (5) Studio, three hours; outside practice, 90 minutes. Corequisite: course 61A. Limited to lower-division Music Education majors. Emphasis on repertoire and improving vocal technique. Grades are assigned by studio instructor in conjunction with student's vocal coach for fall and winter quarters and by jury examination in spring quarter. May be repeated for maximum of 12 units. P/NP or letter grading.

66. Composition Studio. (2) Studio, one hour per week to be arranged with instructor; outside study, five hours. Enforced requisite: courses 20A, 20B, 20C. Limited to Music Composition students and designed to be used in conjunction with composition lessons with assignments and compositions tailored to student progress and level of achievement. Lessons address counterpoint, voice-leading, harmonic and melodial construction, form, texture, style, notation, and performance feasibility. May be repeated twice for credit. P/NP or letter grading.

74A-74B-74C. Introduction to Singing Diction. (2–2–2) Laboratory, five minutes; outside study, four to five hours. Development of International Phonetic Alphabet (IPA) transcription skills, along with addressing issues of translation. Exploration of safety of voice including repertoire, art songs, early music, recitative, and folk songs. Transcription, translation, speaking, and singing of texts from pieces assigned in course, as well as from repertoire being prepared for juries. Grades are assigned by studio instructor in conjunction with student’s vocal coach for fall and winter quarters and by jury examination in spring quarter. May be repeated for maximum of 3 units. P/NP or letter grading.

74A. French and English. Introduction to basics of singing diction and development of English and Italian skills for beginning students. 74B. German. Introduction to basics of singing diction and development of German skills for beginning students. 74C. French. Introduction to Basics of Singing Diction and Development of French Skills for Beginning Students.

80A. Beginning Keyboard. (4) Laboratory, five hours; preparation/practice, seven hours. Enforced requisite: course 20A. Students must receive grade of C- or better to proceed to next course in sequence. May be repeated twice for credit. P/NP or letter grading.

80B. Intermediate Keyboard. (4) Laboratory, five hours; preparation/practice, seven hours. Enforced requisite: course 80A. Review of basic keyboard concepts, with focus on developing comprehensive keyboard musicianship from music theory, sight-reading, composing, improvising, analysis of form, study of musical terms and abbreviations, chords, scales, cadences, transposing, and ear training. Offered in summer only. P/NP or letter grading.

80C. Sight Singing and Ear Training. (4) Laboratory, five hours; preparation/practice, seven hours. Introduction to keyboard skills together with basic aspects of music theory and its practical application to keyboard: sight-reading, to- nality, chords, scales, cadences, simple compositions, and improvised improvisations. May be repeated for credit without limitation. Offered in summer only. P/NP or letter grading.

80D. Advanced Ear Training. (2–2–2) Laboratory, five minutes; outside study, four to five hours. Development of International Phonetic Alphabet (IPA) transcription skills, along with addressing issues of translation. Exploration of safety of voice including repertoire, art songs, early music, recitative, and folk songs. Transcription, translation, speaking, and singing of texts from pieces assigned in course, as well as from repertoire being prepared for juries. Grades are assigned by studio instructor in conjunction with student’s vocal coach for fall and winter quarters and by jury examination in spring quarter. May be repeated for maximum of 3 units. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated, P/NP grading.

Upper-Division Courses

102A-102B-102C. Advanced Musicianship I, II, III. (2–2–2) Laboratory, four hours. Enforced requisites: courses M6A, M6B, M6C. Course 102A is enforced requisite to 102B, and 102B is enforced requisite to 102C. Students must receive a grade of C- or better to proceed to next course in sequence. Advanced-level sight singing, sight reading, rhythm, melodic and harmonic dictation, tonal and modal improvisation, keyboard skills. Letter grading.

M103. Creating Musical Community. (4) Same as Ethnomusicology M103, Global Jazz Studies M103, and Musicology M103.) Seminar, four hours; discussion, one hour. Limited to school of music majors. Faculty and students make music together in different modes. Students learn certain repertoire, refine it, and bring it to concert performance. Students critically engage musical literacies and notion of social contract that forms basis of musical notation. Drawing from American music folk game traditions, highlights complex history of this country and way in which entire body is used as repository when instruments are unavailable. Letter grading.

104A. Modal Counterpoint. (3) Lecture, three hours. Requisite: course 120C (accelerated section). In-depth exploration of styles and techniques of counterpoint of 15th and 16th centuries through writing and analysis of important forms of period, including species, canon, free counterpoint, cantus, firmus, point of imitation, motto, ricercare, and binary form. Letter grading.

104B. Special Topics in Counterpoint. (3) Lecture, three hours. Requisite: course 120C (accelerated section). In-depth exploration of polyphonic styles and textures since 1750, with emphasis on late-19th- and 20th-century modes of expression, through writing and analysis. Letter grading.
11B. Music Creation and Analyses through Technology (4) (Lecture, two hours; laboratory, two hours. Enroll by consent of instructor. Introduction to computer fundamentals and techniques necessary to develop and maintain bassoon reeds. May be repeated for credit. P/NP or letter grading.

120A. Speculative Music Theory I. (4) Lecture, four hours; discussion, four hours. Requisites: course 120B with grade of C (2.0) or better. Barbaric harmonic language, including nonfunctional harmony, polytonality, free atonality, serialism, and minimalism. P/NP or letter grading.

121A. Speculative Music Theory II. (4) Lecture, four hours; discussion, four hours. Requisites: course 120B with grade of C (2.0) or better. 20th-century harmonic language, including nonfunctional harmony, polytonality, free atonality, serialism, and minimalism. P/NP or letter grading.


124B. Scoring for Wind Ensemble. (4) Discussion, three hours. Requisites: courses 106B, 120C (accelerated section), 123C. Practical applications in scoring and arranging for wind ensembles. May be repeated once for credit. P/NP or letter grading.

125. Study and Conducting of Instrumental and Choral Literature. (2) Lecture, three hours. Requisite: course 117. Study and practice of conducting both instrumental and choral repertoire. In addition to further development of conducting gestures, focus on score study techniques, rehearsal techniques, style, and interpretation as applied to choral and instrumental repertoire. Letter grading.


127. Study and Conducting of Instrumental and Choral Literature. (2) Lecture, three hours. Requisite: course 116. Study and practice of conducting both instrumental and choral repertoire. In addition to further development of conducting gestures, focus on score study techniques, rehearsal techniques, style, and interpretation as applied to choral and instrumental repertoire. Letter grading.

128. Scoring and Arranging for Choral Ensemble. (4) Discussion, three hours. Requisites: courses 106B, 120C (accelerated section), 123C. Practical applications in scoring and arranging for choral ensembles, including a capella as well as choral with instruments. Preparation and production of parts and full scores. At least one reading by UCLA Chorale or other choral group scheduled. Letter grading.

M131. Development of Latin Jazz. (4) (Same as Ethnomusicology M131 and Global Jazz Studies M131.) Lecture, three hours. Some amount of formal music study and experience as vocalist or instrumentalist desirable but not essential. Introduction to history, tradition, and some of the music of Latin jazz from different genres and approaches, and interactions between music and culture, society, and history. P/NP or letter grading.

M132. Introduction to Armenian Music. (4) (Same as Ethnomusicology M132.) Lecture, three hours. Some amount of formal music study and experience as vocalist or instrumentalist desirable but not essential. Introduction to history, tradition, and some of the music of Armenia. Foundations for teaching jazz by development of understanding of curriculum, rehearsal techniques, improvisation, and uses of technology in jazz education. Technology understanding includes basic concepts of sequencing, composition, performance, and creation of multimedia presentations using tablet (iPad) technology. Letter grading.

120A. Music Theory V. (4) Lecture, four hours; discussion, four hours. Requisite: course 120C with grade of C (2.0) or better. Theory: advanced harmonic chromatic harmony including development of harmony from 1850: analytical projects; style composition. Musician ship: advanced score reading; advanced harmonic dictation; preparation for departmental first-year examination. Requisite: course 20C with grade of C (2.0) or better. Theory: barbaric counterpoint including chorale prelude; two-part invention and first modulation; three-part invention; canonic principles; analysis of inventions, canons, and fugues. Musicianship: sight-singing of extended chromatic melodies; advanced harmonic dictation (diatonic and chromatic); keyboard harmonization of modulating melodies; elementary score reading. P/NP or letter grading.

120B. Music Theory VI. (4) Lecture, four hours; discussion, four hours. Requisite: course 120A with grade of C (2.0) or better. Theory: advanced harmonic chromatic harmony including development of harmony from 1850: analytical projects; style composition. Musician ship: advanced score reading; advanced harmonic dictation; preparation for departmental first-year examination. Requisite: course 20C with grade of C (2.0) or better. Theory: barbaric counterpoint including chorale prelude; two-part invention and first modulation; three-part invention; canonic principles; analysis of inventions, canons, and fugues. Musicianship: sight-singing of extended chromatic melodies; advanced harmonic dictation (diatonic and chromatic); keyboard harmonization of modulating melodies; elementary score reading. P/NP or letter grading.
140A-140B. History and Analysis of Western Music. (5–5) Lecture, four hours; discussion, one hour. Survey of Western music; examination of representation within their curricula and development of analytical methods appropriate to each repertory. Letter grading. 140A, To 1700. Requisite: course 140B with grade of C or better.

C150. Keyboard Skills for Pianists. (2) Activity, two hours; outside study, four hours. Applied music course with focus on necessary skills for piano performance. Areas include sight playing, score reading, transposition, figured bass, harmonization, improvisation, score reduction, vocal composition, and others. Concurrently scheduled with course C450. P/NP or letter grading.

C155. Instrumental and Piano Duo Repertoire. (2) Activity, two hours; outside study, four hours. Performance-based course that develops repertoire and experience in comparative performance for pianists and instrumentalists. Activities include weekly score preparation, weekly rehearsals, regular coaching, and performances for lessons, juries, recitals, master classes, and other related activities. Regular coaching with faculty members, weekly performance workshop, and rehearsals. Concurrently scheduled with course C455. P/NP or letter grading.

C161A. Advanced Vocal Studio, Diction, and Interpretation. (2) Activity, two hours; outside study, four hours. Enforced requisite: course 74C. Performance-based course that develops repertoire and experience in comparative performance for pianists and vocalists. Activities include text and score preparation, diction, weekly rehearsals, regular coaching, and performances for lessons, juries, recitals, master classes, and other related activities. Intensive studio activity incorporated. Regular coaching with faculty members, weekly performance class, and rehearsals. May be repeated for maximum of 8 units. Concurrently scheduled with courses C454B-C454D. P/NP or letter grading.

C163A. Advanced Vocal Recital. (2) Studio, one hour; outside practice, six to eight hours. Limited to senior Music Performance majors. One-on-one composition lessons with assignments and compositions tailored to student progress and level of achievement. Lessons address technical and artistic concerns, and include preparation of vocal literature appropriate to ensembles. Total of 12 units. May be repeated for credit. P/NP or letter grading.

C166. Advanced Composition Studio. (2) Studio, one hour; outside study, five hours. Enforced requisite: course 66 (6 units). Limited to junior/senior music composition students. Preparation for capstone recital. Letter grading.

C185A. UCLA Chorale. (2) Activity, four hours. Preparation: audition. Large mixed ensemble performing choral music of all periods appropriate for concert choral ensembles. May be repeated for credit without limitation. May be concurrently scheduled with course C480B. P/NP or letter grading.

C185B. Chamber Singers. (2) Activity, four hours. Preparation: audition. Designed primarily for Music Performance majors. Select mixed ensemble performing choral music of all periods. May be repeated for credit without limitation. May be concurrently scheduled with course C480B. P/NP or letter grading.

C185C. Opera Workshop. (2) Activity, six hours. Preparation: audition. Preparation for operatic and major choral works. May be repeated for credit without limitation. May be concurrently scheduled with course C480C. P/NP or letter grading.

C185D. Symphony Orchestra. (2) Activity, three hours. Preparation: audition. Group performance of symphonic orchestral literature. May be repeated for credit without limitation. May be concurrently scheduled with course C480D. P/NP or letter grading.

C185E. Philharmonia. (2) Activity, six hours. Preparation: audition. Designed primarily for Music Performance majors. Group performance of orchestral literature, as well as orchestral accompanying for operatic and major choral works. May be repeated for credit without limitation. May be concurrently scheduled with course C480E. P/NP or letter grading.

Performance includes, but is not limited to, lessons, rehearsals, special studio performance projects, master classes, concerts, auditions, juries, and recitals. May be repeated for credit without limitation. Concurrently scheduled with course C44B. P/NP or letter grading.

C186C. Harp Accompanying. (2) Activity, four hours; outside study, two hours. Collaboration with instrumentalists, choruses, small and large ensembles. Performance includes, but is not limited to, lessons, rehearsals, special studio performance projects, master classes, concerts, auditions, juries, and recitals. May be repeated for credit without limitation. Concurrently scheduled with course C484C. P/NP or letter grading.

C188. Seminar: Special Topics in Music. (4) Formerly numbered 188.) Seminar, three hours. Explora- tion of topics in music through variety of approaches that may include projects, performances, readings, discussions, research papers, and oral presentations. Topics announced in advance. May be repeated for credit. May be concurrently scheduled with C202. P/NP or letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin prepa- ration of final individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor for graduate music performance students. Survey of gen- eral bibliographic techniques in music, with emphasis on materials for performing musicians. Letter grading. C209A. Oboe Reed Making. (1) Activity, one hour; outside study, two hours. Enrollment by consent of in- structor. Introduction and overview of oboe reed making, including hands on training with tools and techniques necessary to develop and maintain oboe reeds. May be repeated for credit. May be concurrently scheduled with course C109A. S/U or letter grading.

C209B. Bassoon Reed Making. (1) Activity, one hour; outside study, nine hours. May be repeated for credit. May be concurrently scheduled with course C109B. S/U or letter grading.

C218A. Advanced Choral Conducting. (2) Lecture, one hour; studio, two hours. Requisites: courses 116, 117. Conducting basics, baton technique, beat patterns, dynamics, score preparation and analysis. May be repeated once for credit. Concurrently scheduled with course C118A. Letter grading.

C218B. Choral Techniques and Methods. (2) Lecture, one hour; studio, two hours. Requisites: courses 116, 117, 218A. Vocal and choral pedagogy, vocal- izing and warm-up techniques, diction, and rehearsal and audition techniques. May be repeated once for credit. Concurrently scheduled with course C118B. Letter grading.


C254. Advanced Music Analysis: Pre-Tonal Music. (4) Seminar, three hours. Preparations: course 218A. Enforced corequisite: course 218A. Seminar on how music students use to make their interpretive decisions in per- formance of vocal and instrumental music of Euro- pean tradition. Topics include: explanation of melodic and rhythmic transformations; tempo indications, expressive notation, use and influ- ence of recordings, composer-performer relationship, and nonstandard notation. Letter grading.


C260A. Seminar: Composition for Motion Pictures and Television. (6) Seminar, three hours; laboratory, three hours. Practical experience in composing for commercial movies. Difference between underscore and source music and discussion of surrealist effect when they merge, as in MTV, dream sequences, or montages. Study of three principal areas of film- making—preproduction, production (shooting), and postproduction. Examples from classic movies and discussion of their scores. Composition of actual cues for acoustic instruments coordinated to picture to be term project. Separate cues involve dialogue, melo- drama, comedy, chase, memory montage, and ten- sion. Letter grading.

C260B. Seminar: Composition for Motion Pictures and Television. (6) Seminar, three hours; laboratory, three hours. Focus on task of completing entire television or film project from planning film. Discussion of recent television shows. Composition of one original title song and short cues to someone else’s song required. Term assignment involves stu- dent orchestra recording and editing the work to ap- proximate actual conditions of completing profes- sional Hollywood assignment, from spotting to scoring. Letter grading.

270A-275J. Problems in Performance Practices. (4 each) Seminar, three hours; outside study, nine hours. Limited to graduate performance students. Investigations of primary source readings in performance prac- tices, as related to period; analytical reports on prac- tical applications in class demonstrations. May be re- peated for credit. Letter grading. 261A. Medieval; 261B. Renaissance; 261C. Baroque; 261D. Classical; 261E. Romantic; 261F. Contemporary; 261J. Jazz.

266. Graduate Composition Studio. (4) Studio, one hour arranged with instructor; outside study, 11 hours. Limited to graduate composition students. One-on- one composition lessons, with assignments and com- positions tailored to each student’s level of achievement, addressing counterpoint, voice- leading, harmonic and melodic construction, orches- tration, form, texture, style, notation, and performance features. Evaluation of composition提交 Richard L. K just the music and evaluation based on student’s level of achievement. Presentation of at least one composition com- posed during course in graduate composition concert during academic year. May be repeated for credit without limitation. S/U or letter grading.

270A-270Q. Seminars: Music Education. (6 each) Seminar, three hours. May be repeated for credit without limitation. S/U or letter grading. 270A. History; 270B. Non-Western Musics; 270C. Curriculum Inno- vations; 270D. Tests and Measurements; 270E. Choral Literature; 270F. Instrumental Literature; 270G. General Topics.

C271. Selected Topics in Keyboard Literature. (2) Lecture, two hours. Corequisite: course 460S or 460T or 460U. In-depth study of selected topics in keyboard literature, concentrating on problems of per- formance through analysis, historical and comparative studies, and actual performances by participants. May be repeated for credit. May be concurrently scheduled with course C271. S/U or letter grading.

CM282. Music Industry. (4) (Same as Ethnomusi- coLOGY CM288 and Musicology CM288.) Lecture, four hours; discussion, one hour; outside study, seven hours. Limited to Ethnomusicology, Music, and Musici- cology majors. Examination of influence of music in- dustry on way music is created, performed, listened to, evaluated, and used. Historical and contemporary approach taken, beginning with music published in 18th century
343. Effective and Creative String Teaching. (2) Without limitation. S/U or letter grading. Creative approaches to charging and drill design and grams for high school and college teachers, including hours. Innovative approaches to marching band pro- ensemble programs. May be repeated for credit without limitation. Study of new and recently published literature

330. Introduction to Orff Schulwerk. (2) Lecture, 10 hours; discussion, five hours; laboratory, 15 hours. Intended for teachers of music, church musicians, and music therapists who have had little or no previous ex- perience with Orff Schulwerk. Introduction to Orff Schulwerk, including history, philosophy, and teaching processes of this approach to music instruction for children. Offered in summer only. S/U or letter grading.

331A-331B-331C. Orff Schulwerk Training Courses. (4-4-4) See course description. Each course is designed to train teachers in preparation for the work with children in various age groups. Each course is eligible for certification at that level through American Orff Schulwerk Association. S/U or letter grading. 331A. Level I (Beginning); 331B. Level II (Intermediate); 331C. Level III (Advanced).

341. Conducting for High School and College Band/ Wind Ensemble Teachers. (2) Lecture, two and one half hours. Comprehensive view of current trends in band/wind ensemble programs, including nonverbal communication, conducting, and rehearsal techniques. Study of new and recently published literature and discussions of administration of band/wind ensem- ble programs. May be repeated for credit without limitation. S/U or letter grading.

342. Contemporary Marching Band. (1) Lecture. two hours. Innovative approaches to marching band pro- grams for high school and college teachers, including creative approaches to charging and drill design and use of music in preparation of musical literature in area of specializa-

C340A-C340B-C340C. Advanced Vocal Repertoire, Diction, and Interpretation. (2) Activity, two hours; outside study, four hours. Performance-based course that develops repertoire and ex-
perience in collaborative performance for pianists and instrumentalists. Activities include weekly score preparation, weekly rehearsals, regular coaching, and performances for lessons, juries, recitals, master classes, auditions, and other related activities. Regular coaching with faculty members, weekly performance workshop, and rehearsals. Concurrently scheduled with course C155. Letter grading.

C455. Instrumental and Piano Duo Repertoire. (2) Activity, two hours; outside study, four hours. Per-
formance-based course that develops repertoire and ex-
perience in collaborative performance for pianists and instrumentalists. Activities include weekly score preparation, weekly rehearsals, regular coaching, and performances for lessons, juries, recitals, master classes, auditions, and other related activities. Individualized study of repertoire and improving performance. Grades are based on, but not limited to, lessons, rehearsals, special studio and private coaching. May be repeated for credit without limitation. Offered in summer only. S/U or letter grading.

C460I. Music / 675

343L. Effective and Creative String Teaching Labo-

ratory. (1) Laboratory. 12 hours. Exploration of string orchestra, ensemble, and chamber music literature appropriate for elementary, junior high, and high schools. Examination of this literature in reading and discussion, with emphasis on practical experience. May be repeated for credit without limitation. Offered in summer only. S/U or letter grading.

345S. Voice Pedagogy. (2) Lecture and laboratory. Three hours; laboratory, three hours. Introduction to teacher voice classification, and survey of standard and current choral literature. S/U or letter grading.

C390A-C390B-C390C. Advanced Vocal Repertoire, Diction, and Interpretation. (2) Activity, two hours; outside study, four hours. Performance-based course that develops repertoire and ex-
perience in collaborative performance for pianists and instrumentalists. Activities include weekly score preparation, weekly rehearsals, regular coaching, and performances for lessons, juries, recitals, master classes, auditions, and other related activities. Individualized study of repertoire and improving performance. Grades are based on, but not limited to, lessons, rehearsals, special studio and private coaching. May be repeated for credit without limitation. Offered in summer only. S/U or letter grading.
performance projects, master classes, concerts, auditions, juries, and recitals. May be repeated for maximum of 12 units. Concurrently scheduled with course C118A. S/U or letter grading.

C484B. Guitar Accompaniment. (2) Activity; four hours; outside study, two hours. Collaboration with instrumentalists and/or vocalists in role of accompanists. Performance includes, but is not limited to, lessons, rehearsals, special studio performance projects, master classes, concerts, auditions, juries, and recitals. May be repeated for credit without limitation. Concurrently scheduled with course C118B. S/U or letter grading.

C484C. Harp Accompaniment. (2) Activity; four hours; outside study, two hours. Collaboration with instrumentalists and/or vocalists in role of accompanists. Performance includes, but is not limited to, lessons, rehearsals, special studio performance projects, master classes, concerts, auditions, juries, and recitals. May be repeated for credit without limitation. Concurrently scheduled with course C118C. S/U or letter grading.


C485X-C485Z. Percussion. (Flux Contemporary)


C487. Introductory Practicum for Teaching Apprentices in Music. (2) Eight-week two-hour seminar series, plus intensive training session during Fall Quarter registration week. Preparation: appointment as teaching apprentice in Music Department. Required of all new teaching apprentices. Special course dealing with problems and practices of teaching music at college level. May not be applied toward degree requirements. S/U grading.

C488. Technology Seminar. (2) Seminar, two hours; laboratory, one hour; outside study, three hours. Introduction to departmental and campuswide technology resources, exploration of applications of technology in education, and development of means of using technology to assess and document teaching competence. S/U grading.


C491. Directed Individual Studies in Orchestration and Composition. (2, 4, or 6) Tutorial, to be arranged. Only 4 units may be applied toward MA or MM degree requirements. May be repeated for credit. S/U or letter grading.

C492. Directed Individual Studies in Music Education. (2, 4, or 6) Tutorial, to be arranged. Only 4 units may be applied toward MA or MM degree requirements. May be repeated for credit. S/U or letter grading.

C493. Directed Individual Studies in Performance Practices. (2 to 12) Tutorial, to be arranged. Only 4 units may be applied toward MA or MM degree requirements. May be repeated for credit. S/U or letter grading.

C494. Preparation for Master's Comprehensive Examination or PhD Qualifying Examinations. (2 or 4) Tutorial, to be arranged. S/U grading.

C495. Introductory Practicum for Teaching Apprentices in Music. (2) Eight-week two-hour seminar series, plus intensive training session during Fall Quarter registration week. Preparation: appointment as teaching apprentice in Music Department. Required of all new teaching apprentices. Special course dealing with problems and practices of teaching music at college level. May not be applied toward degree requirements. S/U grading.

C496. Technology Seminar. (2) Seminar, two hours; laboratory, one hour; outside study, three hours. Introduction to departmental and campuswide technology resources, exploration of applications of technology in education, and development of means of using technology to assess and document teaching competence. S/U grading.

C497. Directed Individual Studies in Performance Practices. (2 to 12) Tutorial, to be arranged. Only 4 units may be applied toward MA or MM degree requirements. May be repeated for credit. S/U or letter grading.

C498. Guidance of MA Thesis. (4, 8, or 12) Tutorial, to be arranged. Only 4 units may be applied toward degree requirements. May be repeated for credit. S/U grading.

C499. Guidance of PhD or DMA Dissertation. (4, 8, or 12) Tutorial, to be arranged. May be repeated for credit. S/U grading.

MUSIC INDUSTRY Interdepartmental Program Herb Alpert School of Music

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Overview
The Music Industry Interdepartmental Program prepares students for transformative, creative career paths in and around an ever-evolving music industry. Committed to diversity and justice in the music industry, the program provides challenging historical, critical, and global perspectives through deep integration with the Herb Alpert School of Music’s departments of Music, Musicology, and Ethnomusicology, and with other UCLA professional and arts schools. Fostering students’ intellectual and musical creativity equips them to recognize and develop the creativity of others. Balanced programs of courses and projects build the technical, computational, fiduciary, communications, and marketing skills necessary for success in any part of the professional music world. Internships, mentoring, and individualized capstone projects give students direct experience with working music communities, and forge lifelong connections between our students and faculty, engaged industry professionals and the world.

Undergraduate Major

Music Industry BA

Capstone Major

Music Industry is a designated capstone major. Undergraduate students must complete a senior thesis that demonstrates the skills and expertise they have acquired in earlier course-work. This requirement may be fulfilled through a written research paper, but, given the experimental nature of the Music Industry degree, it may also be fulfilled by the honing of creative expression for personal or political effect (songwriting, production, etc.), by problem solving or entrepreneurial initiatives in the music industry (music tech start-up, record label, etc.), or by experiential learning in an organization outside of academia (entrepreneurial, community, or corporate project with formal reporting). Students in the capstone are expected to work together to curate their collective work and experience in a formal and public capstone event, which may include online and virtual components as well as a live performance showcase for creative work.

Learning Outcomes

The Music Industry major has the following learning outcomes:

• Understanding of basics of economics and accounting, and master advanced financial concepts relevant to the entertainment and concert industry, including the management of intellectual property rights
• Understanding through study and performance of basic parameters of music, and how it works as a communicative language and a cultural force
• Displayed familiarity with the current practices of music and law, artist management, digital marketing, music publishing, concert and tour promotion, and other key tasks of the music and entertainment industries
• Demonstrated working understanding of acoustics, audio technology, audio engineering, studio production, and electronic music making
• Effective spoken and written communication and negotiation
• Understanding of how to plan, organize, and budget complex projects
• Development of techniques for managing and motivating collaborative and creative teams
• Engagement with analytical and historical research to development broad critical understanding of social, economic, and historical underpinnings of the global music industry, with special attention given to race/gender equity and music as a force for social justice
• Creation of collaborative networks with others in the music industry
• Acquisition of direct experience in characteristic music industry working environments, and reflection on that experience
• Participation in sustained mentoring relationships
• Assembling of a portfolio of relevant work experience and achievements

Entry to the Major

Admission

Applicants are reviewed individually, based on a questionnaire, grade-point average, test scores, a personal statement of purpose, a portfolio review, and an interview.

Transfer Students

Transfer applicants to the Music Industry major with 90 or more units must complete as many
of the following introductory courses as possible prior to admission to UCLA: at least two quarters of musicianship or music theory training equivalent to Music Industry 20A and 20B, and at least two quarters of study in finance and accounting equivalent to Music Industry 10A and 10B.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: (1) Music Industry core—Music Industry 1 (three quarters), 2, 10A, 10B, 20A, 20B, 25; (2) Ensemble—one unit in one ethnomusicology, music, or music industry ensemble; (3) History and Culture of Music—one course from Ethnomusicology 20A, 20B, M25, 30, M35, 40, 45, M50A, M50B, M110A, M110B, Music Industry 29, 55, Musico
gy 5, 7, 8, 13, 60, 61, 64, 65, 68, 84; (4) Race, Culture and American Music—one course from Ethnomu
society M35, M50A, M50B, M110A, M110B, Musicology 64, 65, 75; (5) Communication Fun
damentals—Communication 1 or equivalent.

The Major

society M116, M119, 174, 175, Mus
ic Industry 108, 131, 132, 134, Musico
ology 126, M136, M137, 140; (5) Elective—one addi
tional course from any of the three subareas; (6) Internship/PRACTICUM EXPERIENCE—Music Industry 195CE or 196; (7) Capstone Expe

Policies

Preparation for the Major

Each course must be taken for a letter grade.

Undergraduate Minor

Music Industry Minor

The Music Industry minor is intended to the
history, theory, and practice of music as a calling and a business; and to provide opportunities for students to work with practitioners on real-world projects in the music industry.

Admission

To apply to the minor, transfer students must have completed a minimum of one term of resi
dency at UCLA, and students admitted as first years must have completed a minimum of three terms of residency at UCLA. Students must be in good academic standing with an overall grade-point average of at least 2.0.

In addition, students who are not enrolled in a major within the Herb Alpert School of Music must complete at least one performance or en
semble course selected from Ethnomusicology 91A through 91Z, Global Jazz Studies 176A through 176G, Music M90T, C185A through C186C prior to application to the minor. The performance requirement may also be fulfilled through successful completion of Music Indus
try 91A, 91B, 111A, 111B, or through an equiv
alent music industry course by petition.

The Minor

Required Courses (28 units): Music Industry 101, 195CE (8 units), and five additional courses (20 units) selected from Ethnomusicol
ogy M25, 30, M35, C100, 105, M110B, 117, C155, C184, Music C176, Musicology 128, M137, 140, 164, 165, 177, 185, Music Industry 29, 55, 95, M103 through 186, 195CE, 197.

Policies

A maximum of two lower-division courses may be counted toward the minor. Other UCLA upper-division courses may be applied to the minor by petition.

A minimum of 20 units applied toward the mi
nor requirements must be in addition to units applied toward major requirements or another minor.

With the exception of Music Industry 95 and 195CE (mandatory P/NP grading), each minor course must be taken for a letter grade. Suc
cessful completion of the minor is indicated on the transcript and diploma.

Music Industry Lower-Division Courses

1. Music Industry Forum. (1) Lecture, one hour. Intro
duction to considerations of contemporary issues in global music industry through interaction with in
structor, guest lecturers. May be repeated for credit. P/NP grading.

2. Music Industry Fundamentals. (4) Formerly num
bered 112; Lecture, three hours; discussion, one hour. Introduction to current music industry, Overview of career paths, monetization strategies, organizational behavior, and entrepreneurial thinking. Designed to serve as gateway for music industry degree programs. Students familiarize themselves with basic functions of industry that are covered in greater detail in upper-division coursework. Letter grading.

3. Reel Beatles: Understanding Beatles through Film and Media. (3) Lecture, three hours; discussion, one hour. Designed to tell story of the Beatles through visual media. Covers over 80 years of their lives, their journey, and enormous impact they had on world. Focus on how the Beatles were seen on television and in film. Examination of their most impactful filmed per
formances, movies they made as group, their promo
tional videos, their landmark broadcast moments, documentaries made about them while still they were still together, television interviews they did after group broke up, best documentaries made about them since 1970, and official multi-part documentary story of the Beatles they did together as well as Peter Jackson’s 2021 documentary. Letter grading.

4. 10A-10B. Finance and Accounting in Music Industry I, II, (4-4) Lecture, three hours. Introduction to how money works in both nonprofit and for-profit music in
dustries, including practical management of funds, budgeting (including tour budgets), fees, scales, ser
vice agreements, issues pertaining to trade unions, and various modes of accounting for salary, royalties, local and international taxation, streaming revenues, li
ensing payments, and other income and expenditure. Letter grading. 10B, Requisite: course 10A.

19. 10A-20B. How Music Works I, II, (4-4) Lecture, four hours; recitation, one hour. Introduction to how music works in both nonprofit and for-profit music in
dustry in technological era of mass culture, and reconsid
eration of music theory for global 21st century music professional. How organized sound can be come source of pleasure, mode of communication, strategy of resistance, and (sometimes) source of in
tellectual property. No particular style of music or type of notation is privileged, and no traditional musical training is required. Letter grading. 20B, Requisite: course 20A.

25. Fostering Musical Creativity: Artists and Reper
toires. (4) Lecture, four hours; outside study, eight hours. Beginning from psychology of creativity (James, Freud, Gagné), analysis of literature, exploration of creative process and how to foster and control it; and collaborative process with producer, manager, labels, and other executives. Topics include path of creative indi
viduality; structure and freedom; collaboration and how teams work, including inside and outside concert hall and recording studio; focus on gender and career
building; feedback and evaluation. Special attention to musical creativity and its rhythms. Letter grading.

29. 91A-91B. Rock/Pop Studio Ensemble I, II, (2-2) Ac
tivity, five hours. Course 91A is requisite to 91B. Perfor
mance-based introduction to popular music styles, forms, and competencies through immersion in studio performance techniques. Students develop their own documentary and feature films and other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu
dents. Honors content noted on transcript, P/NP or letter grading.

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dents. Honors content noted on transcript, P/NP or letter grading.
fewer units. Internship in supervised setting in community organization, agency, or private business. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for maximum of 8 units. Individual contract with supervising faculty member required. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised individually). Students must enroll in research program in consultation with academic advisor. Required or approved for major's curriculum. May be repeated for maximum of 4 units. Individual contract required; consult Undergraduate Research Center. May be repeated, P/NP grading.

Upper-Division Courses

101. Seminar in Music Industry. (4) Seminar, four hours; outside study, eight hours. Required of Music Industry majors. Introduction to intellectual and theoretical frameworks that form the Music Industry minor and that minors are expected to master to understand the nature of the music industry. Letter grading.

102A. Seminar in Music Industry. (4) Seminar, four hours; outside study, eight hours. Required of Music Industry majors. Seminar in contemporary topics in music and the music business as they pertain to the development of new ideas, technologies, and business models. Letter grading.

103. Music, Mind, and Brain. (4) (Same as Neuroscience M170.) Seminar, three hours; outside study, nine hours. Multidisciplinary approach to understanding brain mechanisms mediating music perception, performance, and cognition. Students’ natural interest in music serves as springboard for learning basic concepts about the brain, and how brain works to determine perception of harmony and rhythm, emotion and meaning in music, and musical creativity. Designed to help students understand methodologies currently used to investigate brain-behavior correlates. Broad understanding of research topics in cognitive neuroscience; introduction to fundamental principles in neurophysiology, psychophysiology, and neuroanatomy. Letter grading.

104A. Music and Law. (4) Seminar, three hours; outside study, nine hours. Fundamentals of American law as it applies to entertainment business, with special attention to music and its use in film, television, and new media, legal and ethical issues in entertainment business and basic business practices. Exploration of legal aspects of process of producing works in entertainment field, from acquisition of rights and talent through production, distribution, etc. Letter grading.

104B. Legal and Business Aspects of Music Publishing. (4) Seminar, three hours. Exploration of legal and business aspects of creation and distribution of musical compositions in today’s evolving marketplace. Detailed exploration of rights afforded songwriters under Copyright Act of 1976, and practical review of ability of these authors to control and monetize these rights. Review and practical analysis of agreements involved from inception to global exploitation of compositions including co-writer agreements, registration of songs, administration agreements, public performance agreements, and sound recordings. Exploration of financial implications for songwriters of these agreements. Letter grading.

104C. Legal and Business Aspects of Sound Recordings. (4) (Formerly numbered 104B.) Seminar, three hours; outside study and research, nine hours. Exploration of legal and business aspects of production and distribution of sound recordings. More detailed practical focus on legal aspects of recording process itself, from initial assembly of material to final distribution and collection of royalties, with material covered also relevant to audio-visual recordings. Introductory presentation on copyright, contract, and trademark law as background for step-by-step process of securing agreements necessary for production and commercial distribution of recordings. Letter grading.

107A. Engineering and Production Fundamentals. (4) Lecture, two hours; studio, one hour; outside study, nine hours. Introduction to basic acoustic principles, practical recording techniques, and recording processes for equipment used in contemporary music production, including microphones, mixers, recorders, synthesizers, and sequencers. Basic sound processing operations (equalization, compression, distortion, reverberation) and typical effects systems. Basic principles of music production software and hardware. Letter grading.

107B. Engineering and Production for Musicians. (4) Studio, four hours; outside study, eight hours. Enforced prerequisite: course 107A. Examination of selected technological elements in greater depth than in course 107A, while applying established concepts to broad range of creative and practical applications. Basic familiarity with standard audio workstation software in use in music industry and introduction to foundational theoretical concepts in audio engineering, psychoacoustics, mixing, mastering, and sound recording. Development of critical listening skills through in-class and assigned listening. Letter grading.

108. Founding and Sustaining Performing Arts Organizations. (4) Seminar, four hours. Examination of process of founding and sustaining performing arts organizations, beginning with inspiration to do so, clarifying organization mission, and mechanics of becoming nonprofit corporations; issues of funding, press relations, fundraising, management of nonprofit arts; building and sustaining relationships with other organizations in field; issues of making and distributing recordings. Students create on paper one performing arts organization, including developing mission statement, preparing bylaws, and writing sample grant proposals. Letter grading.

110. Music Business Now. (4) Seminar, three hours. Hands-on introduction to business of music, with emphasis on marketing and media. Students work in teams to develop strategies for real-world artists. P/NP or letter grading.

111A-111B. Rock/Pop Studio Ensemble I, II. (4–4) Studio, four hours; outside study, four hours. Performance-based introduction to popular music styles, forms, and competencies through immersion in studio performance techniques. Students play in groups to develop ensemble, create material, and produce recordings. May be repeated for credit. P/NP or letter grading.

111A. Introduction to Songwriting. (4) Seminar, four hours; outside study, eight hours. Learning and employment of craft of songwriting. Examination, analysis, and implementation of song structure, lyric and melody writing, performance techniques, and recording techniques. Evolution of songwriting in modern society since advent of phonograph player/ radio; how songs and society affect and reflect one another; how this has informed songs and songwriters. Letter grading.

111B. Advanced Songwriting. (4) Seminar, four hours; outside study, eight hours. Enrollment by consent of instructor. Seminar in contemporary songwriting practices for intermediate to advanced songwriters. Emphasis on collaboration, flexibility, and working within teams to master specific songwriting challenges. All genres and styles of music accommodated. Letter grading.

112A. Introduction to Production. (4) Seminar, four hours; outside study, eight hours. Enrollment by consent of instructor. Seminar in contemporary sound production practices for intermediate to advanced engineers. Use of digital audio workstations, plugins and hardware, creation of live performance rigs controlling sound and vision. Students develop individual proficiency in key styles of beat-oriented popular music, including hip-hop, electronic dance music, pop, and experimental rhythm and blues. Principles of analog and digital synthesis, creation of sound libraries, control of digital audio recording and mixing. Sound amplification and integration of live performance with digital sound. Electronically submitted final project. P/NP or letter grading.


113A. Music Supervision. (4) Seminar, three hours. Recommended prerequisite: course 113A. Further development of theoretical and practical knowledge of music supervision, interaction with professionals in field, and practice negotiating music requests and clearances. Application of music supervision principles in multi-series episode, in-studio music departments, managing extensive catalogs, etc. Letter grading.

114. Concerts and Venues: Producing Special Events. (4) Seminar, three hours. Behind-scenes overview of how to produce successful live show, special event, or concert, from concept to execution, including market planning, venue production, concept and design, operating personnel, talent, security, and budget. Students acquire specialized knowledge and principles involved in staging any kind of event in stadiums, concert halls, arenas, exhibitions, and art installations in venues worldwide. Includes guest speakers and site visits to major shows, venues, and production facilities. Letter grading.

115A. Art of Music Production I. (4) (Formerly numbered 115.) Lecture, three hours; studio, two hours. Exploration of techniques and process of music production and larger issues in art of making music. Students learn how to foster and capture performances of music through variety of methods and tools, including art direction in studio and choices made in sound, arrangement, and application of technology. Letter grading.

115B. Art of Music Production II. (4) Lecture, three hours; studio, two hours. Course 115A is requisite to 115B. Further exploration of techniques, methods, and process of music production and larger issues in art of making music. Students learn how to foster and capture performances of music through variety of methods and tools including artistic direction in studio and choices made in sound, arrangement, and application of technology. Critical listening skills. Introduction to contemporary technologies, including spatial audio, multi-channel sound, etc. Letter grading.


122. Digital Marketing and Promotion. (4) Seminar, four hours; outside study, eight hours. Requisites: courses 101, 102, 104A, or by permission of instructor. Record labels, streaming services, social media, marketing, merchandising, and other avenues of coordinated and independent marketing and promotion. Letter grading.

M176. Music and Capitalism in West. (4) (Same as Ethnomusicology M176.) Lecture, four hours. Follows history of western capitalism and how it has shaped music—making and listening to present time. P/NP or letter grading.

M181. Forensic Musicology. (4) (Formerly numbered 181.) (Same as Musicology CM181.) Seminar, three hours. Survey of critical issues and recent developments in field of forensic musicology—application of musical analysis to law of music copyright. Instructors include professionals in music industry. Study of fundamentals of music analysis and copyright law, review of key music copyright infringement cases from both legal and musical perspectives, outlining of procedural aspects of copyright case, and defining of working relationship between attorney and musicologist. Letter grading.


188. Special Courses in Music Industry. (4) Seminar, four hours; outside study, eight hours. Special topics in music industry for undergraduate students. Students meet on experimental or temporary basis. May be repeated for credit with topic change. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

190. Community or Corporate Internships in Music Industry and Technology. (4) Tutorial, eight hours. Preference given to juniors/senior in Music Industry minor who meet minimum 3.0 grade-point average. Internship in supervised setting in community agency or private business. Students meet on regular basis with supervisor and provide periodic reports of their experience. May be repeated for maximum of 8 units. Individual contract with supervising faculty member required. P/NP grading.

195CE. Community and Corporate Internships in Music Industry. (4) Tutorial, to be arranged; fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship in corporate, governmental, or nonprofit setting coordinated through Center for Community Engagement. Participants complete weekly written assignments, attend biweekly meetings with graduate student instructor, and write final research paper. Faculty mentor and graduate student instructor construct series of reading assignments that examine issues related to internship site. May be repeated for credit. No more than 8 units may be applied toward major. May be repeated for maximum of 8 units. Individual contract required. P/NP or letter grading.

196. Directed Mentorships in Music Industry, (2 or 4) Tutorial, one hour. Limited to senior Music Industry majors with minimum cumulative 3.0 grade-point average. Supervised individual research under guidance of faculty and industry mentoring team. Culminating industry project required. May be repeated for maximum of 8 units. Individual contract required. P/NP or letter grading.

197. Individual Studies in Music Industry and Technology. (2 to 4) Tutorial, six to 12 hours. Limited to juniors/seniors in Music Industry minor with minimum cumulative 3.0 grade-point average. Individual intensive study in music industry and technology, with scheduled meetings to be arranged between faculty member and student. May be repeated for maximum of 6 units. Individual contract with supervising faculty member required. Letter grading.
tive collaboration between performance and scholarship, a cross-cultural global understanding of the art of music, and preparatory training for a broad range of careers in music and the music industry after students graduate.

Undergraduate Majors

Musicology BA

The BA in Musicology appeals to undergraduates with musical backgrounds whose interests and principal career goals lie in areas other than professional performance. This undergraduate program prepares students for graduate programs in music and related fields and offers training within the broader context of the humanities.

Capstone Major

The Musicology major is a designated capstone major. Undergraduate students must complete a senior thesis that demonstrates the skills and expertise they have acquired in earlier coursework. Students are expected to conceive and execute a project that identifies and engages with a problem within a specialized topic, identify and analyze appropriate primary sources both textual and musical, and have a working knowledge of scholarly discourse relative to a specialized topic. While an extended essay is the default expectation for a completed project, students are encouraged to seek alternative formats, such as a lecture-recital, business or marketing plans, set of lesson plans, website, studio sound recording, or video/audio presentation. Students discuss and critique the work of their peers and present their work to other students and, if they choose, to the public as part of a student-organized live event and conference.

Learning Outcomes

The Musicology major has the following learning outcomes:

- Demonstrated specific skills and expertise, including research, analysis, writing, and general knowledge of music and music history
- Identification and analysis of appropriate primary sources and musical scores
- Conception and execution of a project that proposes and supports an original argument about a specialized topic
- Working knowledge of scholarly discourse relative to a specialized topic
- Engagement with peers through presentation, discussion, and critique of student work

Entry to the Major

Admission

The Musicology program assumes that students have some musical background before entering UCLA. Although auditions are not required, prospective majors should be sufficiently competent on an instrument or in voice to participate in a performance group, as required by the program.

Transfer Students

Transfer applicants to the Musicology major with 90 or more units should complete one year of music theory and musicianship prior to admission to UCLA. Experience in music performance is strongly recommended. Transfer students are required to take Musicology 12W at UCLA.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Musicology 1, M6A, M6B, M6C, 12W, Music 20A, 20B, 20C, and 6 units total of performance organizations selected from Ethnomusicology 68A through 68O, 91A through 91Z, 168A through 168O, Global Jazz Studies 176A through 176H, Music C175A through C175G, C185A through 185H, Musicology CM90T, or Music Industry 111A; one lower-division humanities elective (minimum of 4 units).

The Major

Required: Musicology 125A, 125B, 125C, 126, 127, 128 (in a given year, the department may designate individual Musicology seminars in the range 160-185, 188, or 191 as equivalent to 126 and 127); one additional upper-division ethnomusicology, global jazz studies, music, or music industry seminar elective course (minimum of 4 units); and the department capstone sequence, Musicology 187A, 187B, 187C.

Policies

Preparation for the Major

Enrollment in Musicology M6A, M6B, M6C and Music 20A, 20B, 20C requires taking the Music Theory Placement Examination administered by the Music Department during New Student Sessions or week 0. Students who do not pass the examination are required to take Music 3 prior to taking Music 20A.

The Major

Each course applied toward the major must be taken for a letter grade (courses offered only on a P/NP grading basis are acceptable).

Music History and Industry BA

The BA in Music History and Industry is not a technical or business degree; it is a liberal arts degree in musicology whose subject is the music industry, combining the focus on music as an art form with practical training and experiential learning based in the music industry. It includes courses that help students develop their skills in popular music creation and production as well as practical skills appropriate to the fiscal, entrepreneurial, and legal needs of the contemporary music world. A required internship in the Los Angeles music industry is a distinctive feature.

Capstone Major

The Music History and Industry major is a designated capstone major. Undergraduate students must complete a senior thesis that demonstrates the skills and expertise they have acquired in earlier coursework. Students are expected to conceive and execute a project that (a) identifies an issue, problem, or opportunity in the music industry and engages with it practically and critically, or (b) brings to fruition a substantial creative project in contemporary music with tangible results. While an extended essay is the default expectation for a completed project, students are encouraged to seek alternative formats, such as a lecture-recital, business or marketing plans, set of lesson plans, website, studio sound recording, or video/audio presentation. Students discuss and critique the work of their peers and present their work to other students and, if they choose, to the public as part of a student-organized live event and conference.

Learning Outcomes

The Music History and Industry major has the following learning outcomes:

- Development of basic musicianship and music literacy and fluency in music theory to accurately and efficiently communicate about musical concepts across multiple repertoires in popular music; basic competence with music technology
- Demonstrated general knowledge of the histories and repertories of Western European and US—American traditional, popular, and classical musics, as well as the influence of other world traditions
- Engagement with live ensemble performance in at least one area of music
- Working knowledge of scholarly and critical discourse relative to music history and the music industry
- Conception and execution of project that proposes and supports an original argument about a specialized topic or addresses a specific cultural question or presents and analyzes a case study of actual practice in the music industry
- Engagement with peers through presentation, discussion, and critique of their work
- Demonstrated basic understanding of how culture is theorized and interpreted, and the ability to place musical experiences and structures in rich cultural contexts, and to link music with social justice, diversity, and equity goals
- Demonstrated basic economic literacy and basic understanding of the economic and legal organization of creative industries
- Ability to find, evaluate, and apply high-quality data to support executive and entrepreneurial decisions
- Experiential learning in real-world corporate, creative, or entrepreneurial situations with written report

Entry to the Major

Admission

The Music History and Industry major assumes that students have some musical background before entering UCLA, although Western art music is not privileged. Auditions are not required, but prospective majors should be sufficiently competent on an instrument, in produc-
tion, or in voice to participate in a performance group, as required by the program.

Transfer Students
Transfer applicants to the Music History and Industry major with 90 or more units should complete one year of music theory and music history as required by the Musicology program, or in voice to participate in a performance ensemble. (Any genre) is strongly recommended. Transfer students are required to take Musicology 12W at UCLA. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major
Required: Music 20A, 20B, 20C; Musicology 1, M6A, M6B, M6C, 12W; and 4 units total of performance organizations selected from Ethnomusicology 68A through 68C, 91A through 91Z, 161A through 161Z, Global Jazz Studies 176A through 176H, Music C175A through C175G, C185A through C185H, Musicology CM90T, or Music Industry 111A; one lower-division musicology or music industry elective (minimum of 4 units).

The Major
Required: Musicology 125A, 125B, 125C, 128, Music Industry 101, 112A or 112B, 195 or 195CE, two additional upper-division music industry elective courses; and the Music History and Industry capstone sequence, Musicology 187A, 187B, 187C.

Policies

Preparation for the Major
Enrollment in Music 20A, 20B, 20C, and Musicology 1, M6A, M6B, M6C requires taking the Music Theory Placement Examination administered by the Music Department or an equivalent assessment administered by the Musicology Department during New Student Sessions or week 0. Students who do not pass the examination are required to take Music 3 prior to taking Music 20A.

The Major
Each course applied toward the major must be taken for a letter grade (courses offered only on a P/NP grading basis are acceptable).

Undergraduate Minor

Musicology Minor
The Musicology minor provides undergraduates with an overview of music history and the study of music. Students may select from a wide variety of undergraduate courses that range through the history of European and American music.

Admission
To enter the minor, students must have an overall grade-point average of 2.0 or better and complete the Musicology minor application. For more information, see the minor website.

The Minor

Required Lower-Division Courses (14 units): Musicology 1 and two lower-division musicology courses (minimum of 10 units total) with grades of C or better.

Required Upper-Division Courses (20 units): Two upper-division musicology seminar courses (minimum of 8 units total), and three additional upper-division ethnomusicology, global jazz studies, musicology, or music industry courses (minimum of 12 units total).

Policies

Enrollment in some courses may be limited; check with the department or instructor. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade (courses offered only on a P/NP grading basis are acceptable), and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Major

Musicology MA, CPhil, PhD
The graduate program in Musicology offers courses leading to the MA and PhD degrees. It is designed to equip students to pursue careers not only in teaching but also in other areas that require bibliographical skills and training in research methodologies. The department offers teaching and research assistantships each year for qualified students.

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in academic departments, other publications, and websites of the schools, departments, and programs.

Musicology

Lower-Division Courses
1. Issues and Methods in Musicology. (4) Formerly numbered 101.) Seminar, three hours. Introduction for Musicology majors and minors to practical aspects and fundamental issues of musicology as academic discipline. How musicologists go about establishing, editing, performing, analyzing, and interpreting musical texts, Exposure to kinds of activities, philosophies, and styles of scholarship that continue to shape the field of musicology. Letter grading.

M3. Introduction to Classical Music. (5) Formerly numbered Musicology 3.) (Same as Music M14.) Lecture, four hours; discussion, one hour. Survey of music of Western classical tradition, with emphasis on historical context, musical meanings, and creation of tradition itself. P/NP or letter grading.

5. History of Rock and Roll. (5) Lecture, four hours; discussion, one hour. Analysis of forms, practices, and meanings of rock and roll music, broadly conceived, from its origin to present. Emphasis on how this music has reflected and influenced changes in sexual, racial, and class identities and attitudes. Credit for both courses 5 and 185 not allowed. Letter grading.

M6A-M6B-M6C. Introduction to Musicianism. (2-2-2) (Same as Ethnomusicology M6A-M6B-M6C and Music M6A-M6B-M6C.) Laboratory, four hours. Preparation: placement examination. Course M6A is enforced requisite to M6B, which is enforced requisite to M6C. Students must receive grade of C– or better to proceed to next course in sequence. Introduction to musicianship through in-depth exploration of basic common musical elements and training in aural recognition, sight singing, dictation, and keyboard skills. Focus on topics such as tonal and modal harmony, rhythm, improvisation, composition, notation, and ear training to prepare students for later theory courses, participation in music ensembles, advanced study in music, and professional careers. Letter grading.

7. Film and Music. (5) Lecture, four hours; discussion, one hour. History of music and cinema, particularly ways music is used to produce meanings in conjunction with visual image. Credit for both courses 7 and 177 not allowed. P/NP or letter grading.

8. History of Electronic Dance Music. (5) Lecture, four hours; discussion, one hour. Survey of groove-based electronic dance music from its origins in 1960s pop and soul to present day house, techno, ambient, rave, and jungle. Emphasis on interaction of technology, musical structures, psychoactive drugs, and sub cultural and club cultures to induce altered states of musical consciousness; promise (versus reality) of political and spiritual transformation; electronic dance music as new art music. P/NP or letter grading.

9. American Popular Song. (5) Lecture, four hours; discussion, one hour. American popular music before advent of rock and roll in 1950s, with special emphasis on song tradition of Tin Pan Alley, P/NP or letter grading.

12W. Writing about Music. (5) Lecture, four hours; laboratory, one hour. Enforced requisite: English Composition 3 or 3H or English as a Second Language 56. Emphasis on learning specific skills, incorporating technical description, historical contextualization, subjective reaction, and certain stylistic conventions necessary in writing about music. Satisfies Writing II requirement. Letter grading.

13. Punk: Music, History, Subculture. (5) Lecture, four hours; discussion, one hour. Developments in punk music in their historical and subcultural contexts. Survey of punk and musical antecedents in 1960s, rise of punk in 1970s, and tracing of its expressive trajectories to present day. P/NP or letter grading.

19. Flat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP or letter grading.


28A. Medieval Period; 28B. Renaissance Period; 28C. 17th and 18th Centuries.

35. Introduction to Opera. (5) Lecture, four hours; discussion, one hour. Exploration of history of opera from its origins in Florentine Camerata in Italy in early 17th century, through area of Enlightenment and Romanticism, and ending with modern era of early 20th century. History of opera, biography of composers and singers, operatic conventions, dramaturgy, plot, staging, hermeneutics of opera, and musical style, with focus on learning appreciation of music of opera within rich context of its compelling history. P/NP or letter grading.

60. American Musical. (5) Lecture, four hours; discussion, 90 minutes. Survey of American musical in 20th century, beginning with its roots in operetta, vaudeville, and Gilbert and Sullivan, and focusing on its connections to politics, technology, film, opera, and variety of popular musical styles, including Tin Pan Alley, jazz, and rock. Credit for both courses 60 and 160 not allowed. P/NP or letter grading.
61. Music in Los Angeles. (5) Lecture, four hours; discussion, one hour. Exploration of history of music in Los Angeles. From Spanish missions and history of Los Angeles to greater emphasis on music in 20th century, with special focus on European émigrés, interment and postwar history of Japanese American community, Chicano and Mexican American music to present. African American traditions including jazz on Central Avenue, 1940s Beach Boys androck and roll, and more recent history that includes developments in punk and hip-hop. P/NP or letter grading.

62. Mozart. (5) Lecture, four hours; discussion, one hour. Designed for students who do not read music. Life, works, and mythology of Wolfgang Amadeus Mozart, in context of both his age and our own. Credit for both courses 62 and 162 not allowed. P/NP or letter grading.

63. Bach. (5) Lecture, four hours; discussion, one hour. Designed for undergraduate students. Life and works of Johann Sebastian Bach. Credit for both courses 63 and 163 not allowed. P/NP or letter grading.

64. Motown and Soul: African American Popular Music of 1960s. (5) Lecture, four hours; discussion, one hour. Survey of developments in post-World War II African American popular music, with special attention to musical styles and genres associated with Motown Records, Stax, and other rhythm and blues, funk, and soul music centers of production. Relationships between musical forms and political events of 1960s, including the civil rights movement, the Black Panthers, and the Watts Rebellion. P/NP or letter grading.

65. Blues in American Music. (5) Lecture, four hours; discussion, one hour. History of blues, both as specific genre and as range of techniques and approaches that have been central to American music and culture, from 19th-century roots to present. Exploration of commonly accepted blues mainstream exemplified by figures like Bessie Smith, Robert Johnson, and B.B. King, but also central role blues has played in blues by figures like Bessie Smith, Robert Johnson, and B.B. King, but also central role blues has played in American music and culture. Credit for both courses 64 and 164 not allowed. P/NP or letter grading.

66. Getting Medieval. (5) Lecture, four hours; discussion, one hour. Exploration of ideas of medievalism in music from historical perspective to video game. Content covered includes film scores, opera, Gregorian chant, early music revival, folk songs, progressive rock, and Goth. Credit for both courses 66 and 166 not allowed. P/NP or letter grading.

67. Popular Jewish and Israeli Music. (5) (Same as Jewish Studies M67.) Lecture, four hours; discussion, one hour. Music of Jews is diverse. With history of several thousand years and series of developments in modernity, music in Jewish life covers variety of styles found in many contexts. Exploration of music of Jews within last 100 years, with focus on popular music of Jews in America and Israel. Exploration of music in Israel, with focus on songs of last 10 years, Israeli rock, and Muzika Mizrachit (Middle Eastern popular music). P/NP or letter grading.

68. Beatles. (5) Lecture, four hours; discussion, one hour. Examination of life and music of Beatles within social and historical context of 1960s. Credit for both courses 68 and 168 not allowed. P/NP or letter grading.

69. Music and Politics. (5) Lecture, four hours; discussion, one hour. Examination of political and social dimensions of various ways in which music is informed by and informs politics. From individual performances to large demonstrations, music is recognized as a political act and tool that is not simply representative, but also constitutive, meaning that music creates belief systems (politics). Exploration of development and use of music by social movements, political parties, and nations, as tool for resistance to world around us and sounds that compose its future. P/NP or letter grading.

70. Beethoven. (5) Lecture, four hours; discussion, one hour. Designed for undergraduate students. Life and works of Ludwig van Beethoven. Credit for both courses 70 and 170 not allowed. P/NP or letter grading.

71. Listening. (5) Lecture, four hours; discussion, one hour. Introduction to humanistic study of listening, as perceptual modality for engaging others and world, with focus on experiences, history, politics, and ethics of listening. Hearing is shared perceptive faculty among able-bodied people, but listening practices are shaped by history, society, and culture. Hearing people listen differently depending on when, where, and how they live, as well as who they are as individuals. P/NP or letter grading.

72. Sacred Music. (5) Lecture, four hours; discussion, one hour. Study of forms and liturgies of Western church music. Credit for both courses 72 and 172 not allowed. P/NP or letter grading.

73. Music and Religion in Popular Culture. (5) (Same as Ethnomusicology M73.) Lecture, four hours; discussion, one hour. Survey of popular music in religious traditions since the 1970s. Growth of music in Jewish denominations, including Orthodox, Reform, and Conservative, and Christian contemporary music, from evangelical to cross-over artists performing in mainstream traditions. P/NP or letter grading.

75. History of Jazz. (5) Lecture, four hours; discussion, one hour. History and analysis of variety of jazz styles. From late 19th century to present, with emphasis on social meanings of musical practices. Letter grading.

76. Dancehall, Rap, Reggaeton: Beats, Rhymes, and Routes in African Diaspora. (5) Lecture, four hours; discussion, one hour. Introduction to major performers in each genre, comparison of styles, and relationship of each to context of its place of origin and exploration of technologies associated with contemporary music production. P/NP or letter grading.

M70. Jewish American Experience Through Music. (5) (Same as Ethnomusicology M80 and Jewish Studies M80.) Lecture, four hours; discussion, one hour. In synagogue and on stage, and from LP record to YouTube, Jews in America have varied musical experiences. Music of synagogue, celebrations at home, in community, and at all interesting developments of Jewish music. New Opportunities in entertainment industry brought new possibilities for Jews in popular music, rock, and film scores. Exploration of various aspects of music and adapting to their American context and becoming American through music. Exploration of different musical forms and genres represented by guest composers and performers. Letter grading.

M82. Music and Holocaust: Individual Experience. (5) (Same as Jewish Studies M82.) Lecture, three hours; discussion, one hour. Roles of music during Holocaust are as varied as people who experienced it. Music was composed and performed by prisoners in almost every concentration camp; music was means for some individuals to gain favorable treatment, while others weaponized it. Traces development of European musical culture under Nazi regime (1933-45), focusing on how individuals interacted with music throughout Holocaust. Study of some of newest developments in Holocaust music research, including role of American and European non-governmental organizations played in creation of artistic hubs in campus of southern France. Exploration also of cultural representations of Holocaust and role of music in society’s collective memory. Letter grading.

88. Sophomore Seminars: Music History. (2) Seminar, two hours. Designed for sophomore Musicology majors or students interested in pursuing Musicology major. Topics are chosen to reflect academic discipline, with particular emphasis on musicology at UCLA. Study of music and its history and consideration of theoretical issues central to musicology as it is practiced today. May be repeated. P/NP or instructor change. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limit to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

301HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

C490T. Early Music Ensemble. (4) (Same as Music M80T.) Activity, four hours. Preparation: audition. Group performance of Western vocal and instrumental music from historical periods prior to 1800. Early instrumental instruments may be used at instructor’s discretion. May be repeated for credit without limitation. May be concurrently scheduled with course C490T. P/NP or letter grading.

49. Music and Internet. (5) Lecture, four hours; discussion, one hour. Survey of changes undergone by music in digital environment. As music becomes increasingly pervasive—found everywhere, yet living nowhere—music’s social, economic, political, and aesthetic forces are diminishing central attention? Examination of formative force of Internet on sounds themselves. What kinds of noises develop logically within digital context, where creative freedoms and disinterest are equally apparent? What does Internet sound like? P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week for unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

M103. Creating Musical Community. (4) (Same as Ethnomusicology M103, Global Jazz Studies M103, and Music M103.) Seminar, four hours; discussion, one hour. Limited to school of music majors. Faculty and advanced students make music in small groups. Students learn certain repertoire, refine it, and bring it to concert performance. Students critically engage musical literacies and non-musical contexts that form basis of musical notation. Drawn from American music folk game traditions, highlights complex history of this country and way in which entire body is used as resource when instruments are unavailable. P/NP or letter grading.

M112. Disability and Musical-Dramatic Arts: Representation, Embodiment, Themes, and Practices. (5) (Same as Disability Studies M112.) Lecture, four hours; discussion, one hour. Limited to school of music majors. Faculty and advanced students make music in small groups. Students learn certain repertoire, refine it, and bring it to concert performance. Students critically engage musical literacies and non-musical contexts that form basis of musical notation. Drawn from American music folk game traditions, highlights complex history of this country and way in which entire body is used as resource when instruments are unavailable. P/NP or letter grading.

M125. Disability and Musical-Dramatic Arts: Representation, Embodiment, Themes, and Practices. (5) (Same as Disability Studies M125.) Lecture, four hours; discussion, one hour. Exploration of ways disability and impairment factor into musical and musical-dramatic creation and performance, considered historically and aspirationally in terms of representation, embodiment, thematic, and developing practices. P/NP or letter grading.

M133. Variable Topics on Music and Disability. (4) (Same as Disability Studies M133.) Seminar, four hours. Analysis and critique of depictions of disability and music. Topics may include introduction to disability studies; exploring work and creative strategies of disabled musicians; music technologies and instrument design; representation of disability in music; and other. May be repeated. Credit by topic or instructor change. P/NP or letter grading.

125A. Music, History, and Culture: Era of Church and Patron. (5) Lecture, four hours; discussion, one hour. Requisite: course M6A may be taken concurrently. Course 125A is required for 125C. Students must receive grade of C or better to proceed to next course in sequence. Introduction to history, culture, and structure of Western
music, in era of church and court patronage, through selected topics, repertoires, and analytical techniques. Letter grading.

125B. Music, History, and Culture: Era of Empires and Mercantiles. (8) Lecture, four hours; discussion, one hour. Requisite: course M68 (may be taken concurrently), 125A. Course 125A is requisite to 125B, which is requisite to 125C. Students must receive grade of C or better to proceed to next course in sequence. Introduction to history, culture, and structure of Western music, in era of empires and marketplaces, through selected topics, repertoires, and analytical techniques. Letter grading.

125C. Music, History, and Culture: Modern and Postmodern Era. (5) Lecture, four hours; discussion, one hour. Requisite: course M68 (may be taken concurrently), 125B. Course 125A is requisite to 125B, which is requisite to 125C. Students must receive grade of C or better to proceed to next course in sequence. Introduction to history, culture, and structure of Western music, in modern and postmodern era, through selected topics, repertoires, and analytical techniques. Letter grading.

126. Music, Cultures, and Their Interpretation. (5) Lecture, four hours; discussion, one hour. Requisite or corequisite: M6A. Designed to supplement broad historical and cultural approach taken, beginning with music published by and for African-American audiences. Special focus on folk music and early music revivalism. Credit for both courses 66 and 166 not allowed. Letter grading.

128. History of Popular Music. (5) Lecture, four hours; discussion, one hour. Requisite or corequisite: M6A. Survey of English-language popular music in 20th century, with special focus on folk music and early music revivalism. Credit for both courses 66 and 166 not allowed. Letter grading.

135A. Blues and Individual Expression. (5) Seminar, two hours. Enforced corequisite: attendance, but not enrollment, in course 64 lecture. Intensive discussion in seminar setting of selected topics associated with Beatles. Credit for both courses 65 and 165 not allowed. Letter grading.

135B. Selected Topics on Beatles. (5) Seminar, two hours. Enforced corequisite: attendance, but not enrollment, in course 64 lecture. Intensive discussion in seminar setting of selected topics associated with Beatles. Credit for both courses 65 and 166 not allowed. Letter grading.

140. Music, Media, and Consumer Society. (4) Lecture, four hours. Consideration of impact of recording technologies (gramophone, tape recorder, Walkman, sampler); broadcast media (radio, television, MTV, Internet); and Internet (record labels, advertising, Muzak) on people’s way we consume, and are consumed by music. How music functions and functions on recordings, under movies, behind ads, and in semiotic fabric of our culture. Letter grading.

150. Selected Topics in American Musical. (5) Seminar, 90 minutes. Enforced corequisite: attendance, but not enrollment, in course 60 lecture. Exploration of connections between American musical and American society on stage and American film musicals. Credit for both courses 60 and 160 not allowed. Letter grading.

152. Selected Topics in Music of Mozart. (5) Seminar, two hours. Preparation: ability to read music and engage in intellectual and analytical discussions. Enforced corequisite: attendance, but not enrollment, in course 62 lecture. Limited to Musicology majors and minors. Intensive discussion of selected pieces by Mozart and of certain topics important to fuller understanding of his contributions to musical culture of Enlightenment, as well as to contemporary culture. Credit for both courses 62 and 162 not allowed. Letter grading.


164. Selected Topics in African American Popular Music of 1960s. (5) Seminar, two hours. Enforced corequisite: attendance, but not enrollment, in course 64 lecture. Exploration of gender ideologies in several musical communities, with special attention to musical achievements of Motown Records, Stax, and other rhythm and blues, funk, and soul music centers of production. Relationships between musical forms and cultural issues of 1960s, including Civil Rights Movement, counterculture, black nationalism, capitalism, and separatism, and larger dimensions of African American experience as mediated through groove-based music. Credit for both courses 66 and 166 not allowed. Letter grading.

165. Blues and Individual Expression. (5) Seminar, two hours. Enforced corequisite: attendance, but not enrollment, in course 64 lecture. Intensive discussion in seminar setting of selected topics associated with Beatles. Credit for both courses 65 and 165 not allowed. Letter grading.

166. Medievalism and Music History. (5) Seminar, two hours. Enforced corequisite: attendance, but not enrollment, in course 64 lecture. Exploration of ways in which specific approaches and attitudes to past shape music history, composition, and performance, with special focus on folk music and early music revivals. Credit for both courses 66 and 166 not allowed. Letter grading.

167. Beethoven: Study of Selected Works. (5) Seminar, 90 minutes. Enforced corequisite: attendance, but not enrollment, in course 70 lecture. Designed to meet needs of students who read music and wish to examine Beethoven’s music in greater depth. Credit for both courses 70 and 167 not allowed. Letter grading.

170. Beethoven: Study of Selected Works. (5) Seminar, two hours. Enforced corequisite: attendance, but not enrollment, in course 70 lecture. Designed to meet needs of students who read music and wish to examine Beethoven’s music in greater depth. Credit for both courses 70 and 167 not allowed. Letter grading.

172. Selected Topics in Sacred Music. (5) Seminar, two hours. Enforced corequisite: attendance, but not enrollment, in course 72 lecture. Introduction to some ways that music has been used to support, sanctify, and enact sacredness, including experience of god(s), sense of transcendental, work of liturgy, and intersection of music, politics, and religion. Credit for both courses 72 and 172 not allowed. Letter grading.

173. Selected Topics in Music and Religion in Popular Culture. (5) (Same as Ethnomusicology M173.) Seminar, two hours. Enforced corequisite: attendance, but not enrollment, in course 74 lecture. Credit for both courses 73 and 173 not allowed. Letter grading.

177. Selected Topics in Film and Music. (5) Seminar, two hours. Enforced corequisite: attendance, but not enrollment, in course 77 lecture. Credit for both courses 77 and 177 not allowed. Letter grading.


185. Selected Topics in Rock and Roll. (5) Seminar, two hours. Enforced corequisite: attendance, but not enrollment, in course 85 lecture. Intensive discussion in seminar setting of selected topics in rock and roll. Credit for both courses 5 and 185 not allowed. Letter grading.

186. CM186. Music Industry. (4) (Same as Ethnomusicology CM182, Music CM182, and Music Industry M182.) Lecture, four hours; discussion, one hour; outside study, seven hours. Limited to Ethnomusicology, Music, and Musicology majors. Examination of influence of music industry on way music is created, performed, listened to, evaluated, and used today. Historical approach taken, beginning with music published in 18th century and continuing through development of postwar recordings to today. Concurrently scheduled with course CM288. Letter grading.


188. Special Courses in Music History. (4) Lecture, four hours. Special topics in music history for undergraduate students taught on temporary basis. Consult Schedule of Classes for topics and instructors. May be repeated for credit. P/NP or letter grading.


188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: course 188SA. Enforced corequisite: Honors Collegium 101E. Limited to senior/junior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.
190. Research Colloquia in Music History, (2) Seminar, two hours. Designed for senior Musicology majors. Designed to bring together students undertaking supervised seminar research in one or more fuller members to complete their capstone projects and share their work with their peers, as well as act as interlocutors for other course members. Students expected to present their work and to discuss a helpful work of others at other stage of development. They may elect to showcase their work before academic publics (e.g., through organizing one conference or one special publication). Letter grading.

191A-191P. Junior Variable Topics Research Seminars: History of Music. (4 each) Seminar, three hours. Designed for junior Musicology majors. Special aspects of music of early, medieval, and/or Renaissance; 191C, Baroque; 191D, Classic; 191E, Romantic; 191F, 20th Century; 191G. Other Topics; 191P. Performance Practice. Practical issues in performance practice, specific questions of how musical performance intersects with cultural and political performance, and/or general issues of theory of performance in Western music; proportion of each to be determined by reper- toire and historical context selected by instructor.

193C. Music History Journal Club Seminars for Majors, (2) Seminar, limited to Musicology majors. Introduction to discipline through discussion of readings and lectures on current topics in field, with focus especially on its practice at UCLA, and addressing research methodologies and development of bibliographic control. Normally taken in junior year. P/NP grading.

193D. Music History Performance/Analysis Seminars for Majors, two hours. Recommended requisite: course 193C. Limited to Musicology majors. Introduction to how music historians engage with issues of musical performance, and of how historical, theoretical, and/or methodological issues can inform music as practice, especially as it is performed, recorded, listened to, danced to, and otherwise consumed. Continued attention to issues of bibliography. Normally taken in senior year. P/NP grading.

195. Community Internships in Music, (2 to 4) Tutorial, one hour; fieldwork, 10 hours. Limited to juniors/seniors. Internship in supervised setting in community agency on chosen topic in music or music history. Students meet on regular basis with instructor and provide periodic reports of their experiences and final project. May be repeated for credit. Individual contract with supervising faculty member required. P/NP grading.

197. Individual Studies in Music History, (2 to 4) Tutorial, two hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. As- signed reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

198. Honors Research in Music History, (2 to 4) Tu- torial, two hours. Preparation: completion of maximum of four upper-division music history courses with departmental grade-point average of 3.5 or better and overall GPA of 3.0. Limited to junior/senior Musicology majors. One- to two-term independent research study project under supervision of appropriate faculty member, culminating in department honors thesis of approximately 25 pages. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research in Music History, (1 to 4) Tu- torial, one hour. Preparation: 3.0 grade-point average. Limited to junior/senior Musicology majors. Supervised individual research under guidance of faculty mento. Culminating paper or project required. May be repeated for maximum of 8 units. Individual contract required. P/NP or letter grading.

Graduate Courses

200A. Introduction to Music Scholarship, (6) Seminar, three hours. Designed for graduate musicology, ethnomusicology, and music students. Introduction to history of different disciplines (with strong focus on musicology) and to selected debates in those fields. Practical tools for research, logic and structure of arguments, evidence, critical thinking and critical theory, historiography, voice, and archival and ethnographic research. Introduction to practical written forms such as abstract, grant pro- posal, paper/book proposal, and review. Letter grading.

200B. Critical, Cultural, and Social Theory, (6) Seminar, three hours. Designed for graduate musicology, ethnomusicology, and music students. Introduction to issues surrounding music as social, cultural, and historical practice, with strong emphasis on critical, cultural, and social theory. May include introduction to social theory, materialist theories of culture, postcolo- nialism, critical theory, or overview of cultural theory or of group of theories selected by instructor, including feminism, performance studies, sociology, musicology, urban studies, anthropology, philosophy, psycho- analysis, poststructuralism, gender, race, and sexuality studies, lesbian, gay, transgender, and queer studies, disability studies, and so on. Introduc- tion to set body of theory in its relation to study of music. Letter grading.

200C. Music Politics, Analysis, and Philosophy, (6) Seminar, three hours. Designed for graduate musicol- ogy, ethnomusicology, and music students. Explo- ration of selected philosophical, aesthetic, and/or an- alytical perspectives; introduction to and insight into se- lected analytical and philosophical approaches to phenomenon of music and to acquire skills in ana- lyzing and interpreting variety of repertoires. Letter grading.

M201. Repertory and Analysis, (2) Same as Music 201A. Seminar, two hours. Requisite or corequisite: course 200A. Exploration of selected repertoire through readings and analysis. Specific topics vary. May be re- peated for credit. S/U grading.

245. Seminar: Analytical/Repertoire Topics, (4) Seminar, three hours. Designed for graduate musicology students. Coverage of analytical topics that vary from year to year. May be repeated for credit. Meets with course 246; concurrent enrollment in both courses not allowed. Letter grading.

246. Seminar: Theoretical Topics, (4) Seminar, three hours. Designed for graduate musicology students. Coverage of theoretical topics that vary from year to year. May be repeated for credit. Meets with course 245; concurrent enrollment in both courses not al- lowed. S/U grading.

248. Seminar: Special Topics in Musicology, (4) Seminar, three hours. Exploration of topics in musicology through variety of approaches that may include historical, theoretical, or analytical approaches to sub- jects within musicology. Topics announced in ad- vance. May be repeated for credit. Letter grading.

250. Seminar: Theoretical Topics, (4) Seminar, three hours. Designed for graduate musicology students. Coverage of theoretical topics that vary from year to year. May be repeated for credit. Meets with course 251; concurrent enrollment in both courses not al- lowed. Letter grading.

251. Seminar: Theoretical Topics, (2) Seminar, three hours. Requisite or corequisite: course 200A; Specific topics vary from year to year. May not be ap- plied toward MA or PhD degree requirements. May be repeated for credit. Meets with course 255; concurrent enrollment in both courses not allowed. S/U grading.

255. Seminar: Historical Topics, (4) Seminar, three hours. Designed for graduate musicology students. Coverage of historical topics that vary from year to year. May be repeated for credit. Meets with course 256; concurrent enrollment in both courses not al- lowed. Letter grading.

256. Seminar: Historical Topics, (2) Seminar, three hours. Requisite or corequisite: course 200A; Specific topics vary from year to year. May not be ap- plied toward MA or PhD degree requirements. May be repeated for credit. Meets with course 255; concurrent enrollment in both courses not allowed. S/U grading.

257. Seminar: Musicology and Performance Practice, (3) Seminar, three hours. Designed for graduate musicology students. Practical issues in performance practice, specific questions of how musical performance intersects with cultural and political performance, and/or general issues of theory of performance in Western music; proportion of each to be determined by reper- toire and historical context selected by instructor.

258. Seminar: Critical, Cultural, and Social Theory, (3) Seminar, three hours. Designed for graduate musicology, ethnomusicology, and music students. Introduction to issues surrounding music as social, cultural, and historical practice, with strong emphasis on critical, cultural, and social theory. May include introduction to social theory, materialist theories of culture, postcolo- nialism, critical theory, or overview of cultural theory or of group of theories selected by instructor, including feminism, performance studies, sociology, historiog- raphy, urban studies, anthropology, philosophy, psy- choanalysis, poststructuralism, gender, race, and sexu- ality studies, lesbian, gay, transgender, and queer studies, disability studies, and so on. Introduc- tion to set body of theory in its relation to study of music. Letter grading.

260. Mapping Sonic Urban Geography of Los Ange- les in 1940s, (4) Seminar, three hours. Limited to de- partmental graduate students and those in Urban Hu- manities Certificate Program. Exploration of method- ologies and conceptual frameworks for mapping sonic urban geography of Los Angeles in 1940s. In-depth critical discussion of current theories of music and space and of most recently developed methodologies and paradigms for understanding ethnomusicology of an urban area. Proposed study of sound, including recording and mapping soundscapes. May not be applied toward MA or PhD degree requirements. May be repeated for credit. Meets with course 260; concurrent enrollment in both courses not allowed. S/U grading.

260. Mapping Sonic Urban Geography of Los Ange- les in 1940s, (4) Seminar, three hours. Limited to de- partmental graduate students and those in Urban Hu- manities Certificate Program. Exploration of method- ologies and conceptual frameworks for mapping sonic urban geography of Los Angeles in 1940s. In-depth critical discussion of current theories of music and space and of most recently developed methodologies and paradigms for understanding ethnomusicology of an urban area. Proposed study of sound, including recording and mapping soundscapes. May not be applied toward MA or PhD degree requirements. May be repeated for credit. Meets with course 260; concurrent enrollment in both courses not allowed. S/U grading.

261. Topics in Performance Practice, (4) Seminar, three hours. Designed for graduate students. Investi- gation of a primary source or performance practice across history of Western music; analytical reports and practical applications in class demonstra- tions. May be repeated for credit. Letter grading.

269F. Forensic Musicology, (4) Seminar, three hours. Survey of critical issues and recent developments in field of forensic musicology—application of musical analysis to law of music copyright. Instructors include practicing musicians in music industry and professors with copyright law. Review of key music copyright infringement cases from both legal and musicological perspectives, outlining of proce- dural aspects of copyright case, and defining of working relationship between attorney and musicolo- gist. Concurrently scheduled with course CM181. Letter grading.


291. Teaching Western Musical Canon, (1) Seminar, scheduled with course CM186. Letter grading.

292. Research Topics in Musicology, (2 to 4) Seminar, two hours. Preparation: completion of maximum of four upper-division music history courses with departmental grade-point average of 3.5 or better and overall GPA of 3.0. Limited to junior/senior Musicology majors. One- to two-term independent research study project under supervision of appropriate faculty member, culminating in department honors thesis of approximately 25 pages. May be repeated for credit. Individual contract required. P/NP or letter grading.

295. Directed Research in Music History, (1 to 4) Tu- torial, one hour. Preparation: 3.0 grade-point average. Limited to junior/senior Musicology majors. Supervised individual research under guidance of faculty mentor. Culminating paper or project required. May be repeated for maximum of 8 units. Individual contract required. P/NP or letter grading.

596. Directed Individual Studies in Musicology. (2, 4, or 8) Tutorial, to be arranged. Limited to graduate students. S/U or letter grading.

597. Preparation for MA Comprehensive Examination or PhD Qualifying Examinations. (2 or 4) Tutorial, to be arranged. Preparation: development of thesis or dissertation. Limited to graduate students. May be repeated for credit. S/U grading.


Overview

In accordance with the National Defense Act of 1920 and with the concurrence of the Regents of the University of California, a unit of the Army Senior Division Reserve Officer Training Corps (ROTC) was established on the Los Angeles campus in July 1920. Navy and Air Force units were established in 1938 and 1949 respectively.

This voluntary training in the Naval Reserve Officer Training Corps (NROTC) program allows students to qualify for an officer's commission in the Navy or Marine Corps while completing their college education. The NROTC curricula are not considered academic majors, but NROTC courses may be taken as free electives and applied toward the total course requirements of a major. For students contracted in the Naval Science Department, 26 units of naval science credit may be applied toward the requirements for the bachelor's degree.

All three ROTC departments offer voluntary four- and three-year programs for first years and sophomores. The Army and Navy/Marine Corps also offer a two-year program for current and transfer students. All have leadership laboratories that teach leadership and management skills.

Active duty obligation following commissioning varies depending on branch of service and designated career field or occupational specialty.

Scholarships

NROTC scholarships are awarded on a competitive basis to U.S. citizens regardless of parents' income. Scholarships cover tuition, a book allowance, fees, and a tax-free monetary allowance between $250 and $400 per month during the academic year. Applications for scholarships may be obtained online or by calling 800-628-7682. Completed applications should be submitted no later than December 31 for the fall term. Two or three-year scholarship applications may be obtained from the Naval Science Department and should be submitted no later than the end of the spring term.

Naval ROTC Program

The Department of Naval Science provides professional training for students leading to an active duty commission at graduation in the U.S. Navy or Marine Corps. Through the NROTC, scholarship students receive full tuition, fees, books, and subsistence pay of $250 to $400 per month. Nonscholarship students may apply to participate as members of the midshipman battalion under the NROTC College Program and, if selected for advanced standing prior to their junior year, may receive an active duty commission at graduation. Because of the rapid development of highly technical ship systems, aviation, and other military equipment, science and engineering majors are highly desirable; however, Navy/Marine Corps scholarships are currently available to students pursuing any major offered by UCLA, as long as they agree to complete basic technical requirements. In addition to UC and UCLA requirements, Navy option midshipmen must complete 30 units and Marine Corps option midshipmen 22 units of naval science courses, physical fitness tests, and summer training, each about four to six weeks long. Both Navy and Marine Corps option students must also pass a swimming test. Naval science courses are open to UCLA students who are not in the program with consent of instructor and demonstrated interest in the Navy/Marine Corps and related fields, such as engineering, navigation and naval operations, history, and management.

Undergraduate Study

College Program (Nonscholarship)

Students attending UCLA who meet Navy/Marine Corps requirements but who do not have an NROTC scholarship may enroll in the College Program during their freshman or sophomore year. These students have the opportunity to compete for scholarships. If they do not win a scholarship, or choose not to compete for one, they must compete for advanced standing prior to their junior year. All College Program students receive uniforms, naval science textbooks and, once selected for advanced standing, monthly subsistence pay in their junior and senior years.

Marine Corps Option

Highly motivated NROTC students may request designation as Marine Corps option students and may also pursue any UCLA academic degree. The final summer training and a requirement to be commissioned as an officer in the Marine Corps, involves intensive Marine training at Officer Candidate School in Quantico, Virginia. Marine Corps option students also participate, on a limited basis, in field training exercises during the academic year.

Naval Science Lower-Division Courses

Z. Naval Science Laboratory. (No credit) Laboratory, to be arranged. Mandatory for and limited to Naval Science ROTC midshipmen. Provides midshipmen with general military training and practical command and staff leadership experiences through classroom instruction and performance of various tasks and interactive processes within framework of organized midshipmen-run military unit, with oversight by active-duty military staff. As integral part of naval science curriculum, provides professional experiences designed to develop leadership potential and orientation for active duty. No grading.

1A. Introduction to Naval Science. (3) Lecture, three hours. Introduction to organization of Naval Service, various components of Navy, career opportunities, shipboard damage control, fire fighting, Naval and Marine Corps operations, and some customs and traditions of Naval Service. Letter grading.

1B. Naval Ship Systems I. (4) Lecture, four hours. Introduction to naval engineering, with emphasis on steam, nuclear, diesel, and gas turbine propulsion systems and their associated auxiliary components. Basic thermodynamic theory, electrical theory, stability, and buoyancy. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20A. Naval Ship Systems II. (4) Study of naval weapon systems, with emphasis on infrared, radar, and sonar principles. Target designation and acquisition, methods of solving fire control problem, target detection systems. Analysis of transfer and feedback functions inherent in weapon systems.

20B. Seapower and Maritime Affairs. (3) Lecture, three hours. Conceptual study of seapower, with emphasis on historical development of naval and commercial power. Seapower examined in relation to economic, political, and cultural strengths, with focus on current abilities of specific nations to use oceans to attain national objectives. P/NP or letter grading.
Upper-Division Courses


102B. Naval Leadership and Management. (4) Lecture, four hours. Examination of current and classical leadership and management theories, with emphasis on their application to junior military officer’s role as a leader/manager. Topics include managerial functions, performance appraisal, motivation theories, group dynamics, leadership theories, and communication. P/NP or letter grading.

102C. Leadership and Ethics. (4) Lecture, four hours. Recommended requisite for Naval Science ROTC midshipmen: course 102B. Capstone and second of two core leadership courses that provide academic foundation of NROTC leadership development. Integration of intellectual exploration of Western moral traditions and ethical philosophy with military leadership, core values, professional ethics, Uniform Code of Military Justice, and Navy regulations. Provides midshipmen with basic understanding of major moral traditions, including relativism, utilitarianism, Kantian ethics, natural law theory, divine command theory, and virtue ethics. Letter grading.

103. Evolution of Warfare. (4) Study of evolution of warfare, including historical and comparative consideration of influence that leadership, political, economic, and sociological and technological development factors have had on warfare and influence they continue to exert in age of limited warfare.

104. Fundamentals of Maneuver Warfare. (4) Seminar, four hours. Study of fundamentals of maneuver warfare, with particular emphasis on doctrine, tactics, and equipment used. Examination of topics through study of political and military objectives by focusing on historical examples from Revolutionary War to modern times. Examination of contemporary doctrine through study of recent operations. Letter grading.

197. Individual Studies in Naval Science. (1 to 4) Tutorial, four hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

NEAR EASTERN LANGUAGES AND CULTURES

College of Letters and Science

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Near Eastern Languages and Cultures

310-825-4165

Department e-mail

Kathlyn (Kara) M. Cooney, PhD, Chair

Faculty Roster

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Carol A. Bakhos, PhD
Aaron A. Burke, PhD (Kershaw Professor of Ancient Eastern Mediterranean Studies)
Kathlyn (Kara) M. Cooney, PhD
Michael D. Cooperson, PhD
S. Peter Cowe, PhD (Narekatsi Professor of Armenian Studies)
Nouri Gana, PhD
Nile S. Green, PhD (Ibn Khaldun Endowed Professor of World History)
William M. Schniedewind, PhD
M. Rahim Shayaneg, PhD (Jahangir and Eleanor Apostolos Professor of Iranian Studies)
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Sariel H. Birnbaum, PhD
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Abeer T. Hamza, PhD
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Hagop Koulujian, MBA
Nahid Pirnazar, PhD

Banafsheh Pourzangi, MA
Sahba Shayani, PhD
Ahmad Karimi-Hakkak, PhD
Hans Barnard, MD, PhD
Ali Mousavi, PhD

Overview

The department offers instruction in the major modern and ancient languages of the Near East: Akkadian, ancient Egyptian, Arabic, Aramaic, Armenian, Berber, Coptic, Hebrew, Persian, and Turkic. To meet increasing demands for a knowledge of this area and its past and present, it treats each language in a wide perspective—as a means of communication, as a vehicle of a cultural heritage, as a research tool for the area, and as an object of research itself.

Mission

The mission of the department is the discovery, interpretation, dissemination, and preservation of human values created over a period of five or more thousand years in an area that was the cradle of all civilization.

Undergraduate Study

Undergraduate majors may be taken in Ancient Near East and Egyptology, Arabic, Iranian Studies, Jewish Studies, and Middle Eastern Studies. In each of these fields students must meet the requisites and take the courses prescribed. Their adviser assists in selecting a plan of study developed around their interests.

Students may combine their major with one in another department (double major) to enhance their educational opportunities. Due to the number of additional courses required, they are advised to consider this option early in their academic career and in consultation with program advisers in both majors.

Graduate Study

Master of Arts (MA) and Doctor of Philosophy (PhD) programs are offered in Ancient Near Eastern Civilizations, Arabic, Armenian, Hebrew, Iran, Islamic Studies, Semitics, and Turkic.

Career Prospects

Courses in the department prepare students for careers in government, foreign trade, teaching abroad, journalism abroad, archaeology, and further academic work involving the area.
Undergraduate Majors

Ancient Near East and Egyptology BA

Study Abroad

Students are encouraged to spend time abroad either to (1) study with an education abroad program or (2) work on a UCLA-affiliated archaelogical excavation in the broader Middle East. For information on studying abroad, contact the Education Abroad Program, 1332 Murphy Hall, 310-825-4995; for UCLA-affiliated excavations, contact the departmental academic counselor at 310-825-4165.

Learning Outcomes

The Ancient Near East and Egyptology major has the following learning outcomes:

- Demonstrated mastery of the ancient Near East and its history
- Demonstrated skills and expertise, including research, analysis, and writing
- Identification, evaluation, and analysis of historical monuments, time periods, vocabulary, concepts, and historical figures

Entry to the Major

Transfer Students

Transfer applicants to the Ancient Near East and Egyptology major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one civilization course on Mesopotamia, Egypt, Near Eastern archaeology, or Middle Eastern cultures. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major


Policies

The Major

No more than two upper-division 4-unit independent study or directed research courses (197, 198, 199) may be applied toward the major. Other courses, including extra-departmental courses, may be applied with consent of the adviser.

Iranian Studies BA

Students majoring in Iranian Studies may combine the major with specialization in other fields to enhance their career opportunities. Due to the number of additional courses required, they are advised to consider this option early in their academic career.

Learning Outcomes

The Iranian Studies major has the following learning outcomes:

- Demonstrated written and oral mastery of Persian language
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Ability to read texts in Persian and analyze the language and cultural context
- Identification, evaluation, and analysis of historical monuments, periods in time, vocabulary, concepts, and historical figures

Entry to the Major

Transfer Students

Transfer applicants to the Iranian Studies major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of Arabic. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Three courses selected from Ancient Near East 102A, 102B, 102C, 103A, 103B, 103C, 103D, 103E, 103F, 120, 140, 141, 142, 161A, 161B, 161C, CM163, 164, 169, 170 (at least three of the seven must be selected), Arabic 55 or M60.

The Major


Policies

The Major
A maximum of two Iranian 197 or 199 courses (8 units total) may be applied toward the major.

Jewish Studies BA

Study Abroad
Students are encouraged to spend up to one year in Israel either to (1) study with an education abroad program or (2) study at an Israeli university. For information on studying in Israel, contact the Education Abroad Program, 1332 Murphy Hall, 310-825-4889.

Learning Outcomes
The Jewish Studies major has the following learning outcomes:

- Demonstrated written and oral mastery of the Hebrew language
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Ability to read texts in Hebrew and analyze the language and cultural context
- Identification, evaluation, and analysis of historical monuments, periods in time, vocabulary, concepts, and historical figures

Entry to the Major

Transfer Students
Transfer applicants to the Jewish Studies major with 90 or more units must complete the following introductory course prior to admission to UCLA: one social, cultural, and religious institutions of Judaism course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Jewish Studies M10, one course selected from Ancient Near East 10W, 12W, Jewish Studies M67, M80, M82, Middle Eastern Studies M50A, M50B, M50CW, and demonstrated proficiency equivalent to level 3 at UCLA in one foreign language (Arabic, Amharic, Hebrew) in consultation with the department.

The Major


Middle Eastern Studies BA

Study Abroad
Students are encouraged to spend time abroad either to (1) study with an education abroad program or (2) work on a UCLA-affiliated archeological excavation in the broader Middle East. For information on studying abroad, contact the Education Abroad Program, 1332 Murphy Hall, 310-825-4889; for UCLA-affiliated excavations, contact the departmental academic counselor at 310-825-4165.

Learning Outcomes
The Middle Eastern Studies major has the following learning outcomes:

- Demonstrated written and oral mastery of a Middle Eastern language
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Identification, evaluation, and analysis of historical monuments, periods in time, vocabulary, concepts, and historical figures

Entry to the Major

Transfer Students
Transfer applicants to the Middle Eastern Studies major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of Arabic, Armenian, Hebrew, Persian, Turkish, or another modern middle Eastern language.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Required: Two courses selected from Ancient Near East 10W, 12W, 14W, 15W, M60, History 90Y, Iranian 55, 56, Islamic Studies M20, Jewish Studies M10, Middle Eastern Studies M50A, M50B, M50CW, Near Eastern Languages M20, 65, and demonstrated proficiency equivalent to level 3 at UCLA in one modern Middle Eastern language (Arabic, Armenian, Hebrew, Persian, Turkish) or through a departmental language placement examination. Students selecting ancient languages (including Akkadian, Aramaic, Coptic, Egyptian, Old or Middle Iranian, Sumerian, Syriac) are not required to take a modern elementary Middle Eastern language.

The Major
Students must complete 11 courses as follows:

- Required Core Courses: A total of six courses, including at least two from three of the following four areas:
  - Literature: Ancient Near East 150A, 150B, Arabic M110, C141, M149, Hebrew 120, 125, 130, 135, C140, 170, Jewish Studies M113, 143, M150A, 150B, M151A, 151B, M162, 170, 175, M187, Iranian 120, 130, 131, 132, 140, 141, 150A, 150B.


Policies

The Major
Students may petition to substitute a core or elective course with a departmental independent study/directed research course (197, 198, or 199) as long as it covers a topic relevant to Middle Eastern studies. No more than two 197, 198, or 199 courses (8 to 10 units) may be applied toward the major.

Undergraduate Minors

Ancient Near East and Egyptology Minor

Admission
To enter the Ancient Near East and Egyptology minor, students must have an overall grade-point average of 2.0 or better and file a petition in 378 Kaplan Hall, 310-825-4165.
The Minor

Required Lower-Division Courses (10 units):

Required Upper-Division Core Courses (12 to 15 units):

Required Elective Courses (8 to 10 units):

Policies

A maximum of 4 graded units of special studies courses (197, 198, 199) approved by the adviser may be applied toward the minor. No course for the minor or preparation for the minor may be taken on a P/NP grading basis.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Armenian Studies Minor

The Armenian Studies minor is designed for students who wish to augment their major program with a group of courses that provide a systematic introduction to the study of Armenian culture.

Admission

To enter the minor, students must have an overall grade-point average of 2.0 or better and file a petition in 378 Kaplan Hall, 310-825-4165.

The Minor

Required Upper-Division Courses (35 units):

Policies

Course 199 may not be applied. With consent of the undergraduate adviser, two of the five courses may be taken outside the department. Ordinarily, the following courses may be applied: History 107A through 107E, Indo-European Studies M150.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Hebrew and Jewish Studies Minor

Admission

To enter the Hebrew and Jewish Studies minor, students must have an overall grade-point average of 2.0 or better and file a petition in 378 Kaplan Hall, 310-825-4165.

The Minor

Required Lower-Division Courses (15 units):
Arabic 1A, 1B, 1C, or equivalent.

Required Upper-Division Courses (20 units):
Five courses in Arabic or Islamic studies; 197, 198, 199 courses may not be applied. Courses recommended as electives for the major in Arabic (Anthropology M166Q, Art History 119A, 119B, C120, Comparative Literature 100, History 105A, 105B, 105C, M106, 108B, 111A, 111B, 111C, 130, Political Science 132A, M132B, 157, 165) may be applied.

Policies

With consent of the undergraduate adviser, two of the five courses may be taken outside the department. Other courses may be applied with consent of the adviser.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Israel Studies Minor

The Israel Studies minor is designed for students interested in adding a particular focus on Israel to their major. Comprised of coursework that serves to create a broad introductory foundation of familiarity with Israeli history, society, politics, and culture, the minor is appropriate

Admission

To enter the Israel Studies minor, students must have an overall grade-point average of 2.0 or better and file a petition in 378 Kaplan Hall, 310-825-4165.

The Minor

Required Lower-Division Courses (15 units):
Hebrew 1A, 1B, 1C, or 8, or equivalent.

Required Upper-Division Courses (20 units):
Five courses from the Hebrew or Jewish studies section of the department; 199 courses may not be applied. With consent of the undergraduate adviser and based on course content, two of the five courses may be taken outside the department.

Policies

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Iranian Studies Minor

Admission

To enter the Iranian Studies minor, students must have an overall grade-point average of 2.0 or better and file a petition in 378 Kaplan Hall, 310-825-4165.

The Minor

Required Lower-Division Courses (10 to 11 units):
Iranian 1C or 20C or equivalent and one course from Iranian 55 or M60.


Policies

A maximum of 4 units of special studies courses (197, 198, 199) approved by the adviser may be applied toward the minor. No course for the minor may be taken on a P/NP grading basis.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Israel Studies Minor

The Israel Studies minor is designed for students interested in adding a particular focus on Israel to their major. Comprised of coursework that serves to create a broad introductory foundation of familiarity with Israeli history, society, politics, and culture, the minor is appropriate
Graduate Majors

Islamic Studies MA, CPhil, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Near Eastern Languages and Cultures MA, CPhil, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Ancient Near East

See Semitics for Akkadian, Aramaic, Phoenician, Syriac, and Ugaritic courses.

Lower-Division Courses

10W. Jerusalem: Holy City. (5) Lecture, three hours; discussion, one hour. Enforced requisite: English Composition 3. Not open for credit to students with credit for course 12W. Survey of religious, political, and cultural history of Jerusalem over three millennia as symbolic focus of three faiths: Judaism, Christianity, and Islam. Transformation of sacred space as reflected by literary and archaeological evidence through examination of testimony of artifacts, architecture, and iconography in relation to written word. Study of creation of mythic Jerusalem through event and experience. Satisfies Writing II requirement. Letter grading.

12W. Jerusalem: Holy City. (5) Seminar, four hours. Enforced requisite: English Composition 3. Not open for credit to students with credit for course 10W. Survey of religious, political, and cultural history of Jerusalem over three millennia as symbolic focus of three faiths: Judaism, Christianity, and Islam. Transformation of sacred space as reflected by literary and archaeological evidence through examination of testimony of artifacts, architecture, and iconography in relation to written word. Study of creation of mythic Jerusalem through event and experience. Development of advanced writing skills and critical thinking. Satisfies Writing II requirement. Letter grading.


15. Women and Power in Ancient World. (5) Lecture, four hours; discussion, one hour. Not open for credit to students with credit for course 15W. Examination of how feminine power confronts masculine dominance within complex social systems in ancient world. To gain political power, some female rulers used their sexuality to gain access to important men. Other women gained their position as regents and helpers of masculine kings who were too young to rule. Others

for students from a wide range of majors including Art, Comparative Literature, Film and Television, History, Jewish Studies, Middle Eastern Studies, Political Science, and Study of Religion.

Admission

To enter the minor, students must have an overall grade-point average of 2.0 or better, completed Middle Eastern Studies M50CW or equivalent, and file a petition in 378 Kaplan Hall, 310-825-4165.

The Minor

Required Lower-Division Courses (10 units): Two courses from Ancient Near East 10W, 12W, Jewish Studies M10, Middle Eastern Studies M50A, M50B, or M50CW.


Policies

A maximum of 4 graded units of special studies courses (197, 198, 199) approved by the department may be applied toward the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Middle Eastern Studies Minor

The Middle Eastern Studies minor is designed for students who wish to augment their major program in the College of Letters and Science with a group of related courses from various linguistic, literary, archaeological, and historical disciplines of the Near East, from ancient Egypt, Mesopotamia, and biblical studies to the modern Arabic, Armenian, Iranian, Jewish, and Turkish world.

Admission

To enter the minor, students must have an overall grade-point average of 2.0 or better and file a petition in 378 Kaplan Hall, 310-825-4165.

The Minor


Required Upper-Division Courses (20 units): A total of five courses, including at least three from one of the following four areas:


Policies

Students may not substitute a core or elective course with a departmental independent study/directed research course (197, 198, or 199).

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.
denied their femininity in dress and manner, effectively androgynizing themselves or pretending to be men so that their femininity would not be obstacle to political rule. Many women only gained throne at end of dynastic battles against imperial aggression. No women were able to gain throne through their own prowess or formal education alone. Women’s power was compromised from outset. Examination of root causes and results of this political inequity. P/NP or letter grading.

15W. Women and Power in Ancient World. (5) Lecture, four hours; discussion, one hour. Requisite: English Composition 3. Not open for credit to students with credit for course M60. Survey of period from circa 3000 BC to 300 CE, rise and fall of Achaemenid Persia, first world empire of antiquity, which was ended by Alexander the Great, whose campaigns were as transformative as they were violent. Alexander connected ancient kingdom and political ideology; comparative study of empires; administration and political nuances of ancient world. Focus on themes of ancient kingship and political ideology; comparative study of empires; administration and political nuances of ancient world. Students gain broad knowledge of Achaemenid and Macedonian empires, facility with ancient primary sources, and development of analytical skills central to discipline of history that allow conceptualizing issues of diversity and othering in ancient world. Satisfies Writing II requirement. P/NP or letter grading.

M70. Demons, Fear, and Uncanny in Ancient World. (5) (Same as Religion M70.) Lecture; three hours; discussion, one hour. Consideration of place of demons and fears in several cultures in ancient world: Mesopotamia; ancient Egypt, Greece, and Rome; and Biblical and early Jewish contexts. Investigation into why demons and monsters existed in these cultures; how they were conceived and protected against; and how that different societies feared, and how that fear was represented. As demons and monsters are reflections of particular culturally specific fears and norms, studying them allows for examination of societies that constructed them. Examination of how fear of threats such as disease, illness, and death were constructed alongside fears of foreign enemies, such as Persians. Examination of wide range of primary source texts, addressing core question of how different societies construct unique fear — and how those fears shape those societies in turn. P/NP or letter grading.

Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, research, and other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

BHHC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Design as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

CM101A. Art and Architecture of Ancient Egypt, New Kingdom to Greco-Roman Period. (4) (Same as Art History M101B.) Lecture, three hours. Study of art, architecture, sculpture, painting, and minor arts during Pre-dynastic period and Old Kingdom. May be repeated for credit with consent of instructor. Concurrently scheduled with course C267A. P/NP or letter grading.

M101C. Ancient Egyptian Temple and City of Thebes. (4) (Same as Art History M110C.) Lecture, four hours; discussion, one hour (when scheduled). Course M101A is not requisite to M101B. Designed for juniors/seniors. Political and cultural institutions of ancient Egypt and ideas on which they were based. P/NP or letter grading. May be repeated for credit with consent of instructor. Concurrent discussion of Prehistory, Old and Middle Kingdom. M103B. New Kingdom and Late period until 332 BC.

M104A. History of Ancient Mesopotamia and Syria. (4) (Same as History M104B.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Political and cultural development of Fertile Crescent, including Palestine, from Late Uruk to neo-Babylonian period. P/NP or letter grading.

M104B. Sumerians. (4) (Same as History M104B.) Lecture, three hours. Overview of Sumer and related cultures of Greater Mesopotamia in 4th and 3rd millennium BCE, with focus on rich cultural history of region and integration of archaeology and historical, and written records. P/NP or letter grading.

M104C. Babylonians. (4) (Same as History M104C.) Lecture, three hours. Overview of Babylonia and cultural history of region from late 3rd millennium BCE to invasion of Cyrus in 539 BCE, with focus on history and archaeology of region, urban structure, literature, and legal practices. P/NP or letter grading.

M104D. Assyrians. (4) (Same as History M104D.) Lecture, three hours. Overview of Assyrian cultural history from its origins to end of Neo-Assyrian period (circa 612 BCE), with focus on rise, mechanics, and decline of Neo-Assyrian Empire, which at its peak ruled ancient Near East from Zagros to Egypt. P/NP or letter grading.

M105. Archaeology of Egypt and Sudan. (4) (Same as Anthropology M115.) Lecture, two hours; laboratory, three hours. Ancient Egypt is well known for its rich archaeological sites and artifacts. Students will explore the history and archaeology of region, urban structure, literature, and legal practices. P/NP or letter grading.

M110A-M110B-M110C. Iranian Civilization. (4-4-4) (Same as History M110A-M110B-M110C.) Lecture, four hours; discussion, one hour (when scheduled). P/NP or letter grading. M110A. History of Achaemenid Empire. From end of Elam and rise of Medes to Macedonian conquest of Achaemenid Empire. Emphasis on political history, state structure, empire’s religions, and Greco-Persian interactions. Further accents on Cyrus’ empire and Darius’ world order, age of Persian Wars, Cyrus the Younger. Achaemenid Empire’s conquest. M110B. History of Arsacid (Parthian) Empire. From Hellenistic rule in Persia to Sassanian conquest. Emphasis on political history, state structure, empire’s...
Lecture, three hours. Requisite: course 121A. Reading of Egyptian texts to deepen knowledge of Egyptian grammar and to acquire familiarity with arts and methods of philology, study of ancient texts.

121A-121B-121C. Intermediate Ancient Egyptian Readings. (5–5–5) Lecture, three hours. Requisite: course 121B, which is requisite to 121C, which is requisite to 121A. Thematic readings in ancient Egyptian hieratic and literary texts. May be repeated for credit. P/NP or letter grading.

122. Ancient Egyptian: Intensive. (12) Lecture, 10 hours; discussion, 10 hours. Not open to students who have completed course 121A. Reading of enough Egyptian to qualify for more advanced courses. Intensive course equivalent to courses 120A, 120B, and 120C. Introduction to hieroglyphic script and phonology and morphology of Middle Egyptian, with emphasis on textual evidence, reading, and grammar. Offered in summer only. P/NP or letter grading.

C123A-C123B. Coptic. (5–5) Lecture, three hours. Introduction to Coptic, final phase of Egyptian language, which is attested in writing from circa 300 to 1400 CE. Concurrently scheduled with courses C223A-C223B. P/NP or letter grading. C123A. Devoted to learning Coptic alphabet, grammar, and vocabulary (Sahidic dialect), with particular emphasis on historical linguistics. C123B. Requisite: course C123A. Introduction to variety of Coptic textual genres, from hagiographies to homilies, historical documents, legal tracts, and Gnostic Gospels found in Nag Hammadi. Readings in texts in dialects other than Sahidic (Bohairic, Fayumic, Akhmimic).

124. Middle Egyptian Technical Literature. (4) Lecture, three hours. Requisite: courses 121A-C. Reading of Middle Egyptian technical literature in hieroglyphic transcription. Medical, veterinary, mathematical, and astronomical texts included. P/NP or letter grading.

125A. Digital Cultural Mapping Core Course A: Place, Time, and Digital World. (4) Lecture, three hours; discussion, one hour. Introduction to how emerging digital mapping technologies like geographic information systems (GIS), virtual globes, and three-dimensional modeling are being utilized as new means of inquiry in the humanities and social sciences. Provides students with critical apparatus needed to learn to critically analyze map-based presentations. Tracing of history of mapping and spatial representation of place to learn how mapping has always been connected with societal structures and power, and how contemporary use technology in digital cultural mapping projects. Analysis of different forms of visual presentation, with focus on data representation through mapping, reasoning, and visualization of data to learn to critically analyze map-based presentations. Tracing of history of mapping and spatial representation of place to learn how mapping has always been connected with societal structures and power, and how contemporary use technology in digital cultural mapping projects.

M125B. Digital Cultural Mapping Core Course B: Google Earth, Geographic Information Systems, Hypertexts, and Timelines. (4) Same as Architecture and Urban Design M125B. Three hours; discussion, one hour. Enforced requisite: course 125A. Hands-on laboratory-based investigation of emerging digital mapping technologies, including instruction in Web-based mapping applications, virtual globes, and geographic information systems (GIS). Critique and creation of maps of cultural phenomena, applying skills students learned in course 125A to real-world datasets. Historical and cross-cultural examples. By masterinig emerging technologies in fields of digital cultural mapping, students take part in evaluation and production of sophisticated visual representations of complex data, becoming active participants in development of this new field. Hour and computer geography tools. Fostering of creative approaches to data and engagement with mapping technologies: What new questions can be asked and answered using these technologies? How does one reason, argue, and solve real-world problems through digital cultural mapping? Design, development, and implementation of student mapping-based research projects. Part of Digital Cultural Mapping Project supported by W.M. Keck Foundation. P/NP or letter grading.

M125C. Digital Cultural Mapping Core Course C: Summer Research. (4) Same as Architecture and Urban Design M125C. Three hours; discussion, one hour. Enforced requisite: course M125B or Architecture and Urban Design M125B. Participation in collaborative geographic information systems (GIS) research project in which students use skills learned in courses 125A and 125B. Gathering and input of datasets from real-world sources, creating visual representations of data through production of digital maps, and performing analysis of larger dataset to answer specific research questions. Final personal presentation that details student work and provides critical analysis of source material and technological/methodological issues inherent to type of GIS used for investigation. Part of Digital Cultural Mapping Project supported by W.M. Keck Foundation. Offered in summer only. P/NP or letter grading.

M130. Ancient Egyptian Religion. (8) Same as Religion M132B.) Lecture, three hours; discussion, one hour. Introduction to religious beliefs, practices, and sentiments of ancient Egypt to study Egyptian religion as coherent system of thought and sphere of action that once served to control and order life and the universe. Focus will be on the development of religion in ancient Egypt and the role it played in the lives of the ancient Egyptians. Topics will include the study of the major deities, their origins, and development, with special attention to the religious practices of ancient Egypt. P/NP or letter grading.

M131. Religion in Ancient Israel. (4) Same as Religion M131.) Lecture, three hours. Introduction to study of ancient Israel and Judah through combination of archaeological and textual records. Social, religious, and political traditions of ancient Israel are traced through a combination of archaeological and textual sources. Themes will include the role of religion in ancient Israel and Judah; the development of religious beliefs and practices; and the relationship between religion and other social institutions. Focus will be on the development of religion in ancient Egypt and the role it played in the lives of the ancient Egyptians. Topics will include the study of the major deities, their origins, and development, with special attention to the religious practices of ancient Egypt. P/NP or letter grading.

140A. Elementary Sumerian. (4) Lecture, three hours. Introduction to Sumerian, oldest cuneiform language, with examples attested in Mesopotamia from 3rd millennium BCE to 1st century CE. Elementary grammar, syntax, and vocabulary. Focus will be on understanding basic Sumerian words and phrases. Topics will include the study of the major deities, their origins, and development, with special attention to the religious practices of ancient Egypt. P/NP or letter grading.

140B-140C. Elementary Sumerian. (4) Lecture, three hours. Requisites: Semitics 140A, 140B. Elementary grammar and reading of royal inscriptions, letters, and administrative texts from Ur III period. P/NP or letter grading.


150A. Heroes, Gods, and Monsters: Literature and Epic in Mesopotamia. (3) Three hours. Survey of works representative of ancient Mesopotamian literature, with emphasis on the development of epic poetry. Texts read in English translation include literary texts, royal inscriptions, incantations, royal and divine hymns, with focus on literary epic, particularly first millennium BCE Epic of Gilgamesh. Discussion of texts, their narratives, and their divine and human actors. Discussion of sociohistorical context for concise form (Sumerian and Akkadian) texts and oral, religious, and cultural roles of different texts. P/NP or letter grading.

150B. Survey of Ancient Near Eastern Literatures in English: Egypt. (4) Lecture, three hours. Preparation: familiarity with Egyptian history. Required: courses M103A, M103B. Survey of 3,000 years of ancient Egyptian literature. Reading of Egyptian texts in translation to study Egypt’s intellectual history and trace transformations in its construction of cultural identity. Topics include invention of writing, autobiographies, religious and legal texts, narrative, hymns, and hymns. Discussion of text analysis such as narratology, may be taken independently for credit. P/NP or letter grading.


Archaeology of Prehistoric Mesopotamia. (4) Lecture, three hours. Survey of prehistoric archaeological periods in Mesopotamia. P/NP or letter grading.

162. Archaeology, Identity, and Bible. (5) Lecture, three hours; discussion, one hour. Introduction of archaeological record of sources dealing with the history of ancient Israel from Bronze Age through Achaemenid Period (circa 2500–332 BC) in combination with current understandings of genre, authorship, and historical value of biblical literature. Ancient Israelite traditions are traced through a combination of archaeological and textual sources. Themes will include the role of religion in ancient Israel and Judah; the development of religious beliefs and practices; and the relationship between religion and other social institutions. Focus will be on understanding basic Sumerian words and phrases. Topics will include the study of the major deities, their origins, and development, with special attention to the religious practices of ancient Egypt. P/NP or letter grading.

CM163. Archaeology of Iran. (4) Same as Iranian CM163.) Lecture, three hours. Designed to introduce students to Iranian archaeology from prehistoric through Achaemenid periods. Concurrently scheduled with course CM259. P/NP or letter grading.

164. Archaeology of Levant. (4) Lecture, three hours. Survey of archaeology of Levant from late fifth millennium BCE through Iron Age (circa 4500–332 BC). Examination of social, economic, political, and cultural developments through archaeological finds from geographic region bounded by Anatolia and Mesopotamia on north, Egypt to south, and Arabian Peninsula to east. Archaeological methods, theory, and practice are addressed; and geographic, environmental, climatological, and textual data are employed to establish broader contexts for Levantine human occupation. P/NP or letter grading.

C165. Egyptian Archaeology. (4) Seminar, three hours. Opportunity to research aspects of topics in ancient Egyptian archaeology. Topics vary each year. May be repeated for credit. Concurrently scheduled with course C265. P/NP or letter grading.

M166. Art and Death in Ancient Egypt. (4) (Formerly numbered 166) (Same as Art History M110D.) Lecture, four hours. Ways of death, burial, funerary ritual, and afterlife beliefs in ancient Egypt, as well as in ancient Near East and Nubia, with focus on ancient visual materials—both objects and architecture—from Predynastic to Roman periods. P/NP or letter grading.

M171. Religion in the Ancient World. (4) (Same as Classics M167.) Lecture, three hours; discussion, one hour (when scheduled). Requisite: Classics 10 or 20. Exploration of art of influencing natural course of events by occult means as practiced in ancient world at large. Coverage of beliefs in supernatural forces, rites aimed at controlling these forces effectively, and character
and social roles of ritual experts in various cultures of ancient world. Source material includes types of magical spells, literary texts about magic and magicians, and artifacts such as amulets and ritual implements. P/NP or letter grading.

M168A. Introductory Hittite. (Formerly numbered M168B.) (Same as Indo-European Studies M168A.) Lecture, three hours. Recommended preparation: knowledge of ancient languages and concepts. Introduction to Hittite grammar by series of graded lessons covering morphology and syntax, followed by readings of selected texts from various genres. P/NP or letter grading.

M168B. Introductory Hittite. (Same as Indo-European Studies M168B.) Lecture, three hours. Recommended requisite: course M168A. Readings of selected Hittite texts from variety of genres and historical periods. Individual topics in synchronic and historiographic grammar of Hittite and in history and culture of Hittites are treated in detail. P/NP or letter grading.

CM169. Introduction to Archaeological Sciences. (4) (Same as Anthropology CM110Q.) Lecture, three hours. Preparation: course CM168. Introduction to archaeological sciences, focusing on the material under consideration. Consideration of narrative exhibits and how objects and their arrangement convey deliberate or accidental messages. Consideration of audiences as well as original context of each object. Focus on people behind objects, technologies, or material characteristics. P/NP or letter grading.

M185D. Religions of Ancient Near East. (4) (Same as History M185D and Religious Studies M185D.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Main polytheistic systems of ancient Near East, with emphasis on Mesopotamia and Syria and with reference to religion of ancient Israel: varying concepts of divinity, hierarchies of gods, prayer and cult, magics, wisdom, and moral conduct. P/NP or letter grading.

169. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Development of individual honors contract. In individual study with course CM269. P/NP or letter grading.

M170. Bible and Its Interpreters. (4) (Same as Religion M172.) Lecture, three hours. Knowledge of original languages not required. Bible (Old and New Testaments) as book, canon, text, and versions, Linguistic, literary, historical, and religious approaches to Bible study, Survey of history of interpretation from antiquity to present. P/NP or letter grading.

M172. Elementary Luwian. (4) (Same as Indo-European Studies M172.) Lecture, three hours. Recommended preparation: knowledge of Hittite and in history and culture of Hittites. Introduction to Luwian grammar through texts. May be repeated for credit. S/U or letter grading. P/NP or letter grading.

M261. Practical Field Archaeology. (2 to 8) Seminar, two hours. Fieldwork, seminars, and discussions on principles of practice in archaeology from prehistoric through historic times. Coverage of theoretical implications and interpretation of Near Eastern archaeological finds in museum collections. Students work with objects in Heeramanek Collection of Los Angeles County Museum of Natural History, and with help of specialists. S/U or letter grading.

263. Seminar: Egyptian Monuments. (4) Seminar, two hours. Selected monuments and sites in Egypt, including Delta, Nile Valley, desert sites, wadis, oases, and border regions. Architecture and decoration of temples and tombs, statuary and monuments, settlement and use history, text translation of appropriate documents, including stele, monumental inscriptions, or pertinent socioeconomic texts. May be repeated. S/U or letter grading.

265. Depositional History and Stratigraphic Analysis. (4) (Same as Anthropology M265.) Lecture, two hours. Theoretical understanding of depositional processes (“laws”) which lead to site formation and of stratigraphic procedures to be used in recovery of embedded cultural materials. Study of issues covered in literature, with specific test cases from actual excavations and site reports. Coverage of theoretical implications of such disciplines as surveying and pedology with help of specialists. S/U or letter grading.

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M201. Archaeological Research Design. (4) (Same as Anthropology M201C and Archaeology M201C.) Seminar, three hours. Recommended prerequisite: Archaeology M201A, M201B. How to design archaeological projects in preparation for MA thesis or PhD phase. Students do exploratory research to select subject, then write research proposal which would form basis for extensive paper, grant application, or oral examination. Students work closely with faculty members and report weekly on their progress. Preparation of at least two oral or written research proposals. Consideration of theoretical framework and one on practical aspects of project. Final written research design that incorporates theoretical and practical aspects of research and formulates bridges arguments required. S/U or letter grading.

M202. Topics in Ancient Iranian History. (4) (Same as History M210 and Iranian M210.) Seminar, three hours. Varying topics on Elamite, Achaemenid, Arsacid, and Sassanian periods. May be repeated for credit. S/U or letter grading.

210. Late Egyptian. (4) Lecture, three hours. Requisites: courses 121A, 121B, 121C. Late Egyptian grammar and reading of both hieroglyphic and hieratic texts. May be repeated for credit. S/U or letter grading.


251. Readings in Middle Kingdom Literature. (4) Seminar, three hours. Enforced requisites: courses 120A, 120B, 120C. Survey of Middle Kingdom literature through close readings of texts in original language and evaluation of current scholarship on these texts. Students hone their knowledge of Middle Egyptian grammar and become familiar with philological methods in study of Egyptian literature. S/U or letter grading.

220. Seminar: Ancient Egypt. (4) Seminar, three hours. May be repeated for credit with topic change. S/U or letter grading.

221A-221B. Demotic. (4–4) Lecture, three hours. Requisites: course 121C. Course 221A is requisite to 221B. Introduction to Demotic grammar and orthography. Reading of texts from various genres. May be repeated for credit with topic change. S/U or letter grading.

C223A-C223B. Coptic. (5–5) Lecture, three hours. Introduction to Coptic, final phase of Egyptian language, which is attested in writing from circa 300 to 1400 CE. Co-requisite: scheduled courses C122A-C122B, S/U or letter grading. C223A. Devoted to learning Coptic alphabet, grammar, and vocabulary (Sahidic dialect), with emphasis on paleography. Required background in historical linguistics. S223B. Requisite: course C223A. Introduction to variety of Coptic textual genres, from hagiographies to homilies, magical spells, private letters, legal contracts, and Gnostic Gospels found in Nag Hammadi. Readings in texts in dialects other than Sahidic (Bohairic, Fayyumic, Akhmimic).

230. Seminar: Ancient Syria/Palestine. (4) Seminar, three hours. Examination of selected topics on political, social, and intellectual history of ancient Israel. Exploration of how historical, social, and political contexts shaped and influenced interpretation and use of biblical texts. May be repeated for credit. S/U or letter grading.

240A-240B-240C. Seminars: Sumerian Language and Literature. (4–4–4) Seminar, two hours. Readings of texts from various Sumerian periods and literary genres; selected problems in linguistic or stylistic analysis and literary history. S/U or letter grading.

CM259. Archaeology of Iran. (4) (Same as Iranian CM259.) Lecture, three hours. Designed to introduce students to Iranian archaeology from prehistoric through historic times. Concurrently scheduled with course CM163. S/U or letter grading.

250. Seminar: Ancient Near Eastern Archaeology. (2 to 4) Seminar, two hours. May be repeated for credit. S/U or letter grading.

251. Field Project Archaeology. (2 to 8) Fieldwork, two hours. Participation in archaeological excavations or other archaeological research in Near East under staff supervision. May be repeated for credit. S/U or letter grading.

252. Object Archaeology. (4) Seminar, two hours. Examination of objectivity, one hour. Examination of analysis and interpretation of Near Eastern archaeological finds in museum collections. Students work with objects in Heeramanek Collection of Los Angeles County Museum of Natural History, and with help of specialists. S/U or letter grading.

263. Seminar: Egyptian Monuments. (4) Seminar, two hours. Selected monuments and sites in Egypt, including Delta, Nile Valley, desert sites, wadis, oases, and border regions. Architecture and decoration of temples and tombs, statuary and monuments, settlement and use history, text translation of appropriate documents, including stele, monumental inscriptions, or pertinent socioeconomic texts. May be repeated. S/U or letter grading.

265. Depositional History and Stratigraphic Analysis. (4) (Same as Anthropology M265.) Lecture, two hours. Theoretical understanding of depositional processes (“laws”) which lead to site formation and of stratigraphic procedures to be used in recovery of embedded cultural materials. Study of issues covered in literature, with specific test cases from actual excavations and site reports. Coverage of theoretical implications of such disciplines as surveying and pedology with help of specialists. S/U or letter grading.
19. Flat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members, focusing on examining various ways of discovery at UCLA. P/NP grading.

89H. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as an expanded division lecture course. Exploration of topics in greater depth, including laboratory reports, papers, and other activities led by lecture instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

98HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as an additional division lecture course. Individual study with a course instructor to explore topics of current intellectual interest, including readings, papers, or other activities. May be repeated for a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Systematic instruction in research techniques, including analysis of materials (including geological and bioarchaeological techniques), and visual presentation of data and research results (ranging from simple graphs to virtual reality). Concurrently scheduled with course CM169. S/U or letter grading.

270. Old Egyptian. (4) Seminar, three hours. Enforced requisites: courses 120A, 120B, 120C, or one year of introductory Middle Egyptian. Advanced reading class in Old Egyptian, earliest of five Egyptian language phases, to prepare students for independent research on Egyptian texts dating to Old Kingdom (circa 2680 to 2100 BCE). Through the reading of texts in original language and original format, students learn grammar, orthography, and phraseology of Old Kingdom texts as well as tools and methods of epigraphy. Focus on tomb biographies, royal edicts, and Pyramid Texts. Letter grading.

277. Variable Topics in Ancient Near East. (4) Lecture, three hours; discussion, one hour. Variable topics; consult Schedule of Classes for topics to be offered in spring term and to be scheduled with course C177. S/U or letter grading.

596. Directed Individual Study. (2 to 8) Tutorial, to be arranged. May be repeated for credit. S/U or letter grading.


140. Readings in Modern Standard Arabic. (4) Lecture, three hours. Study of Egyptian Arabic. 110A-110B-110C. Intermediate Standard Arabic. (4-4-4) Lecture, four hours. Enforced requisite: course 1C or 8. Course 102B is requisite to 102C, which is requisite to 102C. Not open to students who have learned, from whatever source, enough Arabic to qualify for more advanced courses. Intermediate formal Arabic, including listening, speaking, reading, and writing. P/NP or letter grading.

103A. Advanced Arabic. (4) Lecture, four hours. Enforced requisites: courses 102A, 102B, 102C. Not open to students who have learned, from whatever source, enough Arabic to qualify for more advanced courses. Advanced formal Arabic, including grammar, composition, and readings from classical and modern texts. P/NP or letter grading.

103B. Advanced Arabic. (4) Lecture, four hours. Enforced requisites: courses 102A, 102B, 102C. Not open to students who have learned, from whatever source, enough Arabic to qualify for more advanced courses. Advanced formal Arabic, including grammar, composition, and readings from classical and modern texts. P/NP or letter grading.

103C. Advanced Arabic. (4) Lecture, two and one half hours. Enforced requisite: courses 1C. Introduction to dialect of Arabic spoken in contemporary Iraq, with emphasis on conversational proficiency. Recognition and production of sounds of Arabic and basic vocabulary, grammatical, idiomatic expressions, and relevant cultural background through dialogues and other conversational exercises. P/NP or letter grading.

120. Islamic Texts. (4) Lecture, four hours. Requisite: course 103C. Readings from Qur'an, Tafsir, Hadith, Fiqh. May be repeated for credit. S/U or letter grading.

123. Oral Literature and Performance of Arab Traditions. (4) Lecture, three hours. Study of Egyptian colloquial Arabic for heritage speakers or students who have completed courses 1A, 1B, 1C. P/NP or letter grading.

115. Studies in Arabic Dialectology. (4) Lecture, three hours. Introduction to one spoken dialect of Arabic, with emphasis on speaking and listening comprehension. Dialects vary from year to year based on student interest and instructor availability and may include Iraqi, Levantine, North African, or Gulf Arabic. May be repeated for credit. P/NP or letter grading.


111A-111B-111C. Elementary Spoken Egyptian Arabic. (4-4-4) Lecture, three hours. Knowledge of Arabic not required; suitable for heritage speakers. Introduction to spoken Arabic dialect of Egypt. Training in listening, speaking, and reading. P/NP or letter grading.


112A-112B-112C. Advanced Spoken Egyptian Arabic. (4-4-4) Lecture, three hours. Study of Egyptian colloquial Arabic for heritage speakers or students who have completed courses 1A, 1B, 1C. P/NP or letter grading.


111. Studies in Arabic Dialectology. (4) Lecture, three hours. Introduction to one spoken dialect of Arabic, with emphasis on speaking and listening comprehension. Dialects vary from year to year based on student interest and instructor availability and may include Iraqi, Levantine, North African, or Gulf Arabic. May be repeated for credit. P/NP or letter grading.

120. Islamic Texts. (4) Lecture, four hours. Requisite: course 103C. Readings from Qur'an, Tafsir, Hadith, Fiqh. May be repeated for credit. S/U or letter grading.

123. Oral Literature and Performance of Arab Traditions. (4) Lecture, three hours. Study of Egyptian colloquial Arabic for heritage speakers or students who have completed courses 1A, 1B, 1C. P/NP or letter grading.

120. Islamic Texts. (4) Lecture, four hours. Requisite: course 103C. Readings from Qur'an, Tafsir, Hadith, Fiqh. May be repeated for credit. S/U or letter grading.

123. Oral Literature and Performance of Arab Traditions. (4) Lecture, three hours. Study of Egyptian colloquial Arabic for heritage speakers or students who have completed courses 1A, 1B, 1C. P/NP or letter grading.

120. Islamic Texts. (4) Lecture, four hours. Requisite: course 103C. Readings from Qur'an, Tafsir, Hadith, Fiqh. May be repeated for credit. S/U or letter grading.

123. Oral Literature and Performance of Arab Traditions. (4) Lecture, three hours. Study of Egyptian colloquial Arabic for heritage speakers or students who have completed courses 1A, 1B, 1C. P/NP or letter grading.

120. Islamic Texts. (4) Lecture, four hours. Requisite: course 103C. Readings from Qur'an, Tafsir, Hadith, Fiqh. May be repeated for credit. S/U or letter grading.

123. Oral Literature and Performance of Arab Traditions. (4) Lecture, three hours. Study of Egyptian colloquial Arabic for heritage speakers or students who have completed courses 1A, 1B, 1C. P/NP or letter grading.
writing abilities in modern standard Arabic, as well as cultural knowledge, through film screenings, discussions, written compositions, verbal presentations, and readings. Includes texts from Arab media and critical texts and making use of film, video-clip, and song in approaching literary culture. May be repeated for credit. Concurrently scheduled with course C241, Letter grading.

142. Arabic Media. (4) Lecture, four hours. Requisite: course 103A. Development of facility with language of Arabic press and broadcasting. Activities include monitoring current materials via Internet; transcribing, translating, and summarizing; writing original reviews in Arabic; and oral presentations and discussions. May be repeated for credit. P/NP or letter grading.

M148. Contemporary Arab Film and Song. (4) (Same as Comparative Literature M148B) Seminar, three hours. Designed for upper-division literature majors. Examination of contemporary Arab film and song and between popular cultures and cultures of invention (litmus), with possible focus on literatures such as those of contemporary Arab film; feminist Arab film or popular Arab film and song; topics such as nation, gender, and representation or democracy and human rights or censorship, reception, and resistance. Possible examination of various national cinemas such as Tunisian, Egyptian, Moroccan, Algerian, and Palestinian. Various musical genres such as Ria, Mizoued, and Hip-hop also examined. May be repeated for credit. P/NP or letter grading.

150. Classical Arabic Literature in English. (4) Lecture, three hours. Readings in English: knowledge of Arabic not required. Survey of premodern Arabic cultural production in its political, religious, and social contexts. Coverage of pre-Islamic Arabia, rise of Islam, and major themes of Southwest Asian history, along with significant figures and moments in literature and culture of premodern period. Consideration of selected themes responses to Arabic tradition. P/NP or letter grading.

M151. Modern Arabic Literature in English. (4) (Same as Comparative Literature M151B.) Lecture, three hours. Designed for upper-division literature majors. Topics include constructions of the modern Arab culture; East-West debate; memory, trauma, and mourning; violence, narrative, and ethics; globalization, oil, and cultural insurgency; Arab culture in transnational context or questions of reception, exoticism, translation, and marketing. Genres may include prison narratives; novel of terror; memoirs by women and/or by refugees and exiles; 19th- and 20th-century travel narratives; Arabic romantic poetry; literature of pre-1948; rise of Arab novel. Areas may range from generic look at Arab world to narrow focus on Naguib Mahfouz or one country such as Algeria, Palestine, Iraq, and Lebanon. May also be organized around Arab literatures written in one specific language, namely English, Arabic, or French. Letter grading.

M155. Al-Anadus: Literature of Islamic Spain. (4) (Same as Comparative Literature M119B.) Lecture, three hours. Study of literature of Islamic Spain to learn about interaction of Arabic and Western and Arabic and Christian cultures and to recognize the influence of Islamic culture as vital force in European life and letters. P/NP or letter grading.

171. Culture Area of Maghrib (North Africa). (4) (Same as Anthropology M168B and History M108C.) Lecture, three hours. Designed for junior/seniors. Introduction to North Africa, especially Morocco, Algeria, Tunisia, and Libya, also known as Maghreb or Tamarqta. Topics include changing notions of personal, tribal, ethnic, linguistic and religious identities; colonialism; gender and legal rights, changing representations of Islam, and religions in region’s public spaces. P/NP or letter grading.

177. Variable Topics in Arabic. (4) Lecture, three hours. Variable topics; inscribed syllabus of classes for inscribed topics to be offered in specific term. May be repeated for credit. P/NP or letter grading.

180. Linguistic Analysis of Arabic. (4) Lecture, four hours. Requisite: course 102C. Linguistic description of Arabic in broad and dialect forms. Introduction to linguistic analysis of Arabic phonology, morphology, and syntax and to linguists’ approaches to specific problems posed by Arabic grammar and orthography.

181. Translating Arabic. (4) Seminar, three hours. Preparation: advanced proficiency in English and Arabic (at least three years of Arabic instruction or equivalent). Open to both native and native speakers of English and Arabic. Training of students in methodology of translation from Arabic into English, with focus on producing accurate and readable English versions of Arabic texts from variety of fields. Close reading and written translation of Arabic texts, with review of linguistic and cultural difficulties that arise in course of translation. Texts may include classical Arabic literature (religion, historiography), modern writing (literature, media), and spoken Arabic (television, radio), based on student interest. Letter grading.

188F. Special Studies: Readings in Arabic. (2) Seminar, two hours. Requisite: course 102C. Students must be concurrently enrolled in a affiliated main course. Primary readings and additional work in Arabic to enrich and augment work assigned in main course, including reading, writing, and other exercises. May be repeated for credit. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

197. Individual Studies in Arabic. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tutorial meeting of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research or Senior Project in Arabic. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culuminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

C206. Qur’an. (4) Lecture, three hours. Introduction to Qur’anic early history, and form and function as scripture in Muslim history, civilization, and culture. Focus also on Qur’anic interpretation, its relationship to Islamic law, and Qur’an in contemporary discourses such as as Manicheanism, heresy, and contemporary reform movements. Primary sources include excerpts from Qur’an, Qur’anic interpretation, and selected writings of Muslim thinkers and reformists. Strong focus on ancient Qur’anic scholarship and class assignments and discussion. Concurrently scheduled with course CM106E. Letter grading.

220. Seminar: Islamic Texts. (4) Seminar, three hours. Major Islamic thinkers and their works from classical period to modern times. Coverage of doctrines and hermeneutics of various schools of thought in Islam, such as Ahi al-sunna wa’l-jama’a, Shi’a, Mu’tazila, and Sufis. May be organized around one author and his works, multiple authors and their works, or specific topics. May be repeated for credit. May be offered in Arabic and other languages for student research papers. May be repeated for credit. S/U or letter grading.

M231. Texts in Judeo-Arabic. (4) (Same as Hebrew M231B) Lecture, three hours. Requisite: course 102C, or Arabic 102C. Reading of Judeo-Arabic texts by Maimonides (medieval religion, medicine, philosophy) and more recent texts in Judeo-Arabic dialects of Iraq and Egypt, with discussion of grammar and deviations from norms of classical Arabic. S/U or letter grading.

240A. Seminar: Arab Historians. (4) Seminar, three hours. Introduction to very large body of literature on medieval Islamic history. Selected readings in Arabic that represent cross-section of Islamic historiographical writings, including Ibn Ishaq’s Sira, Wajid’s Maghazhi, Baladurhi’s Futuh, Tabarî’s Tahrîk, digests of Ya’qubi and Mas’udi, Ibn Khaldun’s Muqadimah, and Maqrizi’s topography. Historians studied either to determine their reliability as sources or their view of history and its theoretical foundations. Exploration of sources, research tools, and problems in Islamic history. May be repeated for credit. S/U or letter grading.

240B. Seminar: Arab Geographers. (4) Seminar, three hours. Introduction to large body of literature on medieval Islamic geographies. Selected readings in Arabic that represent cross-section of Islamic geographical writings distributed over number of disciplines and various aspects of the geography, such as Surat al-ard, Kitab al-Buldan, al-Masaliq wal-mamlakah, topography, and rivers and accounts. May be repeated for credit. S/U or letter grading.

C241. Modern Arabic Literature. (4) Lecture, three hours. Requisite: course 102C. Conducted in English and Arabic, with all required readings in original Arabic. Readings in modern Arab literature, variably organized across or around particular trends, genres, topics, canonical authors, regional, or national literatures, mixing thematic and formal analyses of literary and critical texts of Islamic film, video-clip, and song in approaching literary culture. May be repeated for credit. Concurrently scheduled with course C241. Letter grading.

250. Seminar: Premodern Arabic Literature. (4) Seminar, three hours. Readings in Arabic texts from variety of periods and genres, along with appropriate secondary literature. Topics include pre-Islamic poetry and oratory, Qur’an, Umayyad and Abbasid poetry and poetry prose, Hadith, Qur’an, Arab biography, geography, medicine, mathematics, theology, asceticism, and mysticism. May be repeated for maximum of 24 units. S/U or letter grading.

251. Seminar: Modern Arabic Literature. (4) Seminar, three hours; discussion, one hour. Requisite: course C141. Selected topics in modern and contemporary Arabic prose and poetry. May be repeated for credit. Letter grading.

M255. Literatures and Cultures of Maghreb. (4) (Same as Comparative Literature M255.) Seminar, three hours. Limited to graduate students. Examination of traditionally diverse literatures of Maghreb in their Arab and non-Arab forms. Readings in modern Arab and non-Arab languages for student research papers. May be repeated for credit. S/U or letter grading.

275. Encountering Arabic Manuscripts: Introduction to Arabic Paleography and Critical Edition of Manuscripts. (4) Lecture, three hours; discussion, one hour. Requisite: course 103C. Introduction to Arabic paleography and critical methods of analysis of historical manuscripts with critical apparatus and stemma. During past decades enormous number of previously unknown Arabic manuscripts have been discovered.
While vast range of medieval texts have been published in editions of varying quality, equally large number of manuscripts remain unpublished. UCLA has outstanding collections of Near Eastern manuscripts in Arabic, Persian, and Ottoman Turkish, primarily in fields of medicine, literature, philology, theology, law, and history. It is rich in works related to studies of theologians and scholars at different centers of learning in this vast period of pre-Islamic and post-Islamic times. Works of Shi’ite theology, Islamic sciences, and philosophy, Course opens this treasure to graduate students interested in editing and/or translating manuscripts. 

Upper-Division Courses


102A-102B-102C. Intermediate Modern Western Armenian. [5-5-5] Lecture, five hours. Recommended prerequisite: course 101C. Students with knowledge of Eastern or Western Armenian (from elementary or high school) should contact instructor to determine appropriate enrollment level. Reading of selected texts, composition, and conversation. Each course may be taken independently for credit. P/NP or letter grading.

M288. Modern Arab Thought. (4) (Same as Comparative Literature M288.) Seminar, three hours. While much has been written and said about resurgence and spread of political Islam after collapse of ideology of Arab nation, much has been written and said about resurgence and spread of current intellectual importance, taught by faculty member. While vast range of medieval texts have been published in editions of varying quality, equally large number of manuscripts remain unpublished. UCLA has outstanding collections of Near Eastern manuscripts in Arabic, Persian, and Ottoman Turkish, primarily in fields of medicine, literature, philology, theology, law, and history. It is rich in works related to studies of theologians and scholars at different centers of learning in this vast period of pre-Islamic and post-Islamic times. Works of Shi’ite theology, Islamic sciences, and philosophy, Course opens this treasure to graduate students interested in editing and/or translating manuscripts. 

Armenian

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty member. In members of their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89.Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth than regular readings, class discussions, and other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individually study with lecture course instructor to explore topics in greater depth than regular readings, class discussions, and other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.


102A-102B-102C. Intermediate Modern Western Armenian. [5-5-5] Lecture, five hours. Recommended prerequisite: course 101C. Students with knowledge of Eastern or Western Armenian (from elementary or high school) should contact instructor to determine appropriate enrollment level. Reading of selected texts, composition, and conversation. Each course may be taken independently for credit. P/NP or letter grading.

103A-103B-103C. Advanced Modern Western Armenian. [4-4-4] Lecture, four hours. Recommended prerequisite: course 102C. Course 103A is required to 103C. Students with knowledge of Eastern or Western Armenian (from elementary or high school) should contact instructor to determine appropriate enrollment level. Designed for students with advanced speaking fluency and reading abilities in Armenian. Exploration of advanced Western Armenian in following areas of competency: fluency, literacy, accuracy, and proficiency. Use of language to engage literary themes and cultural issues of historical and contemporary significance for Armenian speakers. P/NP or letter grading.

104A-104B-104C. Elementary Modern Eastern Armenian. [5-5-5] Lecture, five hours. Course 104A is recommended prerequisite to 104B, which is recommended prerequisite to 104C. Students with knowledge of Eastern or Western Armenian (from elementary or high school) should contact instructor to determine appropriate enrollment level. Designed for students with little or no prior knowledge of Eastern Armenian. Oral and written exams may be taken independently for credit. P/NP or letter grading.

105A-105B-105C. Intermediate Modern Eastern Armenian. [5-5-5] Lecture, five hours. Recommended prerequisite: course 104C. Students with knowledge of Eastern or Western Armenian (from elementary or high school) should contact instructor to determine appropriate enrollment level. Continuing introduction to Armenian grammar, conversation, and exercises. P/NP or letter grading.

106A-106B-106C. Armenian Society and Culture. [4-4-4] Lecture, four hours. Recommended prerequisite: course 105C. Students with knowledge of Eastern or Western Armenian (from elementary or high school) should contact instructor to determine appropriate enrollment level. Designed for students with advanced speaking fluency and reading abilities in Armenian. Discussion of contemporary Armenian social and cultural issues through readings from critical essays, editorials, short stories, and poems written since World War II and film showings. Emphasis on enhancing students’ self-expression orally and in written form. Each course may be taken independently for credit. Letter grading.

110. History of Armenian Language. (4) Lecture, three hours. Prerequisites: course 1C or 4C. Exploration of history of Armenian language as reflected in literature created in Armenia throughout written period (5th through 20th centuries). Use of top-down approach beginning with modern state of Armenian language in its two standard versions (Western and Eastern), then reatching of historical development through formation of New Armenian (17th century). Middle Armenian (17th through 12th centuries), and earliest attested form, Grabar, literary version of an earlier attested form, Grabar, literary version of an earlier attested form. Investigation of interface between sociopolitical and aesthetic norms were impacted by these periods. Byzantium, Western Europe) and the Crusader states, Seljuks, Mamluks, Mongols.) Letter grading.

596. Directed Individual Study. (2 to 8) Tutorial, to be determined appropriate enrollment level. Armenian grammar, conversation, and exercises. Armenian phonology and morphology in preliterary order to position Armenian on sociolinguistic map of world languages. Exploration of various phenomena such as linguistic features of heritage speakers, patterns and domains of language use, psychological restraints (i.e., anxiety, fear, etc.) connected with speaking heritage languages, language attitudes with ideologies, and role of language in Armenian identity construction. P/NP or letter grading.

130. Armenian Civilization under Bagratid Dynasty, 884 to 1064. (4) Lecture, four hours. Interdisciplinary investigation of interface between societal and economic factors in creation of works of art (literature, art, architecture, etc.) and social function these works performed in this important period of Armenian history.

131. Armenian Civilization in Cilician Period, 1080 to 1375. (4) Lecture, four hours. Interdisciplinary investigation of rise and fall of unique form of Armenian poesy which paralleled decline and renaissance of cultural life of this period. P/NP or letter grading.

134. Introduction to Armenian Music. (4) (Same as Ethnomusicology M134 and Music M134.) Lecture, three hours. Some amount of formal music study and experience as vocalist or instrumentalist desirable but not essential. Introduction to history, tradition, and scope of music of Armenia. Focus on number of different genres and approaches, and interactions between music and culture, society, and history. P/NP or letter grading.


C151. Armenian Literature and Canon Formation. (4) Lecture, four hours. Discussion of fundamental themes and genres around which Armenian literary tradition evolved and modalities by which this has been transformed in course of last two centuries as result of exposure to European thought and expressive forms. Concurrently scheduled with course C251. P/NP or letter grading.

C152. Modern Armenian Drama as Vehicle for Social Critique. (4) Lecture, four hours. Readings of selected plays from 1668 to 1992 from three main genres of tragedy, comedy, and serious drama and featuring works by most significant Armenian playwrights, with focus on their role as commentators on contemporary mores and as agents for social reform. Concurrently scheduled with course C252. Letter grading.

C153. Art, Politics, and Nationalism in Modern Armenian Literature. (4) Lecture, four hours. Examination of role of literature in shaping current Armenian society in service to cause or causes, as propaganda for various ideologies, as art for art’s sake, etc. Exploration of contrasting aesthetics implicit in these differing interpretations. Concurrently scheduled with course C253. P/NP or letter grading.

160A-160B. Armenian Literature of 19th and 20th Centuries. (4–4) Lecture, three hours. Requisite: courses 102A, 102B, 102C. Reading of texts and discussion on major themes, authors, and issues of modern Armenian literature within context of Armenian cultural renaissance. P/NP or letter grading.

C166. Armenian Film and Culture. (5) Lecture, six hours. Requisite: course 1C or 4C. Overview of development of Armenian cinema from first talkie to present, with focus on work of most seminal directors from Armenian Republic, as well as various voices from worldwide diaspora. Concurrently scheduled with course letter grading.

170. Armenian Poetry, 1880 to 1930. (4) Lecture, three hours. Requisite: course 1C or 4C. Examination of process behind creation of range and variety of poetic expression that developed in new literary formats and genres of what became standard modern Eastern Armenian poetic expression that developed in new literary formats.

171. Variable Topics in Armenian Studies. (4) Lecture, three hours. Examination of major issues in Armenian studies. May be repeated for maximum of 16 units with topic and/or instructor change. P/NP or letter grading.

M172. Medieval Armenian Art. (4) (Same as Art History M118A) Lecture, three hours. Exploration of cultural and historical impact of Armenian miniature paintings, P/NP or letter grading.

M173. Armenian Painting, 17th to 20th Century. (4) (Same as Art History M118B) Lecture, three hours. Overview of development of modern Armenian painting out of its matrix in 17th and 18th centuries. P/NP or letter grading.

188. Variable Topics in Armenian. (4) Lecture, four hours. Departmentally sponsored experimental or temporary courses, such as those taught by visiting faculty members. May be repeated for credit with topic change. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, one hour. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities, and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

197. Individual Studies in Armenian. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and outside reading of master of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research or Senior Project in Armenian. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Cumulating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

230A-230B-230C. Elementary Classical Armenian. (4–4–4) Lecture, three hours. Course 230A is requisite to 230B, which is requisite to 230C. Introduction to grammar of classical literary language (5th to mid-19th century) and guided readings in narrative prose texts. Letter grading.


232A-232B-232C. Advanced Classical Armenian. (4–4–4) Lecture, four hours. Requisite: course 231A or 231B or 231C. In-depth reading and linguistic analysis of texts related to Philhellene School of the 6th to 8th century and related works up to 19th century. Each course may be taken independently for credit. Letter grading.

250A-250B. Seminars: Armenian Literature. (4–4) Seminar, three hours. Selected topics from various periods of Armenian literature. May be repeated for credit. S/U or letter grading.

251. Armenian Literature and Canon Formation. (4) Lecture, four hours. Discussions of fundamental themes and genres around which Armenian literary tradition evolved and modalities by which this has been transformed in course of last two centuries as result of exposure to European thought and expression. Concurrently scheduled with course C151. S/U or letter grading.

252. Modern Armenian Drama as Vehicle for Social Critique. (4) Lecture, four hours. Readings of selected plays from 1688 to 1992 from three main genres of tragedy, comedy, and serious drama and featuring works by most significant Armenian playwrights, with focus on their role as commentators on contemporary affairs; introduction to notion of social reform. Concurrently scheduled with course C152. Letter grading.

253. Art, Politics, and Nationalism in Modern Armenian Literature. (4) Lecture, four hours. Examination of role of literature in modern Armenian society in service to cause or causes, as propaganda for various ideologies, as art for art’s sake, etc. Exploration of contrasting aesthetics implicit in these diverging interpretations. Concurrently scheduled with course C153. P/NP or letter grading.


266. Armenian Film and Culture. (5) Lecture, six hours. Requisite: course 1C or 4C. Overview of development of Armenian cinema from first talkie to present, with focus on work of most seminal directors from Armenian Republic, as well as various voices from worldwide diaspora. Concurrently scheduled with course C166. S/U or letter grading.

267. Directed Individual Study. (2 to 8) Tutorial, to be arranged. May be repeated for credit. S/U or letter grading.


Hebrew Lower-Division Courses

1A-1B-1C. Elementary Hebrew. (5–5–5) Lecture, four hours; laboratory, one hour. Enforced preparation: Hebrew placement test. Course 1A is enforced requisite to 1C. Not open to native speakers. Introduction to modern Hebrew, including listening, speaking, reading, and writing. Offered in summer only. P/NP or letter grading.

1A1B-1C. Intermediate Hebrew. (5–5–5) Lecture, four hours; laboratory, one hour. Enforced preparation: Hebrew placement test. Course 1A is enforced requisite to 1C. Not open to native speakers. Introduction to modern Hebrew, including listening, speaking, reading, and writing. Offered in summer only. P/NP or letter grading.

8. Elementary Hebrew: Intensive. (12) Lecture, 10 hours; discussion, 10 hours. Intensive course equivalent to courses 1A, 1B, and 1C. Introduction to modern Hebrew, including listening, speaking, reading, and writing. Offered in summer only. P/NP or letter grading.

11A. Hebrew Cultural Seminars. (3) Lecture, two hours; laboratory, one hour. Enforced preparation: course 11A. Course 11B is requisite to 11C. Vocabulary used in daily life, different speech acts in both formal and informal contexts, the role of Hebrew in sociocultural issues using different kinds of media, such as video, Internet, and newspapers. P/NP or letter grading.

Near Eastern Languages and Cultures / 697

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their area of expertise, illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

99C. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99D. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

102A-102B-102C. Intermediate Hebrew. (5–5–5) Lecture, five hours. Enforced requisite: course 1C or Hebrew placement test. Course 102A is enforced requisite to 102B, which is enforced requisite to 102C. Not open to native speakers. Amendment of grammar; reading of texts from modern literature. P/NP or letter grading.

103A-103B-103C. Advanced Hebrew. (4–4–4) Lecture, five hours. Enforced requisites: courses 102A, 102B, and 102C, or Hebrew placement test. Students with prior knowledge of Hebrew who did not take courses 102A, 102B, and 102C should contact instructor to determine appropriate enrollment. Not open to native speakers. Designed for students with intermediate speaking fluency and reading abilities in Hebrew. Introduction to modern Hebrew literary texts. P/NP or letter grading.


110C. Readings in Biblical Hebrew. (4) Lecture, three hours. Enforced prerequisite: courses 110A, 110B, or Hebrew placement test. Reading of prose texts from Hebrew Bible, particularly from Former Prophets (Joshua-Kings). Introduction to certain aspects of historical grammar of biblical Hebrew. Reading and translation of variety of texts from different historical periods of Hebrew language, including texts from Archaic, Standard, and Late periods. Increased understanding of Hebrew verbal system, including different verbal patterns, their morphology, and syntactic function in biblical Hebrew prose. P/NP or letter grading.

111A. Israel Society through Hebrew Song and Video. (4) Lecture, three hours; laboratory, one hour. Requisite: course 1C. Use of contemporary Israeli song and video to explore Israeli collective imagination and various Israeli sociocultural issues to familiarize students with different aspects of Israeli daily life and popular culture, while teaching the use of speech acts in both formal and informal contexts and enriching their Hebrew vocabulary and its retention. P/NP or letter grading.

111B-111C. Conversational Hebrew. (3–3) Lecture, two hours; laboratory, one hour. Requisite: course 111A. Course 111B is requisite to 111C. Vocabulary used in daily life, different speech acts in both formal and informal contexts, including various sociocultural issues using different kinds of media, such as video, Internet, and newspapers. P/NP or letter grading.
112. Readings in Modern Scholarly Hebrew. (2) Seminar, two hours. Requisite: course 102C. In-depth reading and discussion of selected scholarly articles in modern Hebrew disciplines. Bible study, Jewish history and folklore, sociology, and literary criticism. Development of student proficiency in vocabulary, terminology, and ideas in these fields while enhancing comprehension of complex syntactical structures in Hebrew. May be repeated for credit. P/NP or letter grading.

M113. Contemporary Israeli Short Stories/Novellas and Films in English. (5) Same as Jewish Studies M113.) Lecture, two hours. Exploration of Israeli short stories/novellas and films (translated into English) written since mid-1980s that use, each to varying degree, postmodernist technique to undermine predomiance of modernist-Zionist narrative. Recycling and reexamination of Israeli condition and Zionism condition and skepticism about legitimacy of meta-narratives to redefine blurred outline of Israeli identity and subvert its underlying foundational mythic. They simultaneously display loss of faith in representative dimension of language, including ability of texts to penetrate to its hidden meaning. Using periphery discourses, these texts strive to change modernist aesthetic and power paradigm. P/NP or letter grading.


125. Hebrew Bible with Medieval Commentaries. (4) Lecture, three hours. Requisite: course 103C. Hebrew Bible with important commentaries of Rashi, Ibn Ezra, and/or Nahmanides. May be repeated for maximum of 16 units. Letter grading.


C140. Modern Hebrew Poetry and Prose. (4) Lecture, three hours. Requisites: courses 103A, 103B, and 103C, or equivalent knowledge of Hebrew. Study of major Hebrew writers of past 100 years. May be repeated for credit. Concurrently scheduled with course C240. Letter grading.

170. Dead Sea Scrolls. (4) Lecture, three hours. Requisite: course 110C. Readings in Dead Sea Scrolls from modern perspective or with equivalency to one hour. (Same as Near Eastern Languages and Cultures M231.) Lecture, three hours. Requisites: course 102C, 102D, and 102E. Reading and analysis of biblical text by Masorites (medieval medicine, religion, medicine, philosophy) and more recent texts in Judeo-Arabic dialects of Iraq and Egypt, with discussion of grammar and devotion from Dead Sea Scrolls. May be repeated for credit. S/U or letter grading.


225. Studies in Dead Sea Scrolls. (2 or 4) Seminar, three hours. Requisite: course 120C. Critical study of Dead Sea Scrolls, with attention to history of biblical interpretation and role of Dead Sea Scrolls in formative Judaism. Reading in original manuscripts from Dead Sea Scrolls. May be repeated for credit. S/U or letter grading.

230. Rabbinic Hebrew Literature. (4) Seminar, three hours. May be repeated for credit. S/U or letter grading.

M231. Texts in Judeo-Arabic. (4) Same as Arabic M231.) Lecture, three hours. Requisites: course 102C, Arabic 102C. Reading of Judeo-Arabic texts by Maimonides (medieval medicine, religion, medicine, philosophy) and more recent texts in Judeo-Arabic dialects of Iraq and Egypt, with discussion of grammar and devotion from Dead Sea Scrolls. May be repeated for credit. S/U or letter grading.

235. Hebrew Literature of Second Temple Period. (4) Seminar, three hours. Designed for students who have basic language skills and capacities necessary for reading Biblical Hebrew or Rabbinic Hebrew. Reading, analysis, and interpretation of Hebrew literature composed during Second Temple period. Relevant sources include Chronicles, Ezra-Nehemiah, Ecclesiastes, Ben Sira, Daniel, Dead Sea Scrolls, and other documents from Judean desert, and various apocalyptic and pseudepigraphic. Special attention to historical development of Hebrew language and literature in relation to both earlier biblical sources, styles, grammar, and syntax and to subsequent Rabbinic writings. Course builds following skills: reading unpointed texts, mastering distinctive elements of vocabulary, idiom, and syntax of Second Temple Hebrew, and analyzing relationships between biblical and postbiblical sources. May be repeated for credit. S/U or letter grading.

C240. Modern Hebrew Poetry and Prose. (4) Lecture, three hours. Requisites: courses 103A, 103B, and 103C, or equivalent knowledge of Hebrew. Study of major Hebrew writers of past 100 years. May be repeated for credit. Concurrently scheduled with course C140. Letter grading.


Graduate Courses


225. Studies in Dead Sea Scrolls. (2 or 4) Seminar, three hours. Requisite: course 120C. Critical study of Dead Sea Scrolls, with attention to history of biblical interpretation and role of Dead Sea Scrolls in formative Judaism. Reading in original manuscripts from Dead Sea Scrolls. May be repeated for credit. S/U or letter grading.

230. Rabbinic Hebrew Literature. (4) Seminar, three hours. May be repeated for credit. S/U or letter grading.

M231. Texts in Judeo-Arabic. (4) Same as Arabic M231.) Lecture, three hours. Requisites: course 102C, Arabic 102C. Reading of Judeo-Arabic texts by Maimonides (medieval medicine, religion, medicine, philosophy) and more recent texts in Judeo-Arabic dialects of Iraq and Egypt, with discussion of grammar and devotion from Dead Sea Scrolls. May be repeated for credit. S/U or letter grading.

235. Hebrew Literature of Second Temple Period. (4) Seminar, three hours. Designed for students who have basic language skills and capacities necessary for reading Biblical Hebrew or Rabbinic Hebrew. Reading, analysis, and interpretation of Hebrew literature composed during Second Temple period. Relevant sources include Chronicles, Ezra-Nehemiah, Ecclesiastes, Ben Sira, Daniel, Dead Sea Scrolls, and other documents from Judean desert, and various apocalyptic and pseudepigraphic. Special attention to historical development of Hebrew language and literature in relation to both earlier biblical sources, styles, grammar, and syntax and to subsequent Rabbinic writings. Course builds following skills: reading unpointed texts, mastering distinctive elements of vocabulary, idiom, and syntax of Second Temple Hebrew, and analyzing relationships between biblical and postbiblical sources. May be repeated for credit. S/U or letter grading.

240. Modern Hebrew Poetry and Prose. (4) Lecture, three hours. Requisites: courses 103A, 103B, and 103C, or equivalent knowledge of Hebrew. Study of major Hebrew writers of past 100 years. May be repeated for credit. Concurrently scheduled with course C140. Letter grading.


257. Examination Preparation. (2 or 4) Tutorial, to be arranged. May be arranged. S/U grading.


Irish

Lower-Division Courses

1A-1B. 1C. Elementary Persian. (5–5–5) Lecture, six hours. Course 1A is enforced requisite to 1B, which is enforced requisite to 1C. Not open to students with prior knowledge of Persian. P/NP or letter grading.

8. Elementary Persian: Intensive. (15) Lecture, ten hours; discussion, ten hours. Not open to students who have learned from whatever source, enough Persian to qualify for more advanced courses. Intensive course equivalent to courses 1A-1B and 1C. Introduction to fundamentals of Persian, including pronunciation, grammar, and Persian script, with emphasis on all four basic language skills—speaking, listening comprehension, reading, and writing. Offered in summer only. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20A-20B-20C. Accelerated Elementary Persian. (6–6–6) Lecture, four hours; discussion two hours; lab/GP, 30 minutes per day. Preparation: some knowledge of spoken Persian. Course 20A is enforced requisite to 20B, which is enforced requisite to 20C. Intensive and thorough study of fundamental structure of Persian grammar; reading from a wide range of classical and modern poetry and prose compositions. P/NP or letter grading.

55. Gender and Sexuality in Arts and Literatures of Iran and Middle East. (5) Lecture, three hours; discussion, one hour. Multicultural introduction to Persian poetry, recognized as jewel of Persian culture, and to pictorial, architectural, performative, cinematographic, and photographic dimensions of artistic milieu spanning between Balkans, India, and Central Asia from 10th century CE to present. With consideration of centrality of discourses on identity, desire, and spirituality to core of Persian aesthetics, study of broad variety of socio-political, ethical, and critical issues stemming from both mainstream topics characterizing extensive field of Iranian studies and most controversial conversations on nature of sexuality, ethics, and religion. P/NP or letter grading.

M60. Achaemenid Civilization and Empire of Alexander. (8) (Same as Ancient Near East M60 and History M60.) Lecture, three hours; discussion, one hour. Survey of period from circa 600 to 300 BCE, rise and fall of Achaemenid Persia, first world empire of antiquity, which was ended by Alexander the Great, whose campaigns were as transformative as they were violent. Alexander connected ancient Mediterranean and Near East as never before, ushering in new era and forever changing cultural landscape of ancient world. Focus on themes of ancient kingship and political ideology; comparative study of empires; administration and institutions; and religious and ethnic diversity in large, heterogeneous states. Emphasis on diversity critical to understanding political nuances of ancient world. Students gain broad understanding of Achaemenid and Macedonian empires, facility with ancient primary sources, and development of analytical skills central to discipline of history that allow conceptualizing issues of diversity and othering in ancient world. P/NP or letter grading.

M60W. Achaemenid Civilization and Empire of Alexander. (8) (Same as Ancient Near East M60W and History M60W.) Lecture, three hours; discussion, one hour. Requisite: English Composition 3. Not open for
credit to students with credit for course M50. Survey of period from circa 600 to 300 BCE, rise and fall of Achaemenid Persia, first world empire of antiquity, which was ended by Alexander the Great, whose campaigns were as transformative as they were violent. Alexander connected ancient Mediterranean and Near East as never before, ushering in new era and forever changing cultural landscape of ancient world. Focus on ancient King and his empire, political history, state structure, empire’s religions, and religious and ethnic diversity in large, multi-ethnic kingdoms. Emphasis on diverstiy, critical to understanding political nuances of ancient world. Students gain broad knowledge of Achaemenid and Macedonian empires, facility with ancient primary sources, and breadth of analytical skills central to discipline of history that allow conceptualizing issues of diversity and othering in ancient world. Satisfies Writing II requirement. P/NP or letter grading.

89. Honors Seminars. (1 Seminar) Three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit with consent of instructor. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1 Seminar) Three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for credit with consent of instructor. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2 Tutorial) Supervised research or other scholarly work). Three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in related classes (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

102A-102B-102C. Intermediate Persian. (5–5–5) Lecture, six hours. Requisite: course 1C or 20C. Course 102A is requisite to 102B, which is requisite to 102C. P/NP or letter grading.

103A-103B-103C. Advanced Persian. (4–4–4) Lecture, three hours. Requisite: course 102C. Students who do exceptionally well in course 20C may be permitted to enroll with consent of instructor. Emphasis on reading and conversational skills. May be taken independently for credit. P/NP or letter grading. 103A. Introduction to Classical Persian Poetry; 103B. Introduction to Classical Persian Prose; 103C. Introduction to Contemporary Persian Poetry and Prose.

104. Philosophical Texts. (4) Lecture, three hours. Readings in English. Introduction to wide selection of philosophical texts in translation, identification of major philosophical themes in ontology, epistemology, psychology, and cosmology through texts, with study in detail. P/NP or letter grading.

105A. Bahá’í Faith in Iran: Historical and Sociological Survey. (4) (Same as Religion 105A.) Lecture, three hours. Readings in English. Rise and development of Bábí and Bahá’í religions in context of 19th century Iran. Focus on personalities of Báb, Báb’s brother, and ‘Abdu’l-Bahá. May be taken independently for credit. P/NP or letter grading.


105CC. Bahá’í Faith in Iran: 20th-Century Iran and the Bahá’ís. (4) (Same as Religion 105CC.) Lecture, three hours. Focus on history of 20th-century Iran beginning with constitutional revolution, development and persecution of Bahá’í community, and latter’s relation to reform movements in Iran. May be taken independently for credit. P/NP or letter grading.


115A-115B-115C. Elementary Azeri. (4–4–4) (Same as Turkic Languages 115A-115B-115C.) Lecture, five hours. Knowledge of Russian, Turkish, and Iranian helpful. Grammatical competence at elementary level; knowledge of basic facts of Azeri grammar; reading competence with help of dictionary; ability to write simple compositions; basic conversational skill. P/NP or letter grading.

120. Comparative Study of Six Major Persian Poets. (4) Lecture, two hours; discussion, one hour. Preparation: knowledge of Persian. Lectures in Persian, read in English. Comparative study of six major Persian poets from 10th to 14th century who shaped sense of Persian identity and delineated chief distinguishing characteristics of Persian thought and culture. May be repeated for credit with consent of instructor. P/NP or letter grading.

130. Intellectual History of Jews of Persia. (4) Lecture, three hours. Readings in English. Introduction to intellectual history of Jews in Persia by highlighting select renaissance figures and focusing on various authors and their work. P/NP or letter grading.

131. Introduction to Judeo-Persian Language and Literature. (4) Lecture, three hours. Enforced requisites: courses 102C, 131. Literary study of Judeo-Persian literature in English and Persian. Comparative study of six major Persian poets from 10th to 14th century who shaped sense of Persian identity and delineated chief distinguishing characteristics of Persian thought and culture. May be repeated for credit with consent of instructor. P/NP or letter grading.

132. Comparative Study of Six Major Persian Poets. (4) Lecture, three hours. Enforced requisites: courses 102C, 131. Literary study of Judeo-Persian literature, as segment of Iranian classical literature. Judeo-Persian literary genres, in forms of prose and verse, compared with their parallel genres in context of Iranian literature. Textual study of Judeo-Persian manuscripts, both print and cursive, and their variations depending on time period or locality. P/NP or letter grading.


141. Persian Analytical Prose. (4) Lecture, three hours. Requisite: course 102C. Study of major Persian works on popular ethics that have helped shape normative social, cultural, and political values in Iranian civilization. May be repeated for credit with consent of instructor. P/NP or letter grading.

150A-150B. Survey of Persian Literature in English. (4–4) Lecture, three hours. Knowledge of Persian not required. Each course may be taken independently for credit.

161A-161B-161C. Elementary Middle Iranian. (4–4–4) Lecture, three hours. Preparation: knowledge of Perso-Arabic. Course 102A is requisite to 161B, which is requisite to 161C. Studies in grammars and texts of Middle Iranian languages (e.g., Middle Persian, Parthian, Sogdian, Khotanese, Bactriani). May be repeated for credit with consent of instructor. P/NP or letter grading.

C163. Archaeology of Iran. (4) (Same as Ancient Near East CM163.) Lecture, three hours. Designed to introduce students to Iranian archaeology from prehistoric through Achaemenid times. Concurrently scheduled with course CM259. P/NP or letter grading.

164. Ancient Cities of Iran: Archaeological Survey of Historic Cities and Sites of Iran from 4000 BC to 1900 AD. (4) Lecture, four hours. Introduction to archaeological and historical monuments and sites of Iran from earliest periods to early 20th century. Examination of emergence of early Iranian villages, formation of cities and their urban planning, interaction throughout late Sasanian and early Islamic periods to preindustrial era in early years of past century. Study of selection of ancient Iranian sites and cities, from first millennium BC to Qajar period, based on relevant archaeological, historical, and geographical sources. Study of archaeology and geographical history of each site or city with aerial views, which reveal rich array of architecture and town planning—from ordinary settlements and vernacular constructions to worldly-known royal and religious monuments. P/NP or letter grading.

169. Civilization of Pre-Islamic Iran. (4) Survey of Iranian culture from the beginning through Sasanian period.

170. Religion in Ancient Iran. (4) History of religion in Iran from the beginning to the Mohammadan conquest; Indo-Iranian background, Zoroastranism, Manichaism, Mazdaism.

M178. Introduction to History and Culture of Iranian Jews. (4) (Same as History M178 and Jewish Studies M178.) Lecture, three hours. Introduction to political, intellectual, cultural, and social history of Izpowi this of Iranian Jews. Exploration of history of Iranian Jews from ancient period throughout history, with focus on post-Middle Ages to present time. Topics, studied from perspectives of Iranian cultural and intellectual history, include identity and status, religious tolerance versus forced conversion, Iranian Jewish emancipation, and dynamic symbiosis between Iranian Jews and other Iranians. P/NP or letter grading.

187. Variable Topics in Iranian Studies. (4) Lecture, three hours. Variable topics; consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit. P/NP or letter grading.

188FL. Special Studies: Readings in Iranian. (2) Seminar, two hours. Requisite: course 102C. Students must be concurrently enrolled in affiliated main course. Primary readings and advanced training in Iranian. Additional work in Iranian to enrich and augment work assigned in main course. Reading, writing, and other exercises in Iranian. P/NP or letter grading.

189. Advanced Honors Seminars. (1 Seminar) Three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Selection of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated to toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1 Seminar) Three hours. Limited to students in College Honors Program. Designed as and adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for
maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

197. Individual Studies in Iranian. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research or Senior Project in Iranian. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

M210. Topics in Ancient Iranian History. (4) (Same as Ancient Near East M208 and History M210.) Seminar, three hours. Varying topics on Esarhaddon, Achaemenid, Anasid, and Sassanian history. May be repeated for credit. S/U or letter grading.


221. Rumi, Mystic Poet of Islam. (4) Seminar, three hours. Requisite: course 220A or 220B. Study of life and works of Rumi in context of interaction of Sufism and poetry creating. May be repeated twice for credit. P/NP grading.


M230A-M230B. Old Iranian. (4–4) (Same as Indo-European Studies M230A-M230B.) Lecture, four hours. Students must be in good academic standing and under guidance of faculty mentor. Culminating paper or project required. Honors content noted on transcript. P/NP or letter grading.

M231A-231B-231C. Advanced Middle Iranian. (4–4–4) Lecture, three hours. Requisite: course 161C. Course 231A is requisite to 231B, which is requisite to 231C. Further studies in grammars and texts of Old Persian and Avestan. Comparative considerations. Only course M231B may be repeated for credit. S/U or letter grading.

231A-231B-231C. Advanced Middle Iranian. (4–4–4) Lecture, three hours. Requisite: course 161C. Course 231A is requisite to 231B, which is requisite to 231C. Further studies in grammars and texts of Middle Iranian languages (Old Persian, Parthian, Sogdian, Khotanese, Bactrian). May be repeated twice for credit. P/NP grading.

250. Seminar: Classical Persian Literature. (4) Seminar, three hours. Requisites: courses 103A, 103B, 103C, 199. May be repeated twice for credit.


2559. Archaeology of Iran. (4) (Same as Ancient Near East CM259.) Lecture, three hours. Designed to introduce students to Iranian archaeology from prehistoric through Achaemenid times. Concurrently scheduled with course CM163. S/U or letter grading.

596. Directed Individual Study. (2 to 8) Tutorial, to be arranged. May be repeated for credit. S/U or letter grading.


Islamic Studies

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

M20. Introduction to Islam. (5) (Same as Religion M20.) Lecture, three hours; discussion, one hour. Genesis of Islam, its doctrines, and practices, with readings from Qur’an and Hadith; schools of law and theology; piety and Sufism; reform and modernism. P/NP or letter grading.

M27A-M27B-M27CW. Global Islam. (6–6–6) (Same as Clusters M27A-M27B-M27CW.) Course M27A is enforced requisite which is requisite to reach M27CW. Introduction to Islam, immensely diverse global tradition which is second largest religion. Study of Islam and Muslims within framework of study of global religious traditions and emphasis on profound diversity of localized belief and practice found across world. Examination of Islam’s evolution across 15 centuries, from late antiquity–when it emerged as localized religion of Persia–to 20th century, where it is practiced from U.S. to Indonesia. Concentration on broad analytical categories in study of religions such as text, culture, history, and prophecy. Students transition to more complex analyses through chronologically consistent overview of Islamic history. Study also of case studies of Muslim global networks in arenas such as art, music, literature, and political thought. M27A-M27B. Lecture, three hours; discussion, one hour. Requisites: courses 103A, 103B, 103C. May be repeated for credit. S/U or letter grading. M27CW. Special Topics. Seminar, three hours. Satisfies Writing II requirement. Letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled, hijab, or pilgrimage (whichever is the case). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

CM107. Islam in West. (5) (Formerly numbered M107.) Lecture, three hours; discussion, one hour. Acquisition of understanding of basic doctrines and practices of Islam. Survey of history of Islam in West, with focus on U.S. and France. Analysis of issues relevant to growth and development of Muslim communities in Western societies. Exposure to diverse expressions of Islam through independent research on Muslim communities and institutions in U.S. Development of strong analytical writing skills. Concurrently scheduled with course C207. P/NP or letter grading.

M111. Introduction to Islamic Archaeology. (4) (Same as Art History M119C and Middle Eastern Studies M111.) Lecture, three hours. From earliest monuments of Islam to the fall of the Abbasid Empire, to humble remains of small Egyptian port, broad focus on archaeological and standing remains in central Islamic lands (primarily Syria, Egypt, and Iraq). Turkey, Iran, North Africa, and Spain. Profound cultural transformations occurred from birth of Islam in 7th century to early Ottoman period in 16th and 17th centuries, which are traceable in material records. Assessment of effectiveness of tools afforded by historical archaeology to aid understanding of past societies. P/NP or letter grading.

M112. Archaeology and Art of Christian and Islamic Egypt. (4) (Same as Art History M112, Art History M119D, and Middle Eastern Studies M112.) Lecture, three hours. Culture of Egypt transformed gradually after Muslim conquest in mid-7th century CE. According to material evidence such as ceramics, textiles, architectural forms, and building techniques, it is functionally impossible to separate pre-Islamic Christian Egyptian from early Islamic Egypt. Although population may have become largely Muslim by 10th century, Egypt remained Coptic in many senses even to 14th century. Egypt retains sizable minority of people to present. Survey of archaeological remains and standing architecture of Egypt from 6th to 19th century, charting changes and continuities in material culture and shifts in human geography and land use. P/NP or letter grading.

CM115. Islam and Other Religions. (5) (Formerly numbered M115.) (Same as Religion M115.) Lecture, three hours; discussion, one hour. Students gain familiarity with historical cases and modes of interaction between Muslims and non-Muslims in plural societies. Consideration of axis questions such as how does Qur’an reflect religious plurality; how does it situate Islam vis-a-vis its alternatives; what encounters did rapid expansion of Islam bring about in diverse societies; how did Islam and other religions change through debate, war, and exchanges of ideas; what has political power played in interreligious interaction; how have conversion and hybridity affected what it means to be Muslim; what is different about interreligious interactions in secular states and how is past invoked to justify opinions and policies today. Investigation of these questions by conducting microstudies: close readings of sources through theoretical lens. Concurrently scheduled with course C215. P/NP or letter grading.

130. Shi’a in Islamic History. (4) Seminar, three hours; discussion, one hour. Rise and development of Shi’a Islam, its doctrines, and practices; major branches: Twelvers, Ismailis, Zaydis; their contribution to Islamic thought, political civilization; modern trends of reinterpretation and reform. Letter grading.

C151. Islamic Thought. (4) (Formerly numbered 151.) Lecture, three hours. Recommended requisite: introductory course on Islam or instructor consent. Introduction to major fields of inquiry and debate in Islamic studies (e.g., exegesis, Hadith, law, theology, Sufism). Focus on selected topics of debate such as nature of Islam vis-a-vis its alternatives; what encounters did rapid expansion of Islam bring about in diverse societies; how did Islam and other religions change through debate, war, and exchanges of ideas; what has political power played in interreligious interaction; how have conversion and hybridity affected what it means to be Muslim; what different about interreligious interactions in secular states and how is past invoked to justify opinions and policies today. Investigation of these questions by conducting microstudies: close readings of sources through theoretical lens. Concurrently scheduled with course C215. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

197. Individual Studies in Islamic Studies. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research or Senior Project in Islamic Studies. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.
Graduate Courses

200. Introduction to Islamic Studies. (4) Seminar, three hours. Introduction to various disciplines and methods employed in study of Islamic histories, cultures, and literatures with special emphasis on methodological and current theories and how they may be used and combined by Islamic studies students. Content varies each year. Letter grading.

201. Arabo-Islamic Studies. (4) Seminar, three hours. Preparation for advanced lecture courses in Arab language, literature, and culture. Exploration of key themes and methodologies in modern Arab studies and Islamic studies.

205A. Current Issues in Islam. (4) Lecture, three hours; discussion, one hour. The evolution of Islam in the 20th century and beyond, focusing on the role of religion in contemporary social and political contexts.

205B. Contemporary Issues in Islam. (4) Lecture, three hours; discussion, one hour. The contemporary role of Islam in the world, focusing on issues such as women's rights, modernization, and globalization.

209. Introduction to Semitic Languages and Literatures. (4) Lecture, four hours. The study of Semitic languages and literatures, including the Hebrew, Arabic, and Amharic traditions.

212. Arabic Language and Literature. (4) Lecture, three hours. The study of Arabic language and literature, including the Quran, Hadith, and contemporary Arabic writing.

213. Hebrew Language and Literature. (4) Lecture, three hours. The study of Hebrew language and literature, including the Bible, Rabbinic literature, and modern Hebrew literature.

214. Introduction to Islamic Studies. (4) Seminar, three hours. An introduction to the study of Islamic thought, history, and culture, focusing on key figures and movements.

215. Islamic Thought. (4) Lecture, three hours. An examination of major Islamic thinkers and their contributions to the development of Islamic thought.

251. Islamic Thought. (4) Lecture, three hours. An examination of major Islamic thinkers and their contributions to the development of Islamic thought.

291A. Variable Topics in Islamic Studies. (4) Seminar, three hours. Selected topics on Islam. May be repeated for credit with topic change. S/U or letter grading.


Jewish Studies

Lower-Division Courses

M10. Introduction to Judaism. (5) (Same as Religion M10.) Lecture, three hours; discussion, one hour. Judaism’s basic beliefs, institutions, and practices. Topics include development of biblical and rabbinic Judaism; concepts of god, sin, repentance, prayer, and the messiah; history of Talmud and synagogue; evolution of folk beliefs and year-cycle and life-cycle practices. P/NP or letter grading.

M11. Contemporary Israeli Short Stories/Novellas and Films in English. (5) (Same as Hebrew M1113.) Lecture, three hours; laboratory, two hours. Exploration of Israeli short stories/Novellas and films (translated into English) written since mid-1980s that use, repeated for credit with topic change. S/U or letter grading.

M12A. Hadith, Law, Theology, Sufism. (4) Lecture, four hours; discussion, one hour. Focus on selected aspects of Islamic historical or contemporary developments, with emphasis on how ideas and practices have developed over time. Topics include the role of hadith in legal and spiritual life, the evolution of Islamic legal systems, and the impact of Sufism on Islamic thought.

M12B. Introduction to Jewish Folklore. (4) Lecture, three hours. An introduction to the study of Jewish folklore, focusing on the oral traditions and cultural expressions of Jewish communities.

M12C. Introduction to Jewish History. (4) Lecture, three hours. An introduction to the study of Jewish history, focusing on key historical periods and events.

M12D. Zionism: Ideology and Practice in Making of Jewish State. (4) (Same as Middle Eastern Studies M144.) Lecture, three hours; discussion, one hour. Study of the ideology and practice of Zionism, focusing on its impact on modern Jewish identity and the development of the State of Israel.

M12E. Judaism, Christianity, and Islam. (4) Lecture, three hours. An introduction to the study of the relationship between Judaism, Christianity, and Islam, focusing on key historical periods and events.

M12F. Modern Israel: Politics, Society, Culture. (4) (Same as Middle Eastern Studies M142.) Lecture, three hours. An introduction to the study of modern Israel, focusing on its political and cultural development.

M13. Contemporary Israeli Short Stories/Novellas and Films in English. (5) (Same as Hebrew M1113.) Lecture, three hours; laboratory, two hours. Exploration of Israeli short stories/Novellas and films (translated into English) written since mid-1980s that use, repeated for credit with topic change. S/U or letter grading.

Upper-Division Courses

M131. Contemporary Israeli Short Stories/Novellas and Films in English. (5) (Same as Hebrew M1113.) Lecture, three hours; laboratory, two hours. Exploration of Israeli short stories/Novellas and films (translated into English) written since mid-1980s that use, repeated for credit with topic change. S/U or letter grading.

M132. Islamism and Other Religions. (5) Lecture, four hours; discussion, one hour. Focus on the relationship between Islam and other religions, including Christianity, Judaism, and other religions. Topics include the evolution of Islamic thought and practice, the impact of Islam on other religions, and the ways in which other religions have responded to Islam.

M133. Jewish Studies. (4) Seminar, two hours. An introduction to the study of Jewish studies, focusing on the relationship between Jewish studies and other disciplines.

M134. Islam and Other Religions. (5) Lecture, four hours; discussion, one hour. Focus on the relationship between Islam and other religions, including Christianity, Judaism, and other religions. Topics include the evolution of Islamic thought and practice, the impact of Islam on other religions, and the ways in which other religions have responded to Islam.


M136. Zionism: Ideology and Practice in Making of Jewish State. (4) (Same as Middle Eastern Studies M144.) Lecture, three hours; discussion, one hour. Study of the ideology and practice of Zionism, focusing on its impact on modern Jewish identity and the development of the State of Israel.

M137. Judaism, Christianity, and Islam. (4) Lecture, three hours. An introduction to the study of the relationship between Judaism, Christianity, and Islam, focusing on key historical periods and events.

M138. Modern Israel: Politics, Society, Culture. (4) (Same as Middle Eastern Studies M142.) Lecture, three hours. An introduction to the study of modern Israel, focusing on its political and cultural development.

M139. Islamism and Other Religions. (5) Lecture, four hours; discussion, one hour. Focus on the relationship between Islam and other religions, including Christianity, Judaism, and other religions. Topics include the evolution of Islamic thought and practice, the impact of Islam on other religions, and the ways in which other religions have responded to Islam.

M140. Modern Israel: Politics, Society, Culture. (4) (Same as Middle Eastern Studies M142.) Lecture, three hours. An introduction to the study of modern Israel, focusing on its political and cultural development.

M141. Judaism, Christianity, and Islam. (4) Lecture, three hours. An introduction to the study of the relationship between Judaism, Christianity, and Islam, focusing on key historical periods and events.

M142. Zionism: Ideology and Practice in Making of Jewish State. (4) (Same as Middle Eastern Studies M144.) Lecture, three hours; discussion, one hour. Study of the ideology and practice of Zionism, focusing on its impact on modern Jewish identity and the development of the State of Israel.

M143. Judaism, Christianity, and Islam. (4) Lecture, three hours. An introduction to the study of the relationship between Judaism, Christianity, and Islam, focusing on key historical periods and events.

M144. Judaism, Christianity, and Islam. (4) Lecture, three hours. An introduction to the study of the relationship between Judaism, Christianity, and Islam, focusing on key historical periods and events.


M146. Islamism and Other Religions. (5) Lecture, four hours; discussion, one hour. Focus on the relationship between Islam and other religions, including Christianity, Judaism, and other religions. Topics include the evolution of Islamic thought and practice, the impact of Islam on other religions, and the ways in which other religions have responded to Islam.

M147. Modern Israel: Politics, Society, Culture. (4) (Same as Middle Eastern Studies M142.) Lecture, three hours. An introduction to the study of modern Israel, focusing on its political and cultural development.

M148. Zionism: Ideology and Practice in Making of Jewish State. (4) (Same as Middle Eastern Studies M144.) Lecture, three hours; discussion, one hour. Study of the ideology and practice of Zionism, focusing on its impact on modern Jewish identity and the development of the State of Israel.

M149. Judaism, Christianity, and Islam. (4) Lecture, three hours. An introduction to the study of the relationship between Judaism, Christianity, and Islam, focusing on key historical periods and events.

M150A-150B. Hebrew Literature in English. (4-4) Lecture, 3-3 hours. Course may be taken independently for credit. M150A. Literature of Arab-Islamic Countries. (4) Lecture, 3-3 hours. Course may be taken independently for credit. M150B. Modern Hebrew Literature. (4) Lecture, 3-3 hours. Course may be taken independently for credit.

M151A. Diaspora Literature. (Same as Comparative Literature M166B.) Study of literary responses of Jews to their various experiences of diaspora, focusing on the ways in which literature has been used to explore themes such as identity, belonging, and cultural identity in the context of Jewish diaspora communities around the world.

M151B. Modern Hebrew Literature. (4) Study of modern Hebrew literature, focusing on the evolution of the language and its role in the development of the State of Israel. Topics include the role of Hebrew literature in the development of the State of Israel, the influence of Jewish history on modern Hebrew literature, and the role of Hebrew literature in the development of Jewish identity.

M155. Angels, Demons, and End of World: Magic, Mysticism, and Apocalypse in Jewish Traditions. (4) (Same as Religion M155.) Lecture, three hours. Focus on popular Jewish traditions of magic, mysticism, apocalypse, and various contemporary Jewish texts and traditions, with emphasis on the role of these traditions in modern Jewish culture. Topics include the role of magic and mystical practices in Jewish culture, the role of apocalypse in Jewish thought, and the role of various contemporary Jewish texts and traditions in modern Jewish culture.

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order to decipher features and functions of magic, mysticism, and apocalypse in antiquity and modernity. P/NP or letter grading.

M162. Israel Seen through Its Literature. (4) (Same as Comparative Literature M162.) Lecture, three hours. Attempt to impart profound understanding of Israel as seen through its literature. Examination of variety of literary texts—stories, novels, and poems—and reading them in context of their historical backgrounds. P/NP or letter grading.


175. Modern Israeli Literature Made into Films. (5) Lecture, four hours; discussion, one hour. Reading, analysis, and discussion of modern Israeli literature that was made into films, including literary works of prominent Israeli authors (S. Yizhar, A.B. Yehoshua, Amos Oz, and Yitzhak Ben Ner) that were translated to English and had filmic adaptations. Letter grading.

177. Variable Topics in Jewish Studies. (4) Lecture, three hours. Variable topics; consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit. P/NP or letter grading.

M178. Introduction to History and Culture of Islamic Jews. (4) (Same as History M179 and Islamic M178.) Lecture, three hours. Introduction to political, intellectual, cultural, and socioeconomic status of Islamic Jews. Exploration of history of Islamic Jews from ancient period to Middle Ages to present time. Topics, studied from perspective of Iranian culture and intellectual history, include identity and status, religious tolerance versus forced conversion, Islamic Jewish emancipation, and dynamic symbiosis between Islamic Jews and other Iranians. P/NP or letter grading.

M181. Topics in Jewish History. (4) (Same as History M181.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of major issues in Jewish history. May be repeated for maximum of 16 units with topic and/or instructor change. P/NP or letter grading.

M181SL. Jewish Thought, Politics, and Ethics: From Theory to Practice. (4) (Same as History M181SL.) Lecture, three hours; fieldwork, two hours. Designed for juniors/seniors. History of Los Angeles, with special emphasis on social role. Jews have played in shaping Los Angeles and role that Los Angeles has played in reshaping of Jewish identities, communities, and cultures. Exploration of themes related to regionalism in American Jewish community, comparative immigration and migration patterns, and frontiers and borderlands, while providing overview of historical methodologies and interpretation. Examination of ethical and methodological issues of writing history in digital age and learning how to read and analyze these new media works as primary and secondary historical texts. Opportunity to contribute to body of historical work related to Los Angeles Jewish history through required service work with community partners and development of digital public history projects. P/NP or letter grading.

M182A. Ancient Jewish History. (4) (Same as History M182A.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of social, political, and religious developments. P/NP or letter grading.

M182B. Modern Jewish History. (4) (Same as History M182B and Religion M182B.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Exploration of unfolding of Jewish history from rise of Christianity to expulsion of Jews from Spain in 1492. P/NP or letter grading.

M182C. Modern Jewish History. (4) (Same as History M182C.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of early-to-modern Jewish history beginning with enormously repercussive expulsion of Jews from Spain in 1492, followed by transformations in Jewish society and identity over five centuries in Europe and Middle East, and concluding with nationalism. P/NP or letter grading.

M184A. Jewish Civilization: Encounter with Great World Cultures. (4) (Same as History M184A and Religion M184A.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Exploration of dynamic and millennia-old interaction of Jews with great world cultures. Creative adaptations that have lent Jewish culture its distinct and various forms. P/NP or letter grading.

M194C. American Jewish Experience. (4) (Same as History M194C.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Experience of Jews in America, both historical and contemporary. P/NP or letter grading.

M194D. History of Zionism and State of Israel. (4) (Same as History M194D.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of history of State of Israel from 1948 to present. P/NP or letter grading.

M187. Holocaust in Literature. (4) (Same as Comparative Literature M165.) Lecture, three hours. Investigation of how Holocaust informs variety of literary and cinematic works and of themes and concerns of aesthetic and moral questions. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191. Variable Topics Research Seminars: Jewish Studies. (4) Seminar, three hours. Research seminar on selected topics. Reading, discussion, and development of research through supplemental readings, papers, or other activities. May be repeated for credit. P/NP or letter grading.

197. Individual Studies in Jewish Studies. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. As signed reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research or Senior Project in Jewish Studies. (2 to 4) Tutorial, one hour. Limited to juniors/ seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Course


Upper-Division Courses

M111. Introduction to Islamic Archaeology. (4) (Same as History M111.) Lecture, three hours. From earliest monuments of Islam in Arabia and Jerusalem to humble remains of small Egyptian port, broad focus on archaeological and standing remains in central Islamic lands (primarily Syria, Egypt, and Iraq), Turkey, Iran, North Africa, and Spain. Profound cultural transformations occurred from birth of Islam in 7th century to early Ottoman period in 16th and 17th centuries, which are traceable in material records. Assessment of effectiveness of tools afforded by historical archaeology to aid understanding of past societies. P/NP or letter grading.

M112. Archaeology and Art of Christian and Islamic Egypt. (4) (Same as Archaeology M112, Art History M119D, and Islamic Studies M112.) Lecture, three hours. Culture of Egypt transformed gradually after Muslim conquest and its greater depth through readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

9. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Middle Eastern Studies

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Discussion, one hour. Discussion of a critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

M50A. First Civilizations. (5) (Same as Ancient Near East M50A.) Lecture, three hours; discussion, one hour. Survey of great civilizations of ancient Near East—Egypt, Israel, and Mesopotamia—with attention to emergence of writing, monotheism, and urban societies. Letter grading.

M50B. Origins of Judaism, Christianity, and Islam. (5) (Same as Ancient Near East M50B and Religion M50B.) Lecture, three hours; discussion, one hour. Examination of three major monotheisms of Western cultures—Judaism, Christianity, and Islam—historically and comparatively. Development, teachings, and ritual practices of each tradition up to and including medieval period. Composition and development of various sacred texts, highlighting key themes and ideas within different historical and literary strata of traditions, such as mechanisms of revelation, struggle for religious authority, and common theological issues such as origin of evil and status of nonbelievers. Letter grading.

M50CW. Making and Studying Modern Middle East. (5) (Same as Anthropology M57W.) Lecture, three hours; discussion, one hour. Requisite: English Composition 3. Survey of modern Middle Eastern cultures through readings and films from Middle East and North Africa. Satisfies Writing II requirement. Letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.
History, Memory, and Identity in Israel. (4) Seminar, three hours. Israeli society was born in effort to reshape images of Jewish past and has been shaken by many debates over history, recent and ancient events, and how these are represented by historical scholarship as well as in popular media and public spaces. Struggles over image of past have become central (as in many other societies) to debates about identity, belonging, and cultural background from which these multitudinous texts emerged, and to explore major themes and consider variety of approaches to scripture. Development of appreciation for role of scripture plays in these religious systems and in American culture and society. P/NP or letter grading.

Seminar, three hours. Survey of Hebrew Bible/Old Testament, New Testament, and Qur’an to familiarize students with content of scriptures of Judaism, Christianity, and Islam, and sociocultural background from which these multitudinous texts emerged, and to explore major themes and consider variety of approaches to scripture. Development of appreciation for role of scripture plays in these religious systems and in American culture and society. P/NP or letter grading.

Modern Israeli Politics: Society, Culture. (4) (Same as Jewish Studies M142.) Lecture, three hours. Examination of evolution of Israel—its changing social, volatile domestic and foreign politics, and dynamic culture—from its foundation in 1948 to present, in context of global political and cultural change and changing Jewish world. Tension between Israel’s conception of itself as Jewish state and fact that it is home to wide variety of ethnic and religious groups and to great diversity of cultures; that it was envisaged as safe haven for refugees from Holocaust and has been characterized by insecurity and ongoing war; that, founded as democracy, it contends with multiple strains on its democratic system, such as tensions between Jews and Arabs, secular and religious Jews, and disparate ethnic groups. P/NP or letter grading.

Zionism: Ideology and Practice in Making of Jewish State. (4) (Same as Jewish Studies M144.) Lecture, three hours. Historical analysis of Zionism on backdrop of European, world, and Jewish histories from ideological origins to political, cultural, and social foundations of State of Israel. P/NP or letter grading.

Variable Topics in Middle Eastern Studies. (4) Lecture, three hours. Variable topics; consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit. P/NP or letter grading.

Seminar, three hours. Interdisciplinary approach to some major topics in study of religion and Middle Eastern studies. May be repeated for credit with topic change. P/NP or letter grading.

Movement in Art, Philosophy, and Daily Life. (5) (Same as Comparative Literature M179SL.) Seminar, three hours; fieldwork, three hours. Exploration of relation between humanities and world. Only relevant one hour of credit of what was covered or not go on inside it, is control over movements. In living animals, sentience or consciousness exists to integrate often complex input and decide on course of action. Similarly, ownership and agency are inseparably associated with biological systems that control our movements. Movements play vital part in constructing psychosocial environment that permeates and surrounds us. How humans and animals move, and how movement, as well as limitations of mobility, relate to personal and community identity. P/NP or letter grading.

Advanced Honors Seminars. (1) Seminar, three hours. Limited to students in College Honors Program. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

Honor-Division Courses

Flit Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current interest. Taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

Visible Language: Study of Writing. (5) (Same as Asian M20, Indo-European Studies M20, Slavic M20, and Southeast Asian M20.) Lecture, three hours; discussion, one hour. Consideration of concrete means of language representation in writing systems. Earliest representations of language known are those of Near East dating to end of 4th millennium BC. While literate civilizations of Egypt, Indus Valley, China, and Mesoamerica left little evidence of corresponding earliest developments, their antiquity and, in case of China and Mesoamerica, their evident isolation mark these centers as loci of independent developments in which writing systems, alphabetic and ideographic, assessed and shaped parallel advances in modern alphabetic writing systems, and presentation of conceptual basis of semiotic language representation. Original and nearly non-Western writing systems, How Greco-Roman alphabet arose in 1st millennium BC and how it compares to other modern writing systems. P/NP or letter grading.

Global Time Travel. (5) Lecture, three hours; discussion, one hour. Time travel is our best effective fictional device for asking what past was like, what future will bring, and how our present might look when viewed from other times. Though often associated with Euro-American genre of hard science fiction, time travel is global genre. Study of time travel stories, novels, television productions, and films from variety of periods, regions, and languages in order to explore anxieties genre responds to and other worlds it helps us imagine. Examination of theorists and critics whose work helps explain how time travel interfaces with history, narrative, and visibility. P/NP or letter grading.

Honors Seminars. (1) Seminar, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and register with minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Teaching and Learning of Heritage Languages. (4) (Same as Asian CM124 and Slavic CM114.) Lecture, three hours. Consideration of issues relevant to heritage language learners (HLL) and to heritage language (HL) instruction. Readings and discussion on such topics as definitions of HLLs and HLs; linguistic, demographic, and sociocultural profile of HLLs, particularly HL groups most represented among UCLA students; institutional and instructor attitudes toward HLLs; impact of student motivation and expectations on HL curriculum and instructional methods; diagnostic assessment tools and other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

Honor-Division Courses

CM114. Teaching and Learning of Heritage Languages. (4) (Same as Asian CM124 and Slavic CM114.) Lecture, three hours. Consideration of issues relevant to heritage language learners (HLL) and to heritage language (HL) instruction. Readings and discussion on such topics as definitions of HLLs and HLs; linguistic, demographic, and sociocultural profile of HLLs, particularly HL groups most represented among UCLA students; institutional and instructor attitudes toward HLLs; impact of student motivation and expectations on HL curriculum and instructional methods; diagnostic assessment tools and other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

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Near Eastern Languages

Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and register with minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and register with minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.
Semiotics

Lower-Division Courses

19. Flat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Graduate Courses

CM214. Teaching and Learning of Heritage Languages. (4) (Same as Asian CM224 and Slavic CM214.) Lecture, three hours. Consideration of issues relevant to heritage language learners (HLL) and to heritage language (HL) instruction. Exploration and discussion on such topics as definitions of HLs and HLLs; linguistic, demographic, sociolinguistic, and sociocultural profile of HLLs; particularly HL groups most represented among UCLA students; institutional and instructor attitudes toward HLLs; impact of student motivation and expectations on HL curriculum and teaching approaches; similarities and differences between HLs and foreign language learners (FLs) regarding teaching methods and materials; diagnostic testing and needs analysis; use of oral/aural proficiency as springboard for literacy instruction; optimization of HL and FL classes. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

M248. Anthropology and History of Mediterranean. (Same as Anthropology M248 and History M248.) Seminar, three hours. Introduction to historical and anthropological writings about Mediterranean. Draws on variety of classic and contemporary theories, histories, and ethnographic studies about Mediterranean Sea. Topics include geographical and imaginary boundaries, Mediterranean honor/shame concepts, colonial and postcolonial Mediterranean, Levantianism, the Bible and the Dead Sea scrolls, and Mediterranean and Jewish Heritage. May be repeated for credit. P/NP grading.

M287. Central Asian Studies: Discipline, Methods, Debates. (2) (Same as Anthropology M247Q and History M287.) Seminar, two hours. Introduction to historical and anthropological study of the central and eastern Asian languages and societies. Theory and classroom practice, with individual counseling and faculty evaluation. Preparation: apprenticeship with Undergraduate Personnel Office. May be repeated for credit. S/U grading.

M289. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

M241. Seminar: Akkadian Literature. (4) Lecture, three hours. Reading of Akkadian literary texts; selected problems in literary history and stylistic analysis. May be repeated for credit. S/U or letter grading.

M240X. Seminar: Akkadian Language. (1) Seminar, two hours. Readings of texts from various dialects of Akkadian; selected problems in linguistic analysis of Akkadian dialects. May be repeated for credit. S/U or letter grading.

M240X. Seminar: Akkadian Language. (1) Seminar, two hours. Readings of texts from various dialects of Akkadian; selected problems in linguistic analysis of Akkadian dialects. May be repeated for credit. S/U or letter grading.

M241. Seminar: Akkadian Literature. (4) Seminar, two hours. Readings of texts from various dialects of Akkadian; selected problems in linguistic analysis of Akkadian dialects. May be repeated for credit. S/U or letter grading.

M250A. Reading of Akkadian texts, with introductions to historical tradition of works and their literary structure. May be repeated for credit. P/NP or letter grading.

M250B. Reading of Akkadian texts, with introductions to historical tradition of works and their literary structure. May be repeated for credit. P/NP or letter grading.
May be applied toward honors credit for eligible stu-
dents. Honors content noted on transcript. P/NP or
letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours.
Limited to students in College Honors Program.
Signed as adjunct to lower-division lecture course.
Individual study with a lecture course instructor to
explore topics in greater depth through supplemental read-
ings, papers, or other activities. May be repeated for
maximum of 4 units. Individual honors contract re-
quired. Honors content noted on transcript. Letter
grading.

99. Student Research Program. (1 to 2) Tutorial (su-
prised research or other scholarly work), three hours
per week per unit. Entry-level research for lower-
division students under guidance of faculty mentor.
Students must be in good academic standing and en-
rolled in the program (excluding this course). Individ-
ual contract required; consult Undergraduate
Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101A-101B-101C. Elementary Turkish. (5–5–5) Lec-
ture, five hours. Course 101A is requisite to 101B,
which is requisite to 101C. Grammar; reading, conver-
sation, and elementary composition drills. P/NP or
letter grading.

102A-102B-102C. Advanced Turkish. (4–4–4) Lec-
ture, five hours. Requisites: courses 101A, 101B,
101C. Continuing study of grammar, conversation
and composition. Readings in modern literature and
social science texts. May be repeated for credit. P/NP
or letter grading.

111A-111B-111C. Elementary Uzbek. (4–4–4) Lec-
ture, three hours; laboratory, two hours. Elementary
grammar, reading, and composition exercises; el-
ementary conversation.

112A-112B-112C. Advanced Uzbek. (4–4–4) Lec-
ture, three hours; laboratory, two hours. Descriptive
Uzbek grammar, reading, and analysis of Uzbek lit-
erary and folkloric texts. High-style composition and
discussion.

M115A-M115B-M115C. Elementary Azeri. (4–4–4)
Same as the program through 115C. Lecture, five hours.
Knowledge of Russian, Turkish, and Iranian
helpful. Grammatical competence at elementary level;
knowledge of basic facts of Azeri grammar; reading
comprehension with help of dictionary; ability to write
simple compositions; basic conversational skill. P/NP
or letter grading.

116A-116B-116C. Advanced Azeri. (4–4–4) Lecture,
three hours; discussion, one hour; laboratory, one
hour. Preparation: placement test. Proficiency-based
course in descriptive Azeri grammar. Reading and
analysis of Azeri literary and folkloric texts in new
writing system. High-style composition and discus-
sion. May be repeated for credit. Letter grade
accepted.

160. Turkish Tradition. (4) Lecture/discussion. Prepa-
ration: entrance examination. Survey of cultural history
of the Turks, as seen primarily through their literature,
from their early history to the present.

165. Islamic Literary Heritage of Central Asia. (4)
Lecture, two hours; discussion, one hour. Systematic
survey of Islamic documents produced in Turkish and
Persian in Central Asia, with reading of primary sources.
English translation. Study of special char-
acteristics of Central Asian Islam.

170. Turco-Mongolian Nomadic Empires. (4) Lec-
ture, three hours. Required of students in Turkic pro-
gram. Survey of history of Turic and Mongolian do-
minions from the 3rd century BC to AD 13th century
(Hsing-nu, Hsien-pi, Juan-Juan, Tu-Chueh, Uyyghur,
Khitai, Karakhanid, Seljuk, Kara-Khitai, Khazar, Jengiz-Khanite).

180. Modern Turkic Languages and Peoples. (4)
Lecture, three hours. Required of students in Turkic
program and recommended for students in Soviet
studies. Ethnic and linguistic survey of the Turkic peo-
ples.

189. Advanced Honors Seminars. (1) Seminar, three
hours. Limited to 20 students. Designed as adjunct
to undergraduate lecture course. Exploration of topics in
greater depth through supplemental readings, papers,
or other activities and led by lecture course instructor.
May be applied toward honors credit for eligible stu-
dents. Honors content noted on transcript. P/NP or
letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours.
Limited to students in College Honors Program. De-
signed as adjunct to upper-division lecture course.
Individual study with lecture course instructor to
explore topics in greater depth through supplemental read-
ings, papers, or other activities. May be repeated for
maximum of 4 units. Individual honors contract re-
quired. Honors content noted on transcript. Letter
grading.

197. Individual Studies in Turkic. (2 to 4) Tutorial,
one hour. Limited to juniors/seniors. Individual extensive
study, with scheduled meetings to be arranged be-
tween faculty member and student. Assigned reading
and tangible evidence of mastery of subject matter re-
quired. May be repeated for credit. Individual contract
required. P/NP or letter grading.

199. Directed Research or Senior Project in Turkic.
(2 to 4) Tutorial, one hour. Limited to juniors/seniors.
Supervised individual research or investigation under
guidance of faculty mentor. Culumnating paper or
project required. May be repeated for credit. Individual
contract required. P/NP or letter grading.

Graduate Courses

210A. Readings in Ottoman I. (4) Lecture, three hours.
Examination of printed texts in Ottoman from 19th and
20th centuries to improve student competence to read,
transliterate, and translate Ottoman texts. Read-
ings include selections from newspapers, almanacs,
travel books, and literary and historical texts. S/U or
letter grading.

211. Ottoman Diplomtics. (4) Lecture, three hours.
Requisites: courses 210A, 210B, 210C. Organization and
contents of Ottoman archives; reading and dis-
cussion of documents and regions. Introduction to
use of Ottoman archive materials as a source for his-
torical research.

596. Directed Individual Study. (2 to 8) Tutorial, to be
arranged. May be repeated for credit. S/U or letter
grading.

597. Examination Preparation. (2 to 8) Tutorial, to be
arranged. S/U grading.

599. PhD Dissertation Research and Preparation. (2
to 8) Tutorial, to be arranged. S/U grading.

NEUROBIOLOGY

David Geffen School of Medicine
73-235 Center for Health Sciences
Box 951763
Los Angeles, CA 90095-1763

Neurobiology
310-825-8153

Dr. Paul E. Micevych, PhD, Chair
James W. Bisley, PhD, Vice Chair
Samantha J. Butler, PhD, Vice Chair
Equity, Diversity, and Inclusion

Overview

The Department of Neurobiology is a premier research department and a leading force in neuroscience and education at UCLA and worldwide. Department faculty with diverse research backgrounds in cellular and molecular biology, psychology, and engineer-

ing; utilize the most sophisticated technologies available to work in concert with colleagues throughout UCLA and the world to enhance the understanding of the brain and its role in health and disease.

Neurobiology faculty information is available from the department.

Medical History

Lower-Division Courses

10A & 10B & 10C. History of Medical Sciences.
(1-2) Lecture, three hours. Major contributions of
medical and personal personalities from earliest
times. P/NP or letter grading.

107A-107B. Historical Development of Medical Sci-
ces. (4-4) Lecture, three hours. Major contributions
of medicine and personal personalities from earliest
times through 1650. 107B. Subject in the period from 1650
to the 19th century, illustrated lectures, class
discussion, and required readings from selected texts.

M169. History of Neurosciences. (4) Same as Neu-
robiology M169., Lecture, one hour; discussion, two
hours. Development of neurosciences, especially neu-
roanatomy and neurophysiology, from Enlightenment
time through latter 20th century. Emphasis on funda-
mental nervous functions, cell communication, and tech-
nological, conceptual, and cultural influences that
have shaped understanding of brain and nervous system.

Graduate Course

596. Directed Individual Studies in Medical History.
(2 to 12) Tutorial, to be arranged. Investigation of sub-
jects in medical history selected by students with ad-
vice and direction of instructor. Individual reports and
conferences. S/U or letter grading.

Neurobiology

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one
hour. Discussion of and critical thinking about topics
of current intellectual importance, taught by faculty
members in their areas of expertise and illuminating
many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (su-
prised research or other scholarly work), three hours
per week per unit. Entry-level research for lower-di-
vision students under guidance of faculty mentor. Stu-
dents must be in good academic standing and en-
rolled in minimum of 12 units (excluding this course).
Individual contract required; consult Undergraduate
Research Center. May be repeated. P/NP grading.

Upper-Division Courses

M169. History of Neurosciences. (4) (Same as Neu-
robiology M169.) Lecture, one hour; discussion, two
hours. Development of neurosciences, especially neu-
roanatomy and neurophysiology, from Enlightenment
time through latter 20th century. Emphasis on funda-
mental nervous functions, cell communication, and tech-
nological, conceptual, and cultural influences that
have shaped understanding of brain and nervous system.

P/NP or letter grading.
nological, conceptual, and cultural influences that have shaped understanding of brain and nervous system. P/NP or letter grading.

M171. Variable Topics Research Seminars: Contem-
porary Biology. (2) (Same as Physiological Science M171.) Seminar, two hours. Limited to undergraduate felows in Integrated and Interdisciplinary Undergraduate Research Program. Presentations of scientific data from primary research articles and from students’ own research. May be repeated for credit. P/NP grading.

197. Individual Studies in Neurobiology. (2 to 4) Tu-
torial, to be arranged. Limited to juniors/seniors. Indi-
vidual intensive study, with scheduled meetings to be
arranged between faculty member and student. As-
signed readings and tangible evidence of mastery of
subject matter required. May be repeated for credit.
Individual contract required. P/NP or letter grading.

199. Directed Research in Neurobiology. (2 to 8) Tu-
torial, to be arranged. Limited to juniors/seniors. Su-
pervised individual research or investigation under
guidance of faculty mentor. Studies in neuroscience
and related subject areas appropriate for training of
particular students, which includes reading assign-
ments or laboratory work leading to final oral or written
report. May be repeated for credit. Individual contract
required. P/NP or letter grading.

Graduate Courses

M200F. Cellular Neurophysiology. (4) (Same as Neu-
roscience M202 and Physiological Science M202.)
Lecture, three hours; discussion, two hours. Requi-
sites: Physiological Science 111A (or M180A or
Physics 5C). Advanced course in cellular physi-
ology of neurons. Action and membrane potentials,
channels and channel blockers, gates, ion pumps and
neuronal homeostasis, synaptic receptors, drug-re-
ceptor interactions, transmitter release, modulation by
second messengers, and sensory transduction. Letter
grading.

M200G. Biology of Learning and Memory. (4) (Same as
Neuroscience M220 and Psychology M228.) Lecture,
four hours. Molecular, cellular, circuit, systems,
neuroanatomy, theory, and models of learning and
memory. Cross-disciplinary focus on learning and
memory to provide integrated view of subject that
emphasizes interactions across levels that take advantage of
novel groundbreaking models. Letter grading.

225. Functional Organization of Visual System. (2)
Seminar, three hours. Preparation: basic neuroscience
course. Recommended: neuroanatomy, neurophysi-
ology, and/or systems neuroscience courses. Designed
for neuroscientists, cell biologists, and psychologists.
Basic organizational, physiological, and functional
principles of visual system and how visual information
is processed at different levels of nervous system.
Structure, microcircuitry organization and function of
retina, central visual nuclei, and primary cortical areas
mediating visual behavior. S/U or letter grading.

M255. Seminar: Neural and Behavioral Endocrinolo-
y. (2) (Same as Physiological Science M255 and Psy-
chology M294.) Seminar, one hour; discussion, one
hour. Topics include hormonal biochemistry and phar-
macology. Hypothalamic/hypophyseal interactions,
both hormonal and neural. Structure and function of
hypothalamus. Hormonal control of reproductive and
other behaviors. Sexual differentiation of brain and be-
havior. Stress: hormonal, behavioral, and neural as-
pects. Aging of reproductive behaviors and function.
Letter grading.

270. Joint Seminar: Neuroscience Lectures. (1)
Seminar, one hour. Formal lectures on current re-
search topics in neuroscience by speakers from na-
tional, international, and local neuroscience communi-
ties. S/U grading.

**NEUROLOGY**

**David Geffen School of Medicine**

C-153 Reed Neurological Research Center
Box 951769
Los Angeles, CA 90095-1769

**Neurology**

310-825-5521

S. Thomas Carmichael, Jr., MD, PhD, Chair
Christopher DeGiorgio, MD, Vice Chair, Olive View-UCLA
Charles C. Flippen II, MD, Vice Chair, Education
Jason D. Hinman, MD, PhD, Vice Chair, Research
Mario F. Mendez, MD, PhD, Vice Chair, VA Greater Los Angeles Healthcare System
P. Leia Nghiemphu, MD, Vice Chair, Academic Affairs
Martina H. Wiedau, MD, Vice Chair, Clinical Affairs
Jeffrey L. Saver, MD, Senior Associate Vice Chair, Clinical Research

**Overview**

Neurology is the medical science dealing with the normal and diseased nervous system. Neuro-
ological disorders are often associated with significant disability, morbidity, and mortality. Their higher incidence in association with
greater longevity of the population, increased awareness, improved diagnostic methods, and
other factors place neurological disorders among the major medical problems today. The Department of Neurology and the Reed Neuro-
logical Research Center provides means for a coordinated basic science and clinical research
approach to neurological disorders, patient care, and neurological education.

The department instructs medical students throughout the four years. Emphasis in the first
year is on basic aspects of neuroanatomy, chemistry, and physiology; in the second year,
neurological history taking and neurological ex-
amination of afflicted patients are stressed. The third year consists of a clerkship, and the fourth
year provides electives in neurology, including an advanced clinical clerkship.

Graduate students and postdoctoral candi-
dates are trained in both the basic and clinical laboratories.

For more details on the Department of Neuro-
logy and courses offered, see the department website.

Neurology faculty information is available from the department.

**Neurology**

**Lower-Division Courses**

19. Fiat Lux Freshman Seminars. (1) Seminar, one
hour. Discussion of and critical thinking about topics
of current intellectual importance, taught by faculty
members in their areas of expertise and illuminating
many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (su-
pervised research or other scholarly work), three hours
per week per unit. Entry-level research for lower-divi-
sion students under guidance of faculty mentor. Stu-
dents must be in good academic standing and en-
rolled in minimum of 12 units (excluding this course).
Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

**Upper-Division Courses**

188SA. Individual Studies for USIE Facilitators. (1)
Tutorial, to be arranged. Enforced corequisite: Honors
Collegium 101E. Limited to junior/senior USIE facilita-
tors. Individual study in regularly scheduled meetings
with faculty mentor to discuss selected USIE seminar
topic, conduct preparatory research, and begin prepa-
ration of syllabus. Individual contract with faculty
mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1)
Tutorial, to be arranged. Enforced corequisite: course
188SA. Enforced corequisite: Honors Collegium 101E.
Limited to junior/senior USIE facilitators. Individual
study in regularly scheduled meetings with faculty
mentor to finalize course syllabus. Individual contract
with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2)
Tutorial, to be arranged. Enforced corequisite: course
188SB. Limited to junior/senior USIE facilitators. Indi-
vidual study in regularly scheduled meetings with fac-
ulty mentor while facilitating USIE 88S course. Indi-
vidual contract with faculty mentor required. May not
be repeated. Letter grading.

199. Directed Research in Neurology. (2 to 8) Tuto-
rial, two hours. Limited to juniors/seniors. Supervised
individual research or investigation under guidance of
faculty mentor. Culminating paper required. May be
repeated for credit. Individual contract required. P/NP
or letter grading.

**NEUROSCIENCE, UNDERGRADUATE**

**Interdepartmental Program**

**College of Letters and Science**

1321 Gonda Center
Box 951761
Los Angeles, CA 90095-1761

**Neuroscience Undergraduate IDP**

310-206-2349

E-mail contact

Stephanie A. White, PhD, Chair
Kate M. Wassum, PhD, Vice Chair

**Faculty Committee**

Scott H. Chandler, PhD (Integrative Biology and Physiology)
David L. Glanzman, PhD (Integrative Biology and Physiology, Neurobiology)
Paul E. Micevych, PhD (Neurobiology)
Patricia E. Phelps, PhD (Integrative Biology and Physiology)
Overview
Neuroscience seeks to understand the brain in health and in disease. Topics of fundamental interest include perception, cognition, learning, memory, motor control, and regulation of body function. The undergraduate interdepartmental program seeks to explore the principles and concepts of this broad range of nervous system function at many levels of analysis, including molecular, cellular, synaptic, network, computational, and behavioral.

Information on the graduate program in this discipline can be found in the Neuroscience graduate interdepartmental program section.

Undergraduate Major

Neuroscience BS

Capstone Major
The Neuroscience major is a designated capstone major. Undergraduate students have the option of conducting two terms of independent research within a faculty laboratory, applying to participate in Project Brainstorm or DOPA-Team, or completing an advanced laboratory methods course with a series of research modules. Through their capstone work, students demonstrate ability to generate testable scientific hypotheses and develop a research plan to test such hypotheses; work on research projects independently and in small groups; evaluate and discuss primary literature and the validity of hypotheses generated by others; communicate effectively orally and in writing; and demonstrate creative thinking.

Learning Outcomes
The Neuroscience major has the following learning outcomes:

- Demonstrate creative thinking
- Effective written and oral communication
- Evaluation of the validity of hypotheses
- Generation of testable scientific hypotheses and development of a research plan to test such hypotheses
- Work on research projects independently and in small groups
- Evaluation and discussion of primary literature
- Critical thinking

Entry to the Major

Transfer Students
Transfer applicants to the Neuroscience major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general biology with laboratory, one year of organic chemistry and one statistics course. A second semester of organic chemistry or one year of calculus-based physics is strongly recommended but not required for admission.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Life Sciences Core Curriculum
Required: Chemistry and Biochemistry 14A, 14B, 14BL, 14C, 14CL, and 14D, or 20A, 20B, 20L, 30A, 30AL, 30B, and 30BL; Life Sciences 7A, 7B, 7C, 23L; Life Sciences 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, 3C, and Statistics 10 or 13, or Mathematics 31A or 31AL, 31B, 32A, and Statistics 10 or 13; Physics 1A, 1B, 1C, 4AL, and 4BL, or 5A, 5B, and 5C.

The Major
The Neuroscience major consists of 10 courses (approximately 43 units). Consult respective department or program sections for course descriptions.

Required Core: Neuroscience M101A (with grade of C– or better), M101B, M101C, 102, Chemistry and Biochemistry 153A. Physiological Science 111A and Psychology 115 cannot be substituted for Neuroscience M101A.

Elective Options: One course from each of the following three options:

- **Molecular, Cell, and Developmental Neuroscience:** Neuroscience M145, C177, 180, 181, 182, 186, M187, 191C, Physics C186, Physiological Science M106, 121, C126, C127, M145, 146, 147, 174, 175, Psychology 119A, 162, or M166.

Capstone Research Options: One course from each of the following three options:

- **Neuroscience 101L, M116A, Psychology M116A, or 116B:** Neuroscience C177 and 192CX, two quarters of 192BX, 198A and 198B, or 199A and 199B options must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in all upper-division courses taken for the major.

-Honors Program

Majors who have completed all preparation courses with a grade-point average of 3.0 or better and an overall GPA of 3.2 or better may apply for admission to the honors program. Applications and program requirements are available in the Neuroscience Undergraduate Office. Students must submit the application before beginning their upper-division honors requirements. After completion of all requirements and with the recommendation of the faculty sponsor and a second reader of the thesis, the chair confers honors at graduation.

Undergraduate Minor

Neuroscience Minor

The Neuroscience minor is designed to allow students in other majors an opportunity to explore the interdisciplinary field of neuroscience in a structured and rigorous way, while pursuing a major field of study in another discipline at the same time.

Admission
To enter the minor, students must have an overall grade-point average of 2.0 or better and a 2.5 GPA in the requisite courses for Neuroscience M101A and M101B.

-Honors Program

Nonscience majors wishing to minor in Neuroscience should be aware that preparation courses in chemistry, life sciences, and physics are requisites to the upper-division course requirements.
Lower-Division Courses

10. Brain Made Simple: Neuroscience for 21st Century. (4) Lecture. Four hours. Preparation: high school background in either biology or chemistry. Open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M118A or Psychology M117A) or Psychological Science 111A or Psychology 115. General overview and introduction to major topics and fundamental approaches in neuroscience. Letter grading.

17. Science of Music. (4) Lecture, three hours; discussion, one hour. Preparation: high school background in either biology or chemistry. General overview of scientific principles of music and their applications to human behavior.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Preparation: high school background in either biology or chemistry. General overview of scientific principles of music and their applications to human behavior. Open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M118A or Psychology M117A) or Psychological Science 111A or Psychology 115. General overview and introduction to most exciting and fundamental topics encompassing field of neuroscience. P/NP or letter grading.

116A. Behavioral Neuroscience Laboratory. (4) Lecture, one hour. Preparation: background in either biology or chemistry. General overview of scientific principles of music and their applications to human behavior. Open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M118A or Psychology M117C). Laboratory exercises range from molecular and cellular to behavioral. Hands-on experience with important methodology and experimental approaches in neuroscience. P/NP or letter grading.

119L. Human Neuropsychology. (4) (Same as Psychology M119L) Lecture, three hours. Preparation: background in either biology or chemistry. General overview of scientific principles of music and their applications to human behavior. Open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M118A or Psychology M117C). Laboratory exercises range from molecular and cellular to behavioral. Hands-on experience with important methodology and experimental approaches in neuroscience. P/NP or letter grading.

151. Computational Neuroscience for Interdisciplinary Scientists. (4) Lecture, two hours; laboratory, two and one half hours. Preparation: background in either biology or chemistry. General overview of scientific principles of music and their applications to human behavior. Open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M118A or Psychology M117C). Laboratory exercises range from molecular and cellular to behavioral. Hands-on experience with important methodology and experimental approaches in neuroscience. P/NP or letter grading.

145. Neural Mechanisms Controlling Movement. (5) (Same as Biological Sciences M145) Lecture, four hours. Preparation: background in either biology or chemistry. General overview of scientific principles of music and their applications to human behavior. Open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M118A or Psychology M117C). Laboratory exercises range from molecular and cellular to behavioral. Hands-on experience with important methodology and experimental approaches in neuroscience. P/NP or letter grading.

M153. Dynamical Systems Modeling of Physiological Processes. (5) (Same as Biological Sciences M153) Lecture, four hours; laboratory, two hours. Examination of art of making and evaluating dynamical models of physiological systems and of dynamical principles inherent in physiological systems. Letter grading.

140. Brain Injury and Recovery of Function. (4) Seminar, four hours. Preparation: background in either biology or chemistry. General overview of scientific principles of music and their applications to human behavior. Open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M118A or Psychology M117C). Laboratory exercises range from molecular and cellular to behavioral. Hands-on experience with important methodology and experimental approaches in neuroscience. P/NP or letter grading.

151. Computational Neuroscience for Interdisciplinary Scientists. (4) Lecture, two hours; laboratory, two and one half hours. Preparation: background in either biology or chemistry. General overview of scientific principles of music and their applications to human behavior. Open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M118A or Psychology M117C). Laboratory exercises range from molecular and cellular to behavioral. Hands-on experience with important methodology and experimental approaches in neuroscience. P/NP or letter grading.

119L. Human Neuropsychology. (4) (Same as Psychology M119L) Lecture, three hours. Preparation: background in either biology or chemistry. General overview of scientific principles of music and their applications to human behavior. Open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M118A or Psychology M117C). Laboratory exercises range from molecular and cellular to behavioral. Hands-on experience with important methodology and experimental approaches in neuroscience. P/NP or letter grading.

119N. Visual System. (4) (Same as Psychology M119N) Lecture, three hours. Preparation: background in either biology or chemistry. General overview of scientific principles of music and their applications to human behavior. Open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M118A or Psychology M117C). Laboratory exercises range from molecular and cellular to behavioral. Hands-on experience with important methodology and experimental approaches in neuroscience. P/NP or letter grading.

CM123. Neurobiology of Sleep. (4) (Same as Physiology M123) Lecture, three hours; discussion, one hour. Preparation: background in either biology or chemistry. General overview of scientific principles of music and their applications to human behavior. Open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M118A or Psychology M117C). Laboratory exercises range from molecular and cellular to behavioral. Hands-on experience with important methodology and experimental approaches in neuroscience. P/NP or letter grading.

119L. Human Neuropsychology. (4) (Same as Psychology M119L) Lecture, three hours. Preparation: background in either biology or chemistry. General overview of scientific principles of music and their applications to human behavior. Open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M118A or Psychology M117C). Laboratory exercises range from molecular and cellular to behavioral. Hands-on experience with important methodology and experimental approaches in neuroscience. P/NP or letter grading.

119N. Visual System. (4) (Same as Psychology M119N) Lecture, three hours. Preparation: background in either biology or chemistry. General overview of scientific principles of music and their applications to human behavior. Open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M118A or Psychology M117C). Laboratory exercises range from molecular and cellular to behavioral. Hands-on experience with important methodology and experimental approaches in neuroscience. P/NP or letter grading.

CM123. Neurobiology of Sleep. (4) (Same as Physiology M123) Lecture, three hours; discussion, one hour. Preparation: background in either biology or chemistry. General overview of scientific principles of music and their applications to human behavior. Open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M118A or Psychology M117C). Laboratory exercises range from molecular and cellular to behavioral. Hands-on experience with important methodology and experimental approaches in neuroscience. P/NP or letter grading.

119L. Human Neuropsychology. (4) (Same as Psychology M119L) Lecture, three hours. Preparation: background in either biology or chemistry. General overview of scientific principles of music and their applications to human behavior. Open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M118A or Psychology M117C). Laboratory exercises range from molecular and cellular to behavioral. Hands-on experience with important methodology and experimental approaches in neuroscience. P/NP or letter grading.

119N. Visual System. (4) (Same as Psychology M119N) Lecture, three hours. Preparation: background in either biology or chemistry. General overview of scientific principles of music and their applications to human behavior. Open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M118A or Psychology M117C). Laboratory exercises range from molecular and cellular to behavioral. Hands-on experience with important methodology and experimental approaches in neuroscience. P/NP or letter grading.

CM123. Neurobiology of Sleep. (4) (Same as Physiology M123) Lecture, three hours; discussion, one hour. Preparation: background in either biology or chemistry. General overview of scientific principles of music and their applications to human behavior. Open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M118A or Psychology M117C). Laboratory exercises range from molecular and cellular to behavioral. Hands-on experience with important methodology and experimental approaches in neuroscience. P/NP or letter grading.

119L. Human Neuropsychology. (4) (Same as Psychology M119L) Lecture, three hours. Preparation: background in either biology or chemistry. General overview of scientific principles of music and their applications to human behavior. Open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M118A or Psychology M117C). Laboratory exercises range from molecular and cellular to behavioral. Hands-on experience with important methodology and experimental approaches in neuroscience. P/NP or letter grading.

119N. Visual System. (4) (Same as Psychology M119N) Lecture, three hours. Preparation: background in either biology or chemistry. General overview of scientific principles of music and their applications to human behavior. Open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M118A or Psychology M117C). Laboratory exercises range from molecular and cellular to behavioral. Hands-on experience with important methodology and experimental approaches in neuroscience. P/NP or letter grading.
computational neuroscience. Highly interdisciplinary study in computational neuroscience. Integrates data-driven modeling, simulations, and analyses of neural dynamics to train students in hypothesis-driven approach to computational modeling. Students can immediately apply acquired knowledge and skills in research or industry settings. Concurrently scheduled with course C251, P/NP, or letter grading.


M176. Auditory Neuroscience of Speech Perception and Vocal Communication. (Same as Physiology M176.) Lecture, two and one-half hours; discussion, 90 minutes. Prerequisite: course M101A or Physiology M107. Introduces to general principles of hearing and how animals and other organisms communicate emotion and meaning using sound. Weekly research topics in disciplines of systems neuroscience, cognitive neuroscience, psychophysics, and psycholinguistics. Emphasizes on fundamental principles in neurophysiology, neuroanatomy, and neuroethology. Letter grading. Letter grading.

M177. Drugs of Abuse: Translational Neurobiology. (4) Lecture, four hours. Prerequisite: course M101A. Course ranges from synapse to society. Provides an intensive didactic and curricular scientific basis for understanding substance abuse and blends that material with relevant topics such as epidemiology, co-occurring disorders, treatment options, prevention, and public policies, with emphasis on communication of course content to general public. Concurrently scheduled with course C277. Letter grading.

178. Human Electrophysiology and Evoked Potentials in Research and Clinical Diagnosis. (4) Seminar, four hours. Prerequisite: course M101A. Not open for credit to students with credit for course 191A. Seminar 1. Emphasis on human electroencephalogram (EEG) and various forms of sensory-evoked potentials. Introduction to number of experimental paradigms that allow for recording of different brain signals from brainstem to cortex. Letter grading.


180. Genetic, Molecular, and Genomic Approaches to Neural Development and Disease. (4) Seminar, three hours. Enforced requisite: course M101A, M101B. Not open for credit to students with credit for course 191C, seminar 1. In-depth study of genetic, molecular, and genomic approaches to studying nervous system development and disease. Overview of current technologies used to generate mouse models for genetic and phenotypic analysis. Review of techniques for studying development and disease. Integrative genomic approaches for identifying and characterizing gene(s) involved in these processes. Emphasis on mouse models, but other model organisms considered as well. Letter grading.


186. Neural Stem Cells: Biology, Diseases, and Therapies. (4) Lecture, two and one-half hours. Preparation: background in biology and biochemistry. Enforced requisite: courses M101A, M101B. Designed for third- and fourth-year Neuroscience majors. Comprehensive coverage of stem cells of nervous system during development and adulthood, involvement of stem cells in diseases (e.g., brain tumors, Alzheimer’s, Parkinson’s), and use of stem cells for therapy. P/NP or letter grading.

M187. Neurobiology of Bias and Discrimination. (4) Game as Physiological Science M106 and Psychology M166. Limited to junior/senior neuroscience, physiological science, and psychology students. Exploration of aspects of mammalian brain and behavior related to evolutionary bias, and discrimination. Consideration of research at multiple levels of analysis from genetics to neural circuits to behavior. Discussion of societal implications of these research findings, including their relevance to public policies and criminal justice system. Letter grading.

188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Coleman 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. Letter grading.


188C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 883 course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

190A-191A-191C. Variable Topics Research Seminars: Neuroscience. (4-4-4) Seminar, three hours. Topics on one or more aspects of neuroscience. Reading, discussion, and development of culminating project. Open to USIE facilitators. May be repeated once. P/NP or letter grading.

191A-191B-191C. Preparatory Readings for Undergraduate Assistants in Neuroscience. (2) Seminar, three hours. Preparation of students to give accurate, knowledgeable, and appropriate lesson plans to be used in Project Brainstorm. Seminar only. Not open for credit. P/NP or letter grading.

192A. Practicum in Neuroanatomy for Undergraduate Assistants. (2) Seminar, three hours. Lab. Prerequisites: course M101A and 102, with grades of A. Limited to senior Neuroscience majors. Training and supervised practicum in neuroanatomy for undergraduate assistants. Students assist faculty members and graduate teaching assistants in laboratory only. May not be applied toward elective requirements. May not be repeated for credit. P/NP or letter grading.

192B. Project Brainstorm: Neuroscience K-12 Outreach. (4) Formerly numbered 192B.) Seminar, one hour; fieldwork, three hours. Limited to seniors/junior Neuroscience majors selected for Project Brainstorm Capstone. Completion of this course in winter and spring quarters is required for successful completion of Project Brainstorm Capstone. Course to be supervised by faculty and teaching assistant advisers. Project Brainstorm is K-12 science education outreach program of Brain Research Institute (BRI) and Neuroscience PhD and undergraduate programs that stimulates interest in science for children and young adults in grades K-12 by providing hands-on learning experiences that emphasize function and importance of brain. Students are expected to prepare age-appropriate lesson plans to be used in Project Brainstorm classroom visits. Students submit weekly reports of their experiences. May be repeated once for credit. Letter grading.

192C. Drug Abuse and Society: Conveying Concepts to High School Students. (4) Formerly numbered 192C.) Seminar, four hours (seven weeks); fieldwork, four hours (three weeks). Enforced requisite: courses M101A, M101B. Limited to junior/senior USIE majors. Limited to students of USIE neuroscience majors selected for DOPA Team capstone option. Preparation of students to give accurate, knowledgeable, and age-appropriate lectures in areas of drug abuse and society. Students will prepare appropriate lesson plans as a followup to course C177 where students learned didactic material on mechanisms of action and transatlantic aspects of drugs of abuse. Students meet on regular basis with supervisors and provide periodic reports of their experience. Letter grading.
Overview

The interdepartmental Neuroscience PhD program prepares students for careers in neuroscience research and education. The hallmark of the program is an integrated approach to study of the nervous system, using the multilevel analytical tools of molecular, cellular, systems, and/or behavioral biology, as well as quantitative approaches from the fields of mathematics, physics, and engineering. Students working at one or two analytical levels nevertheless learn to appreciate the methods and advantages of other levels of analysis. Emphasis is both on mechanisms of neural function and the biological basis of disease. Students select their research mentor from the list of all neuroscience faculty at UCLA.

Information on the undergraduate program in this discipline can be found in the Neuroscience undergraduate interdepartmental program section.

Graduate Major

Neuroscience PhD Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate departments available at the Graduate Division website and in the current UCLA Graduate Catalog. Any departmental or program restrictions are indicated in the program requirements. Students consult a faculty advisor early in their program for assistance in selecting the appropriate courses.

Graduate Courses

201. Cell, Developmental, and Molecular Neurobiology. (6) Formerly numbered M201. Lecture, six hours. Fundamental topics concerning cellular, developmental, and molecular neurobiology, including intracellular signaling, cell-cell communication, neurogenesis and migration, synapse formation and elimination, programmed neuronal death, and neurotropic factors. S/U or letter grading.


M203. Anatomy of Central Nervous System. (4) Same as Bioengineering M226. Lecture, 75 minutes; discussion, two hours. Introduction to fundamental anatomy of the nervous system, with emphasis on integration of molecular mechanisms, cellular processes, anatomical circuits, and behavioral analysis to understand function of neural systems. Letter grading.

205. Systems Neuroscience. (4) Lecture/discussion, four hours. Introduction to fundamental concepts of neuroscience, with emphasis on integration of molecular mechanisms, cellular processes, anatomical circuits, and behavioral analysis to understand function of neural systems. Letter grading.

M206. Neuroengineering. (4) Same as Bioengineering M260 and Electrical and Computer Engineering M255. Lecture, four hours; laboratory, three hours; outside study, five hours. Requisites: Mathematics 32A, Physics 18B or 5C. Introduction to principles and technologies of bioelectricity and neural signal recording, processing, and stimulation. Topics include bioelectricity, electrophysiology (action potentials, local field potentials, EEG, EOG, intracellular and extracellular recording, microelectrode technology, neural signal processing (neural signal frequency bands, filtering, spike detection, spike sorting, stimulation artifact removal), brain-computer interfaces, deep-brain stimulation, and prosthetics. Letter grading.

207. Integrity of Scientific Investigation: Education, Research, and Career Implications. (2) Discussion, two hours. Designed for graduate students. Debate on topics related to ethical conduct of scientific investigation, with emphasis on critical thinking. Topics include scientific misconduct, mentoring, data ownership, authorship, peer review, use of animals and humans in biomedical research, conflicts of interest, technology, and scientific integrity. S/U grading.


211A-211B-211C. Evaluation of Research Literature in Neuroscience. (2–2–2) Discussion, two hours. Critical discussion of current research literature related to topics of the five core courses in neuroscience graduate curriculum. S/U grading.


19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. Poor grade in any seminar will result in mandatory audit of additional seminars. S/U grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.
215. Variable Topics Research Literature Seminars: Neurosciences. (1) Seminar, two hours. Critical discussion and analysis of current literature for various neurosciences and psychology. Only one topic may be taken twice for credit and applied toward neurosciences graduate requirements. S/U grading.

M220. Biology of Learning and Memory. (4) (Same as Neurobiology M200G and Psychology M208.) Lecture, four hours. Exploration of cellular, circuitry, and behavioral mechanisms of learning and memory, theory, and models of learning and memory. Cross-disciplinary focus on learning and memory to provide integrative view of subject that emphasizes research findings that take advantage of novel groundbreaking models. Letter grading.

222. Brain Imaging and Brain Stimulation. (4) Lecture, four hours. Limited to graduates in students in neurosciences, bioengineering, psychology, and School of Medicine. Introduction to fields of brain imaging and brain stimulation, including various imaging modalities and neurostimulation strategies. Introduction to use of brain imaging in isolation or in combination with brain stimulation to understand neural circuits, systems, and networks in health and disease. Encourages critical thinking about opportunities and limitations of two fields, and how to overcome them by combining two approaches for investigation of brain systems and functions. S/U or letter grading.

CM232. Neurobiology of Sleep. (4) (Same as Physiology Science CM223.) Lecture, three hours; discussion, one hour; section, one hour. Cellular and molecular mechanisms of falling asleep, many discrete brain structures involved in control of sleep/wakefulness, and homeostatic regulation of sleep. Sleep stages shaped by evolutionary history, age, and gender. Latest insights into question of function of sleep, critical role sleep plays in memory formation and consolidation; close association between sleep and waking disorders are considered, as they provide insights into mechanisms underlying sleep. For background on science of sleep and circadian rhythms, completion of Physiological Science C121 is recommended. Concurrently scheduled with course CM123. Letter grading.

M230. Molecular and Cellular Mechanisms of Neural Integration. (5) (Same as Physiological Science M210 and Physiology M210.) Lecture, four hours; discussion, one hour. Requisite: course M202. Introduction to mechanisms of synaptic processing, selected problems of current interest, including regulation and modulation of transmitter release, molecular biology and pharmacology of ion channels, cellular basis of sensation in sensory perception and learning, neural nets and oscillators, and molecular events in development and sexual differentiation. Letter grading.


240. Phenotypic Measurement of Complex Traits. (4) Lecture, three hours. Preparation: background in human genetics helpful. Integrative approach to understanding gene to behavior pathways by examination of levels of phenotype expression across systems (cell, brain, behavior), across species (including mouse, human), and throughout development across varying environmental milieus. Using examples from human disorders such as schizophrenia and Alzheimer’s disease, these diverse approaches in genetic research to map out integrative system of understanding basis of complex human behavior. Emphasis on basic understanding of methods used at each level of analysis, along with major sources that can be accessed to gain insight to gene-behavioral links. Letter grading.

245. Optical Approaches in Neuroscience. (4) Lecture, four hours. State-of-art, light-microscopy-based approaches in neuroscience. Background material on basic optical principles and microscope design, as well as certification in use of lasers. Technical approaches commonly used in study of nervous system, including imaging modalities such as two-photon microscopy, methods for imaging and stimulating neuronal activity, and advanced microscopy approaches such as FRET and FLIM. Letter grading.

M248. Brain and Behavioral Development during Adolescence. (4) Lecture, two hours; discussion, one hour. Overview of neuroanatomy, neurodevelopment, and mechanisms of assigned readings and presentations by guest faculty and scientists. S/U or letter grading.


251. Computational Neuroscience for Interdisciplinary Scientists. (4) Lecture, two hours; laboratory, one hour. Requisite: course M101A or Psychology 115; Life Sciences 30A or 30B, or Mathematics 3A, 3B, or 3C, or 31A, 31B, and 32A; Life Sciences 40 or Psychology 100A or Statistics 10 or 13. Designed for students in both experimental and computational tracks to acquire significant breadth and depth in computational neuroscience. Highly interdisciplinary study in computational neuroscience integrates data-driven modeling, simulations, and analyses of neural dynamics to train students in hypothesis-driven approach to computational modeling. Students can immediately apply skills and knowledge in research or industry settings. Concurrently scheduled with course C151. S/U or letter grading.


259. Introduction to Dynamical Systems. (4) Lecture, two hours; discussion, one hour. Introduction to essential concepts of modeling and dynamics, with applications at various levels of neuroscience and neurosciences. S/U grading.

260. Introduction to Signal Processing for Neuroscientists. (4) Lecture, four hours. Limited to Neuroscience graduate students. Introductory principles for handling some common types of data collected in medical imaging. Calculations used to measure brain activity (spikes, local field potentials, calcium transients), analysis of data with simple computer scripts for team-based projects. May not be repeated for credit.

265. Essentials of Neuro-Oncology. (4) Lecture, 90 minutes; discussion, 90 minutes. Preparation: competence in general statistics, neurobiology, and neuroanatomy. Introduction to topics in clinical neuro- oncology and neuro-oncology research. Exposure to multidisciplinary field of neuro-oncology through weekly meetings consisting of lectures from expert faculty and in-depth journal club or topical discussions on both fundamental and contemporary topics in neuro-oncology. Students learn various types of central nervous system tumors, and how they are diagnosed, treated, and monitored. Unique aspects of treating neuro-oncology patients, including issues associated with changes in quality of life, neurocognition, and psychological concerns. Discussion of current and new approaches to neuro-oncology. Letter grading.


M273. Neural Basis of Memory. (4) (Same as Psychiatry M270.) Lecture, two hours; discussion, one hour. Anatomical, physiological, and neurobiological data integrated into models for memory and neurobiological theory and memory. How errors in memory arise. Discussion of invertebrate memory, cortical conditioning, hippocampus and declarative memory, and frontal lobes and primary memory.

275. Advanced Techniques in Neurobiology. (2) Lecture, two hours. Preparation: introduction to computational neuroscience (any language), general statistics. Requisite: Psychiatry M266. Review of computational imaging methods for study of nervous system, with emphasis on quantitative understanding and data interpretation and features common to modalities. X-ray computed tomography, magnetic resonance imaging, positron emission tomography, magnetoencephalography, transcranial magnetic stimulation, near infrared imaging. Letter grading.


M285. Functional Neuroimaging: Techniques and Applications. (3) (Same as Bioengineering M284, Physics and Biology in Medicine M285, Psychiatry M285, and Psychology M278.) Lecture, three hours. In-depth examination of activation imaging, including MRI (functional magnetic resonance imaging, positron emission tomography, magnetoencephalography, transcranial magnetic stimulation, near infrared imaging. Letter grading.

286A. Electroencephalography Methods and Analysis I. (4) Lecture, three hours. Recommended preparation: one term of graduate level statistics, biostatistics. Understanding of neural origins of electroencephalography (EEG), common and advanced methods for experiment design, EEG recording and noise reduction, data processing, feature extraction, and biomarker identification: one term of graduate level statistics, biostatistics. Development of expertise in interpretation of electroencephalographic (EEG) signals in context of current issues. Students identify neural networks and biomarkers of interest, develop understanding of neural origins of electroencephalography and EEG, and extract useful information using popular EEG processing interfaces such as EEGLAB and BrainStorm, perform some common statistical tests on the extracted features and explain achieved results, and navigate through state-of-the-art analyses and applications of EEG. Letter grading.

286B. Electroencephalography Methods and Analysis II. (4) Lecture, three hours. Requisite: course 286A. Recommended preparation: one term of graduate level statistics, biostatistics. Development of expertise in interpretation of electroencephalographic (EEG) signals in context of current issues. Students identify neural networks and biomarkers of interest, develop understanding of neural origins of electroencephalography and EEG, and extract useful information using popular EEG processing interfaces such as EEGLAB and BrainStorm, perform some common statistical tests on the extracted features and explain achieved results, and navigate through state-of-the-art analyses and applications of EEG. Letter grading.
Neurosurgery

Neurosurgery faculty provides operative and nonoperative management of pain. As such, neurosurgery encompasses treatment of adult and pediatric patients with disorders of the nervous system—disorders of the brain, meninges, and skull and their blood supply, including the extracranial carotid and vertebral arteries, disorders of the pituitary gland, disorders of the spinal cord, meninges, and vertebral column, including those that may require treatment by spinal fusion or instrumentation, and disorders of the cranial and spinal nerves throughout their distribution.

For more details on the Department of Neurosurgery, see the department website.

Neurosurgery faculty information is available from the department.

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Course


NURSING

David Geffen School of Medicine

562 Wasserman Building
Box 956901
Los Angeles, CA 90095-6901

Overview

Neurosurgery is a discipline of medicine that provides operative and nonoperative management (i.e., critical care, prevention, diagnosis, evaluation, treatment, and rehabilitation) of disorders of the central, peripheral, and autonomic nervous systems, including their supporting structures and vascular supply; the evaluation and treatment of pathological processes that modify the function or activity of the nervous system, including the hypoprophysis; and the operative and nonoperative management of pain.

As such, neurosurgery encompasses treatment of adult and pediatric patients with disorders of the nervous system—disorders of the brain, meninges, and skull and their blood supply, including the extracranial carotid and vertebral arteries, disorders of the pituitary gland, disorders of the spinal cord, meninges, and vertebral column, including those that may require treatment by spinal fusion or instrumentation, and disorders of the cranial and spinal nerves throughout their distribution.

For more details on the Department of Neurosurgery, see the department website.

Neurosurgery faculty information is available from the department.
Adjoint Professors
Mary Lynn Brecht, PhD
Nancy Jo Bush, RN, MN, MA, AOCN, ONP, FAAN
Catherine L. Carpenter, PhD

Adjoint Associate Professors
Nancy T. Blake, RN, PhD, CCRN-K, NHDP-BC, NEA-BC, FAAN
Anita R. Bralock, RN, PhD, CNM
Denice Economou, PhD, CNS, CHPN
Kathleen McDermott, RN, APRN, MSN, DNP, PMHNNP-BC
Benissa E. Salem, RN, MSN, PhD, CNL, PHN
Rita L. Secola, RN, PhD
Ali Tayyab, RN, PhD, NPD-BC, PHN
Elizabeth Anne Thomas, RN, PhD, ANP-BC, COHN-S, FAAN

Adjunct Assistant Professors
Theresa A. Brown, RN, DNP, MSN, ACNP-BC, AACC, FAAN
Emma Lyn M. Cuenca, RN, DNP, CCRN, CSC, CNS

Overview
A strong scientific basis underlies the teaching of nursing practice, leadership, and research. Related clinical experiences are arranged within the Reagan UCLA Medical Center, its affiliates, other major medical centers, or in selected community sites.

At the bachelor’s level, nurses are prepared as generalists with special skills in primary, secondary, and tertiary prevention and care within a population-based context, leadership, and evidence-based practice. At the master’s level, nurses are prepared as generalists in hospital-based care or for advanced nursing practice as nurse practitioners, or clinical specialists, or administrators in a variety of settings and specialized areas of healthcare. The Doctor of Philosophy (PhD) program prepares scholars who do original research, generate new theories, and build the scientific basis for professional nursing practice. Research is both basic and applied.

Undergraduate Major

Nursing BS Prelicensure

The focus of the prelicensure program is on the preparation of nurse generalists with special skills in primary, secondary, and tertiary prevention and care within an individual- and population-based context while developing the basics for a strong leadership role. Students learn the art and science of nursing using the latest research findings to guide their practice.

Capstone Major

The Nursing (Prelicensure) major is a designated capstone major. Students complete a clinically based scholarly project that is approved by a designated faculty member. In completing the capstone course, students should select, evaluate, and apply appropriate theory and research findings concerning individual- and population-based health promotion and disease prevention, biobehavioral and health systems, and social environmental, cultural, and human diversity to the nursing process. They should utilize the nursing process to promote biopsychosocial health and disease prevention and to support the resources of culturally diverse clients and families in community- and/or hospital-based settings.

Through their work, students should demonstrate effective communication and collaboration skills with clients and their families, research participants, other health professionals, colleagues, and policymakers. They also should identify practice-based problems and hypotheses and critique research on issues of importance to nursing and health care delivery; participate effectively in relevant professional and community organizations and/or interest groups; demonstrate leadership as a member of the health team to plan, manage, and evaluate care of individuals, families, and communities for culturally diverse populations; and practice their work based on the principles of ethics, social justice, and law.

Learning Outcomes
The Nursing major has the following learning outcomes:

- Selection, evaluation, and application of appropriate theory and research findings concerning individual- and population-based health promotion and disease prevention, biobehavioral and health systems, social environmental, and cultural and human diversity to the nursing process with a variety of clients, families, and communities from diverse cultural backgrounds
- Use of the nursing process to promote biopsychosocial health and disease prevention, and to support client resources in community and hospital settings
- Demonstrated effective communication and collaboration skills with clients, families, research participants, health professionals, and policymakers
- Identification of practice-based problems and hypotheses, and critique research on issues of importance to nursing and health care delivery within hospital and community settings
- Effective participation in professional and community organizations and interest groups relevant to health care delivery and modification of nursing standards and practices in keeping with current trends
- Demonstrated leadership as a health team member to plan, manage, and evaluate care of individuals, families, and communities
- Practice of hospital- and community-based nursing using principles of ethics, social justice, and law

Entry to the Major

Admission
The School of Nursing strives to attract a culturally and ethnically diverse student population. Admission is designed for first-year students and transfer students at the junior level. First-year applicants are expected to fulfill the University of California admission requirements. Transfer applicants are expected to fulfill the Intersegmental General Education Trans-
Graduate Majors

Doctor of Nursing Practice

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Master of Science in Nursing

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Concurrent Degree Program

Concurrent degree programs allow students to reduce the number of courses required for two degrees, since some courses may apply to both degrees.

- Master of Science in Nursing/Master of Business Administration

Nursing MS, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Nursing

Lower-Division Courses

3. Human Physiology for Healthcare Providers. (3) Lecture, three hours; laboratory, two hours. Basic understanding of human physiological processes, with emphasis on applications to patient evaluation and care. Concepts underlying normal function and how alterations in these normal functions can affect body systems. Knowledge and understanding of these normal human processes is basic to providing quality nursing care. Examination of system variations across lifespan. Letter grading.

10. Introduction to Nursing and Social Justice I. (2) Lecture, two hours. Within context of history of nursing, introduction to practice of nurses, including role of advocacy. Concepts of communication and collaboration, interpersonal relationships, cultural competence, and nursing process with critical thinking skills as clinical decision-making strategies. Central to health outcomes are linked to prevention of disease and recovery from disease. Covers biological, public health, and clinical aspects of major macronutrients and micronutrients, digestion, energy assessment, obesity, malnutrition, dietary assessment, nutritional therapies, and exercise using candidate disease approach. Examination of influences of overarching political, societal, and governmental systems within U.S. on observed nutritional patterns. Exploration of food production in relation to climate change, inequality of food choice and availability as well as consumption are linked to health disparities. Letter grading.

15A. Pharmacology and Therapeutics. (5) Lecture, three hours; laboratory, three hours. Introduction to mathematics calculations and terminology used in clinical setting. Letter grading.

Nursing Lower-Division Courses


140. Advanced Growth and Development in Culturally Diverse Populations. (5) Lecture, five hours. Introduction of primary prevention strategies as they pertain to health and wellness across lifespan, using population-based approach to nursing care of diverse populations. Includes priorities in reproductive health including issues related to contraception and parenting, well child care, school-age health, and chronic illness prevention strategies for young and middle-aged adults and elderly who live independently in communities or within institutions. Letter grading.

141. Nutrition for Health Care Providers. (5) Lecture, four hours; laboratory, three hours. Critical analysis of nutritional prevention strategies for young and middle-aged adults and elderly who live independently in communities or within institutions. Letter grading.
C155. Global Health Elective: Globalization, Social Justice, and Human Rights. (3) Seminar, two hours. Exploration of theories, issues, debates, and peda-
gogy associated with globalization, social justice, and human rights and how these perspectives influence human health and well-being. Provides students with a unique opportunity to explore these topics within classroom, via Internet and other technologies, and in other classrooms located around globe. Students, through collaborative projects with peers around the world, reflect on how globalization shapes and trans-
forms local communities and national cultures. Con-
currently scheduled with course C255. Letter grading.

160. Secondary Prevention. (4) Lecture, four hours. Responsibility for the health of individuals within context of family, social and community systems, and interdisci-
plinary healthcare systems. Emphasis on differences in developmental stages in response to screening for early cancer and symptoms of illness in ambula-
tory and acute care settings, community agencies, rehabilitation units, outpatient specialty clinics and surgical units, and home and community settings. Letter grading.

161. Psychiatric Mental Health Nursing. (5) Lecture, three hours; clinical, six hours. Requisites: courses 160, 162B. Knowledge development and skill assess-
ment techniques and the mental health of individuals with psychiatric disorders. Appli-
cation of knowledge to interpretation of individual mental health and diagnostic data for purpose of planning, imple-
menting, and evaluating care for patients. Letter grading.

162A. Foundational Concepts for Tertiary Preven-
tion and Care of Medical-Surgical Patients and Families. (4) Lecture, three hours; clinical, three hours. Requisites: courses 54A, 54B, 150A. Corequisites: courses 115, 150B. Examination of nursing assess-
ment and conceptualization of common health problems that adults experience. Theory content in basic as-
se ssment, health history, and diagnostic reasoning for selected health problems, with emphasis on social, cultural, and developmental influences. Integration of basic knowledge of pathophysiology, pharmacology, therapeutic interventions, and communication concepts as applied to care of individuals experiencing health problems and diagnostic data for purpose of planning, imple-
menting, and evaluating care for patients. Letter grading.

162B. Tertiary Prevention and Care of Medical-Surgi-
cal Patients and Families. (6) Lecture, four hours; clinical, six hours. Requisite: course 162A. Pathophys-
ological and psychosocial aspects of assessment and management for selected acute and emergent prob-
lems of adult patients with common illnesses, including multifaceted assessment, health history, and diag-
nostic reasoning skills, and emphasis on social, cul-
tural, and developmental influences. Integration of knowledge of pathophysiology, pharmacology, ther-
apeutic interventions, evidence-based practice, patient safety, and communication concepts as applied to client care. Supervised practicum experience within settings of multidisciplinary teams directing care of medical-surgical clinical units, with focus on clinical interpretation of assessment and diagnostic data for purpose of planning, implementing, and evaluating course of care for patients, both as individuals and cohorts. Intermе-

162C. Tertiary Prevention and Care of Complex Cases. (6) Lecture, four hours (10 weeks); clinical, 24 hours (five weeks). Requisite: course 162B. Nursing assessment and management of acute and chronic health problems of illness, with emphasis on health history, and diagnostic reasoning with emphasis on so-
cial, cultural, and developmental influences. Integra-
tion of pathophysiology, pharmacology, stress and ad-
aptation, adolescent development theory, therapeutic interventions, evidence-based practice, patient safety, and communication concepts as applied to care of acutely ill medical surgical patients, with complex and comorbid conditions. Application of critical and contextual thinking skills and diagnostic reasoning. Nursing process, ethical principles, clinical research, evidence-based practice, and clinical assessment and management for selected acute and emergent problems of maturity/newborn patients. Diagnosis and management of health care problems managed by master’s-level clinical nurses in acute care settings. Letter grading.

163. Nursing Care of Geriatric Patients and Fami-
lies. (5) Lecture, clinical, one hour. Requir-
te: course 162A. Addresses prevention and manage-
ment of acute and chronic health problems of older adults. Theory content emphasizes assessment, goal setting, and planning for nursing care of care of older adults and their families with emphasis on psychosocial, cultural, and developmental influ-
ences. Students integrate knowledge of pathophys-
iology, pharmacology, stress and adaptation, adult de-
v el opment theory, therapeutic interventions, and com-
munication concepts as applied to care of older adult patients and their families. Emphasis on concept of nurse as nurse scientist with critical and contextual thinking skills and diagnostic reasoning. Nursing pro-
cess, ethical principles, clinical research, evidenced-
based practice, and clinical thinking that maximize pa-
 tient safety and quality of care employed during clinical experiences. Letter grading.

164. Maternity Nursing. (5) Lecture, three hours; clinical, six hours. Requisites: courses 160, 160B. Nursing assessment and management for selected acute and emergent problems in maternity/newborn patients, with emphasis on social, cultural, and developmental influences. Integration of basic knowledge of patho-
physiology, pharmacology, therapeutic interventions, and communication concepts as applied to childbearing families, with application of nursing process, evidenced-based practice, problem-solving strategies, and critical thinking. Supervised clinical practicum experience within setting of multidivi-
densional team, with focus on application of theory in clinical interpretation of assessment and diagnostic data for purpose of planning, implementing, and eval-
uating nursing care for maternity/newborn patients. In-
termediate-level assessment, health maintenance, and management of symptoms in this population. Letter grading.

165. Pediatric Nursing. (5) Lecture, three hours; clinical, six hours. Requisites: courses 160, 160B. Nursing assessment and management of acute, chronic, crit-
al, and emergent illnesses in infants, children, and adolescents. Application of nursing process, evolving and develop-
mental influences. Integration of basic knowl-
edge of pathophysiology, pharmacology, therapeutic interventions, and family-centered care concepts. Emphasis on nutrition, health, and adoles-
cents. Application of nursing process, evi-
dence-based practice, and problem-solving and crit-
ical-thinking strategies to improve patient safety, care quality, and health outcomes. Supervised practicum experience within setting of multidimensional team in clinical interpretation, assessment, and diagnostic data for purpose of planning, implementing, and evalu-
ing nursing care for infants, children, and adoles-
cents. Letter grading.

166. Advanced Leadership and Role Integration. (5) Lecture, five hours. Requisites: courses 161, 162C, 163, 164, 165. Leadership and management theories and models, role acquisition and management, delegation and teamwork, conflict resolution, healthy

work environments, legal and ethical aspects of pro-
 fessional practice, evaluation of professional practice, patient safety and quality improvement, accreditation process for health care systems, and contemporary is-
sues in health care organizations. Emphasis on inter-
gration of all professional role behaviors, application of research, evidence-based practice, and leadership-manage-
ment of patient-centered care as transition is made from student role to that of practicing professional nurse. Focus placed on preparation for National Council Licensure Examination (NCLEX). Letter grading.

169. Clinical Internship: Internship. (12) Clinical, 36 hours. Requisites: courses 161, 162C, 163, 164, 165. Supervised practicum experience within clinical set-
ing as part of interdisciplinary health care team. Focus on application of theory in clinical interpretation of assessment and diagnostic data for purpose of planning, implementing, and evaluating course of care for patients, both as individuals and co-
horts. Students design and complete a quality improve-
ment project that contributes to unit’s goals and ob-
jectives. Students implement advanced-level assess-
ment, health maintenance, and management of symptomatology across care settings.

171. Public Health Nursing. (6) Lecture, three hours; clinical, nine hours. Requisites: courses 161, 162C, 163, 164, 165. Theoretical content focuses on popula-
tion-based approach to public health nursing in rela-
tion to public health promotion and prevention at level of individuals, families, communities, and sys-
tems. Clinical practicum concentrates on population-
based public health nursing in culturally diverse set-
tings including health department, health policy insti-
tutions, and public service agencies. Clinical practicum activities include health promotion and dis-
ease prevention at level of communities, populations, and systems, both domestically and globally. Letter grading.

M172. Care Work: Disability Justice and Health Care. (2) Same as Disability Studies M172. Lecture, one hour. Emphasis on disability, social justice, disability justice movement, and health care. Consideration of intersections, interdependence, and complexities of formal and informal care webs and care economies between caregivers and receivers, which includes kin, advocates, disability communities, and health professionals. Use of multi-media, schol-
ary texts, and theoretical frameworks from disability justice, disability studies, film, gender studies, health, labor studies, law, nursing, and public policy to inves-
tigate the concepts of care and care work. Letter grading.

M172XP. Care Work: Disability Justice and Health Care. (3) Same as Disability Studies M172XP. Sem-
inaria, one hour. Corequisite: course M172. Exploration of nature, history, models, and propositions of care, care economics, disability, disability justice movement, and health care. Consideration of intersections, interde-
pendence, and complexities of formal and informal care webs and care economies between caregivers and receivers, which includes kin, advocates, disability communities, and health professionals. Use of multi-media, scholarly texts, and theoretical frameworks from disability justice, disability studies, film, gender studies, health, labor studies, law, nursing, and public policy to inves-
tigate the concepts of care and care work. Letter grading.

173W. Introduction to Nursing Research and Writing II. (5) Lecture, five hours. Requisite: English Compos-
tion. Further development of research and writing project based on simple question. Review of components of re-
search activities: specific aims and study purposes, variables, instrumentation and sampling, data collection tools, data analyses, and ethical conduct in research studies. Examples of research used as models to demonstrate steps of research process as related to nursing practice. Emphasis on comprehension of re-
search terminology and concepts that are part of each step of research process. Students critique published
research. Study by example of relationship between theory and nursing research. Satisfies Writing II re- quirement. Letter grading.

174. Physical Assessment. (4) Lecture, three hours; laboratory, one hour. Corequisite: course 3, 13. De- signed to provide in-depth review and synthesis of physical assessment skills and knowledge covering lifespan. Individual study, use of audiovisual aids, physical assessment in laboratory, and required text are mandatory. Letter grading.

177. Public Health Nursing. (6) Lecture, three hours; clinical, three hours. Theoretical content focuses on population-based approach to public health nursing in relation to health promotion and disease prevention at community, state, and national levels. Individual study, use of audiovisual aids, physical assessment skills and knowledge covering lifespan, and public service agencies. Clinical practicum activities include promotion of health and prevention at level of communities, populations, and societal systems. Letter grading.

178. Introduction to Qualitative Analysis. (3) Lecture, three hours; discussion, one hour. Limited to upper-division students under guidance of faculty mentor. May be repeated for credit. Individual contract required. Letter grading.

179. Physical Assessment. (4) Lecture, three hours; laboratory, three hours. Com- prehensive study of physical assessment skills and knowledge covering lifespan and in- terpersonal communication. Individual study, use of audiovisual aids, physical assessment skills practice in laboratory, and required text are mandatory. Letter grading.

180. Special Topics in Nursing. (4) Lecture, three hours; discussion, one hour. Limited to junior/senior Nursing majors. Clinics coordinated for experimental or temporary courses, such as those taught by visiting faculty members. May be repeated for credit. Letter grading.

181. Research Apprenticeship in Nursing. (2 to 4) Tutorial, four hours per week per unit. Limited to ju- nior/seniors. Entry-level research apprenticeship for upper-division students under guidance of faculty mentor. May be repeated for credit. Individual contract required. Letter grading.

182. Individual Studies in Nursing. (2 to 4) Tutorial, one hour. Limited to junior/senior Nursing majors. Indi- vidual intensive study with scheduled meetings to be arranged between faculty member and student. As- signed reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. Letter grading.

183. Directed Research Project in Nursing. (2 to 4) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Cullmulating paper or project required. May be repeated for credit. Individual contract required. Letter grading.

Graduate Courses


209. Human Diversity in Health and Illness. (4) Lecture, four hours. Human diversity in response to illness that nurses diagnose and treat, centering on culture and human belief systems associated with diverse orien- tations related to ethnicity and gender. Provides a conceptual base that nurses can use in clinical prac- tice, research, teaching, and administration. Letter grading.

210. Critical Review of State of Science in Nursing Research. (3) Lecture, three hours. Requisite: doc- toral standing or consent of instructor. In-depth explo- ration of state of science for health science, biological, vulnerable populations, and research topics. Students explore research on particular phe- nomena, analyze current and historical scholarly find- ings in literature, critique significance of focus on this phenomenon for nursing science, and offer valuable and meaningful gaps in knowledge through systematic re- view of research literature, and provide recommenda- tions for future nursing research in biologic, biobehav- ioral, vulnerable populations, and health services re- search. Letter grading.

211. Women’s Health Primary Care. (2 to 4) Lecture, three hours; discussion, one hour. Theory and re- search on assessment and management of women’s health issues during reproductive years. Clinical topics include gynecology, family planning, pregnancy, and neonatal care, with emphasis on health promotion of women during reproductive years in primary care settings. Letter grading.

212. Family Healthcare Perspectives. (2) Lecture, four hours. Overview of conceptual frameworks re- lated to contemporary family structure and func- tioning, with particular emphasis on health. Family is defined broadly to include nontraditional families; consi- deration of cross-cultural views of families as well. Identification of limitations of current theory and re- search related to family study and applicability of cur- rent knowledge to various problems encountered in care of families. Letter grading.

213. Worker Health and Safety: Role and Theory. (4) Lecture, four hours. Occupational and environmental health nursing practice and research related to work- place health and safety; work/family life, environment, and health. Letter grading.

214. Seminar: Advanced Concepts in Oncology Nursing. (4) Seminar, four hours. Designed for adult/ gerontology acute care, gerontologic, and family nurse practitioners and clinical nurse specialists. Com- prehensive overview of oncology care. Advanced prac- tice nursing, with emphasis on theories and research related to prevention, detection, health history/risk as- sessment, cancer diagnosis and staging, treatment, rehabilitation, oncology emergencies, genetics, and psychosocial issues that provide emotional and family- focused care related to solid tumors and hematologic malignancies. In-depth exploration of symptom management (nausea and vomiting, dyspnea, fatigue, cognitive dysfunction, anemia, immunosuppression, anxiety, depression). Evidence-based practice guide- lines for comprehensive care of patients with cancer, acute, chronic, and late effects, and psycholog- ical concepts in long-term survivorship. Letter grading.

216A-216B-216C. Adult/Gerontology Concepts for Advanced Practice Registered Nurses. (4) Lecture, four hours. Requisites: courses 200, 231. Corequisite for course 216A: course 224. Course 216A is requisite to 216B, which is requi- site to 216C. Assessment and management of health problems affecting adult/gerontology population from late adolescence to senescence in acute care set- tings. Synthesis of knowledge from advanced courses
in pathophysiology, pharmacotherapeutics, health promotion, and evidence-based psychosocial care and cultural constraints. Letter grading.

220. Theories of Instruction and Learning in Nursing. (3) Lecture, two hours. Theories of learning, curriculm and program development, and principles and techniques of evaluation. Examination of educator role of advanced practice nurse in variety of settings and with diverse groups. Culrural and socioeconomic groups. Opportunities provided for skill development in use of computer-based information systems and development of instructional aids. Letter grading.


224. Advanced Pharmacology for Advanced Practice Registered Nurses. (8) Lecture, five hours. Required: courses 225, 226, 228D. Examination of clinical pharmacology, pharmacokinetics, and pharmacodynamics as they impact on patients with stable acute or chronic conditions. Letter grading.

225A-225B. Advanced Pharmacology I, II, (3–2) Lecture, three hours (course 225A) and two hours (course 225B). Required: courses 226, 228D. Basic pharmacologic principles in addition to clinical knowledge and skills necessary for patient-centered care with stable acute or chronic conditions. Focus on major pharmacologic mechanisms of action, pharmacokinetics, and adverse effects. Examination of quality and safety of pharmacologic interventions in clinical practice, with emphasis on collaboration, role of the advanced practice nurse (physician or pharmacists) and evidence-based practice (e.g. current guidelines). Letter grading.

229A-229B-229C. System-Based Healthcare I, II, III. (1–1–1) Seminar, two hours. System-based healthcare where students focus on context of medical decision-making, including team, hospital, culture, politics, economics, law, and personal bias. Topics include legal, political, and moral aspects of sexual assault and abuse, pain management, and fatigue regulation. Designed to involve students in local communities and national cultures. Consummered with course C155. Letter grading.

230A. Advanced Pathophysiology I. (3) Lecture, three hours. Required: course 227, 12, or equivalent. Study of disease conditions, and pharmokinetics and pharmacodynamics. Detailed study and analysis of manifestations of, and responses to, processes of cellular and molecular pathophysiology that underlie specific main organ system, and human levels. Letter grading.

230B. Advanced Pathophysiology II. (2) Lecture, two hours. Required: course 230A. In-depth examination of pathophysiological processes that underlie human illness and disease across all body systems including cellular adaptation, fluid and electrolyte balance, acid-base balance, immunity, inflammation, infection, wound healing, genetics, neoplasms, temperature regulation, somatoasensory and pain processing, stress and affective dysfunctions, with emphasis on development and their application to care. Letter grading.


232. Human Responses to Aging and Chronic Illness. (2 or 4) Lecture/discussion, four hours. Pathophysiologic concepts and nursing management of older adults who are healthy or who have disability and/or chronic illness. Nursing aspects of selected acute and chronic illnesses. Exploration of evidenced based practice in gerontological nursing. Letter grading.

233. Human Responses to Aging and Chronic Illness. (2 or 4) Lecture/discussion, four hours. Biopsychosocial concepts and nursing management of health, illness, disability, and chronic illness in older adults addressing pathophysiologic aspects of common health problems. Implications for advanced practice in gerontological nursing. Letter grading.


235A-237B. Assessment and Management in Pediatric Acute Care I, II. (3–3) Lecture, three hours. Two-course sequence for acute care pediatric nurse practitioner student. Focus on pathophysiology of specific disease processes, pharmacologic knowledge, clinical decision-making, and treatment modalities in managing acute, critical, and chronic health conditions in infants, children, and adolescents. Cultural sensitivity, child development, family support, ethical issues, and palliative care/end of life care integrated into selected acute/chronic conditions, Lectures and other learning activities demonstrate application and evaluation of evidence-based research and clinical guidelines in pediatric population. Letter grading.

237A, 237B. Assessment and Management in Pediatric Acute Care I, II. (3–3) Lecture, three hours. Three-course sequence for acute care pediatric nurse practitioner student. Focus on pathophysiology of specific disease processes, pharmacologic knowledge, clinical decision-making, and treatment modalities in managing acute, critical, and chronic health conditions in infants, children, and adolescents. Cultural sensitivity, child development, family support, ethical issues, and palliative care/end of life care integrated into selected acute/chronic conditions, Lectures and other learning activities demonstrate application and evaluation of evidence-based research and clinical guidelines in pediatric population. Letter grading.

238A. Assessment and Management in Pediatric Primary Care. (4) Lecture, four hours. Required: course 231, 234, or equivalent. Corequisite: course 437A. Letter grading. Letter grading.

239A-239B-239C. Adult/Gerontology Primary Healthcare for Advanced Practice Registered Nurses I, II, III. (4–4–4) Lecture, four hours. Required: courses 200, 224, 231. Course 239A is required to 238B, which is required to 239B, which is required to 239C, which is required to 239A. Corequisites: courses 238A, 238B, 437A, 437A. Letter grading. Letter grading.

242. Biobehavioral Foundations of Neuropsychiatric Nursing Care. (4) Lecture, four hours. Biobehavioral foundations of disease by variety of disciplines, including nursing, for application to treatment of neuro-psychiatric dysfunction. Exploration of research underlyng treatment interaction in cognitive, addictive, and affective dysfunctions, with emphasis on developing a biobehavioral nursing approach. Letter grading.

244. Theoretical Foundations of Clinical Nurse Specialist Practice. (4) Lecture/discussion, four hours. Theoretical foundations of clinical nurse specialist practice, including systems theory, behavioral theory, and system development and models of research utilization. Emphasis on application of relevant theories to clinical nurse specialty practice roles in healthcare systems through case-study analysis, with focus on application of these settings which include culturally diverse populations. Letter grading.

249. Meeting Health-Related Needs in Underserved Populations. (4) Lecture, four hours. Examination of systematic barriers within healthcare settings that limit access to those in greatest need of culturally appropriate interventions. Unmet healthcare needs often result in health disparities and compromised quality of life among underserved, low income marginalized populations. Analysis of current evidence-based strategies and interventions designed to address these clinical problems and improve outcomes in culturally competent manner. Presentation of context of healthcare financing, limited access, and public policy. Letter grading.

250. Ethical Issues, Social Justice, and History of Nursing. (5) Lecture, five hours. Interplay of social, ethical, legal, political, and moral aspects of the U.S. form background for study of ethical issues related to role of nurses as advocates for social justice and safe, effective, high-quality patient-centered care in contemporary society. Students situated within context of history of nursing, with emphasis on human rights, civil rights, and patient rights. Discussion of profession of professional nursing within healthcare arenas in relation to ethical principles, cultural competence, evidence-based practice, and human diversity. Letter grading.

255. Global Health Elective: Globalization, Social Justice, and Human Rights. (2 or 4) Lecture, two hours. Exploration of theories, issues, debates, and pedagogy associated with globalization, social justice, and human rights and how these perspectives influence human health and well-being. Provides students with unique opportunity to explore these topics within classroom, via Internet and other technologies, and in other classrooms located around globe. Students, through collaborative projects with peers around the world, reflect on how globalization shapes and transforms local communities and national cultures. Consummered with course C155. Letter grading.


delivery, and clinician well-being. Concepts related to policy making, formulating health care policy, how to affect political processes, and stakeholder involve-
ment. Topics include decision making and implementation.
Development of understanding of increasing levels of public, governmental, and third party participation in and scrutiny of health care system. Discussion of as-
sembly bills effect on nursing. Emphasis on clinical care within micro-, meso-, and macro-levels of health care systems; managing care within multidisciplinary team framework; and promoting effective teamwork that enhances patient outcomes, improves staff efficiency, and reduces costs. Emphasis on system theory, problem solving and decision making, nursing care delivery models, delegation, and team strategies in relation to clinical nurse leader. satisfies course requirement for CNL certification. Letter grading.

249. Quality Improvement and Population-Based Quality of Practice. (4) Lecture, four hours. Requi-
rites: courses 268, 465A, 465B. Focus on prin-
cipal elements related to quality improvement theories and ways in which quality management impacts deli-
v ery of public health care. Discussion of concepts including improving system performance, efficient use of fiscal resources, quality improvement, and patient-population quality practice at organizational level. Approaches to be studied include improvement of patient-care outcomes such as organizational sup-
port, effective teamwork, and quality improvement. Emphasis on quality management, patient safety, miti-
gating clinical risks, systems, evidence-based practice, cost-effective decision making, resource manage-
ment, and external impacts on quality control. Satisfies course requirement for CNI certification. Letter grading.

250. Variable Topics in Nursing. (4) Lecture, three hours; discussion, one hour. Variable topics; consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit. S/U grading.

251A. Applied Statistics and Analytics for Health Sciences Research I. (4) Lecture, three hours; labora-
tory, one hour. Requisite: doctoral standing or consent of instructor, introductory statistics course. Introduc-
tion to applied statistics and analytics. Emphasis on statistical inference and proba-
bility, distributions, effect size, analyses for descrip-
tion, data visualization, parametric and nonparametric tests for simple comparisons and relationships, and research design and management. Students conduct analyses with statistical software and inter-
pret results from their analyses and from research re-
ports in literature. Letter grading.

251B. Applied Statistics and Analytics for Health Sciences Research II. (4) Lecture, three hours; dis-
cussion, one hour. Requisites: course 251A, doctoral standing, or consent of instructor. Focus on linear sta-
tistical models and other analytic techniques to ex-
amine complex relationships and comparisons. Ap-
proach primarily from applications and interpretation perspective. Students evaluate statistical/analytical results from research literature, analyze data using quantitative multivariate techniques, and interpret re-
sults. Introduction of concepts and interpretation of broad range of multivariate statistical and analytical approaches. Letter grading.

291C. Special Topics in Applied Statistics and Ana-
fics for Health Sciences Research III. (4) Lecture, three hours; discussion, one hour. Requisites: course 291B, doctoral standing, or consent of instructor. Focus on statistical models and analytic techniques to examine complex relationships and comparisons. Ap-
proximately from applications and interpretation perspective. Students evaluate analytical results from research literature, analyze data using quantitative multivariate models, evaluate data, and interpret re-
sults using selected quantitative approaches. Intro-
duction of concepts and interpretation of results from selected quantitative approaches that can address complex nursing and other health sciences research questions. Approaches to be studied include selected topics from mediation models, interactions and effect modification, structural equation models, mixed ef-ect models, and multilevel or mixed-level models; specific data, secondary analysis, weighted survey data, meta analysis, genomic statistics, artificial intelligence/ma-
chine learning approaches for analyzing data. Letter grading.

295A. Grant Writing I: Scientific Proposal Develop-
ment. (3) Seminar, three hours. Requisites: courses 202, 205A, 206A, 210A, 210B, Biostatistics 100B. In-
roduction to grant writing, with focus on preparing application for National Student Research Award (NSRA) or similar award. Discussion of requirements of various extramural and specialty organization funding sources and identification of evaluation cri-
teria. Emphasis on development of skills to facilitate doctoral and postdoctoral research, research activi-
ties, and professional development. Letter grading.

295B. Grant Writing II: Scientific Proposal Develop-
ment. (4) Seminar, four hours. Requisites: courses 202, 205A, 206A, 210A, 210B, Biostatistics 100B. Designed to develop proposals to request for proposals (RFPs) from federal or state level and non-
profit organizations. Incorporation of requirements of various extramural and specialty organizations, intra-
mural funding sources, and evaluation criteria in grant writing. Emphasis of role of external funding to facili-
tate doctoral and post-doctoral research, research ac-
tivity, and professional development. Letter grading.

296C. Nursing Science Seminars. (2) Seminar, two hours. Requisite: course 295A. Introduction to grant writing, with focus on preparing applications for Na-
tional Student Research Award. Discussion of require-
ments of various extramural and specialty organiza-
tion funding sources, and evaluation criteria identified. Role of external funding to facilitate doctoral and post-
doctoral research, research activities, and professional development. S/U grading.

M296. Interdisciplinary Response to Infectious Dis-
ease Emergencies: Nursing Perspective. (4) (Same as Community Health Sciences M256, Medicine M256) Seminar. Three hours; discussion, one hour. Designed to instill in profes-
sional students ideas of common emergency health problems and coordinated response, with specific at-
tention to bioterrorism. Examination of tools to help students prevent, detect, and intervene in infectious disease emergencies. Interdisciplinary sessions also attended by students in Schools of Dentistry, Medi-
cine, and Public Health during weeks two through five. Letter grading.

299A. Ethical Conduct in Research. (2) Seminar, two hours. Examination of historical and current issues of ethical integrity at each stage of research process in related disciplines, focusing on the respon-
sible authorship, data management, and handling of misconduct in research with both human and animal subjects. Systematic instruction on ethical and re-
sponsible conduct of research and protection of re-
search subjects as students create their own applica-
tion for research. Letter grading.

299B. Nursing Research Mentorship. (1) Seminar. Discretionary.* Seminar. Three hours. Requi-
rites: courses 202, 205A, 206A, 208, 209, 210A, 210B, 295A, Biostatistics 100A, 210A. Special topics course for doctoral students who have com-
pleted the required core curriculum and wish to ad-
vance to doctoral candidacy. Discussion topics range from identifying areas of research/labouratory experi-
ences, and engagement in planning for and evaluation of students’ mentored experiences on weekly basis. Letter grading.

299C. Nursing Research/Laboratory Experiences. (4) Seminar/discussion, one hour; research/laboratory, three hours. Requisites: courses 202, 206. Seminars and research/laboratory-based experiences to assist students prepare for research experiences, with focus on research methodology and mentorship. S/U grading.

299D. Nursing Education Seminar. (2) Seminar, two hours. Students and faculty are invited to join seminar to assist students to prepare for careers in academic settings, with focus on teaching. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Sem-
inar, to be arranged. Preparation: apprentice per-
curriculum and assignment, associate, or fellow. Teaching apprenticeship under active guide-
ance and supervision of regular faculty member re-
ponsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

401. Scientific Underpinnings for DNP Practice. (3) Lecture/seminar, three hours. Requisite: doctoral standing. Develops critical thinking skills of DNP stu-
dents in evaluating state of nursing science and its im-

Clinical Scholarship for Evidence-Based Practi-
ce. (3) Lecture/seminar, three hours. Requisite: do-
tor standing. Designed to provide DNP students with skills to critically appraise and translate evidence into practice. Evidence-based practice approaches, frame-
works are used to promote understanding of scientific information and support critical decision-making in health care. Students learn to formulate clinically rele-
vant focused question(s) that guide their DNP project proposal. Letter grading.

403. Organizational and Systems Leadership for Quality Improvement. (3) Lecture/seminar, three hours. Requisite: doctoral standing. Provides interdisciplinary background in sciences of quality improvement and patient safety within health care settings. Addresses history and evolution of quality movement, theories and thought leaders, current quality of care issues, evaluation of health disparities, and application of knowledge and clinical scholarship in doctoral nursing practice. Theoretical concepts and strategies that in-
tegrate practice into the DNP role. Letter grading.

Clinical Scholarship for Evidence-Based Practi-
ce. (3) Lecture/seminar, three hours. Requisite: doctoral standing. Designed to provide DNP students with skills to critically appraise and translate evidence into practice. Evidence-based practice approaches, frame-
works are used to promote understanding of scientific information and support critical decision-making in health care. Students learn to formulate clinically rele-
vant focused question(s) that guide their DNP project proposal. Letter grading.

404. Analytical Methods for Evidence-Based Practi-
ce. (3) Lecture/seminar, three hours. Requisite: do-
tor standing. Advanced concepts on research methods and measurement strategies that are appli-
cable to support advanced practice in both clinical research, evaluate, and utilize data from various sources in-
cluding research, quality improvement initiatives, and interprovincial technical questions. Letter grading.


406. Clinical Prevention and Population Health. (3) Lecture/seminar, three hours. Requisite: doctoral standing. Enables DNP students to integrate, synthe-
size, and apply key concepts introduced in previous coursework in order to incorporate core components into practice. Evidence-based practice, clinical pre-
ventive service and health promotion, health systems policy, and population health. Community as-
pects of practice are emphasized through focus on current health issues. Letter grading.

408. Introduction to the Research for Improving Patient and Population Health Outcomes. (3) Lec- ture/seminar, three hours. Requisite: doctoral standing. Designed to acquaint DNP students with contemporary research and to expose students to interprofessional collaborative practice concepts and competencies. Debate of bar- riers and facilitators to achieving model collaborative practice. Students will engage in evidence-based practice and change current practice. Exploration of students’ per- sonal belief systems about high-level collaboration and team performance. Addresses relationship be- tween interdisciplinary education, practice, and health care outcomes and processes to prepare DNP graduate to assume leadership roles. Letter grading.

409. Health Care Policy for Advocacy in Health Care. (3) Seminar, three hours. Requisite: doctoral standing. Designed to become engaged in and committed to leadership role in health policy. Students gain principles, skills, and knowledge to advocate for patients, profession, and health care systems gained through current policies, programs, and guidelines that govern health care services and prac- tice. Within ethical framework, discussion of issues of equity, health disparities, access to care, and quality of care. Through development of policy brief, students recognize role of political activism as it relates to DNP practice. Letter grading.


411. Information Technology for Nursing Practice. (2) Lecture, two hours. Requisite: doctoral standing. Prepares students to obtain knowledge and skills re- lated to information technology and patient care tech- nology. Prepares DNP graduates to apply new knowl- edge, manage individual and aggregate information, and assess efficacy of patient care technology appro- priate to specialized area of practice. Allows students to use information technology competencies to implement quality improvement initiative, support practice administrative decision-making. Students gain ability to demonstrate conceptual and technical skills to develop and apply innovative applications for data extraction from practice systems and databases. Letter grading.

416A-416B. Adult/Gerontology Acute Care Nurse Practitioner Practicum I, II. (2-6) Clinic practicum, six hours (course 416A) and 16 hours (course 416B). En- forced requisite: course 440. Course 416A is enforced to require 416B. Assessment and therapeutic inter- ventions for selected health problems in acute adult/ gerontology populations. Developmental, health pro- motion, and maintenance needs of clients in relation to family, social, and cultural structures. For course 416A, students complete minimum of 40 direct clinical hours; for course 416B, they complete minimum of 160 direct clinical hours. Letter grading.

416C-416D. Adult/Gerontology Acute Care Nurse Practitioner Practicum III, IV. (6 each) Clinic practicum. Course 416C is enforced to require 416D. Assessment and therapeutic interventions for selected health problems in acute adult/gerontology populations. Developmental, health promotion, and maintenance needs of clients in relation to family, social, and cul- tural structures. Students complete minimum of 160 direct clinical hours. Letter grading.

416E. Adult/Gerontology Acute Care Nurse Practitioner Practicum V. (6 to 8) Clinic practicum, 15 to 24 hours. Enforced requisite: course 416D. Assessment and therapeutic interventions for selected health prob- lems in acute adult/gerontology populations. Developmental, health promotion, and maintenance needs of clients in relation to family, social, and cultural structures. Students complete minimum of 160 direct clinical hours. Letter grading.


429A. Family Nurse Practitioner Practicum I. (4) Clinic practicum, 10 hours. Requisite: course 429A. First of five clinical practice designed to prepare family nurse practitioners with knowledge, skills, and competencies necessary to assume role of primary healthcare provider for individuals and families across lifespan. Use of family-focused framework of care for those who experience common acute and chronic illness, developmental transitions, and health problems. Emphasis on promotion of mainte- nance, and risk reduction interventions across wide range of diverse populations. Focus on context of community, cultural awareness, and practice in interdiscipli- nary teams. Students complete minimum of 80 di- rect clinical hours. Letter grading.

429B. Family Nurse Practitioner Practicum II. (4) Clinic practicum, 12 hours. Requisite: course 429A. Second of five clinical practice designed to prepare family nurse practitioners with knowledge, skills, and competencies necessary to assume role of primary healthcare provider for families and individual patients across lifespan. Use of family-focused framework of care for those who experience common acute and chronic illness, developmental, and transition issues. Emphasis on health promotion, maintenance, and risk reduction interventions across wide range of diverse populations. Focus on context of commu- nity, cultural awareness, and practice in interdiscipli- nary teams. Students complete minimum of 80 di- rect clinical hours. Letter grading.

429C. Family Nurse Practitioner Practicum III. (6-8) Clinic practicum, 18 hours (courses 429C, 429D) and 27 hours (course 429E). Requisite for course 429C; course 429B; for 429D: courses 429C, 429E; for 429E: courses 429C, 429D. Third, fourth, and fifth of clinical practice designed to prepare family nurse practitioners with knowledge, skills, and competencies necessary to assume role of primary healthcare provider for families and individual patients across lifespan. Use of family-focused framework of care for those who experience common acute and chronic illness, developmental, and transition issues. Emphasis on health promotion, maintenance, and risk reduction interventions across wide range of diverse populations. Focus on context of commu- nity, cultural awareness, and practice in interdiscipli- nary teams. Students complete minimum of 80 di- rect clinical hours. Letter grading.

429D. Family Nurse Practitioner Practicum IV. (6) Clinic practicum, 10 to 12 hours. Corequisite: course 238B. Focus on advanced comprehensive assessment, diagnosis, and management of chronic and acute pediatric illnesses in ambulatory setting. Clinical practice, seminar, and other learning activities related to the development and evaluation of evidence-based research and clinical guidelines in pediatric chronic and acute illnesses. Letter grading.

429A. Adult/Gerontology Primary Care Nurse Practitioner Practicum I. (6 to 10) Clinic practicum, 20 to 32 hours. Corequisite: course 238C. Third course in three clinical practicum sequence with emphasis on advanced comprehensive assessment, diagnosis, and management of chronic and acute pediatric illnesses in ambulatory setting. Clinical practice, seminar, and other learning activities related to the development and evaluation of evidence-based research and clinical guidelines in chronic and acute illness. Letter grading.

437C. Acute Care Pediatric Nurse Practitioner Clini- cal Practicum III. (6) Clinic practicum, 18 hours. Requi- sites: courses 237A, 237B, 437A, 437B, 441. Offers clinical opportunity to apply advanced knowledge of pathophysiology, pharmacology, current research, and diagnostic skills in caring for infants, children, and adolescents with complex acute, critical or chronic health conditions. Emphasis on integration of acute care pediatric nurse practitioner role in management of comprehensive management plan for children with complex acute, critical or chronic health conditions under supervision of faculty and preceptors. Letter grading.
knowledge in advanced practice role. Students complete minimum of 160 direct clinical hours. Letter grading.

439E. Adult/Gerontology Primary Care Nurse Practitioner Practicum V. (2) Clinic, practicum, 27 hours. Preparation in variety of clinical settings to implement evidence-based practice guidelines and to critically analyze and adapt healthcare interventions based on individualized assessments, with emphasis on cultural, community, and practice in interdisciplinary teams. Students complete minimum of 240 direct clinical hours. Letter grading.


441. Advanced Pediatric Diagnostics. (3) Lecture/ laboratory, three hours. Requisite: course 440. Diagnosis for acute-care pediatric nurse practitioner students. Advanced diagnostic reasoning and skills in management of infants, children, and adolescents with complex acute, critical, and chronic health conditions. Focus on developing knowledge for pediatric assessment and management of selected health conditions to aspects of diagnostic tests, test interpretation, and invasive procedures to stabilize or monitor acute, critical, or chronic patient. Lectures and other learning activities demonstrate application and evaluation of evidence-based research and clinical guidelines in pediatric population. Letter grading.


445. Advanced Practice Registered Nursing: Clinical Nurse Specialist Practicum. (2 to 10) Clinic, practicum, six hours. Knowledge base and skills, and competencies to function collaboratively and autonomously to achieve high quality patient outcomes. Clinical nurse specialty (CNS) practice achieves this by working within three spheres of influence: patient/family, nursing personnel, and organizational systems utilizing multidisciplinary approach through application and integration of theory, research, and clinical knowledge. 17 units complete minimum of 500 units CNS hours required for professional certification. Letter grading.


463. Nursing Care of Geriatric Patients and Families. (3) Lecture, two hours; clinical, one hour. Requisites: courses 252A, 252B, 465A. Addresses prevention and management of acute and chronic health problems in older adults. Students focus on health and diagnosis, goal setting, treatment planning, and evaluation of nursing care of older adults and their families with emphasis on psychosocial, cultural, and developmental influences. Integration of knowledge of pathophysiology, pharmacology, stress and adaptation, and critical thinking strategies to improve patient safety and quality care for older adults are employed during clinical experiences. Letter grading.


465C. Tertiary Prevention and Care of Complex Medical-Surgical Patients and Families. (8) Lecture, four hours; clinical, 12 hours. Requisites: courses 204, 260, 465B. Examination of nursing assessment and management of acute and chronic health problems of acutely ill adults. Theory content in assessment, health history, and diagnostic reasoning with emphasis on cultural, and developmental influences. Integration of knowledge of pathophysiology, pharmacology, stress and adaptation, adult development theory, therapeutic interventions, patient safety, evidence-based practice, and concepts as applied to care of critically ill medical-surgical patients, with complex and comorbid conditions, and their families. Focus of nurses as bedside scientists, pathophysiological and critical thinking skills and diagnostic reasoning. Nursing process, ethical principles, clinical research, evidence-based practice, and critical thinking to maximize patient safety and quality care for acutely ill patients employed during clinical experiences. Letter grading.

467. Clinical Internship: Integration. (12) Clinical, 36 hours. Requisites: courses 268, 461, 462, 463, 464, 465A, 465B, 465C. Supervised practicum experience within clinical setting as part of interdisciplinary clinical clerk team, with focus on application of theory in clinical setting and interpretation of assessment and diagnostic data for purpose of planning, implementing, and evaluating course of care for patients, both as individuals and cohorts. Students design and complete quality improvement project that contributes to unit's goals and objectives. Students implement advanced-level assessment, health history, and diagnostic reasoning. Letter grading.

470A. DNP Scholarly Project Course I: Project Conceptualization and Planning. (2) Lecture, two hours; clinical, four hours. Requisite: course 470B. Students develop DNP project proposal which reflects synthesis of student knowledge, theory, and clinical practice and work in area of interest or expertise under direction of faculty mentor. Provides structured didactic content and application of student's DNP scholarly project. Letter grading.

470B. DNP Scholarly Project Course II: Project Proposal. (8) Lecture, two hours; clinical, six hours. Requisite: course 470A. DNP students develop full DNP scholarly project proposal that reflects synthesis of student knowledge, theory, and clinical practice and work in area of interest or expertise under direction of faculty mentor. Provides structured didactic content and application of student's DNP scholarly project. Letter grading.

470C. DNP Scholarly Project Course III: Project Implementation. (8) Lecture, two hours; clinical, six hours. Requisite: course 470B. Continued development of DNP scholarly project proposal and application of student's DNP scholarly project proposal. Students assume role of leadership in interprofessional collaboration, consultation, and partnership. Students receive feedback from faculty committee chair and peer feedback as they become engaged in microsystem where
they implement their DNP scholarly project. Provides structured didactic content and application of student’s DNP scholarly project. Letter grading.

470D. DNP Scholarly Project Course IV: Project Evaluation. (8) Lecture, two hours; clinical, six hours. Requisite: course 470C. Students complete evidence-based DNP scholarly project. Students complete implementation phase, evaluate project, and write final DNP scholarly project manuscript. Students receive individual direction from faculty committee chair and peer feedback as final DNP scholarly project paper is written. Students are also mentored in making professional presentations and writing for publication. Letter grading.

495. Nursing Education Practicum. (2) Seminar, six hours. Supervised student teaching internship in preparation for academic roles. In-depth opportunity to gain skills in role of nurse educator within university setting, including application of instructional strategies and evaluation methods. S/U grading.

495A. Teaching Assistant Training Seminar. (2) Seminar, 90 minutes. Prepares students to serve as teaching assistants in School of Nursing. Students gain skills in role of nurse educator within university setting, including application of instructional strategies and evaluation methods that are consistent with expectations for student learning, creating inclusive teaching environment, and dealing with difficult situations. All new teaching assistants are required to take series of five Foundations of Teaching workshops by end of quarter in which this course is completed. S/U grading.

496A–496B–496C. Education Practicum in Nursing Practice I, II, III. (1–1–1) Activity, one hour; discussion, one hour. Corequisites for course 496A: courses 401, 402; course 496A is requisite to course 496B, which is requisite to course 496C. Focuses on development and implementation of patient education program. Prepares DNP students for teaching roles in variety of different health care settings. Emphasis on application of educational program structure, content, appropriate curriculum development, methods of teaching and evaluation that can be applied in variety of different settings in which DNP advanced practices nurses teach. In progress (courses 496A, 496B) and letter (496C) grading.

596. Directed Individual Study or Research. (2 to 12) Tutorial, to be arranged. Opportunity for individual graduate nursing students to pursue special studies or research interests. May be repeated for credit, but only 4 units may be applied toward graduate degree requirements. S/U grading.

597. Individual Study for Comprehensive Examination. (2 to 4) Tutorial, to be arranged. Opportunity for individual graduate nursing students to prepare for comprehensive examination. May be repeated once for credit, but only 4 units may be applied toward MSN degree requirements. S/U grading.

598. Study for and Preparation of PhD Dissertation. (2 to 12) Tutorial, to be arranged. Individualized faculty supervision of PhD dissertation research by student’s chair. May be repeated for credit, but only 8 units may be applied toward PhD degree requirements. S/U grading.

OBSTETRICS AND GYNECOLOGY
David Geffen School of Medicine
27-139 Center for Health Sciences
Box 951740
Los Angeles, CA 90095-1740

Obstetrics and Gynecology
310-206-6575

Obstetrics and Gynecology

Overview
The medical student program in the Department of Obstetrics and Gynecology is designed to provide students with firm background in the essentials of women’s reproductive health. The educational objectives are set forth by the Association of Professors of Gynecology and Obstetrics (APGO). Through a combination of didactic instruction and supervised clinical experience, students acquire the relevant clinical skills of history taking and physical examination and learn reproductive physiology from infancy to the postmenopausal period; antepartum, intrapartum, and postpartum obstetric care; and recognition and management of various gynecologic disorders. Students work in ambulatory clinics and on inpatient services during a four-week core clerkship. Greater depth of experience is provided by elective clerkships during the fourth year that emphasize subspecialties such as maternal/feetal medicine, reproductive endocrinology and infertility, gynecologic oncology, and reproductive health. For more details on the Department of Obstetrics and Gynecology, see the department website.

Obstetrics and Gynecology

Lower-Division Courses
19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Course
199. Directed Research in Obstetrics and Gynecology. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

OPHTHALMOLOGY
David Geffen School of Medicine
2-142 Stein Eye Institute
Box 957000
Los Angeles, CA 90095-7000

Ophthalmology
310-825-5053

Anne L. Coleman, MD, PhD, Chair
Anthony J. Aldave, MD, Vice Chair
Academics
Anthony C. Arnold, MD, Vice Chair
Education
Alfredo A. Sadun, MD, PhD, Vice Chair
Doheny Eye Centers-UCLA
Alapakkam P. (Sam) Sampath, PhD, Associate Director, Jules Stein Eye Institute

Overview
Ophthalmology is the medical science that encompasses knowledge concerning the eyes and the visual system. Derived from many basic and clinical fields, this knowledge must be synthesized by the physician and applied to the prevention, diagnosis, medical management, and surgical therapy of ocular disease.

In response to the steadily increasing incidence and growing importance of ocular disorders, the Department of Ophthalmology as well as the Stein Eye Institute and Doheny Eye Institute are closely coordinated to form a comprehensive center for research in the sciences related to vision, for the care of patients with disease of the eyes and related structures, and for education in the broad field of ophthalmology, all with community outreach.

The Department of Ophthalmology provides instruction and electives to medical students during the first, second, third, and fourth years at the Stein Eye Institute and the Doheny Eye Centers UCLA. Through lectures, demonstrations, discussions, and the opportunity to observe patients and review data on cases with a variety of ocular conditions, students gain knowledge and experience in ophthalmology.

For more details on the Department of Ophthalmology and courses offered, see the department website.

Ophthalmology faculty information is available form the department.
Ophthalmology

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Course

199. Directed Research in Ophthalmology. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

ORAL BIOLOGY

School of Dentistry
13-089 School of Dentistry
Box 951668
Los Angeles, CA 90095-1668

Oral Biology E-mail contact

Cun-Yu Wang, DDS, PhD, Chair
Fariba S. Younai, DDS, Vice Chair

Faculty Roster

Professors

Shen Hu, PhD, MBA
Anahid Jawett, MPH, PhD
Mo K. Kang, DDS, MS, PhD (Jack A. Weichman Professor of Endodontics)
Reuben H. Kim, DDS, PhD (Naomi and Jim Elision Endowed Professor)
Yong Kim, PhD, in Residence
Renate Lux, PhD
Diana V. Messadi, DDS, MMSc, DMSc
Ichiro Nishimura, DDS, DMSc, DMD
Igor Spigelman, PhD
Sotirios Tetrads, DDS, PhD
Cun-Yu Wang, DDS, PhD (Dr. No-Hee Park Professor of Dentistry)
David T. Wong, DMD, DMSc

Associate Professor

Alireza Moshaverinia, DDS, MS, PhD, FACP

Assistant Professor

Jimmy K. Hu, PhD

Adjunct Professor

Ki-Hyuck Shin, MS, PhD

Adjunct Associate Professor

Fang Wei, PhD

Professor of Clinical Dentistry

Fariba S. Younai, DDS

Overview

Oral biology is the area of knowledge that deals with the development, structure, and function of the oral tissues and their interrelationships with other organ systems in normal and disease states. It is a multidisciplinary field that includes cell biology, bone biology, molecular biology, biochemistry, neuroscience, immunology, microbiology, and virology. The objective of the graduate program is to provide students with a sound foundation in these areas in order to pursue an academic or research career.

Graduate Study

A combined DDS/Oral Biology MS or PhD, or advanced certificate training/Oral Biology MS or PhD, is also offered.

Graduate Major

Oral Biology MS, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Oral Biology

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.


203. Oral Embryology and Histology. (4) Lecture, one hour; discussion, one hour. Lectures and group instruction in development and histological structure of facial region and oral and peri-oral organs and tissues. Letter grading.


205A. Methodology in Research Design and Data Analysis. (2) Lecture, two hours. Designed for graduate oral biology students. Integration of didactic lectures in descriptive and inferential statistics and in research design (emphasis on experimental design), presentations of statistical software, and open discussion of specific needs of oral biology students when they design their research. Letter grading.


205C. Advanced Seminar: Comparative Effectiveness and Evidence-Based Research. (2) Seminar, one hour; discussion, one hour. Required courses 205A, 205B (may be taken concurrently). Hands-on experience in process of systematic review, as shared mechanism in comparative effectiveness and evidence-based research. Specialized topics include level and quality of evidence assessments, acceptable sampling analysis, meta-analysis and meta-regression, and Bayesian-derived decision making following utility versus logic modus operandi of students.

206. Current Topics in Oral Immunology. (2) Lecture, two hours. Preparation: basic immunology. Discussion and analysis of current research dealing with immunological issues related to oral health, including HIV, opportunistic oral infections, periodontal pathology, oral immunopathology, carcinogenesis, endoderm immunology, etc. Letter grading.

207. Development and Regeneration of Craniofacial Complex. (2) Lecture, two hours. Focus on cell biology and molecular mechanisms that direct formation of different vertebrate head structures during embryonic development, as well as their abilities to regenerate in adults. Examination of genetic and signaling regulation of craniofacial patterning, morphogenesis, cell differentiation, evolution, and stem cell-based organ regeneration, through both didactic lectures and critical reading of primary research literature. Letter grading.

208. Genomics and Proteomics in Oral Biology Research. (2) Lecture, one hour; discussion, one hour. Introduction to fundamentals and technical aspects of genomics and proteomics and analysis of data derived therefrom. Discussion of implications and applications of genomics and proteomics in diagnostic protocols such as salivary diagnostics. Letter grading.

209. Scientific Ethics. (2) Seminar, two hours. Required course in scientific ethics for graduate students in Oral Biology MS and PhD programs and for NRSA trainees in School of Dentistry. Letter grading.


212. Proseminar: Oral Biology Research. (2) Seminar, one hour; discussion, one hour. Final review of oral biology literature course for graduate MS students. Guest seminars on topics of research in oral biology (pain pathways, im-
214. Current Research in Osteoimmunology. (2) Seminar, one hour; discussion, one hour. Exploration, two hours. Basic cellular and molecular mechanisms involved in responses mediated by immune effectors, with emphasis on immunopathology involved in autoimmunity, cancer, and immunodeficiency syndromes. Letter grading.


215B. Current Advanced Research Topics in Immunology. (2) Seminar, one hour; discussion, one hour. Overview of rapidly changing discoveries in very important field of immunology. Directed and student-led discussions of current cutting-edge research developments in immunology. Letter grading.

220. Integrative Biology and Biomaterials Science in Relation to Dentistry. (2) Lecture, one hour; laboratory, 90 minutes. Introduction to integrative biology and biomaterials science by bringing together diversity of disciplines that complement one another to unravel complexity of biology in biomaterials in relation to dentistry. Integration of bioengineering, materials science, cell biology, and dentistry. Fundamentals of materials science in relation to dentistry, stem cell biology, and knowledge necessary to participate in dental and biomedical research, innovation, and product development. Letter grading.

221. Advanced Dental Materials. (2) Lecture, one hour; laboratory, 90 minutes. Preparation of individuals for academic and research careers in dental materials science or broader area of biomaterials relevant to clinical dental practice. Fundamentals of dental materials science and knowledge necessary to participate in research and product development. Introduction to materials science, with focus on major classes of materials used in dentistry, including polymers, metals, and ceramics, and providing up-to-date information on dental materials currently used in clinical dentistry. Letter grading.

226. Craniofacial Growth and Development. (2) Lecture, two hours. Preparation: strong background in histology and endocrinology. Students acquire, from scientific literature discussed in lecture/seminar format, advanced knowledge of relevant aspects of human biology as a basis for classic and current concepts of principles governing growth and development of craniofacial region. Students required to present seminars on assigned topics that aid their understanding and analysis of literature that has application to their specific and professional fields. Letter grading.

227. Dental Embryology and Histology. (2) Lecture, two hours. Description and interpretation of important stages in development of orofacial apparatus and histological features of its component tissues. Critique of scientific literature relevant to course content and analysis of current state of knowledge about selected features of orofacial apparatus that are of significance to clinical dental specialists. S/U or letter grading.

228. Dental Pharmacology and Therapeutics. (2) Lecture, three hours. Survey of pharmacology, with particular emphasis on how drugs interact with dentistry. General principles of drug action and drug effects on autonomic and central nervous systems. S/U or letter grading.

229A. Culture, Ethnicity, and Health: Implications for Oral Biology and Medicine. (2) Seminar, one hour; discussion, one hour. Examination of sociocultural, biological, and environmental factors that influence health and well-being, experience and distribution of illness, prevention and treatment of oral disease, and current concepts of healthcare, therapy, and cultural influence and utilization of pluralistic medical systems. Theory, perspectives, and methods from clinical medicine, public health, epidemiology, demography, and social sciences. Letter grading.

229B. Anthropological Perspectives on Global Health: Implications for Oral Biology and Medicine. (2) Seminar, one hour; discussion, one hour. What factors influence health, illness, and disease in global context, including political ecology of infectious diseases, child health issues, women’s health and reproductive health, global trade in legal and illegal drugs, demography and health transition, structural adjustment problems associated with globalization of pharmaceutical industry; antibiotic resistance, and global health equity. Letter grading.

234. Seminar: Developmental Neuroendocrine-immunology. (2) Lecture, two hours. Designed for graduate students. Psychological and physiological processes intertwined, and one important aspect of psychoneuroimmunological research is characterization of mechanisms that underlie these interactions. Examination of current literature on neuroimmune interaction from developmental perspective. S/U or letter grading.

M226. Interdisciplinary Response to Infectious Disease Emergencies: Dentistry Perspective. (4) Same as Community Health Sciences M226, Medicine M226, and Nursing M226.) Lecture, three hours; discussion, one hour. Designed to instill in professional students ideas of common emergency health problems and coordinated response, with specific attention to bioterrorism. Examination of tools to help students prevent, detect, and intervene in infectious disease emergencies. Interdisciplinary sessions also attended by students in Schools of Medicine, Nursing, and Public Health during weeks two through five. Letter grading.


273. Research in Clinical Immunology and Lymphology. (2) Lecture, one hour; discussion, one hour. Forum for discussion of cutting-edge topics in immunology and lymphology from clinical perspective. Emphasis on immune surveillance and lymphatic drainage of oral pathologies associated with AIDS and other diseases. Letter grading.

275. Molecular and Cell Biology for Oral Biology Graduate Students. (2) Lecture, two hours; literature review, one hour. Advanced course on prokaryotic and eukaryotic molecular and cellular biology, with emphasis on applications in dental research. Letter grading.

596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. S/U or letter grading.

597. Preparation for PhD Qualifying Examinations. (2 to 8) Tutorial, to be arranged. S/U or letter grading.


ORBOPAECIC SURGERY

David Geffen School of Medicine
76-143 Center for Health Sciences
Box 956902
Los Angeles, CA 90095-6902

Orthopaedic Surgery
310-825-6557

Nicholas M. Bernthal, MD, Interim Chair
Sharon L. Hame, MD, Director, Medical Student Education

Overview

The medical student program in the Department of Orthopaedic Surgery is designed to provide students with experience in understanding the diagnosis and management of disorders of the musculoskeletal system. Through a combination of didactic instruction and supervised clinical experience, students acquire the clinical skills of history taking and physical examination of the musculoskeletal system. Diagnosis and orthopaedic management of bone and soft tissue trauma, skeletal development defects, tumor, spinal disorders, hand and foot disorders, and arthritis are primary objectives. Third-year students work in ambulatory clinics and on inpatient services during their core surgical clerkship. Fourth-year electives provide the opportunity for in-depth experience on rotations at the Reagan UCLA Medical Center and affiliated institutions and emphasize subspecialties such as joint replacement, sports medicine, orthopaedic oncology, metabolic bone disorders, hand and foot surgery, spinal surgery, and pediatric orthopaedics.

For more details on the Department of Orthopaedic Surgery and courses offered, contact the Education Office at 310-825-6557 or see the department website.

Orthopaedic Surgery faculty information is available from the department.

Orthopaedic Surgery

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research) or pass/fail, three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Course

199. Directed Research in Orthopaedic Surgery. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.
Overview
Pathology is the branch of medicine concerned with the causes and development of disease.

Coursework is designed so that students gain an in-depth knowledge of cell and molecular biology, genetics, and disease mechanisms. Didactic instruction is complemented by participation in seminars and training in the design and execution of original laboratory research. As a result, graduates obtain the expertise to translate and answer questions defined in the clinical area to the laboratory bench and vice versa. For more information, see the Pathology and Laboratory Medicine website.

Pathology and Laboratory Medicine faculty information is available from the department.

Pathology and Laboratory Medicine

Lower-Division Courses
19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial, to be arranged. Enrolled students under guidance of faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

Graduate Courses

M215. Interdepartmental Course: Tropical Medicine. (2) Same as Medicine M215 and Pediatrics M215. Lecture, two and one half hours. Requisite: basic biology. Presentation of at least one journal article per meeting (one clinical and one basic/translational). Selection of current subtopics and publications dealing with tumor viruses, oncogenesis, development, and cellular regulation. S/U grading.

M222. Hematoepoiesis: Basic Biology and Clinical Implications. (4) Lecture, three hours; discussion, one hour. Major emphasis on clinical and experimental aspects of knowledge in field. Discussion of important pathological states within hematopoietic system, as well as established and novel avenues for therapy. Letter grading.

M270. Basic and Clinical Aspects of Developmental Hematology. (4) Lecture, two hours. Postgraduate-level course that covers broad range of topics in both basic and clinical aspects of developmental hematology. Pediatric hematologic disorders provide important paradigms for understanding of normal and abnormal hematopoiesis, angiogenesis and novel therapeutic strategies. Topics include hematopoietic stem cells and niche, transcriptional and epigenetic regulation of hematopoiesis, B- and T-lymphocyte development, myeloid, erythroid, and platelet development, immune responses, myeloid and lymphoid neoplasia, and bone marrow transplantation/gene therapy. S/U or letter grading.

110. Introduction to Cytogenetics. (4) Lecture, one hour; discussion, two hours. Limiting knowledge in concert with cutting-edge state-of-the-art cyto- genetic and genomic principles and techniques and their utility in clinical and research applications. Focus on relationship between various chromosomal and genomic abnormalities in human disease and basic and advanced technologies such as fluorescence in situ hybridization (FISH), chromosomal microarray analysis (CMA), and next-generation sequencing (NGS). Letter grading.
molecular biology and tissue engineering can be applied to use of stem cells in regenerative medicine. Bioethical and legal issues related to stem cell research. S/U or letter grading.

280. Clinical Aspects and Molecular Biology of Bone Marrow Failure Syndromes. (4) Lecture, two hours. Limited to graduate students. Coverage of broad range of topics on both clinical aspects and molecular pathogenesis of bone marrow failure syndromes. Studies provide important paradigms to understand fundamental mechanisms of human disease in addition to normal and abnormal blood cell development. Topics include basic biology and clinical features of aplastic anemia, myelodysplastic syndromes, Diamond Blackfan Anemia, Schwachman Diamond Syndrome, Fanconi Anemia, Dyskeratosis Congenita, Polycythemia Nodularis Hemoglobinuria, flow cytometry, and research approaches to study bone marrow failure syndromes. Journal club sessions include discussion of two journal articles per meeting—one clinical and one basic/translational. Students present at least one journal article and lead group discussion. S/U or letter grading.


296. Research Topics in Pathology. (1 to 2) Research group meeting, one to two hours. Limited to departmental graduate students. Advanced study and analysis of current topics in pathology. Discussion of current research and literature in research specialty of faculty member teaching course. May be repeated for credit. S/U grading.


375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

596. Directed Individual Study or Research. (4 to 12) Tutorial, to be arranged. Individual research with members of the staff or of other departments, the latter for purpose of supplementing programs available in department. S/U grading.


PEDIATRICS
David Geffen School of Medicine
22-412A Marion Davies Children’s Center Box 951752
Los Angeles, CA 90095-1752

Pediatrics
310-825-5095
Sherin U. Devaskar, MD, Executive Chair
Peter G. Szilágyi, MD, MPH, Executive Vice Chair and Vice Chair, Research

Overview
For first year medical students, exposure to pediatrics starts with the early authentic experiences and the activities of the pediatric interest group.

For second-year medical students, the required four-week clinical clerkship in pediatrics is offered at seven sites: Cedars-Sinai, Harbor-UCLA, Kaiser Permanente Los Angeles, Olive View-UCLA, UCLA, and UCLA Santa Monica medical centers; and Miller and UCLA Mattel children’s hospitals.

In their third year, it is anticipated that many medical students participate in research projects in the department of pediatrics before starting their fourth year where they can further their pediatric knowledge and clinical experiences by choosing in-depth subspecialty electives and subinternships offered by department.

For more details on the Department of Pediatrics and courses offered, see the department website.

Pediatrics

Lower-Division Courses
19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating major emphasis on infectious diseases in School of Medicine or Public Health. Study of current knowledge about diseases prevalent in tropical areas of world. Major emphasis on infectious diseases, with coverage of problems in nutrition and exotic noninfectious diseases. Syllabus supplements topics covered in classroom. S/U grading.

Upper-Division Courses
188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

199. Directed Research in Pediatrics. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Course

PHILOSOPHY
College of Letters and Science
321 Dodd Hall
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Los Angeles, CA 90095-1451

Philosophy
310-825-4641
Department e-mail
Sherrilyn Roush, PhD, Chair

Faculty Roster
Professors
David L. Blank, PhD
C. Tyler Burge, PhD (Mr. and Mrs. C.N. Flint Professor of Philosophy)
Samuel J. Cumming, PhD
Mark D. Greenberg, JD, DPhil (Michael H. Schill Endowed Professor of Law)
Barbara Herman, MA, PhD (Gloria and Paul Griffin Professor of Philosophy)
Pamela Hieronymy, PhD
David B. Kaplan, PhD (Hans Reichenbach Professor of Scientific Philosophy)
Kareem E. Khalifa, PhD
Gavin Lawrence, DPhil
Calvin G. Normore, PhD (Brian P. Copenhaver Professor)
Michael A. Rescorla, PhD
Sherrilyn Roush, PhD
Seana Shiffrin, JD, DPhil (Pete Kameron Professor of Law and Social Justice)
Sheldon R. Smith, PhD

Professors Emeriti
Robert Merrihew Adams, PhD
Joseph Almog, DPhil
John P. Carriero, PhD
Brian P. Copenhaver, PhD (Steven F. and Christine L. Udvar-Hazy Professor Emeritus)
Donald A. Martin, BS

Associate Professors
Adam D. Crager, PhD
The Philosophy major has the following learning outcomes:

- Development of oral and written skills that display skill at argument and the ability to engage honestly with difficult and controversial topics

**Entry to the Major**

**Transfer Students**

Transfer applicants to the Philosophy major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one philosophy of mind or skepticism and rationality course, one ethical theory course, one symbolic logic course, and one additional philosophy course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

**Requirements**

**Preparation for the Major**

Required: Four lower-division courses, including Philosophy 7 or 21, 22, 31, and one other lower-division philosophy course.

**The Major**

Required: Thirteen upper-division (100 series) or graduate (200 series) philosophy courses (52 units), including Philosophy 100A, 100B, 100C. Seven of the 13 courses must be distributed among the groups into which the undergraduate and graduate courses are divided—history of philosophy (numbered 101–119, 201–219); logic, semantics and philosophy of science (120–139, 220–239); ethics and value theory (150–169, 240–259); and metaphysics and epistemology (170–187, 270–289). Students must take two courses in each of three of the groups and one course in the remaining group.

**Honors Program**

Students must satisfy the honors directed study requirement by taking Philosophy 198A and 198B in conjunction (usually, but not necessarily concurrently) with two different regular upper-division philosophy courses supervised by the instructors of those courses.

**Policies**

**The Major**

Contract courses (199) may be applied toward the major but not toward a group requirement. A maximum of 8 units of course 199 may be applied toward the major but not toward a group requirement. Courses 100A, 100B, 100C may not be applied toward any group requirement. No course used to satisfy the major or preparation requirements may be taken on a P/NP basis.

**Honors Program**

To be admitted to the honors program, students must have an overall grade point average of 3.7. To be awarded honors in philosophy at graduation, Philosophy majors must (1) have a 3.7 grade-point average in UCLA philosophy courses and a 3.7 GPA in upper-division UCLA philosophy courses; (2) satisfy the honors directed study requirement; and (3) receive a grade of A– or better in each course applied toward satisfaction of the honors requirement.

Students may substitute Philosophy 191 for either course 198A or 198B or, alternatively, may complete up to two philosophy graduate seminars in lieu of courses 198A and/or 198B. For an undergraduate or graduate seminar to be applied toward the honors directed study requirement, the consent of both the seminar instructor and the faculty honors adviser is required in advance. Students may also substitute up to one 4-unit Philosophy 199 course in which they produce a substantial paper that represents an original piece of research or its equivalent.

Exceptional work done to satisfy the honors requirement may be submitted to the department chair for consideration for highest honors.

**Undergraduate Minor**

The benefits of an undergraduate education in philosophy are those Francis Bacon attributed to reading, conversation, and writing: reading gives us material for our own thought; conversation, facility at sharing and debating ideas; and writing, the ability to fix ideas with precision. A typical philosophy course involves reading: from the center and margins of the major world traditions, to modern thinkers framing today’s urgent issues. It also involves conversation, as philosophers like to test ideas out in company and learn from those who see things differently to them. The final test of a philosophical theory or argument is to submit it to the rigor of writing. Philosophical writing, in the ideal, is clear, exact, and free of the rhetoric that may be able to temporarily sway an opponent in the heat of conversation.

**Admission**

To enter the Philosophy minor, students must have an overall grade-point average of 2.0 or better.

**The Minor**

Required Lower-Division Courses (10 units): Philosophy 7 or 21, and 22 or 31.

Required Upper-Division Courses (24 units): Five courses, including at least one from each of the four groups into which the undergraduate and graduate courses are divided—history of philosophy (numbered 101–119, 201–219); logic, semantics and philosophy of science (120–139, 220–239); ethics and value theory (150–169, 240–259); and metaphysics and epistemology (170–187, 270–289); one additional upper- or lower-division philosophy course.

**Regents**

To be awarded honors in philosophy at graduation, Philosophy majors must (1) have a 3.7 grade-point average in UCLA philosophy courses and a 3.7 GPA in upper-division UCLA philosophy courses; (2) satisfy the honors directed study requirement; and (3) receive a grade of A– or better in each course applied toward satisfaction of the honors requirement.

Students may substitute Philosophy 191 for either course 198A or 198B or, alternatively, may complete up to two philosophy graduate seminars in lieu of courses 198A and/or 198B. For an undergraduate or graduate seminar to be applied toward the honors directed study requirement, the consent of both the seminar instructor and the faculty honors adviser is required in advance. Students may also substitute up to one 4-unit Philosophy 199 course in which they produce a substantial paper that represents an original piece of research or its equivalent.

Exceptional work done to satisfy the honors requirement may be submitted to the department chair for consideration for highest honors.
3. Historical Introduction to Philosophy. (5) Lecture, three hours; discussion, two hours. Historical introduction to Western philosophy based on classical texts dealing with related themes, ideas, and studied in chronological order: properties of rational argument, existence of God, problem of knowledge, nature of causality, relation between mind and body, possibility of justice, and others. P/NP or letter grading.

4. Philosophical Analysis of Contemporary Moral Issues. (5) Lecture, three hours; discussion, one hour. Critical study of principles and arguments advanced in discussion of current moral issues. Possible topics include revolutionary violence, rules of warfare, sexual morality, right of privacy, punishment, nuclear warfare and deterrence, abortion and mercy killing, experimentation with human subjects, rights of women. P/NP or letter grading.

5. Philosophy in Literature. (5) Lecture, three hours; discussion, one hour. Philosophical inquiry into such themes as freedom, responsibility, guilt, love, self-knowledge and self-deception, death, and meaning of life through examination of great literary works in Western tradition. P/NP or letter grading.

6. Introduction to Political Philosophy. (5) Lecture, three hours; discussion, one hour. Study of some classical or contemporary political philosophers. Questions that may be discussed include What is justice? Why obey the law? Which form of government is best? How much freedom should be allowed in society? P/NP or letter grading.

7. Introduction to Philosophy of Mind. (5) Lecture, three hours; discussion, one hour. Introductory study of philosophical issues about nature of the mind and its relation to the body, including materialism, functionalism, behaviorism, determinism and free will, nature of psychological knowledge. P/NP or letter grading.

8. Introduction to Philosophy of Science. (5) Lecture, three hours; discussion, one hour. Nature of arguments: how to analyze them and assess soundness of reasoning they represent. Common fallacies that often occur in arguments, expressed in light of what counts as good deductive or inductive inference. Other topics include use of language in argumentation to arouse emotions as contrasted with conveying thoughts, logical of scientific experiments and hypothesis-testing in general, and some general ideas about probability and its application in making normative decisions (e.g., betting). P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

21. Skepticism and Rationality. (5) Lecture, four hours; discussion, one hour. How can we know anything with certainty? How can we justify any of our beliefs? Introduction to study of these and related questions through works of some great philosophers of modern period, such as Descartes, Hume, Leibniz, or Berkeley. P/NP or letter grading.

22. Introduction to Ethical Theory. (5) Lecture, three hours; discussion, one hour. Not open for credit to students with credit for course 22W. Recommended for majors in philosophy. Systematic introduction to ethical theory, including discussion of egoism, utilitarianism, justice, responsibility, meaning of ethical terms, relativism, etc. P/NP or letter grading.

22W. Introduction to Ethical Theory. (5) Lecture, three hours; discussion, one hour. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Limited to freshmen/sophomores. Not open for credit to students with credit for course 22W.

Introduction to major ethical theories in Western thought. Examination of works of Plato, Aristotle, Hume, Kant, and Mill. Topics include ideas of virtue, obligation, egoism, relativism, and foundations of morals. Four papers required. Satisfies Writing II requirement. Letter grading.

23. Meaning and Communication. (5) Lecture, three hours; discussion, one hour. Theory of meaning and its relationship to philosophy more generally; nature, origins, and acquisition of language. Additional topics may include nonlinguistic and nonhuman systems of communication; theories of interpretation in law, literature, and arts; and the use of technical terms in science. P/NP or letter grading.

M24. Language and Identity. (5) (Same as Linguistics M7.) Lecture, four hours; discussion, one hour (when scheduled). How do we use language to project our culture? How do we use it to perceive or shape identity of others? Introduction to speech act theory and various claims that speech act theory can account for systematic subordination of women; maligning of racial minorities; and, in some cases, incite-ment to violence through hate speech. Provides foun-dation for students of linguistic theory, philosophy, sociology, anthropology, and communication studies. P/NP or letter grading.

31. Logic, First Course. (5) Lecture, four hours; discussion, one hour. Recommended for students who plan to pursue more advanced studies in logic. Elements of symbolic logic, sentential and quantifica-tional forms of reasoning and structure of language. P/NP or letter grading.

89H. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designated as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designated as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

97. Freshman Seminar. (4) Variable topics; consult Schedule of Classes or “Department Announcements” for topics to be offered in a specific term. May be re-petted for credit with consent of instructor. Limited to students in College Honors Program. Students may be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100A. History of Greek Philosophy. (4) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Survey of origins of Greek metaphysics from pre-Socrates through Plato and Aristotle. P/NP or letter grading.

100B. Medieval and Early Modern Philosophy. (4) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Recommended requisite: course 100A. Survey of development and transmission of Greek metaphysics and episte-mology within context of philosophical theology, and transition from medieval to early modern period. Spe-cial emphasis on Augustine, Anselm, Aquinas, and Descartes. P/NP or letter grading.

100C. History of Modern Philosophy, 1650 to 1800. (4) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Recommended requisite: course 100B. Courses 100A, 100B, and 100C should be taken in immediately successive terms if possible. Survey of development of meta-
physics and theory of knowledge from 1650 to 1800, including Locke and/or Berkeley, Malebranche and/or Leibniz, and culminating in Hume and Kant. Topics may include works of these (and perhaps other) philosophers of the period on mind and body, causality, existence of God, skepticism, empiricism, limits of human knowledge, and philosophical foundations of modern science. P/NP or letter grading.

Group I: History of Philosophy

M101A. Plato—Earlier Dialogues. (4) (Same as Classics M146A.) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Study of selected topics in early and middle dialogues of Plato. P/NP or letter grading.

M101B. Plato—Later Dialogues. (4) (Same as Classics M146B.) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Study of selected topics in middle and later dialogues of Plato. P/NP or letter grading.

M102. Aristotle. (4) (Same as Classics M147.) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Study of selected works of Aristotle. P/NP or letter grading.

M103A. Ancient Greek and Roman Philosophy. (4) (Same as Classics M145A.) Lecture, three hours. Study of some major Greek and Roman philosophical texts, including Parmenides, the Sophists, Plato, Aristotle, and Hellenistic philosophers, with emphasis on historical and cultural setting of texts, their literary form, interrelations, and contribution to discussion of basic philosophical issues. P/NP or letter grading.

M103B. Later Ancient Greek Philosophy. (4) (Same as Classics M145B.) Lecture, three hours; preparation: one course from 100A, 101B, 101D, or 103A. Study of some major texts in Greek philosophy of Hellenistic and Roman periods. Readings vary and include works by Stoics, skeptics, philosophers of science, Neoplatonists, etc. P/NP or letter grading.

104. Topics in Islamic Philosophy. (4) Lecture, three to four hours; discussion, one hour (when scheduled). Preparation: one philosophy course. Development of philosophy within orbit of Islam from beginning of interaction of Islam with ancient philosophy to period of hegemony of Ottoman Empire. Figures examined may vary but usually include many of the following: Ibn Sina (Avicenna), al-Ghazali, ben Maimon (Maimonides), Ibn Rushd (Averroes), and Suhrawardi. Topics include central issues in Islamic philosophy and epistemology. May be repeated for credit with consent of instructor. P/NP or letter grading.

106. Later Medieval Philosophy. (4) Preparation: one philosophy course. Metaphysics, theory of knowledge, and ethics of Aquinas, Duns Scotus, and Ockham, with less full discussion of other authors from the 13th through early 15th century. Selected texts read in English translation.

107. Topics in Medieval Philosophy. (4) Lecture, four hours; discussion, one hour. Preparation: one philosophy course. Recommended requisites: course 105 or 106. Study of philosophy and theology of one medieval philosopher. May be repeated for credit with consent of instructor. P/NP or letter grading.

C108. Hobbes. (4) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Hobbes’ political philosophy, especially Leviathan, with attention to its relevance to contemporary political philosophy. May be concurrently scheduled with course C208. P/NP or letter grading.

C109. Descartes. (4) Lecture, four hours; discussion, one hour. Requisites: course 21 or two philosophy courses. Study of two works of Descartes, with discussion of issues such as problem of skepticism, foundations of knowledge, existence of God, relation between mind and body, and connection between science and metaphysics. May be concurrently scheduled with course C209. P/NP or letter grading.

C110. Spinoza. (4) Lecture, three hours; discussion, one hour (when scheduled). Preparation: one philosophy course. Selected topics in philosophy of Spinoza. May be concurrently scheduled with course C210. Limited to 30 students when concurrently scheduled. P/NP or letter grading.

C111. Leibniz. (4) Lecture, three hours; discussion, one hour. Requisite: course 21. Study of philosophy of Leibniz. May be concurrently scheduled with course C211, in which case there is weekly discussion meeting, plus fewer readings and shorter papers for undergraduates. Limited to 30 students when concurrently scheduled. P/NP or letter grading.

C112. Locke and Berkeley. (4) Lecture, four hours. Preparation: one philosophy course. Study of philosophies of Locke and Berkeley, with emphasis in some cases on one or other. Limited to 30 students when concurrently scheduled with course C212. P/NP or letter grading.

C114. Hume. (4) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Selected topics from metaphysical, epistemological, and ethical writings of Hume. Limited to 40 students when concurrently scheduled with course C214. P/NP or letter grading.

C115. Kant. (4) Lecture, three hours; discussion, one hour. Requisite: course 21 or 22. Study of Kant’s views on related topics in theory of knowledge, ethics, and politics. May be repeated for credit with consent of instructor. Concurrently scheduled with course C215. P/NP or letter grading.

116. 19th-Century Philosophy. (4) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Selected topics in 19th-century thought.

117. Late 19th- and Early 20th-Century Philosophy. (4) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Selected topics in work of one or more of following philosophers: Boltzano, Frege, Husserl, Meinong, G. Moore, early Russell, and Wittgenstein. May be repeated for credit with consent of instructor.

118. Kierkegaard, (4) Preparation: one philosophy course. Philosophical study of some major works of Kierkegaard, with emphasis on interpretation of the texts.

118B. Kierkegaard and Philosophy of Religion. (4) (Same as Religion M118B.) Lecture, three to four hours; discussion, one hour (when scheduled). Preparation: one philosophy course. Study of selected works of Kierkegaard on philosophy of religion, with emphasis on interpretation of texts. P/NP or letter grading.

C119. Topics in History of Philosophy. (4) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Study of selected issues or themes in history of philosophy from different periods (e.g., ancient and medieval, medieval and early modern). May be repeated for credit with consent of instructor. Concurrently scheduled with course C219. P/NP or letter grading.

Group II: Logic, Semantics, and Philosophy of Science

122. Topics in Philosophy of Science. (4) Lecture, three hours; discussion, one hour (when scheduled). Preparation: one philosophy course. Philosophical investigation into one aspect of scientific practice (e.g., theory formation, explanation, prediction). May be repeated for credit with consent of instructor. P/NP or letter grading.

123. Science and Values. (4) Lecture, three hours; discussion, one hour (when scheduled). Preparation: one philosophy course. Study of how philosophical, social, and political values influence scientific inquiry. May be repeated for credit with consent of instructor. P/NP or letter grading.

124. Philosophy of Science: Historical. (4) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Historical introduction to philosophy of science. Several general topics discussed in context of actual developments in history of natural sciences. May be repeated for credit with consent of instructor.

125. Philosophy of Science: Contemporary. (4) Lecture, three hours; discussion, one hour. Requisite: course 31 or 124. Introduction to contemporary philosophy of science, focusing on problems of central importance. May be repeated for credit with consent of instructor.

126. Philosophy of Science: Social Sciences. (4) Lecture, three hours; discussion, one hour. Preparation: two philosophy courses. Discussion of topics in philosophy of social sciences (e.g., methods of social sciences in relation to physical sciences, value-bias in social inquiry, concept formation, theory construction, explanation and prediction, nature of social laws).

C127A. Philosophy of Language. (4) Lecture, four hours; discussion, one hour. Enforced requisite: course 31. Syntax, semantics, pragmatics. Semantical concepts of truth, sense and denotation, synonymy and analyticity, modalities and tenses, indirect discourse, indexical terms, semantical paradoxes. May be repeated for credit with consent of instructor. Concurrently scheduled with course C228A. P/NP or letter grading.

C127B. Philosophy of Language. (4) Lecture, four hours; discussion, one hour. Requisite: course 31. Course C127A is not requisite to C127B. Selected topics similar to those covered in C127A, but with focus on contemporary figures. May be repeated for credit with consent of instructor. Concurrently scheduled with course C228B. P/NP or letter grading.

128. Topics in Philosophy of Mathematics. (4) Lecture, four hours. Requisites: courses 31, 132, and preferably one additional logic course. Introduction to philosophy of mathematics. Survey of philosophy of mathematics from Kant through contemporary developments and development of three main schools of logicism, formalism, and intuitionism in their historical context. Study of original texts of philosophy such as Kant, Frege, and Russell, and how their philosophy interacted with contemporary developments in mathematics and logic. May be repeated for credit with consent of instructor. May be concurrently scheduled with courses C223A, C223B, P/NP or letter grading.

129. Philosophy of Psychology. (4) Lecture, three to four hours; discussion, one hour (when scheduled). Preparation: one 4-unit psychology course, one philosophy course. Selected philosophical issues arising from psychological theories. Nature of perception and issues about perceptual psychology and development of important types of representation (e.g., of body, cause, agency) in early childhood. Relevance of contemporary simulation to accounts of thinking and meaning; relations between semantical theory and learning theory; psychological aspects of theory of syntax. May be repeated for credit with consent of instructor. P/NP or letter grading.

130. Philosophy of Space and Time. (4) Lecture, three hours; discussion, one hour. Preparation: two philosophy courses or one philosophy course and one physics course. Selected philosophical problems concerning nature of space and time. Philosophical implications of space-time theories, such as those of Newton and Einstein. Topics may include nature of geometry, the conventionalism/relativistic views of space and time, philosophical implications of relativity theory.

131. Science and Metaphysics. (4) Lecture, three to four hours; discussion, one hour (when scheduled). Preparation: two philosophy courses. Recommended: some background in basic calculus and physics. Intensive study of one or two metaphysical topics on which results of modern science have been thought to bear. Topics may include nature of causation, reality and direction of time, time-travel, backwards causation, realism, determinism, absolute view of space, etc. May be repeated for credit with consent of instructor. P/NP or letter grading.

133. Topics in Logic and Semantics. (4) Lecture, four hours; discussion, one hour. Enforced requisite: course 132. Topics may include formal theories, definitions, alternative theories of descriptions, many-valued logics, deviant logics. May be repeated for credit with consent of instructor. P/NP or letter grading.

133B. Probability and Inductive Logic. (4) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course 31, or background in logic, computer science, statistics, or mathematics. Topics may include interpretations of probability, Bayesian and non-Bayesian confirmation theory, paradoxes of confirmation, coherence, and conditioning. May be concurrently scheduled with course C225. P/NP or letter grading.

133C. Topics in Probability and Inductive Logic. (4) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course 31, or background in logic, computer science, statistics, or mathematics. Topics may include one or more of the following: decision theory, statistical inferences, causal inference, artificial intelligence, non-probabilistic approaches to inductive logic, or deeper study of topics from course C133B. May be repeated for credit with consent of instructor. P/NP or letter grading.

M134. Introduction to Set Theory. (4) (Same as Mathematics M134S.) Lecture, three hours; discussion, one hour. Requisite: course 135 or Mathematics 110A or 131A. Axiomatic set theory as framework for mathematical concepts; relations and functions, numbers, cardinality, axiom of choice, transfinite numbers. P/NP or letter grading.

135. Introduction to Metalogic. (4) Lecture, four hours; discussion, one hour. Enforced requisite: course 31. Strongly recommended requisite: course 132 or (Mathematics 33A or 33B). Metatheory sentential logic and first-order logic. Introduction to formal language, formal deductive systems, and models. Compactness and completeness theorems that concern complexity of notion of logical consequences. P/NP or letter grading.

136. Modal Logic. (4) Lecture, four hours. Requisites: courses 31 (enforced), 135. Introduction to model theory of modal logic (family of systems that includes logics featuring necessity, temporal logics, epistemic logics, and logics of actions/programs). Topics include invariance results, definability theory, completeness theory, game-theoretic methods, and relativization for conceptions of classical first- and second-order logic. P/NP or letter grading.

137. Philosophy of Biology. (4) Lecture, three to four hours; discussion, one hour (when scheduled). Preparation: one philosophy course. Intensive study of one or two current topics in philosophy of biology, which may include structure of evolutionary theory, fitness, taxonomy, reductionism, concept of biological species, and biological explanation. P/NP or letter grading.

138. Philosophy of Visual Representation. (4) Lecture, four hours. Preparation: one philosophy course (in philosophy of mind or language recommended). Investigation of philosophical questions relating to visual representation. Possible topics include visual perception, mental imagery, image versus language, semantics, pictorial representation, comics and film, diagrams, and data visualization. P/NP or letter grading.

Group III: Ethics and Value Theory

150. Society and Morals. (4) Lecture, three hours; discussion, one hour. Requisite: course 22. Critical study of principles and arguments advanced in discussion of current moral and social issues. Topics similar to those in course 4, but familiarity with some basic philosophical concepts and methods presupposed. May be repeated for credit with consent of instructor.

151A-C151B-151C. History of Ethics. (4-4-4) Lecture, three hours; discussion, one hour. Preparation: two philosophy courses. Each course may be taken independently. C151A. Selected Classics in Ancient Ethical Theories: Plato, Aristotle. C151B. Modern. Intensive study of Kant's ethical theory. May be repeated for credit with consent of instructor. May be concurrently scheduled with course C245. P/NP or letter grading.

152A. Topics in Moral Philosophy. (4) Lecture, three to four hours; discussion, one hour (when scheduled). Study of one or two topics in moral philosophy. Possible topics may include role of emotions in moral agency, reactive attitudes and other responses to moral and immoral action, moral motivation, moral relationships, moral character, moral virtue, morality, and moral transformation. May be repeated for credit with consent of instructor. P/NP or letter grading.

M152B. Topics in Moral Philosophy: Evil. (4) (Same as Religion M179.) Lecture, three to four hours; discussion, one hour (when scheduled). Preparation: one philosophy course. Course 152A is not requisite to M152B. Exploration of philosophical issues raised by topic of evil actions and/or evil people. Issues may include problem of evil and theodicy, responsibility for evil and problem of free will, causes and motivations for evil action, and variant responses to evil such as forgiveness and punishment. P/NP or letter grading.

153A. Topics in Ethical Theory: Normative Ethics. (4) Lecture, three hours; discussion, one hour. Requisite: course 22. Study of selected topics in normative ethical theory. Topics may include human rights, virtues and vices, principles of culpability and praise-worthiness (criteria of right action). May be repeated for credit with consent of instructor. P/NP or letter grading.

C153B. Topics in Ethical Theory: Metaethics. (4) Lecture, three hours; discussion, one hour. Requisite: course 22. Study and analysis of basic concepts, selected problems, and contemporary issues in meta-ethics. Topics may include analysis of moral language, justification of moral beliefs, moral realism, skepticism, free will, moral motivation, etc. May be repeated for credit with consent of instructor. May be concurrently scheduled with course C232B. P/NP or letter grading.

154. Topics in Value Theory: Rationality and Action. (4) Lecture, three hours; discussion, one hour. Requisite: course 6 or 7 or 22. Selected topics concerning normative issues in practical rationality or philosophy of action. Topics may include: emmias, nature of reasons for action, rationality of morality and prudence, weakness of will, freedom of will, and decision theory. May be repeated for credit with consent of instructor. May be concurrently scheduled with course C244B. P/NP or letter grading.

C154B. Topics in Value Theory: Moral Responsibility and Free Will. (4) (Formerly numbered 154B.) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Examination of philosophical problems surrounding moral responsibility and free will, using contemporary or classical readings in attempt to better understand kind of freedom required for moral agents. May be repeated for credit. May be concurrently scheduled with course C244B. P/NP or letter grading.

155A. Medical Ethics. (4) Lecture, three to four hours; discussion, one hour (when scheduled). Course 155A is not requisite to 155B. Examination of philosophical issues raised by problems of medical ethics, such as abortion, euthanasia, and medical experimentation. May be repeated for credit with consent of instructor. P/NP or letter grading.

155B. Topics in Medical Ethics. (4) Lecture, three to four hours; discussion, one hour (when scheduled). Course 155A is not requisite to 155B. Intensive investigation of one or two topics or philosophical issues in medical ethics, such as paternalism, truth-telling, physician-patient relationship, distributive justice, autonomy and medical decision making, and research ethics. Topics announced each term. May be repeated for credit with consent of instructor. P/NP or letter grading.

C156. Topics in Political Philosophy. (4) Lecture, three hours; discussion, one hour. Analysis of some basic concepts in political theory. May be repeated for credit with especially those by Kant, Hegel, and Marx. P/NP or letter grading.

157A-157B. History of Political Philosophy. (4-4) Lecture, three hours; discussion, one hour. Preparation: two philosophy courses. May be repeated with consent of instructor. C157A Reading and discussion of classic works in earlier political theory, especially those by Hobbes, Locke, Hume, and Rousseau. C157B Reading and discussion of classic works in later political theory, especially those by Kant, Hegel, and Marx.

161. Topics in Aesthetic Theory. (4) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Philosophical theories about nature and importance of art and art criticism, aesthetic experience, and aesthetic values. May be repeated for credit with consent of instructor.

166. Philosophy of Law. (4) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Examination, through study of recent philosophical writings, of such topics as nature of law, relationship of law and morals, legal reasoning, punishment, and obligation to obey law. May be repeated for credit. P/NP or letter grading.

171. Feminist Issues in Philosophy. (4) Lecture, three hours; discussion, one hour (when scheduled). Preparation: one philosophy course. Study of ethical dimensions of feminist issues. Issues discussed may include contested significance of gender; different models of gender identity and gender equality; gender discrimination, subordination, hierarchy, and resistance; gender equality in family and workplace; sexual harassment and violence; human and reproductive freedom; and just and unjust institutional arrangements as they affect gender. P/NP or letter grading.

176. Philosophy of Race. (4) Lecture, three hours; discussion, one hour (when scheduled). Preparation: one philosophy course. Examination of theories of race and racism and intersection of race with other social structures. Topics may include metaphysics of race, social construction, racial identity, racial injustices, implications of racial solidarity, and relationships between race and ethnicity, race and class, and race and gender. P/NP or letter grading.

Group IV: Metaphysics and Epistemology

170. Philosophy of Mind. (4) Lecture, three hours; discussion, one hour. Preparation: two relevant philosophy courses. Analysis of various problems concerning nature of mind and mental phenomena, such as relation between mind and body, and one's knowledge of or other minds. May be repeated once for credit with consent of instructor.

172. Philosophy of Language and Communication. (4) Lecture, three hours; discussion, one hour. Theories of meaning and communication; how words refer to things; limits of meaningfulness; analysis of speech acts; relation of everyday language to scientific discoveries. P/NP or letter grading.

173. Philosophy of Medicine. (4) Lecture, three to four hours; discussion, one hour (when scheduled). Focus on questions like what is health, what is well-being, what is mental disorder, and what is disability. Consideration of nature of evidence and social constructivist types of answers, and error theories. Consideration of roles that fact, value, statistical norms, normal variation, normal function, and harm might have in these concepts. Study of conclusions of different accounts of these concepts for people with minority bodies, minds, and sexualities, and for decisions about cure, enhancement, and reproduction. P/NP or letter grading.

174. Topics in Theory of Knowledge. (4) Lecture, three to four hours; discussion, one hour (when scheduled). Requisite: course 21. Intensive investigation of one or two selected topics or works in theory of knowledge such as a particular knowledge problem of induction, memory, knowledge as justified true belief. Topics announced each term. May be repeated for credit with consent of instructor. P/NP or letter grading.
M175. Topics in Philosophy of Religion. (4) (Same as Religion M175.) Lecture, three hours; discussion, one hour. Requisite: course 21 or 22. Intensive investigation of one or two topics or works in philosophy of religion, such as attributes of God, arguments for or against existence of God, or relation between religion and ethics. Topics announced each term. May be repeated for credit with consent of instructor.


177A. Existentialism. (4) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Analysis of methods, problems, and views of some of the following: Kierkegaard, Nietzsche, Heidegger, Jaspers, Sartre, Marcel, and Camus. Possible topics include metaphysics of nothingness, nature of mind-body dualism, the concept of freedom, problem of self, other people, ethics, existential psychoanalysis. May be repeated for credit with consent of instructor. P/NP or letter grading.

177B. Historical Existentialism. (4) Preparation: one philosophy course. Study of central philosophical texts of one of the following: Nietzsche, Heidegger, Jaspers, Buber, Sartre, or Camus. Emphasis on explanation and interpretation of the texts. May be repeated for credit with consent of instructor.

178. Phenomenology. (4) Lecture, three hours; discussion, one hour. Preparation: two philosophy courses. Introduction to phenomenological method of approaching philosophical problems via works of some of the following: Brentano, Husserl, Heidegger, Scheler, Sartre, Merleau-Ponty, Ricoeur. Topics include ontology, epistemology, and particularly phenomenology of mind.

179. Asian Philosophy. (4) Lecture, three hours; discussion, one hour. Examination of central concepts and arguments in Buddhist or Chinese philosophy. Appropriate parallels to social concepts in Western tradition. May be repeated for credit with consent of department. P/NP or letter grading.

180. Philosophy of Action. (4) Lecture, three to four hours; discussion, one hour (when scheduled). Preparation: two philosophy courses. Study of various conceptions employed in understanding human action. Topics may include rational choice, desire, intention, weakness of will, and self-deception. May be repeated for credit with consent of instructor. P/NP or letter grading.


182. Elements of Metaphysics. (4) Lecture, three hours; discussion, one hour. Requisite: course 21. Study of basic metaphysical questions: nature of physical world, of minds, and of universals; and answers provided by (e.g., phenomenalism, materialism, dualism). P/NP or letter grading.

183. Theory of Knowledge. (4) Lecture, three hours; discussion, one hour. Requisite: course 21. Problem-oriented study of contemporary classics in epistemology of skepticism, justification, foundationalism, epistemic intuitions, closure, reliability, internalism, and externalism, among others. May be repeated for credit with consent of instructor. P/NP or letter grading.

184. Topics in Metaphysics. (4) Lecture, three hours; discussion, one hour. Requisite: course 21. Intensive investigation of one or two topics or works in metaphysics, such as: identity, nature of dispositions, possibility and necessity, universals and particulars, causality. Topics announced each term. May be repeated for credit with consent of instructor. P/NP or letter grading.

185. Major Philosophers of 20th Century. (4) Lecture, three hours; discussion, one hour. Preparation: two philosophy courses. Study of writings of one or more of the following: Russell, Moore, Wittgenstein, Carnap, Quine. May be repeated for credit with consent of instructor. P/NP or letter grading.

187. Topics in Feminist Philosophy: Metaphysics and Epistemology. (4) Seminar. Seminar M110CC). Lecture, three hours; discussion, one hour (when scheduled). Requisite for Gender Studies majors: Gender Studies 10; for other students: one philosophy course. Examination in depth of different theoretical positions on gender and women as they have been applied to study of philosophy. Emphasis on theoretical contributions made by new scholarship on women in philosophy. Concepts and strategies that arise in discussion of women's rights and liberation. Philosophical approach to feminist theories. May be repeated for credit with consent of instructor. P/NP or letter grading.

Special Studies

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparatory meetings for USIE project. Individual study in regular scheduled meetings with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: course 188SA. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, one hour. Limited to 20 students. Designed as adjunct to upper-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, one hour. Limited to honors in College Honors Program. Designated as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May not be applied toward departmental honors. May be repeated for credit. Honors content noted on transcript. P/NP or letter grading.

198A. Honors Research in Philosophy. (2-4) Tutorial, two hours. Limited to junior/senior philosophy honors students. Each course may be taken in conjunction with one upper-division philosophy lecture or seminar course, either concurrently or in subsequent term, under direct supervision of lecture course instructor. Advanced work related to lecture course, further reading, and preparation of 12- to 15-page paper representing original research. Courses 198A and 198B must be taken in conjunction with two different lecture courses, and both courses must satisfy departmental honors requirement. May be repeated for credit. Individual contract required. Letter grading.

198C. Honors Research in Philosophy. (4) Tutorial, four hours. Limited to junior/senior philosophy honors program students. Development and completion of an original research project under direct supervision of faculty member. May be repeated for credit. Individual contract required. Letter grading.

199. Directed Research in Philosophy. (2 to 4) Tutorial, three hours. Limited to 20 students. Individual research under guidance of faculty mentor. Culminating paper or research project required. Up to 8 units may be applied toward degree requirements, but no course may be substituted for course in one of four groups on basis of similarity of subject matter. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200A-200B-200C. Seminar for First-Year Graduate Students. (4-4-4) Seminar, three hours. Limited to and required of all first-year graduate philosophy students. Selected topics in metaphysics and epistemology, history of philosophy, and ethics. Letter (200A, 200B) and S/U (200C) grading.

Group I: History of Philosophy


203. Seminar: History of Ancient Philosophy. (4) Seminar, four hours. Selected problems and philosophers. May be repeated for credit with consent of instructor. S/U or letter grading.

206. Topics in Medieval Philosophy. (4) Lecture, four hours. Study of philosophy and theology of one or several medieval philosophers such as Augustine, Anselm, Abelard, Aquinas, Scotus, Eckhart and study of single area such as logic or theory of knowledge in several medieval philosophers. Topics announced each term. May be repeated for credit with consent of instructor. S/U or letter grading.

207. Seminar: History of Medieval and Renaissance Philosophy. (4) Seminar, four hours. Selected problems and philosophers. May be repeated for credit with consent of instructor. S/U or letter grading.

210C. Honors Seminar. (4) Lecture, four hours. Preparation: one phrase course. Hobbes' political philosophy, especially Leviathan, with attention to its relevance to contemporary political philosophy. May be concurrently scheduled with course C108. S/U or letter grading.

C209. Descartes. (4) Lecture, four hours; discussion, one hour. Study of works of Descartes, with discussion of issues such as problem of skepticism, foundations of knowledge, existence of God, relation between mind and body, and connection between science and metaphysics. May be concurrently scheduled with course C109. S/U or letter grading.

C210. Spinoza. (4) Lecture, three hours; discussion, one hour (when scheduled). Selected topics in philosophy of Spinoza. May be concurrently scheduled with course C110. S/U or letter grading.

C211. Leibniz. (4) Lecture, three hours. Selected topics in philosophy of Leibniz. May be concurrently scheduled with course C111, in which case there is two-hour bimonthly discussion meeting, plus additional readings and longer term paper for graduate students. S/U or letter grading.

C212. Locke and Berkeley. (4) Lecture, four hours. Preparation: one philosophy course. Study of philosophies of Locke and Berkeley, with emphasis in some cases on one or the other. Limited to 30 students when concurrently scheduled. S/U or letter grading.

C214. Hume. (4) Lecture, three hours; discussion, one hour. Selected topics in philosophy of Hume. May be repeated for credit with consent of instructor. May be concurrently scheduled with course C114. S/U or letter grading.
Group II: Logic, Semantics, and Philosophy of Science

221A. Topics in Set Theory. (4) Lecture, three hours. Requisite: Mathematics M114S. Sets, relations, functions, partial and total orderings; well-orderings. Ordinal and cardinal arithmetic, Tarski definitions of truth, continuum hypothesis, inaccessible numbers. Formalization of set theory: Zermelo/Fraenkel; von Neumann/Gödel theory. May be repeated for credit with consent of instructor. S/U or letter grading.

221B. History of Set Theory. (4) Lecture, four hours. Development of concept of set and axiomatic set theory by examining selected writings of Frege, Cantor, Russell, Zermelo, Gödel, and several others. Origins and significance of certain key ideas, such as set theory as logic, axiomatic set theory as reaction to paradoxes, formal first-order axiomatic set theory as opposed to axiomatic set theory, type theory, hierarchy, ramification and predicativity, proper classes and sets as small classes, and particular Zermelo/Fraenkel axiomatic theory. Emphasis on actual expressed ideas and views of various influential authors. S/U or letter grading.

222A-222B-222C. Gödel Theory. (4) Lecture, three hours; discussion, one hour. Requisite: course 31. Course 222B or 222B is recommended. Selected topics similar to those considered in course 222B, but at a more advanced and technical level. May be repeated for credit with consent of instructor. Concurrently scheduled with course C127A. S/U or letter grading.

222B. Philosophy of Language. (4) Lecture, four hours; discussion, one hour. Requisite: course 31. Recommended: courses 222A and 222B. Selected topics similar to those considered in course 222B, but with focus on contemporary figures. May be repeated for credit with consent of instructor. Concurrently scheduled with course C127B. S/U or letter grading.

222C. Philosophy of Science. (4) Lecture, four hours; discussion, one hour. Requisite: course 31. Recommended: courses 222A and 222B. Selected topics similar to those considered in course 222B, but with focus on contemporary figures. May be repeated for credit with consent of instructor. Concurrently scheduled with course C127C. S/U or letter grading.


224. Philosophy of Physics. (4) Seminar, three hours. Small classes and sets as small classes, and particular Zermelo/Fraenkel axiomatic theory. Emphasis on actual expressed ideas and views of various influential authors. S/U or letter grading.

225. Probability and Inductive Logic. (4) Formerly numbered 225B. Lecture, three hours; discussion, one hour (when scheduled). Requisite: course 31, or background in logic, computer science, statistics, or mathematics. May be repeated for credit with consent of instructor. S/U or letter grading.

226. Topics in Mathematical Logic. (4) Lecture, four hours. Content varies from term to term. May be repeated for credit with consent of instructor. S/U or letter grading.

227. Philosophy of Social Science. (4) Lecture, four hours. Examination of philosophical problems concerning concepts and methods used in social sciences. Topics may include relation between social processes and individual actions, interpretation and explanation in social sciences, determinism and spontaneity in history, interpretation of cultures radically different from one’s own. Students with primary interest and advanced preparation in social sciences are encouraged to enroll. May be repeated for credit with consent of instructor. S/U or letter grading.

228A. Philosophy of Language. (4) Lecture, four hours; discussion, one hour. Enforced requisite: course 31. Recommended: courses 222A and 222B. Selected topics similar to those considered in course 222B, but with focus on contemporary figures. May be repeated for credit with consent of instructor. Concurrently scheduled with course C127B. S/U or letter grading.

228B. Philosophy of Language. (4) Lecture, four hours; discussion, one hour. Requisite: course 31. Recommended: courses 222A and 222B. Selected topics similar to those considered in course 222B, but with focus on contemporary figures. May be repeated for credit with consent of instructor. Concurrently scheduled with course C127C. S/U or letter grading.

229. Seminar: Critical Thinking. (4) Seminar, three hours. Selected topics in history, theory, and pedagogy of critical thinking. May be repeated for credit with consent of instructor. S/U or letter grading.

230. Seminar: Logic. (4) Seminar, four hours. May be repeated for credit with consent of instructor. S/U or letter grading.

231. Seminar: Intensional Logic. (4) Seminar, four hours. Topics may include logic of sense and denotation, modal logic, logic of demonstratives, epistemic logic, intensional logic of Principa Mathematica, possible worlds semantics. May be repeated for credit with consent of instructor. S/U or letter grading.

232. Philosophy of Science. (4) Seminar, three hours. Selected topics in philosophy of science. May be repeated for credit with consent of instructor. S/U or letter grading.

233. Seminar: Philosophy of Physics. (4) Seminar, four hours. May be repeated for credit with consent of instructor. S/U or letter grading.

234. Topics in Philosophy of Science. (4) Seminar, three hours. One or more selected topics in philosophy of science. May be repeated for credit with consent of instructor. Not used to satisfy special area requirement. S/U or letter grading.

235. Philosophy of Mathematics. (4) Seminar, three hours. Selected topics in philosophy of mathematics. May be repeated for credit with consent of instructor. S/U or letter grading.

Group III: Ethics and Value Theory

241. Topics in Political Philosophy. (4) Seminar, four hours. Topics may include logic of sense and denotation, modal logic, logic of demonstratives, epistemic logic, intensional logic of Principia Mathematica, possible worlds semantics. May be repeated for credit with consent of instructor. S/U or letter grading.

242. Topics in Value Theory: Rationality and Action. (4) Seminar, three hours. Selected topics on normative issues in practical rationality or philosophy of action. Topics may include moral and practical dilemmas, nature of reasons for action, rationality of morality and prudence, weakness of will, freedom of will, and decision theory. May be repeated for credit with consent of instructor. S/U or letter grading.

244. Topics in Value Theory: Rationality and Action. (4) Seminar, three hours. Selected topics on normative issues in practical rationality or philosophy of action. Topics may include moral and practical dilemmas, nature of reasons for action, rationality of morality and prudence, weakness of will, freedom of will, and decision theory. May be repeated for credit with consent of instructor. S/U or letter grading.

257. Philosophy Legal Theory. (1 to 8) Seminar, two hours. Course M257A is enforced. Selected topics in philosophy of law. May be repeated for credit with consent of instructor. S/U or letter grading.

257A-257B. Philosophy Legal Theory. (1 to 8) Same as Law M254. Seminar, two hours. Course M257A is enforced. Selected topics in philosophy of law. May be repeated for credit with consent of instructor. In Progress (M257A) and S/U or letter (257B) grading.

Contemporary Philosophy of Law. (4) Seminar, three hours. Limited to graduate students. Recent contributions to theoretical literature on contract law.
Possible topics include purpose or function of contract law, relationship of contracts to promises, whether fault should play larger (or smaller) role in contract law, remedial approaches to breach including larger role for unjust enrichment, and contract law’s treatment of fraud and deception. Readings from legal and philosophical literature. S/U or letter grading.

259. Philosophical Research in Ethics and Value Theory. (G) (4) Seminar, two hours. Preparation: completion of proposition requirement. Presentation of ongoing research by graduate students. Participants make presentations, analyze and discuss presentations of others, and read and discuss philosophical texts related to presentations. Must be taken for 4 units in quarters in which students present their own research. May be repeated for credit with consent of instructor. S/U or letter grading.

Group IV: Metaphysics and Epistemology

270. Epistemology of Science. (4) Seminar, three hours. Selected philosophical topics at intersection of epistemology and philosophy of science including scientific knowledge, inferences to best explanation, understanding, cognitive attitudes in science, probabilistic reasoning, and social epistemology of science. May be repeated for credit with consent of instructor. S/U or letter grading.

271. Seminar: Topics in Metaphysics and Epistemology. (4) Seminar, three hours. May be repeated for credit with consent of instructor. S/U or letter grading.

272. Topics in Philosophy of Mind and Language. (4) Seminar, three hours. One or more selected topics in philosophy of mind and/or language. May be repeated for credit with consent of instructor. May not be used to satisfy special area requirement. S/U or letter grading.

275. Human Action. (4) Preparation: two upper-division philosophy courses. Examination of theories, concepts, and problems concerning human actions. Topics may include analysis of intentional actions; determinism and freedom; nature of explanations of intentional actions. May be repeated for credit with consent of instructor.

280. 20th-Century Continental Philosophy. (4) Seminar, three hours. Selected topics in 20th-century continental European philosophy. May be repeated for credit with consent of instructor. S/U or letter grading.

281. Seminar: Philosophy of Mind. (4) Seminar, three hours. May be repeated for credit with consent of instructor. S/U or letter grading.

282. Seminar: Metaphysics. (4) Seminar, three hours. May be repeated for credit with consent of instructor. S/U or letter grading.

283. Seminar: Theory of Knowledge. (4) Seminar, three hours. Preparation: selected topics in theory of knowledge. May be repeated for credit with consent of instructor. S/U or letter grading.

284. Seminar: Philosophy of Perception. (4) Seminar, three hours. May be repeated for credit with consent of instructor. S/U or letter grading.

285. Philosophy of Psychoanalysis. (4) Seminar, three hours. Examination of topics such as nature and validity of psychoanalytic explanations and interpretations, psychoanalysis and language, metapsychological concepts such as the unconscious, ego, id, super-ego, defense mechanisms, and psychoanalytic conception of human nature. S/U or letter grading.

286. Philosophy of Psychology. (4) Seminar, four hours. Relevance of computer simulation to accounts of thinking and meaning; relations between semantical theory and learning theory; psychological aspects of theory of syntax; behaviorism, functionalism, and alternatives; physiology and psychology. S/U or letter grading.

287. Seminar: Philosophy of Language. (4) Seminar, three hours. May be repeated for credit with consent of instructor. S/U or letter grading.

288. Seminar: Wittgenstein. (4) Seminar, three hours. May be repeated for credit with consent of instructor. S/U or letter grading.

289. Seminar: Philosophy of Religion. (4) Seminar, four hours. May be repeated for credit with consent of instructor. S/U or letter grading.

Special Studies

290. Workshop: Philosophy of Language. (2 or 4) Seminar, two hours. Ongoing discussion of current issues in philosophy of language based on contemporary texts and current research. Presentations of ideas by attending faculty and graduate students with open discussion. May be repeated for credit with consent of instructor. S/U grading.

291. Workshop: Philosophy of Mathematics. (4) Seminar, three hours. Ongoing discussion of current issues in philosophy of mathematics based on contemporary texts and current research. Presentations of ideas by attending faculty and graduate students with open discussion. May be repeated for credit with consent of instructor. S/U or letter grading.

292. Philosophical Research in History of Philosophy. (2 to 4) Seminar, two hours. Prerequisite: graduate standing or consent of instructor. Ongoing discussion of current issues in history of philosophy based on contemporary texts and current research. Presentations of ideas by attending faculty and graduate students with open discussion. May be repeated for credit with consent of instructor. S/U grading.

299. Seminar: Philosophical Research. (4) Seminar, three hours. Preparation: advancement to candidacy. Presentation of ongoing research by graduate students or faculty members. Participants make presentations, analyze and discuss presentations of others, and read and discuss philosophical texts related to presentations. May be repeated for credit with consent of instructor. S/U grading.

400. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

406. Teaching College Philosophy. (2 to 4) Seminar, to be arranged. Seminars, workshops, and apprentice teaching. Selected topics, including evaluation scales, various teaching strategies and their effects, and other topics in college teaching. May be repeated for credit. S/U grading.

501. Cooperative Program. (2 to 8) Preparation: consent of UCLA graduate adviser and department chair and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.

596. Directed Individual Studies. (2 to 12) Tutorial, to be arranged. Properly qualified graduate students who wish to pursue one problem through reading or advanced study may do so if their proposed project is acceptable to one staff member. May be repeated for credit. S/U or letter grading.

575. Directed Studies for Graduate Examinations. (2 to 4) Tutorial, to be arranged. Preparation for MA comprehensive examination or PhD oral qualifying examinations. S/U grading.

599. Research for PhD Dissertation. (2 to 12) Tutorial, to be arranged. Preparation: advancement to PhD candidacy. May be repeated for credit. S/U or letter grading.
Since the time of the ancient Greeks, a natural affinity has existed between astronomy and physics, and the intellectual development of the two disciplines has often proceeded synergistically. Newton’s discovery of the laws of mechanics and universal gravitation not only explained motion on Earth, but brought the heavens and Earth into a single quantitative framework in which both are governed by the same laws. The revolutionary discoveries of twentieth-century physics—quantum mechanics and nuclear physics—were rapidly adopted by astronomers to interpret the spectroscopic observations of the stars and to construct accurate models of stellar structure. Einstein’s general theory of relativity predicted the expansion of the universe and that most awesome compaction of matter—the black hole.

Today astronomers study the accretion of matter onto supermassive black holes in quasars and search the most distant regions of the universe to learn about the exotic physical conditions that existed when the universe’s expansion was only fractions of a second old. By measuring the gravitational interactions on distance scales from galaxies to the vast superclusters of galaxies, astronomers have concluded that most of the universe’s matter is dark or nonluminous; physicists have speculated that this dark matter may consist of yet-undiscovered exotic particles that are predicted by the most advanced theories of elementary particle physics.

Department of Physics and Astronomy faculty members and students are able to study the universe in the holistic manner that is demanded by the breadth of these two disciplines.

### Undergraduate Study

#### Astronomy Courses

Astronomy 3 is the fundamental one-term course for students who do not major in physical sciences and should be taken in the first or second year.

Astronomy 4, 5, and 6 develop the topics covered in course 3 to somewhat greater depths but are still aimed at nonscience majors. Course 4 discusses stellar and supermassive black holes; course 5 concentrates on the problem of life in the universe; course 6 discusses the structure and evolution of the universe.

Astronomy 81, 115, and 117 are general survey courses recommended for science majors in their second year. They systematically introduce astrophysics and require a good background in physics and mathematics (at least two terms of the Physics 1 series and two terms of the Mathematics 31 and 32 series).

Students of junior and senior standing in physics or related sciences are invited to select any of these courses: Astronomy 127, 140, 141, 142, 143, 144, 145, 146, 180.

#### Physics Courses

Students who wish to use physics to satisfy part of the general education requirements in the physical sciences and who have no mathematics background beyond the high school mathematics required for admission to UCLA may take Physics 10.

Physics 1A, 1B, and 1C, or 1AH, 1BH, and 1CH form sequences of courses in general physics for majors in Physics.

The department takes into account prior preparation in physics. If students feel their background would permit acceleration, they may be exempted from one course in the 1A, 1B, 1C sequence by taking the final examination with a class at the end of any term. This serves as a placement examination. A satisfactory score on the College Board Advanced Placement Physics C Mechanics Test may also serve as a placement examination, but placement is not automatic. Students should discuss such possibilities with their departmental adviser.

Physics 5A, 5B, 5C form a one-year sequence of courses in basic physics for students in the biological and health sciences. Any two or more courses from Physics 1A, 1AH, and 5A are limited to a total of 6 units of credit.

### Undergraduate Majors

#### Astrophysics BS

**Learning Outcomes**

The Astrophysics major has the following learning outcomes:

- Ability to apply knowledge of classical mechanics, electromagnetism, quantum mechanics, and thermal physics to understand and analyze a broad variety of physical phenomena
- Application and improvement of proficiency in mathematics skills in calculus, differential equations, and linear algebra
- Understanding and analysis of phenomena in astronomy and astrophysics including planets, stars, galaxies, and cosmology
- Ability to make accurate and precise physical measurements using modern laboratory instruments and computerized data acquisition
- Ability to critically analyze and interpret data in order to draw valid scientific conclusions
- Ability to present clear written and oral accounts of scientific results
- Scientific, mathematical, computing, and laboratory skills that enable pursuit of career objectives in graduate or professional schools, in a teaching career, or in a scientific career in government or industry

**Entry to the Major**

**Transfer Students**

Transfer applicants to the Astrophysics major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two astrophysics courses, two years of calculus, one and one half years of calculus-based physics with laboratory for majors, and one programming course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.
Requirements

Preparation for the Major

Required: Astronomy 81; Physics 1A or 1AH, 1B or 1BH, 1C or 1CH, 4AL, 4BL, 17, 32; Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B; and one course from Computer Science 30, 31, or Program in Computing 10A, or demonstrated ability to program.

Recommended: Chemistry and Biochemistry 20A.

The Major


Honors Program

In addition to completing all courses required for the major, students must complete two terms of Astronomy 199.

Policies

The Major

Each course taken to fulfill any of the requirements for the major must be taken for a letter grade.

Honors Program

Senior majors in Astrophysics with a 3.5 grade-point average in all astronomy, mathematics, and physics courses are eligible for the honors program. To receive honors and highest honors at graduation, the grade-point average must remain at 3.6 and 3.75 or better, respectively.

Physicists BS

The Physics BS major should be pursued if students intend to continue toward the PhD in Physics.

A detailed brochure on the major is available from the Undergraduate Office, 1-707A Physics and Astronomy Building.

Learning Outcomes

The Physics major has the following learning outcomes:

- Ability to apply knowledge of classical mechanics, electromagnetism, quantum mechanics, and thermal physics to understand and analyze a broad variety of physical phenomena
- Application and improvement of proficiency in mathematics skills in calculus, differential equations, and linear algebra
- Ability to understand and analyze basic phenomena in biological science
- Ability to make accurate and precise physical measurements using modern laboratory instruments and computerized data acquisition
- Ability to critically analyze and interpret data in order to draw valid scientific conclusions
- Ability to present clear written and oral accounts of scientific results
- Scientific, mathematical, computing, and laboratory skills that enable pursuit of career objectives in graduate or professional schools, in a teaching career, or in a scientific career in government or industry

Entry to the Major

Transfer Students

Transfer applicants to the Biophysics major with 90 or more units must have completed the following introductory courses prior to admission to UCLA: two years of calculus, one and one half years of calculus-based physics with laboratory for majors, one year of general biology with laboratory for majors, and one year of general chemistry with laboratory for majors.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Physics 1A or 1AH, 1B or 1BH, 1C or 1CH, 4AL, 4BL, 17, 32; Chemistry and Biochemistry 20A, 20B; Life Sciences 7A; Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B. Recommended: Physics 18L.

The Major

Required: Physics 105A, 110A, 110B, 112, 115A, 115B, M180G, C187A, C187B; three additional upper-division elective courses selected from one group or among the three groups.


Group C (Molecular and Cellular Biophysics): Chemistry 153A, 153L, Molecular Cell, and Developmental Biology 100 or 165A.

Honors Program

In addition to completing all courses required for the major, students must complete two 4-unit terms of Physics 199.

Policies

The Major

Students will be advised when a course has additional lower-division requirements.

Each course taken to fulfill any of the requirements for the major must be taken for a letter grade.

An overall 2.0 grade-point average in all upper-division courses is required.

Honors Program

Senior majors in Biophysics with a 3.5 grade-point average in upper-division major courses are eligible for the honors program in biophysics. To receive honors and highest honors at graduation, the grade-point average must remain at 3.5 and 3.75 or better, respectively.

Biophysics BS

The goal of the Biophysics major is to provide students with an undergraduate background that will enable them to enter competitive graduate programs in biophysics, molecular biology, and biological physics. It also aims at providing students with a solid, quantitative background for careers in the medical field of the future as well as in molecular biology, neuroscience, and biological physics which are all emerging as important and rapidly developing areas of physics. The major is designed to provide students with a flexible scientific/technical training that allows them to explore these different career paths and tailor their class work to their scientific interests. The program aims at providing an opportunity to the students to become scientific leaders, bringing the analytic and experimental techniques of different fields to bear on the fascinating world of the physics of living systems.

Learning Outcomes

The Biophysics major has the following learning outcomes:

- Ability to apply knowledge of classical mechanics, electromagnetism, quantum mechanics, and thermal physics to understand and analyze a broad variety of physical phenomena
- Application and improvement of proficiency in mathematics skills in calculus, differential equations, and linear algebra
- Ability to understand and analyze basic phenomena in biological science
- Ability to make accurate and precise physical measurements using modern laboratory instruments and computerized data acquisition
- Ability to critically analyze and interpret data in order to draw valid scientific conclusions
- Ability to present clear written and oral accounts of scientific results
- Scientific, mathematical, computing, and laboratory skills that enable pursuit of career objectives in graduate or professional schools, in a teaching career, or in a scientific career in government or industry

Entry to the Major

Transfer Students

Transfer applicants to the Biophysics major with 90 or more units must have completed the following introductory courses prior to admission to UCLA: two years of calculus, one and one half years of calculus-based physics with laboratory for majors, one year of general biology with laboratory for majors, one year of general chemistry with laboratory for majors.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Physics 1A or 1AH, 1B or 1BH, 1C or 1CH, 4AL, 4BL, 17, 32; Chemistry and Biochemistry 20A, 20B; Life Sciences 7A; Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B. Recommended: Physics 18L.

The Major

Required: Physics 105A, 110A, 110B, 112, 115A, 115B, M180G, C187A, C187B; three additional upper-division elective courses selected from one group or among the three groups.


Group C (Molecular and Cellular Biophysics): Chemistry 153A, 153L, Molecular Cell, and Developmental Biology 100 or 165A.

Honors Program

In addition to completing all courses required for the major, students must complete two 4-unit terms of Physics 199.

Policies

The Major

Students will be advised when a course has additional lower-division requirements.

Each course taken to fulfill any of the requirements for the major must be taken for a letter grade.

An overall 2.0 grade-point average in all upper-division courses is required.

Honors Program

Senior majors in Biophysics with a 3.5 grade-point average in upper-division major courses are eligible for the honors program in biophysics. To receive honors and highest honors at graduation, the grade-point average must remain at 3.5 and 3.75 or better, respectively.
The Major

Required: Physics 105A, 105B, 110A, 110B, 112, 115A, 115B, 115C. The remainder of the course of study consists of a plan, to be worked out by students in consultation with their designated departmental adviser, that details which courses they take to complete the degree. There are four overall requirements: (1) the plan must be worked out five terms before students expect to graduate; (2) there must be one course in the Physics 170 series and one course in the Physics 180 series, or two courses in the Physics 180 series; (3) there must be three additional upper-division courses in the plan, preferably selected from Physics 108, 114, 117, M122, 123, 124, 126, 127, 128, 132, 140A, 140B, 144, 150, C186, C187A; (4) there must be written rationale for the plan. Except for the Physics 180 laboratories, the courses need not be in the Physics and Astronomy Department. However, it is expected that the courses fit into a coherent structure. It is important that the structure and rationale be thought out carefully, as the plan must be endorsed by the designated adviser and be approved by the departmental academic affairs committee. Pre-approved plans of study are available from the undergraduate advisers.

Students preparing for graduate school should take additional courses in physics and mathematics. Physics 108, 114, M122, 123, 124, 126, 132, 140A, and 140B are recommended.

Honors Programs

In addition to completing all courses required for the major, students must complete one of the two honors program options.

Research-based: students must complete two 4-unit terms of Physics 199.

Course-based: students must take 4 units of Physics 197—an in-depth individual study of a physics topic of interest to the student under the guidance of a faculty member and resulting in a written report—and are also required to take Mathematics 115A and two courses selected from Mathematics 120A, 120B, Physics 221A, or 221B.

Policies

The Major

Each course taken to fulfill any of the requirements for the major must be taken for a letter grade.

A C average is required in all courses taken to satisfy the major requirements.

Honors Programs

Senior majors in Physics with a 3.5 grade-point average in upper-division mathematics and physics courses are eligible for the honors program in physics.

Physics BA

The Physics BA major is intended to provide students with a strong background in physics, yet allow students flexibility to study other fields as well. It should be of particular interest to students who want to double major or who want to teach science. Students who intend to continue work toward the PhD in Physics are advised to pursue the Physics BS.

A detailed brochure on the major is available from the Undergraduate Office, 1-707A Physics and Astronomy Building.

Learning Outcomes

The Physics major has the following learning outcomes:

- Ability to apply knowledge of classical mechanics, electromagnetism, quantum mechanics, and thermal physics to understand and analyze a broad variety of physical phenomena
- Application and improvement of proficiency in mathematics skills in calculus, differential equations, and linear algebra
- Ability to critically analyze and interpret data in order to draw valid scientific conclusions
- Ability to present clear written and oral accounts of scientific results
- Scientific, mathematical, computing, and laboratory skills that enable pursuit of career objectives in graduate or professional schools, in a teaching career, or in a scientific career in government or industry

Entry to the Major

Transfer Students

Transfer applicants to the Physics BA major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of calculus, one and one half years of calculus-based physics with laboratory for majors, and one general chemistry course for majors.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Physics 1A or 1AH, 1B or 1BH, 1C or 1CH, 4AL, 4BL, 17, 32; Chemistry and Biochemistry 20A; Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B; Program in Computing 10A or Computer Science 30 or 31.

The Major


Policies

Each course taken to fulfill any of the requirements for the major must be taken for a letter grade.

A C average in the upper-division physics courses is required.

Graduate Majors

Astronomy and Astrophysics MAT

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Astronomy and Astrophysics MS, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Master of Quantum Science and Technology

Requirements

Physics MAT

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Physics MS, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

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Astronomy

Lower-Division Courses

3. Nature of the Universe. (5) Lecture, three hours; laboratory, two hours. Not open to students with credit for or currently enrolled in course 81 or 82. No special mathematical preparation required beyond that necessary for admission to UCLA in freshman standing. Course for general UCLA students, normally not intending to major in physical sciences. Introduction to the vast range of cosmic phenomena including planets in our solar system, stars, supernova explosions, black holes, galaxies, and universe as whole. P/NP or letter grading.

7. Black Holes and Cosmic Catastrophes. (4) Lecture, three hours; discussion, one hour. No mathematical preparation required beyond that necessary for admission to UCLA in freshman standing. Course for general UCLA students, normally not intending to major in physical sciences. Introduction to exotic cosmic phenomena, and their bizarre effects on fabric of space and time. Some black holes form in violent events that terminate lives of stars, while formation of much more massive black holes at centers of galaxies is still mysterious. Covers cosmic catastrophes including stellar explosions and mergers, supernovae, gamma-ray bursts, and gravitational waves. Discussion of depiction of black holes in popular culture. P/NP or letter grading.

5. Life in the Universe. (4) Lecture, three hours; discussion, one hour. No special preparation required. Topics include formation and evolution of Earth and Sun, life on Earth, origin and evolution of life, solar system, habitability, extra-solar planets, search for intelligent life in universe, and interstellar travel. Draws primarily from astronomy and biology but includes some chemistry, geology, and physics. P/NP or letter grading.

6. Cosmology: Origin, History, and Fate of the Universe. (4) Lecture, three hours; discussion, one hour. No special mathematical preparation required beyond that necessary for admission to UCLA in freshman standing. Course for general UCLA students, normally not intended to majors in physical sciences. Cosmology is study of large-scale properties of universe. Consideration of origin, fate, composition, and shape of universe, and as it bland and ends, and its structure seen in universe today. Addresses these questions through study of Big Bang, dark matter, dark energy, expansion of universe, and other cosmic phenomena. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members, graduate students, or experts, and illustrating many paths of discovery at UCLA. P/NP grading.

81. Fundamentals of Astrophysics. (4) Lecture, three hours; discussion, one hour. Requisites: Mathematics 31A, 31B, and Physics 1A or 1AH. Open to qualified sophomores and upper-division students. Students develop understanding of fundamental physical concepts such as gravity and radiation, and how these concepts connect to stars and planets. Overview of stars and stellar evolution, and tools and methods important to astrophysics such as telescopes and spectroscopy. P/NP or letter grading.

82. Astrophysics II: Stellar Evolution, Galaxies, and Cosmology. (4) Lecture, three hours; discussion, one hour. Requisites: Mathematics 31A, 31B, and Physics 1A or 1AH. Recommended: course 81, Physics 1B and 1C (or 1BH and 1CH). Open to qualified sophomore and upper-division students. Basic principles of stellar structure and evolution, birth and death of stars and planets, white dwarfs, novae, supernovae, neutron stars, and black holes. Pulsars and galactic X-ray sources. Milky Way galaxy and interstellar medium. Extragalactic astronomy, galaxy clusters, quasars. Introduction to cosmology: Hubble law, thermal history of Big Bang, and earliest moments of universe. P/NP or letter grading.

88A. Lower-Division Seminar: Cosmic Evolution. (2) Seminar, two hours. Limited to freshmen. Varied astronomical and physical processes of evolution; discussion of topics. Evolution of astrophysical and galactic system. Mechanism development of cosmic evolution has transformed universe from fiery origin at Big Bang into abode for intelligent life. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to students who earned honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

115. Introduction to Galactic Astronomy. (4) Lecture, three hours; discussion, one hour. Requisites: course 81, Mathematics 31A, 31B, and Physics 1A or 1AH. Open to qualified sophomores and upper-division students. Introduction of principles important for understanding components and evolution of Milky Way galaxy. Topics include interstellar medium, star and planet formation, examination of basic physical processes governing compact stellar remnants such as white dwarfs, neutron stars, and black holes. Overview of structure and properties of Milky Way galaxy. P/NP or letter grading.

117. Introduction to Extragalactic Astrophysics. (4) Lecture, three hours; discussion, one hour. Requisites: courses 81, 115, Mathematics 31A, 31B, and Physics 1A or 1AH. Open to qualified sophomore and upper-division students. Examination of evolution of universe from Big Bang to structure formation and galaxy evolution. Development of physics behind our modern understanding of universe on large scales. Includes current understanding of dark energy. Introduction of energetic phenomena such as active galactic nuclei and quasars. P/NP or letter grading.

127. Stars from Birth to Death. (4) Lecture, three hours; discussion, one hour. Requisites: courses 81, 115, 117, in-depth exploration into lives and deaths of stars. Covers production of energy and physics of stellar interiors and atmospheres. Topics include star formation, variability and evolution. Includes significant exploration of nuclear physics and advanced stages of fusion. Covers properties and formation of stellar remnants from white dwarfs to black holes. P/NP or letter grading.

142. Data and Computation in Astrophysics. (4) Lecture, three hours; discussion, one hour. Requisites: courses 81, 115, 117, 127. Designed as adjunct to upper-division lecture course. Computational techniques are presented. P/NP or letter grading.

145. High-Energy Astrophysics. (4) Lecture, three hours; discussion, one hour. Requisites: Physics 17, 115A, Mathematics 31A, 31B. Design for upper-division Astrophysics and Physics majors. Focus on detection and characterization of planets orbiting other stars, and on physical processes that determine their formation, structure, and evolution. Topics include broader astrophysical context of planet formation and how observations of solar system properties can be incorporated into understanding of planetary systems. P/NP or letter grading.

146. Astronomical Instrumentation. (4) Lecture, three hours; laboratory, four hours. Designed for juniors/seniors in astrophysics, physics, or related field. Topics include statistical methods in astrophysics, instrumentation, data reduction, and optics. Laboratory experiments include observation of sun, stars, and other astronomical objects. Emphasis is on use of computers for making measurements from two-dimensional astronomical images. P/NP or letter grading.

148. Data and Computation in Astrophysics. (4) Lecture, three hours; discussion, one hour. Requisites: courses 81, 115, 117. Designed for upper-division Astrophysics and Physics majors. Focus on observational techniques in astrophysics. Topics include optical and infrared techniques, including telescope design, charge-coupled devices, and infrared detectors. Also include adaptive optics systems and high contrast detection methods. Covers all optical/near-infrared and far-infrared windows from near-infrared to far-infrared. Other topics include neutrino, dark matter, and gravitational wave detection. P/NP or letter grading.

180. Astrophysics Laboratory. (4) Lecture, two hours; laboratory, four hours. Designed for juniors/seniors in astrophysics, physics, or related field. Topics include statistical methods in astrophysics, instrumentation, data reduction, and optics. Laboratory experiments include observation of sun, stars, and other astronomical objects. Emphasis is on use of computers for making measurements from two-dimensional astronomical images. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

276. Instrumentation and Observational Techniques. (4) Lecture, three hours; discussion, one hour. Recommended for students desiring such coverage. P/NP or letter grading.

277A-277B. Astronomy Research Project. (6-4) Tutorial, to be arranged. Designed for second-year graduate astronomy students. Two-term research project planned; consists of faculty advising you on suitable research topic in astronomy or astrophysics, culminating in written report at end of second term. S/U (277A) and letter (277B) grading.

278. Special Topics in Astronomy. (2 or 4) Seminar, to be arranged. Informal course with lecture/seminar format, focusing on one of set of specific topics in astronomy. S/U (2-unit course) or letter (4-unit course) grading.

279. Seminar: Current Astronomical Research. (2) Seminar, one hour. Astronomy and astrophysics colloquium with lectures on current research by local and visiting researchers. S/U grading.


281. Quantum Mechanics for Astrophysics. (4) Lecture, four hours. Designed for departmental graduate students. Quantum mechanical topics in areas of interest for astrophysics applications. Hydrogen atom, radiative transitions, atomic forms, molecular spectroscopy including electronic, vibrational, and rotational transition, nuclear reaction theory. Letter grading.


283. Numerical and Statistical Methods. (4) Lecture, three hours. Topics selected by instructor in mathematical, numerical, and statistical methods of relevance to modern astrophysical research. Topics include Fourier transforms, filtering, and power spectra, numerical algorithms, N-body codes, maximum likelihood, Bayesian inference, and error estimation. Letter grading.

284. Order of Magnitude Astrophysics. (4) Lecture, three hours. Practice in real-time problem solving covering all fields of astrophysics. Topics selected by instructor. Students work together and individually to solve problems on blackboard using basic physics and order of magnitude estimations. Letter grading.

M285. Origin and Evolution of Solar System. (4) (Same as Earth, Planetary, and Space Sciences M285.) Lecture, four hours. Dynamical problems of solar system; chemical evidences from geochemistry, meteorites, and solar atmosphere; nucleosynthesis; origin of solar system; evolution, and termination; solar nebula, hydromagnetic processes, formation of planets and satellite systems. Content varies from year to year. May be repeated for credit. S/U grading.


289. Research Topics in Astronomy. (2) Discussion, two hours. Advanced study and analysis of current topics in astronomy. Discussion of current research and literature in research specialty of faculty member teaching course. May be repeated for credit. S/U grading.


290b. Directed Study and Research at Lick Observatory. (4 to 12) Tutorial, to be arranged. Designed for graduate students who require observational experience, as well as those working on observational problems for their thesis. May be repeated at discretion of department. S/U grading.

290d. Research Group Seminars: Astrophysics. (1) Seminar, one hour. Graduate students who require observational experience, as well as those working on observational problems for their thesis. May be repeated at discretion of department. S/U grading.

290e. Tutorials in Physics and Astronomy. (1 to 4) Tutorial, to be arranged. May be repeated at discretion of department. S/U grading.


1CH. Physics for Scientists and Engineers: Electro-dynamics, Optics, and Special Relativity (Honors). (5) Lecture/demonstration, four hours; discussion, one hour. Enforced requisite: courses 1A or 1AH, 1BH or 1B, Mathematics 32A, 32B. Enforced corequisite: Mathematics 33A. Recommended corequisite: Mathematics 33B. Enriched preparation for upper-division physics courses. Same material as course 1C but in greater depth, recommended for Physics majors and other students desiring such coverage. P/NP or letter grading.

4AL. Physics Laboratory for Scientists and Engineers: Mechanics (2) Laboratory, four hours. Enforced requisite: course 1A or 1AH. Enforced corequisite: course 1B or 1BH. Computerized measurements of uniform and accelerated motion, including oscillations. Analysis of data and comparison of results to predictions, including least-squares fitting. Conception, execution, and presentation of creative projects involving motion. Letter grading.

4BL. Physics Laboratory for Scientists and Engineers: Electricity and Magnetism (2) Laboratory, four hours. Enforced requisite: courses 1A or 1AH, 1B or 1BH. Enforced corequisite: course 1C or 1CH. Sound waves and electric circuits, taken by digital oscilloscope and computer control. Fourier transforms. Geometrical and physical optics. Conception, execution, and presentation of creative projects involving sound waves or electric circuits. Letter grading.

5A. Physics for Science Majors: Mechanics and Energy. (5) Lecture, three hours; discussion, one hour; laboratory, two hours. Requisites: Life Sciences 33A, 33B, or Mathematics 3A, 3B, 3C (SC may be taken concurrently). Statics and dynamics of motion, energy, including thermal energy, with applications to biological and biochemical systems. P/NP or letter grading.

5B. Physics for Life Sciences Majors: Thermodynamics, Waves, Light, and Optics. (5) Lecture, three hours; discussion, one hour; laboratory, two hours. Requisite: course 5A. Thermal properties of matter, free energy, fluids, ideal gas, diffusion, oscillations, waves, sounds, light, and optics, with applications to biological and biochemical systems. P/NP or letter grading.

5C. Physics for Life Sciences Majors: Electricity, Magnetism, and Modern Physics. (5) Lecture, three hours; discussion, one hour; laboratory, two hours. Requisite: course 5A. Electrostatics in vacuum and in water. Electricity, circuits, magnetism, quantum, atomic and nuclear physics, radioactivity, with applications to biological and biochemical systems. P/NP or letter grading.

10. Physics. (4) Lecture, three hours; discussion, one hour. Not open for credit to students with credit for course 1A or 1AH, 1B or 1BH. Special mathematical preparation beyond that necessary for admission to University in freshman standing not required. Topics include planetary motion, Newton laws, gravitation, electricity and magnetism, wave motion, light, sound, and heat, relativity, quantum mechanics, atoms, and subatomic particles. As time permits, development of physical ideas placed in cultural and historical perspective. P/NP or letter grading.


12. Physics of Sustainable Energy. (4) Lecture, three hours; discussion, one hour. Special mathematical preparation beyond that necessary for admission to UCLA in freshman standing not required. Discussion of physics underpinnings of energy sources and consumption, with emphasis on renewables. Global view of energy and engineering from points of view of physical processes. Ways in which energy is used in everyday life (transportation, heating, cooling), and ways in which it is produced, covering all common and speculative sources of energy from fossil fuels to solar, wind, nuclear, and fusion. Fundamental physical limitations of each technology to master concepts such as efficiency of thermodynamic cycles and fossil fuel and nuclear reactions. Quantitative estimation of amount of energy students use in their daily lives and what physical processes could produce it. P/NP or letter grading.

17. Modern Physics. (4) Lecture, three hours; discussion, one hour. Requisites: courses 1A, 1B, and 1C (or 1AH, 1BH, and 1CH). Corequisite: course 2. Pho- tones, black-body radiation, photoelectric effect, unc- ertainties in quantum mechanics, hydrogen atom, and selected topics in atomic, solid-state, nuclear, and particle physics. P/NP or letter grading.

18. Modern Physics Laboratory. (1) Lecture, one hour; laboratory, two hours. Requisite: courses 1A, 1B, 1C (or 1A, 1B, and 1C). AL, 4BL, 17. Ex- periments on radioactivity, scattering, Planck con- stant, superconductivity, superfluidity. Letter grading.

20. Flat Lux Freshman Seminars. (1) Seminar, three hours; one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their area of expertise and illuminating many paths of discovery at UCLA. P/NP grading.


105B. Analytic Mechanics. (4) Lecture, three hours; discussion, one hour. Requisite: course 105A. Con- served quantities, collisions and scattering, special relativity, non-inertial reference frames, rigid bodies, coupled oscillators, and normal modes. P/NP or letter grading.

108. Optical Physics. (4) Lecture, three hours; discus- sion, one hour. Requisites: courses 1A, 1B, and 1C (or 1AH, 1BH, and 1CH), 110B. Interaction of light with matter; dispersion theory, oscillator strength, linear and nonlinear optical processes. Kirch- hoff formulation of diffraction theory, crystal optics, optical rotation, and magnet optical effects. Additional topics of fundamental or current interest. P/NP or letter grading.

110A. Electricity and Magnetism. (4) Lecture, three hours; discussion, one hour. Requisite: course 32. Electrostatics and magnetostatics. P/NP or letter grading.


114. Mechanics of Wave Motion and Sound. (4) Lecture, three hours; discussion, one hour. Requisites: courses 1A, 1B, and 1C (or 1AH, 1BH, and 1CH). 105A, 105B, Mathematics 32B, 33A, 33B. Vibrating systems and wave propagation in gases, liquids, and solids, including elements of hydrodynamics and elas- ticity. Applications in ultrasonics, low-temperature physics, solid-state physics, architectural acoustics. P/NP or letter grading.


118. Electronics for Physical Measurements. (4) Lecture, three hours; laboratory, four hours. Requ- isites: courses 1A, 1B, 1C, 1G, 117, Mathematics 32A, 32B, 33A. Provides students with opportunity to apply basic knowledge of circuit design for purpose of building stand-alone circuits with function relating to physical measurement. Electromagnetic-ori- ented projects include radio-frequency detection and measurement of mechanical resonances of bar, FM transmitter, speed of sound using radio-frequency waves, and construction of pointers, cosmic ray detector. P/NP or letter grading.
neural dynamics, and behavior in example model systems. Discussion of mechanisms of interaction between neural circuits and their role in cognition, learning, and behavior, and development of an understanding context where students learn to write simple codes to quantify neural activity patterns. Concurrently scheduled with course C286. P/NP or letter grading.

C187A. Biological Physics I: Life at Rest. (4) Lecture, three hours; discussion, one hour. Enforced requisites: courses 105A, 110A, 115A, Chemistry 110A, Molecular, Cell, and Developmental Biology 100 (or M140 or 165A). Equilibrium phenomena, Application of basic mathematics, optics, and thermodynamics to biological design; structure of skeleton, scaling of bone and muscle mass, swim bladders, and animal vision. Application of elementary statistical physics, electrostatics, and elasticity to tissues, DNA, and biomembranes. Concurrently scheduled with course C287A. P/NP or letter grading.

C187B. Biological Physics II: Life in Motion. (4) Lecture, three hours; discussion, one hour. Limited to junior/senior Astrophysics, Physics majors. Departmentally sponsored temporary courses such as pilot courses or those taught by visiting faculty members. May be repeated for credit. P/NP or letter grading.


188C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188A. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory inter laboratory component, and begin preparatory syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

190. Research Colloquia in Physics. (2) Seminar, two hours. Designed to bring together students under-taking supervised tutorial research in seminar setting with one or more faculty members to discuss their own work or related work in discipline. Led by one supervising faculty member. May be repeated for credit. P/NP grading.

191. Variable Topics Research Seminars: Physics and Astronomy. (4) Seminar, three hours. Participating research seminar on advanced topics in physics and astronomy. May be repeated for credit. P/NP or letter grading.

192. Undergraduate Practicum in Physics. (2 to 4) Seminar, two hours. Limited to juniors/seniors. Training and supervised practicum for advanced undergraduate students. Students assist in preparation of materials and development of innovative programs with guidance of faculty members. Small course settings. May be repeated for credit. P/NP or letter grading.

192M. Methods and Application of Collaborative Learning Theory in Physical Sciences. (2 to 4) Seminar, two hours. Limited to juniors/seniors. Enforced requisite: course 1A, 1B, 1C, 5A, 5B, 5C, or 131, course 192S (may be taken concurrently), and at least one term of prior experience in same course in which collaborative learning theory is practiced and refined under supervision of instructors. With instructor guidance, students apply pedagogical principles based on current education research, assist with the development of innovative instruction, and receive frequent feedback on their progress. May be repeated four times for credit. Letter grading.

M192S. Introduction to Collaborative Learning Theory and Practice. (1) Seminar, three hours. Limited to juniors/seniors. Students participate in the classroom and conduct preparatory research. Letter grading.

M193. Journal Club Seminars: Physics. (2) Seminar, one hour. Limited to juniors/seniors. Students are linked to speaker-series seminars offered by department on weekly basis. Supplemental reading from literature on speaker’s topic, as well as active participation and discussion to understand what kind of questions modern-day physicists actually ask and how they go about answering them. May be repeated for credit. P/NP grading.

194. Research Group Seminars: Physics and Astronomy. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 192S. (Same as Atmospheric and Oceanic Sciences M192A, Chemistry M192E, Computer Science M192A, Life Sciences M192A, and Mathematics M192A.) Seminar, one hour. Training seminar for undergraduates who are selected for the Undergraduate Research Assistant (URA) program. Exploration of current topics in pedagogy and education research focused on methods of learning and their practical applications in group settings. Students practice communication skills with frequent assessment of and feedback on progress. Letter grading.


196. Research Apprenticeship in Physics. (2 to 4) Tutorial, one hour. Limited to juniors/seniors with overall 3.0 grade-point average. Enforced requisite: course 194. May be repeated for credit. P/NP grading.

197. Individual Studies in Physics. (2 to 4) Tutorial, to be arranged. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

198. Honors Research in Physics. (2 to 4) Tutorial, 12 hours. Limited to juniors/seniors with overall 3.0 grade-point average. Development of honors thesis or comprehensive research project under direct supervision of faculty member. May be repeated for credit. Individual contract required. Letter grading.

199. Directed Research or Senior Project in Physics. (2 to 4) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

210. Modern Physics Research Areas. (2) Review of modern physics research areas, with emphasis on those actively pursued at UCLA. S/U grading.


221A. Quantum Mechanics. (4) Lecture, four hours; discussion, one hour. Fundamentals of quantum mechanics, Hilbert spaces, correspondence principle, quantum dynamics, and rotations and angular momentum. Special topics such as Berry’s phase and related geometric and topological aspects. Letter grading.

221B. Quantum Mechanics. (4) Lecture, four hours; discussion, one hour. Requisite: course 221A. Symmetries and conservation laws, perturbation theory, scattering theory. Special topics such as Berry’s phase and related geometric and topological aspects. Letter grading.
221C. Quantum Mechanics. (4) Lecture, four hours. Requisites: courses 221A, 212B. Quantum theory of radiation, introduction to relativistic quantum mechanics, solutions of many-body theory, and special topics. S/U or letter grading.


228E. Particle Astrophysics: Exploring Earliest and Extreme Universe. (4) Lecture, three and one half hours. Recommended: course 226A. Introduction to high-energy astronomical observation and discussion of latest developments in both experimentation and theory. Special emphasis on unified picture of universe that emerges from particle physics, astronomy, and cosmology. S/U or letter grading.

230A. Quantum Field Theory. (8) Lecture, four hours. Requisite: course 221C or equivalent and knowledge of basic special relativity. Introduction to relativistic quantum field theory starting from first principles. Topics include particle as unitary representations of Poincare group, fields as finite-dimensional representations of Lorentz group, discrete space-time symmetries, quantization of free scalar, spinor, and gauge fields, Casimir effect, classical interacting scalar, spinor, and gauge fields, and LSZ formalism for calculation of S-matrix from quantum field theory correlators. S/U or letter grading.


230D. Quantum Field Theory. (4) Lecture, four hours. Requisites: courses 221A, 221B, 221C. Topics in modern field theory, quantum field theories, and statistical field theories. Topics include gauge fields, solitons, and other topological defects, large N methods, finite temperature field theory, lattice field theory, effective field theory methods and chiral Lagrangians, conformal field theory, and topological aspects of anomalies. S/U or letter grading.

231A. Methods of Mathematical Physics. (4) Lecture, four hours. Widely used mathematical methods and their applications to physics including basic topology, complex analysis, Fourier analysis, elliptic functions, linear differential operators, Green functions, and special functions associated with eigenvalue problems of ordinary and partial differential operators on flat and curved spaces. Letter grading.

231B. Methods of Mathematical Physics. (4) Lecture, four hours. Requisites: courses 221A, 221B, or equivalent. Widely used methods of group theory with applications to physics, including matrix Lie groups and Lie algebras, crystallographic groups, representation theory, group roots, weights, structure of simple Lie algebras, and homogeneous spaces. S/U or letter grading.


232A-232B. Relativity. (4-4) Special and general theories, with applications to elementary particles and astrophysics. S/U grading.

232C. Special Topics in General Relativity. (4) Lecture, four hours. S/U or letter grading.

236. Geometry and Physics. (4) Same as Mathematics M217.) Lecture, three hours. Interdisciplinary course on topics at interface between physical theories and fields. S/U or letter grading.

237A. String Theory. (4) Lecture, four hours. Requisites: courses 221A, 221B, 221C, 230A. Introduction to string theory, which may include anti-de Sitter/conformal field theory (AdS/CFT) correspondence, string dualities, compactifications and connections to quantum information. S/U or letter grading.


243M. Statistical Mechanics of Living Systems from Active Matter to Immune System. (2 to 4) Seminar, four hours. Exploration of how concepts and models from statistical physics can be used to gain quantitative and intuitive understanding of biological phenomena. Introduction to analytical and computational methods for describing stochastic complex systems, with application to problems in mechanics and dynamics of active matter and evolutionary dynamics of immune system. S/U or letter grading.


250. Introduction to Acceleration of Charged Particles. (4) Seminar, four hours. S/U or letter grading.


256. Seminar: Propagation of Waves in Fluids. (2 to 4) Seminar, three hours. S/U or letter grading.

258. Seminar: Spectroscopy. (2 to 4) Seminar, three hours. S/U or letter grading.

259A. Seminar: Nuclear Physics. (2 to 4) Seminar, three hours. S/U or letter grading.

259B. Seminar: Elementary Particle Physics. (2 to 4) Seminar, three hours. S/U or letter grading.


259D. Strobe Seminar Series: Frontiers in Imaging and Microscopy. (2) Seminar, one hour. Discussion with leading figures of frontiers of imaging and microscopy fields, including multi-dimensional electron microscopy at atomic resolution, real-time functional and ultrafast imaging and super-resolution, super-resolution, and super-resolution microscopy. Advanced optical nano-imaging, and integrative approaches and underpinning technologies for different imaging modalities. May be repeated twice for credit. S/U grading.

261M. Machine Learning for Physical Sciences Laboratory. (4) Lecture, two hours; laboratory, four hours. Requisites: courses 1A, 1B, 1C (or 1AH, 1BH, 1CH). Mathematics 32A, 33A, or equivalent. Preparation: some experience in programming using Python. Project-based course designed for students with no previous experience in machine learning to learn about methods and algorithms in machine learning and their application to scientific problems in physical sciences. Development of experience in compilation, analysis, and clearing of data. Machine learning topics include classification, regression, dimensionality reduction, clustering, and kernel methods. Concurrently scheduled with course C170M. S/U or letter grading.
Lec C286. Neurophysics: Brain-Mind Problem. (4) Lec- ture, three hours; discussion, one hour. Requisites: courses 1A, 1B, and 1C, or 5A, 5B, and 5C, or 6A, 6B, and 6C. Chemistry 14A or 20A, Mathematics 3A, 3B, 3C, 33A. How does mind emerge from brain? Provides summary of basic biophysics of neurons, synapses, and plasticity, and introduction to commonly used experimental and theoretical techniques of measuring, quantifying and modeling neural activity, and their respective strengths and weakness and use of them to understand link between neural circuits, their emergent neural dynamics, and behaviors in example model sys- tems. Discussion of mechanisms of interaction be- tween neural circuits and their role in cognition, learning, and sleep. Computer laboratory component where students learn to code simple codes to quanti- fye neural activity patterns. Concurrently scheduled with course C186. S/U or letter grading.


290. Research Tutorial: Plasma Physics. (2 or 4) Three terms required of each graduate student doing research in this field, ordinarily during second or third year. Seminar and discussion by staff and students directed toward problems of current research interest in plasma physics group, both experimental and theoretical. May be repeated for credit. S/U grading.

291. Research Tutorial: Elementary Particle Theory. (2 or 4) Requisite: course 228A. Required of each graduate student doing research in this field, ordinarily during second or third year. Seminar and discussion by staff, postdoctoral fellows, and graduate students. May be repeated for credit. S/U grading.

292. Research Tutorial: Spectroscopy, Low-Tem- perature, and Solid-State Physics. (2 or 4) Required of each graduate student doing research in these fields, ordinarily during second or third year. Seminar and discussion by staff and students on problems of current research interest in spectroscopy, low-temperature, and solid-state physics. May be repeated for credit. S/U grading.

293. Research Tutorial: Current Topics in Physics. (2) Lecture, one hour. Seminar and discussion by staff and students on current topics in physics, both experimen- tal and theoretical topics not limited to one field of physics). Strongly recommended for graduate stu- dents in physics. May be repeated for credit. S/U grading.

294. Research Tutorial: Accelerator Physics. (2 or 4) Lecture, one hour; discussion, two hours. Required of each graduate student doing research in this field. Seminar and discussion by faculty, postdoctoral fel- lows, and graduate students on topics of current interest in accelerators physics. May be repeated for credit. S/U grading.

295. Research Tutorial: Soft Matter/Biological Phys- ics. (2) Tutorial, one hour. Required of each graduate student doing research in this field. One-hour presen- tation by student on their ongoing research or on a topic agreed upon. Students answer critical questions and participate in critical examination of research. May be repeated for credit. S/U grading.

296. Research Topics in Physics. (2) Advanced study and analysis of current topics in physics. Discussion of current research and literature in research speciality of faculty member teaching course. May be repeated for credit. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Sem- inar, to be arranged. Preparation: apprentice per- sonnel employment as teaching assistant, associate, or fellow. Teaching apprentice under the guidance and supervision of regular faculty member re- sponsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

490. Scientific Writing. (2) Seminar, 90 minutes. Prac- tical guidelines for improved scientific writing and oral presentation. Writing of several short papers with sub- sequent analysis in class. Short blackboard and/or viewgraph presentations. Topics vary. S/U grading.

495. Teaching College Physics. (2) Seminar, two hours; multi-day intensive training at beginning of Fall Quarter. Required of all new teaching assistants. Spe- cial course for teaching assistants designed as an in- troduction to teaching college physics, with emphasis on applying discussed techniques in classroom. Ideas and skills learned are evaluated in the sections of each teaching assistant. May be repeated for credit. S/U grading.

569. Directed Individual Studies. (2 to 12) Tutorial, to be arranged. May be repeated for credit. S/U grading.

597. Preparation for Master’s Comprehensive Ex- amination or PhD Qualifying Examinations. (4) Tuto- rial, to be arranged. May be repeated twice for credit. S/U grading.

598. Master’s Thesis Research and Writing. (4) Tuto- rial, to be arranged. May be repeated twice for credit. S/U or letter grading.

599. PhD Research and Writing. (4 to 12) Tutorial, to be arranged. May be repeated for maximum of 18 units. S/U grading.

Quantum Science and Technology

Graduate Courses

M205. Quantum Programming. (4) Same as Com- puter Science M238.) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: Mathe- matics 115A. History of quantum computing; notion of qubit; four postulates that provide interface to quantum mechanics; concepts of quantum circuit and universal gate set; quantum teleportation; superdense coding; no-cloning theorem; suite of fundamental quantum algorithms including Shor’s algorithm, Grover’s algorithm, and quantum approximate optimi- zation algorithm; several quantum programming lan- guages and how they compare; quantum simulations; quantum computer architectures; quantum error correction; quantum advantage. Students implement several quantum algorithms in multiple languages and run them on both simulators and quantum computer. Letter grading.

402. Quantum Information. (4) Lecture, three hours; discussion, one hour. Requisite: Physics 245. Density matrix evolution, decoherence, characterization of quantum states, distance measures between quantum states, fidelity, quantum error correction, entropy and information, and quantum information theory. May not be repeated for credit. Letter grading.

403. Theory of Quantum Devices. (4) Lecture, four hours; Requisite: course 402, Physics 245. Study of advanced theories, with some elements of quantum transport and advanced many-body physics. Intro- duction and comparison of different types of physical building blocks available for quantum computing. Add- resses practical issues, such as scalability and com- parison between different physical platforms and as- sociated devices. Letter grading.

410. Quantum Optics Laboratory. (4) Laboratory, eight hours. Limited to Master of Quantum Science and Technology students. Examination and use of modern optics, including lasers, optics, fibers, polarization manipulation, and photon counting. Use of Quantum Science and Technology

PHYSICS AND BIOLOGY IN MEDICINE

Interdepartmental Program
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Physics and Biology in Medicine
310-825-7811
Program e-mail
Michael McNitt-Gray, PhD, Chair
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Stephen C. Cannon, MD, PhD (Molecular and Medical Pharmacology, Physiology)
Magnus Dahlbom, PhD (Molecular and Medical Pharmacology)
Dieter R. Enzmann, MD (Radiological Sciences)
Michael McNitt-Gray, PhD (Radiological Sciences)
Michael L. Steinberg, MD, FACR (Radiation Oncology)

Overview
The Physics and Biology in Medicine Master of Science (MS) and Doctor of Philosophy (PhD) Program is a CAMPEP-accredited interdepart- mental graduate program supported by the
departments of Molecular and Medical Pharmacology, Radiation Oncology, and Radiological Sciences. It offers training in four specialities: medical imaging, molecular and cellular oncology, molecular imaging, and therapeutic medical physics.

Facilities
Specialized facilities for training and research are available in the departmental laboratories, as well as in the Crump Institute for Molecular Imaging, Center for Medical Countermeasures against Radiation, and Center for Computer Vision and Imaging Biomarkers, among others. Highly specialized equipment includes state-of-the-art medical imaging modalities such as MRI, CT angiography, and PET/CT in both clinical and preclinical settings, as well as advanced radiotherapy treatment and planning facilities. The program prepares students for careers as independent researchers or professional medical physicists, and graduates pursue academic, industrial, governmental, and clinical careers, regardless of which specialty they pursue.

Career Prospects
Graduates in physics and biology in medicine can expect to engage in any combination of research, teaching, clinical service, and consultation. Biomedical physicists are usually employed in hospitals frequently associated with a medical school, where they are members of the academic staff. They are also in demand in high-technology private industry engaging in research and development of diagnostic equipment. In government agencies, biomedical physicists are involved in the formulation and enforcement of regulations applied to the use of radiation in health care delivery.

Graduate Major
Physics and Biology in Medicine MS, PhD
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Physics and Biology in Medicine
Lower-Division Courses
19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.
99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Course
199. Directed Research in Biomedical Physics. (2 to 4) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses
200A. Physics and Chemistry of Nuclear Medicine. (4) Lecture, three hours; discussion, one hour. Nuclear structure, statistics of radioactive decay, nuclear radiations and their interaction with matter, nuclear decay processes, nuclear reactions, and compartment models. Physical and chemical properties of radioactive preparations used in nuclear medicine. Basic principles of nuclear medicine imaging, SPECT, and PET. S/U or letter grading.
200B. Nuclear Medicine Instrumentation. (4) Lecture, one hour; laboratory, three hours. Requisite: course 200A. Introduction to nuclear medicine instrumentation, including instrument chambers, probe and well scintillation detectors, scintillation cameras, and single photon and positron emission computed tomography. S/U or letter grading.
201. Medical Radiation Accelerator Design. (4) Lecture, three hours. Requisite: course 216. Overview of physical principles involved in design of current particle accelerators (electron, proton, heavy particle) and analysis of characteristics of current accelerators and facility design. S/U or letter grading.
202C. Applications of Medical Physics to Clinical Problems: Radiation Therapy. (4) Clinic, four hours. Requisite: course 204. Clinical medical physics in radiation therapy planning and treatment. Students gain experience in patient planning facilities. The program prepares students in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.
204. Medical Ultrasound. (4) Lecture, three hours; discussion, one hour. Introduction to medical imaging. S/U or letter grading.
205. Physics of Diagnostic Radiology. (4) Lecture, three hours; laboratory, one hour. Production of X rays, basic interactions between X rays and matter, X-ray system components, physics principles of medical radiology, radiographic image quality, fluoroscopy, image intensifiers, special procedures, X-ray protection. Laboratory experiments illustrate basic theory. S/U or letter grading.
206. Advanced Instrumentation. (4) Lecture, three hours; discussion, one hour. Requisite: course 205. Introduction to recent advances in digital diagnostic imaging systems, with topics centered on instrumentation including computer-aided diagnosis (DSA) methods of producing three-dimensional images. S/U or letter grading.
208A. Medical Physics Laboratory: Medical Imaging. (4) Discussion, two hours; laboratory, four hours. Requisite: course 203. Hands-on experience performing acceptance testing and quality control checks of imaging equipment such as fluoroscopy, digital subtraction angiography, mammography, ultrasound, magnetic resonance imaging, computed tomography, and computed radiography. S/U or letter grading.
208B. Medical Physics Laboratory: Radiation Therapy. (4) Discussion, two hours; laboratory, four hours. Requisite: course 203. Hands-on experience calibrating treatment planning and radiation therapy equipment. S/U or letter grading.
210. Advanced Image Processing in Medical Imaging. (4) Lecture, three hours; discussion, one hour. Recommended requisites: Mathematics 155, Program in Computing 10A. Study of image segmentation, feature extraction, object recognition, classification, and visualization with biomedical applications. Topics include region-growing, edge detection, mathematical morphology, clustering, neural networks, and volume rendering in lectures, case studies, and programming projects. S/U or letter grading.
211. Medical Ultrasound. (4) Lecture, 90 minutes; laboratory, two hours. Preparation: one calculus course. Production of real-time ultrasound images, transducer modeling and design, Doppler and color flow instrumentation, biohazards of ultrasound, ultrasound phantom design, and ultrasound tissue characterization techniques. Laboratory included. S/U or letter grading.
212. Biochemical Basis of Positron-Emission Tomography (PET). (4) Lecture, three hours; discussion, one hour. Introduction to biochemical processes and application of radioisotopes to study metabolism non-invasively by positron-emission tomography (PET). Validation of kinetic models to derive quantitative information from PET. Introduction to clinical and experimental application of PET. S/U or letter grading.
213. Quantitative Autoradiography. (4) Lecture, three hours; discussion, one hour. Application of quantitative autoradiography for estimating brain and heart functions. Topics include 2-deoxyglucose method for metabolic rate; iodoantipyrine method for blood flow; amino acid method for protein synthesis; quantitative receptor autoradiography; neuroanatomy and neurophysiology of autoradiogram and PET scan interpretation. S/U or letter grading.


218. Radiologic Functional Anatomy. (4) Lecture, three hours; discussion, one hour. Introduction to human anatomy, cell biology, and physiology as visualized through microscopic, molecular imaging, radiography, CT, MRI, and spectroscopy. Letter grading.

219. Principles and Applications of Magnetic Resonance Imaging. (4) (Same as Bioengineering M219.) Lecture, three hours; discussion, one hour. Basic principles of magnetic resonance (MR), physics, and image formation. Emphasis on hardware, Bloch equations, analytic expressions, image contrast mechanisms, spin and gradient echoes, Fourier transform imaging methods, structure of pulse sequences, and various scanning parameters. Introduction to advanced techniques in rapid imaging, quantitative imaging, and spectroscopy. Letter grading.

220A-220D. Laboratory Rotations in Biomedical Physics. (2-2) Laboratory, two hours. Laboratory projects to provide students with introduction to field. One oral and one written presentation required. S/U grading.

220A. Biophysics; 220B. Medical Imaging; 220C. Therapeutic Medical Physics; 220D. Radiation Biology and Experimental Radiation Therapy.

221. Applied Health Physics. (4) Lecture, three hours; discussion, one hour. Requisite: course 216. Basics of radiation safety as applied to medical applications. Introduction to all areas pertinent to medical uses of radiocactivity. Letter grading.


223. Seminar: Radiation Biology. (4) Seminar, four hours. Exploration of physical and molecular mechanisms that impact on response of normal and malignant tissues to ionizing radiation, with particular emphasis on critical and high in-depth analysis of approaches through which such responses can be modified in therapeutic setting. Understanding of rationale for integrating biological information into process of treatment planning and delivery. S/U grading.

225. Contrast Mechanisms and Quantification in Magnetic Resonance Imaging. (4) Lecture, four hours. Requisite: course 219. Introduction to magnetic resonance contrast mechanisms and quantification techniques in magnetic resonance imaging. Topics include exogenous and endogenous contrast mechanisms, measuring tissue perfusion and permeability, advanced diffusion and q-space analysis, chemical exchange and magnetization transfer imaging, and relaxometry. Letter grading.

227. Human Disease: Current and Future Role of Biomedical Physics. (4) Lecture, three hours; discussion, one hour. Present and future roles of biomedical physics in diagnosis and treatment of human disease, with focus on interdisciplinary nature of this field. Exploration of two diseases in detail with described role of technologies. Letter grading.

229A. Advanced Topics in Magnetic Resonance Imaging. (4) (Same as Bioengineering M219.) Lecture, four hours. Requisite: course M219. Designed for students interested in pursuing research related to development or translation of new magnetic resonance imaging (MRI) techniques. Basic tools and understanding of recent MRI developments that have had high impact on field, including novel pulse sequence design or image reconstructions, and enable imaging of anatomy or function in way that was previously not possible with any modality. Topics include: depth sequence simulation, RF pulse design, rapid image acquisition, parallel imaging, compressed sensing, image reconstruction and processing, motion encoding and compensation, chemical-shift imaging and understanding, and understanding/avoiding artifacts. Programming exercises in MATLAB to provide hands-on experience. Letter grading.

231. Advanced Treatment Planning in Radiation Therapy. (3) Lecture, four hours. Enrolled students: courses 203, 216. Designed to provide theoretical and practical understanding of treatment planning techniques utilized in radiotherapy. Topics include clinical treatment planning workflow, general planning principles and strategies, and specific considerations for various treatment delivery modalities and advanced treatment techniques. Detailed discussion on dose calculation algorithms and inverse planning and optimization. Clinical treatment planning demonstration using commercial treatment planning systems used to provide practical experience of clinical applications and implementation. Letter grading.

248. Introduction to Molecular Imaging. (4) (Same as Bioengineering M224 and Pharmacology M248.) Lecture, three hours; laboratory, one hour; outside study, seven hours. Exploration of role of molecular imaging in modern biology and medicine, including imaging physics, instrumentation, image processing, and applications of imaging in modalities. Practical experience provided through series of imaging laboratories. Letter grading.

260A-260B-260C. Seminars: Biomedical Physics. (1–1–1) Seminar, one hour. Joint critical study by students and instructors of topics pertaining to biomedical physics. Periodic contributions by visiting scientists. Discussion of research in progress. Student presentations required in spring term. May be repeated. S/U (260A, 260B) and letter (260C) grading.

268. Radiopharmaceutical Chemistry. (4) Lecture, two hours; discussion, two hours. Introduction to advanced concepts in chemistry of radiopharmaceuticals and technologies for radiopharmaceutical production and analysis. Areas of focus are (1) radiochemistry with fluorine-18 and other isotopes, (2) technologies for synthesis automation and optimization, (3) analytical instrumentation and tools in radiochemistry, and (4) PET tracer design and development. Introduction to multimodal pharmacokinetic and functional imaging. Basics of standard medical imaging. Lecture covering fundamentals complemented with practical sessions. Lab: hands-on training with technologies and methods used in routine synthesis, synthesis optimization, analysis (and quality control testing), and in vitro and in vivo evaluation of PET probes. S/U or letter grading.

269. Seminar: Medical Imaging. (1) Seminar, one hour. Continuous registration required of students in medical imaging specialty. Topics of current interest in medical imaging, with lecturers from department, other universities, and private industry. S/U or letter grading.

M285. Functional Neuroimaging: Techniques and Applications. (3) (Same as Bioengineering M284, Neuroscience M285, Psychiatry M285, and Psychology M278.) Lecture, three hours. In-depth examination of activation imaging, including MRI and electrophysiological measures. Data acquisition and analysis, experimental design, and results obtained thus far in human systems. Strong focus on understanding technologies, how to design activation imaging paradigms, and how to interpret results. Laboratory visits and design and implementation of functional MRI experiment. S/U or letter grading.

286. Image Registration Techniques. (4) Lecture, four hours. Preparation: strong mathematical background. Examination of state-of-art image registration methods that exist today. Mathematical descriptions of each different class of registration methods and two-dimensional/three-dimensional/four-dimensional implementation details. Programming of registration methods in MATLAB/C/C++/CUDA/JAVA interfaces so students learn all registration methods currently investigated. Letter grading.

M424. Functional Magnetic Resonance Imaging Journal Club. (2) (Same as Psychiatry M424.) Discussion, 90 minutes. Limited to 10 students. Current topics in functional neuroimaging, with emphasis on novel applications, analysis, and acquisition methods. Preparation and critique of student papers. Overall emphasis on magnetic resonance imaging. Example areas include tractography through diffusion tensor imaging, jittered event-related experimental designs, parallel receiver MR imaging, integrated electrophysiological and image acquisition, S/U grading.

495. Special Studies in Biomedical Physics. (4) Seminar, two hours; laboratory, four hours. Teaching assistant in graduate laboratory courses under supervision of faculty member. S/U grading.

569. Research in Biomedical Physics. (4 to 12) Tutorial, to be arranged. Directed individual study or research. Only one 596 course may be applied toward MS degree requirements. May be repeated. S/U or letter grading.

579. Preparation for PhD Qualifying Examinations. (4) Tutorial, to be arranged. May not be applied toward MS degree requirements. May be repeated. S/U grading.

586. Research and Preparation of MS Thesis. (4 to 12) Tutorial, to be arranged. Two 598 courses (or 598 and 596 combined) may be applied toward MS degree requirements. May be repeated. S/U and letter grading.


PHYSIOLOGY
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Yousang Gwack, PhD, Executive Vice Chair

Overview
Physiology is the science of the functional activities of living systems. This covers a wide
range, including observations on humans and experiments on animals and model systems in order to understand principles. Physiology is the science most directly relevant to human medicine in all its specialties and to understanding all environmental factors affecting human life. It is also a pure science of great challenge because of the complexity of its problems and its extensive interaction with mathematical, physical, biochemical, and engineering sciences, as well as with other branches of biology.

Within the prescribed curriculum, students may specialize in cellular and molecular physiology, theoretical and mathematical physiology, and organ systems and integrative phenomena, including neuroscience and behavioral physiology. The Department of Physiology offers postdoctoral training in research and welcomes students interested in articulated MD/PhD programs.

Applicants interested in pursuing graduate study may apply directly to the interdepartmental Molecular, Cellular, and Integrative Physiology Doctor of Philosophy (PhD) program. Physiology faculty information is available from the department.

Graduate Courses

M210. Molecular and Cellular Mechanisms of Neural Integration. (5) (Same as Neuroscience M230 and Physiological Science M210.) Lecture, four hours; discussion, one hour. Requisite: Neuroscience M202. Introduction to mechanisms of synaptic processing. Selected problems of current interest, including regulation and modulation of transmitter release, molecular biology and physiology of receptors, cellular basis of integration in sensory perception and learning, neural nets and oscillators, and molecular events in development and sexual differentiation. Letter grading.

220. Methods in Cell Physiology. (8) Linear circuit analysis, including admittance, transfer admittance, transfer function, and filters using transform methods. Application of these concepts to electronic analog circuits in lectures and laboratory, with emphasis on operational amplifiers. Applications to electrophysiology include microelectrode amplifiers, voltage clamp and patch clamp techniques, with circuit analysis and noise considerations. Digital electronics cover logic gates, sequential circuits, and A/D and D/A conversion, with introduction to sampling theory. Letter grading.

221. Cell Physiology: Excitability. (6) Requisite: course 220. In-depth coverage of general properties of excitable cells, including linear circuit properties, nonlinear conductance changes, and generation and propagation of the nerve impulse. Voltage gaging and gating currents, as well as relationship between macroscopic conductance and single channel properties discussed in analytical detail using original publications. Letter grading.

298. Current Topics in Physiology. (2 to 4) Lecture, one hour; discussion, one hour. Designed for graduate students. Students read primary literature in a specified area and conduct or participate in discussions on these papers. May be repeated for credit. S/U or letter grading.

596. Directed Individual Study or Research. (2 to 12) Tutorial, to be arranged. S/U grading.

597. Preparation for MS Comprehensive Examination or PhD Qualifying Examinations. (2 to 12) Tutorial, to be arranged. S/U grading.


Political Science

College of Letters and Science

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Political Science

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Kathleen Bawn, PhD
Michael S.Y. Chwe, PhD
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Lorrie A. Frasure, PhD (Ralph Bunche Professor of International Studies)

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Christopher N. Tausanovitch, PhD
Michael F. Thies, PhD

Assistant Professors

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Eric A. Min, PhD
Tejas Parasher, PhD
Daniel M. Thompson, MPP, PhD

Adjunct Assistant Professor

James A. Desveaux, PhD

Overview

Political science investigates the nature, causes, and consequences of politics. The Department of Political Science has gained dis-
tinction in political economy, electoral behavior, comparative politics, and political theory. The department is strongly committed to teaching as well as research, with the primary goal of providing the best possible education for students seeking to develop an expertise in the field of political science by instilling skills in research and analytic reasoning.

Undergraduate Major

Political Science BA

The undergraduate major in the Department of Political Science aims to provide students with understanding of basic political processes and institutions as these operate in different national and cultural contexts. It also covers the interaction between nation states, the changing character of the relations between citizens and governments, and the values and criteria by which the quality of political life is judged. The program may be individually focused to serve the needs of the liberal arts major, the student seeking preparation for graduate work in political science, public administration, law, and other professional fields, and the student preparing for specialized roles in political and public organizations.

Learning Outcomes

The Political Science major has the following learning outcomes:

- Critical thinking about basic political processes, institutions, and concepts as they operate in different national and cultural contexts
- Impartial evaluation of arguments
- Application of mathematical and logical reasoning to political processes
- Use and evaluation of statistical and other types of evidence in arguments
- Recognition of limits of quantitative and non-quantitative analysis
- Knowledge of diverse theories of politics by engaging critically with texts, media, and contexts
- Employment of cultural, hermeneutical, normative, and historical approaches
- Location, evaluation, and use of information and scholarship needed to place particular political events in broader historical, cross-national, and theoretical contexts
- Demonstrated familiarity with various approaches to the study of politics, and their application to specific questions, puzzles, and debates
- Written and oral arguments using appropriate evidence, with sensitivity to opposing perspectives, about significant political processes, events, and concepts

Entry to the Major

Pre-major

All students intending to major in Political Science must enroll as Political Science pre-majors. After completion of preparation for the major courses, they need to petition to enter the major in the Undergraduate Office, 4269 Bunche Hall.

Transfer Students

Transfer applicants to the Political Science major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one statistics course and four courses from political theory, world politics, game theory, American politics, or comparative politics.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Policies

Students must complete all pre-major courses with a 2.0 grade-point average by the time they attain 135 units. Admission to the major is granted only after successful completion of all lower-division requirements.

Requirements

Preparation for the Major

Required: Four lower-division courses from Political Science 10, 20, 30, 40, 50. Students must also take Political Science 6 or 6R. Statistics 10 or 12 may be substituted for course 6 or 6R.

The Major

Required: Ten upper-division courses (40 units) selected from Political Science M105 through 199.

Upper-division political science courses are organized into six fields: Field I: Political Theory (numbered 111–119), Field II: International Relations (120–139), Field III: American Politics (140–149), Field IV: Comparative Politics (150–169), Field V: Methods and Models (170–179), and Field VI: Race and Ethnic Politics (180–187).

In fulfilling the requirement of 10 upper-division political science courses, students must satisfy the following:

1. A concentration in one field consisting of at least three upper-division courses in that field
2. A distribution requirement of at least one upper-division course in each of three different fields outside the field of concentration; multifield courses from the concentration field may not satisfy a distribution field
3. Four additional political science courses

Honors Program

To qualify for departmental honors at graduation, students must complete a senior thesis. Highest honors are awarded at the discretion of the honors program director and are based on both cumulative grade-point average in the major and the quality of the honors thesis to students who graduate with a final GPA in the major of at least 3.85, and who complete the senior honors thesis with a letter grade of A+.

Policies

The Major

Each course must be taken for a letter grade. Students are required to maintain a 2.0 overall grade-point average in all upper-division political science courses.

Courses 191H, 195CE, 198, and 199 may not be applied toward either the concentration or distribution requirement.

Honors Program

The department honors program is open to seniors and to students who (1) have completed five upper-division political science courses (two of which are in one field), (2) have a 3.5 grade-point average in upper-division political science courses, and (3) are eligible for College of Letters and Science honors. Students should have substantial experience in writing research papers before they enter the honors program or course 191H.

Successful completion of the honors program is indicated on the transcript and diploma.

Graduate Major

Political Science MA, CPhil, PhD

The graduate program leads to the PhD degree in Political Science (a master’s degree may be earned in the process of completing PhD requirements). It is designed to give students a strong foundation in the discipline while enabling them to acquire additional skills for advancing their professional careers.

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Political Science

Lower-Division Courses

6. Introduction to Data Analysis. (5) Lecture, three or four hours; discussion, one hour (when scheduled). Not open for credit to students with credit for course 19R. Introduction to collection and analysis of political data, with emphasis on application of statistical reasoning to study of relationships among political variables. Use of computer as aid in analyzing data from various fields of political science, among them comparative politics, international relations, American politics, and public administration. P/NP or letter grading.

6R. Introduction to Data Analysis—Research Version. (5) Lecture, three or four hours; discussion, one hour (when scheduled). Enforced corequisite: course 6. Not open for credit to students with credit for course 6R. Not open for credit to students with credit for course 6. Introduction to collection and analysis of political data, with emphasis on application of statistical reasoning to study of relationships among political variables. Use of computer as aid in analyzing data from comparative politics, P/NP or letter grading.

10. Introduction to Political Theory. (5) Lecture, three hours; discussion, one hour. Exposition and analysis of selected political theorists and concepts from Plato to the present. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.
**Field I: Political Theory**

**M111A. Ancient and Medieval Political Theory.** (4) Same as Classics M121.) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of major thinkers such as Plato, Aristotle, Augustine, Aquinas, Machiavelli, and More and questions such as forms of government, citizenship, justice, happiness, rhetoric, religion, emotion. P/NP or letter grading.

**M112A. Invention of Democracy.** (5) Same as Classics M125.) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Invention and critical analysis of major thinkers such as Ben- tham, De Tocqueville, Hegel, Mill, Marx, Nietzsche, Ar- endt, and Foucault and others such as alienation, power, participation, and difference. P/NP or letter grading.

**M112B. Democratic Theory.** (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Critical analysis of selected major authors, issues, and arguments in contempo- rary democratic theory.

**M120A. Foreign Relations of U.S.** (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of theories of international relations and international law, with special emphasis on warfare, from conquest of America to end of World War II. P/NP or letter grading.

**Field II: International Relations**

**M1105. Economic Models of Public Choice.** (4) (Same as Economics M135.) Lecture, three or four hours; discussion, one hour (when scheduled). Preparation: any lower-division political science course. En-forced requisite: Economics 11. Designed for juniors/ seniors. Analysis of methods and consequences of ar- riving at solutions through political mecha- nisms. Topics include free-rider problem, voting and majority choice, demand revelation, and political bar- gainig. P/NP or letter grading.

**Upper-Division Courses**

**M105. Economic Models of Public Choice.** (4) (Same as Economics M135.) Lecture, three or four hours; discussion, one hour (when scheduled). Preparation: any lower-division political science course. Enforced requisite: Economics 11. Designed for juniors/seniors. Analysis of methods and consequences of arriving at solutions through political mechanisms. Topics include free-rider problem, voting and majority choice, demand revelation, and political bargaining. P/NP or letter grading.

Field I: Political Theory

M111A. Ancient and Medieval Political Theory. (4) (Same as Classics M121.) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of major thinkers such as Plato, Aristotle, Augustine, Aquinas, Machiavelli, and More and questions such as forms of government, citizenship, justice, happiness, rhetoric, religion, emotion. P/NP or letter grading.

M112A. Invention of Democracy. (5) (Same as Classics M125.) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Invention and critical analysis of major thinkers such as Ben-tham, De Tocqueville, Hegel, Mill, Marx, Nietzsche, Ar-endt, and Foucault and others such as alienation, power, participation, and difference. P/NP or letter grading.

M112B. Democratic Theory. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Critical analysis of selected major authors, issues, and arguments in contemporary democratic theory.

M120A. Foreign Relations of U.S. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of theories of international relations and international law, with special emphasis on warfare, from conquest of America to end of World War II. P/NP or letter grading.

Field II: International Relations

121A. Studies in Formulation of American Foreign Policy. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Study of formation of American foreign policy and its role in world affairs. Three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of problems of international system seen as community capable of cooperation and development. P/NP or letter grading.

122A. World Order. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Recommended requisite: course 20. Politics and policy of major global environmental issues such as climate change, integrated law, policy, and political science perspectives. P/NP or letter grading.

121B. Global Environment and World Politics. (4) Same as Environment M161.) Lecture, three or four hours; discussion, one hour (when scheduled). Recommended requisite: course 20. Politics and policy of major global environmental issues such as climate change, integrated law, policy, and political science perspectives. P/NP or letter grading.

122C. Global Catastrophic Risk: Clash of Science, Politics, and Ethics (5) Lecture, three hours; discussion, one hour. Designed for juniors/seniors. Global catastrophic risks pose challenge to modern civilization because of their superhuman extension in space, time, and knowledge realm. Their reach is global; their impact is local and personal. There are many possible scenarios. Human interests and outlooks are local, national, and global as well as egocentric, particularistic, and tribal. Overlapping generations spell intergenerational conflicts among living—young, middle-aged, and old—and between ancestors and descendants. Deeply and variably specialized experts struggle to communicate across scientific disciplines, as well as natural and human sciences, and across pure and applied sciences—only to hit brick wall in their communications with lay public, which is variously represented by elected politicians, organized interest groups, and fluid social movements. Study of ensuing clash of science. P/NP or letter grading.

123A. International Law. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Study of nature and place of international law in conduct of international relations. P/NP or letter grading.

123B. International Organizations. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Recommended requisite: course 20. Designed for juniors/seniors. Study of how public issue life cycle is shaped by (1) economic, news media, mass public, organized interests, and political, social, economic, and cultural factors influence contemporary society. May be applied toward Field III or V. P/NP or letter grading.

124A. International Political Economy. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Classic period of European great power politics, beginning with peace settlement at end of Napoleonic wars and ending with coming of World War I. P/NP or letter grading.

123B. International Politics, 1815 to 1914. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of various theoretical approaches to international relations. P/NP or letter grading.

125A. Arms Control and International Security. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Recommended requisite: course 20. Designed for juniors/seniors. Focus on Russia's relations with NATO, the former communist states of Europe, China, and the Commonwealth of Independent States. Reading of Supreme Court cases as well as various historical and current documents.

121A. Electoral Politics: Political Psychology. (4) (Same as Psychology M138.) Lecture, three or four hours; discussion, one hour (when scheduled). Recommended requisite: course 20. Designed for juniors/seniors. Study of character and formation of political attitudes and public opinion. Role of political opinion in elections and its implications for political attitudes toward political parties, candidates, political issues, and the political process. P/NP or letter grading.

121C. Electoral Politics: Political Behavior Analysis. (4) Three or four hours; discussion, one hour (when scheduled). Recommended requisite: courses 6, 40, 141B. Designed for juniors/seniors. Advanced course in use of quantitative methods in study of political behavior, especially as it relates to voting behavior, participation, and techniques of political action. Students conduct computer-aided analyses of issues and problems treated in course 141B and similar courses. P/NP or letter grading.

121E. Electoral Politics: Elections, Media, and Strategy. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Recommended requisite: course 30. Designed for juniors/seniors. Analysis of elections and media, including game-theoretic analysis, Downs spatial model of elections, valence characteristics in elections, campaign finance, endogeneity problems in social sciences, liberal bias in media, industrial organization of news industry, and effects of media on voter decisions. May be applied toward Field III or V. P/NP or letter grading.

142A. Political Parties and Interest Groups. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Recommended requisite: course 40. Designed for juniors/seniors. Organization and activities of political parties in the U.S. Attention to historical development of the parties, nature of party change, campaign functions, and electoral role of parties. Leadership problems and party activists, political finance, and policy formulation practices. P/NP or letter grading.

142D. Understanding Public Issue Life Cycle. (4) (Same as Public Policy M127.) Lecture, three or four hours; discussion, one hour (when scheduled). Recommended preparation: courses 10, 40, and one course from Economics 1, 2, 5, 11, or 101. Examination of how public issue life cycle is shaped by (1) economic and political incentives of various actors—business, news media, mass public, organized interests, Congress, the president, regulatory agencies, and courts and (2) ideology, costs and biases, and ethical reasoning. P/NP or letter grading.


143B. Metropolitan Governance. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of how political, social, economic, and cultural factors influence metropolitan governance in both U.S. central cities and suburban areas. Study of metropolitan governance through classic and contemporary readings on political power, political economy which affect character of the legislative process and capacity of representative institutions to govern in contemporary society. 140B. The Presidency. Study of necessary conditions for one hour (leadership), emphasizing impact of the bureaucracy, congress, public opinion, interest groups, and party system on the presidency and national policy-making. 140C. Supreme Court. Introduction to American constitutional law and role of Supreme Court as interpreter of the U.S. Constitution. Reading of Supreme Court cases as well as various historical and current documents.

Field III: American Politics

140A-140B-140C. National Institutions. (4–4–4) Lecture, three or four hours; discussion, one hour (when scheduled). Recommended requisite: course 40. Designed for juniors/seniors. 140A. Congress. Study of those factors

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of cities, and racial/ethnic segregation, as well as political incorporation and racial/ethnic coalitions. P/NP or letter grading.

143C. Politics of American Suburbanization. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of political, social, and economic evolution of American suburbs, particularly in post-WWII era. Dominant themes focus primarily on historical patterns and implications of U.S. racial/ethnic inclusion and exclusion; class conflict and gender roles; classic and contemporary theories of metropolitan governance; and civic/political participation, suburbanization, American local government, and immigration and community. Topics and case studies include housing, schools, and taxes; immigrant and ethnic minority suburbanization; suburban sprawl and uneven growth; suburban decline and revitalization; P/NP or letter grading.

145A. Public Law and Judicial Process: Anglo-American Legal System. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Requisite: course 40. Designed for juniors/seniors. Evolution of English common law courts and their legal system, with emphasis on development of basic concepts of law which were received from that system in U.S. and remain relevant today. P/NP or letter grading.


145C. Public Law and Judicial Process: Constitutional Law—Civil Liberties. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Requisite: course 40. Designed for juniors/seniors. Protection of civil and political rights and liberties under constitution. P/NP or letter grading.

145D. Public Law and Judicial Process: Judicial Oversight. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Requisite: course 40. Designed for juniors/seniors. Legal controls of administration action, Substantive and procedural limits on administrative discretion imposed by legislation, executive and judicial agencies, and sources of legal powers of administrative bodies within these limits. P/NP or letter grading.

146B. Organization Theory, Public Policy, and Administration: Bureaucracy and Public Management. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Preparation: familiarity with American government. Requisite: course 40. Designed for juniors/seniors. Nature of bureaucracy in modern government, with emphasis on U.S.; explanation of why government agencies behave as they do. Focus on real and imaginary problems with bureaucratic rule; evaluation of commonly proposed solutions for these problems. Examples from schools, armies, welfare bureaus, regulatory agencies, and intelligence services, among others. P/NP or letter grading.

146D. Organization Theory, Public Policy, and Administration: Theories of Organization and Decision Making. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Requisite: course 40. Designed for juniors/seniors. Examination of theoretical frameworks for studying public and private bureaucracies. Analysis of decision-making processes and implementation, individual and organizational behavior patterns, and concepts of organization. P/NP or letter grading.

146E. Organization Theory, Public Policy, and Administration: Industrial Development and Implementation. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Requisite: course 40. Designed for juniors/seniors. Investigation of complex process of policy development and implementation in U.S., including roles of federal, state, and local agencies as well as private organizations. Subsections offered on particular policy areas, with topics announced in preceding term. P/NP or letter grading.

147A. American Political Development: Overview. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Requisite: course 40. Designed for juniors/seniors. Introduction to historical development of American politics and ideas and institutions that developed over time, interaction of American politics and some aspect of culture and society. Assessment of broader political environment of politics, isolating points of contention and conflict. Possible topics include party development, Constitution, business regulation, and politics and religion. Sections offered on regular basis, with topics announced in preceding term. May be repeated for credit with topic change. P/NP or letter grading.

147C. American Political Development: Institutional Development. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Requisite: course 40. Designed for juniors/seniors. Examination of one or more special problems appropriate to American politics. Sections offered on regular basis, with topics announced in preceding term. May be repeated for credit with topic change. P/NP or letter grading.

149. Special Topics in American Government and Politics. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Requisite: course 40, two courses in Field III. Designed for juniors/seniors. Intensive examination of one or more special problems appropriate to American politics. Sections offered on regular basis, with topics announced in preceding term. May be repeated for credit with topic change. P/NP or letter grading.

Field IV: Comparative Politics

150. Political Violence. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of one or several different uses of violence in revolutionary process; demonstrations, coup d’état, assassina- tion, and terrorism. P/NP or letter grading.

151A. African Politics: Government and Politics of Africa. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/se- niors. Survey of African politics in modern times, with special attention to state/society relations, interaction of politics and economic development, political institutions, and conflict and conflict resolution. Letter grading.

151B. African Politics: Political Economy of Africa. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of economic and political factors in African development, with special attention to political basis of inappropriate economic policy during early post-independence period and change toward a more appropriate economic strategy in re- cent times. Letter grading.

151C. African Politics: Special Topics in African Pol- itics. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Consult SFS. Open to students with topics to be offered in a specific term. Letter grading.

152. Political Economy of Climate Change. (4) Same as International Development Studies M152). Lecture, three hours; discussion, one hour (when scheduled). Examination of how governments at inter- national, national, and regional levels are addressing—or not addressing—extraordinary challenge of climate change. Use of combination of readings, lectures, and discussions to better understand causes, conse- quences, and policies to address most important po- litical problem of our time—not just in U.S., but in other major countries as well. Concentration on chal- lenge of mitigating, rather than adapting to, climate change, and concentration on use, rather than agriculture, forestry, and land use. Letter grading.

153A. Comparative Government and Politics of Western Europe: West European Government and Politics. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Comparison of constitut- ional and political structure of West European states, with particular attention to contemporary problems. P/NP or letter grading.

154A-154B. Government and Politics in Latin America. (4-4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Comparative study of governmental and political de- velopment, crisis, and practice. P/NP or letter grading.

154A. States of Middle America. Enforced prerequisite: course 50 or 50R. 154B. States of South America.

156A. Government and Politics of Post-Communist States: Russia. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for ju- niors/seniors. Intensive study of institutions and political development in Russia, with special attention to lessons of Soviet Union. P/NP or letter grading.

157. Government and Politics in the Middle East. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Com- parison of government and politics in Arab States, Turkey, Israel, and Iran. P/NP or letter grading.

158. Southeast Asian Politics. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Requisite: course 50. Designed for juniors/seniors. Study of political environment in major Southeast Asian states. Use of comparative analysis to address major problems confronting region, including democ- raticization, economic growth, drug trade, deforestation, and security threats. Letter grading.

159A. Government and Politics of China: Chinese Revolution and Age of Mao Zedong. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of modern Chinese politics from decline of Manchu dynasty and rise of revolutionary nationalism to death of Mao Zedong, with emphasis on socioeconomic foun- dations and political dynamics of revolution in modern China.


160. Government and Politics of Japan. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Structure and operation of contempo- rary Japanese political system, with special attention to domestic political forces and problems.

163A. Discourse before Democracy. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Requisite: course 50. Designed for ju- niors/seniors. Investigation of collective action in oppression, contribution of shared identities to organizing collective action, role of dis- course in cueing awareness of shared identity, evi- dence across time and space of association between discourse and distancing role (monarchy, exclusive republics, dictatorship). Letter grading.

163B. Colonialism, Discourse, and Democracy. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Transformation of language used to talk or write about politics during era of European col- onialism and resulting shifts in identity ensuing in po- litical change. Theories of democracy, dynamics of col- onial encounter between Europeans and peoples.
living outside Europe, problems of collective action in tyranny and democracy, consequences of sharing identity for collective action, transformation of discourses in the study of communism and ensuing enforcement in Europe, North America, and Southwest Pacific, spread of enfranchisement following discursive transformations in Russia and in selected states emerging in formerly colonized territories. Letter grading.

164A. Roots of Democracy. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of development of democracy around the world from its beginnings in ancient Greece to present day. Techniques of comparative politics used to evaluate major arguments about why different countries become democratic at different times. Preparation: some remain authoritarian. P/NP or letter grading.

164B. Fascism and Right-Wing Extremism: Historical and Present Day. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors. Historical rise of Fascism in Germany, Italy, Japan, and Eastern Europe; its social support and ideology. Focus on Germany, including Nazi economic policy (Tirsoo, Wages of Destruction). Do today’s xenophobic sentiments in Europe and elsewhere resemble earlier Fascism in ideology and social base? P/NP or letter grading.

165. Islam and Politics. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Religious and spiritual foundations of Islamic legal and political institutions; legitimacy of historical and contemporary Islamic regimes, movements, and ideology. The political strategies of Islamic activism. P/NP or letter grading.

166. Comparative Constitutional Design. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Religious and spiritual foundations of Islamic legal and political institutions; legitimacy of historical and contemporary Islamic regimes, movements, and ideology. The political strategies of Islamic activism. P/NP or letter grading.

167D. Political Institutions and Economic Development. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Preparation: one statistics course. Designed for juniors/seniors. Data analytic approach to question of why some countries are rich and others are poor and why, among latter, some have been able to achieve rapid rates of economic growth. Focus on political institutions. Preparation: some may be advanced to account for differences across countries in rates and levels of economic development. May be applied toward either Field IV or V. Letter grading.

167F. Comparative Political Analysis. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Preparation: one statistics course. Designed for juniors/seniors. Data analytic approach to question of why some countries are rich and others are poor and why, among latter, some have been able to achieve rapid rates of economic growth. Focus on political institutions. Preparation: some may be advanced to account for differences across countries in rates and levels of economic development. May be applied toward either Field IV or V. Letter grading.

Field V: Methods and Models

170A. Studies in Statistical Analysis of Political Data. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Enforced requisite: course 6 or 6R. Designed for juniors/seniors. Use of statistical methods to interpret data from various fields in political science and use of quantitative evidence in construction of convincing and truthful arguments related to world of politics. Consult Schedule of Classes for topics to be offered in specific term. P/NP or letter grading.

171A. Applied Formal Models: Collective Action and Social Movements. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. How do collective and political movements convince people to participate? Consideration of various theoretical perspectives, including game-theoretic, social network, structural, and identity approaches, illustrated by case studies. P/NP or letter grading.

171B. Collective Choice and Majority Rule. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Required: course 30. Designed for juniors/seniors. How do political groups get policy results when voting and casting votes affect political decisions? When can voting rules be manipulated by leaders and voters? Examples from legislative, electoral, and judicial politics. P/NP or letter grading.

171C. Legislative Strategy. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Required: course 30. Designed for juniors/seniors. How do political groups get policy results when voting and casting votes affect political decisions? When can voting rules be manipulated by leaders and voters? Examples from legislative, electoral, and judicial politics. P/NP or letter grading.

171D. Negotiation. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Required: course 30. Designed for juniors/seniors. Study of negotiation and bargaining in different contexts. Experiential exercises with emphasis on various aspects of negotiation, including processes, strategy, role of agents. P/NP or letter grading.

172. Strategy and Conflict. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Enforced requisite: course 30. Designed for juniors/seniors. Intermediate topics in game theory applied to political problems, with special attention to strategic consequences of incomplete information and information asymmetries. P/NP or letter grading.

175. Special Topics in Methods and Models. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Required: course 30. Designed for juniors/seniors. Intensive study of one or more special problems related to methods and models in political science. Example: the strategic basis of American foreign policy with topics announced in preceding term. May be repeated for credit with topic change. P/NP or letter grading.

Field VI: Race and Ethnic Politics

180A. African American Political Thought. (4) (Same as African American Studies M114C.) Lecture, three or four hours; discussion, one hour (when scheduled). Enforced requisite: course 30. Designed for juniors/seniors. Intermediate topics in game theory applied to political problems, with special attention to strategic consequences of incomplete information and information asymmetries. P/NP or letter grading.

181A. Politics of Latino Communities. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Enforced requisite: one 140-level course or one upper-division course in race or ethnicity from historical, psychology, or sociology. Required: course 40. Designed for juniors/seniors. Focus on understanding relationships of power and interaction between institutional contexts of race and ethnicity, and cultural system on one hand and structure of everyday life in Latino households, neighborhoods, and communities on other. P/NP or letter grading.

181B. U.S. Latino Politics. (5) (Same as Chicana/o and Central American Studies M155B.) Lecture, four hours; discussion, one hour (when scheduled). Examines history of Latino immigration and political participation in the U.S. political system. Topics include historical analysis of Latino immigration and migration; civil rights movements; increases in citizenship, registration, and voting in 1980s and 1990s; new wave of immigrant atti-

tudes; development, relations, and education for Alien Minors (DREAM) Act and subsequent DREAMer movement; and response by Latinos today, with dis-

182. Ethnic Politics: African American Politics. (4) (Same as African American Studies M144.) Lecture, three or four hours; discussion, one hour (when scheduled). Preparation: one or more special problems related to race and ethnic politics. Letter grading.

183. Experiments in Racial and Ethnic Politics. (4) (Same as the Psychology M136C.) Lecture, three hours; laboratory, one hour. Research practice consisting of designing, analyzing, and reporting effective research results. Topics include studying people’s political attitudes, beliefs, and behaviors through carefully-designed experiments. P/NP or letter grading.

184A. Black Experience in Latin America and Caribbe-

ian I. (4) (Same as African American Studies M154C.) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Culture, history, politics, and identity of African Ameri-
cans in Spanish and Lusophone Caribbean, South America, and Central America. Exploration of issues of identity in context of Afro/Latino migration to U.S. P/NP or letter grading.

184B. Black Experience in Latin America and Caribbe-

ian II. (4) (Same as African American Studies M154D.) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of issues regarding race and ethnicity in Latin America, with emphasis on comparisons to U.S. and within Latin America, with focus on African and indigenous origins, with emphasis on former. P/NP or letter grading.

186. Special Studies in Race, Ethnicity, and Politics. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Recommended requisite: course 30. Designed for juniors/seniors. Intensive study of one or more special problems related to race, ethnicity, and politics in political science. Sections offered on regular basis, with topics announced in preceding term. May be repeated for credit with topic change. P/NP or letter grading.

Special Studies

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: course 188SA. Corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with fac-

ulty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188. Advanced Honors Seminars. (1) Seminar, three hours. Limited to students with Departmental approval. Designed as a supervised tutorial course in a topic of current interest. May be repeated for credit for students who earn a grade other than credit. Individual contract required. Sanctioned. (Syllabus available).

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as an independent honors contract to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189H. Honors Research Colloquia in Political Science. (1) Seminar, one hour. Designed to bring together students under the supervision of a faculty member for seminar setting with one or more faculty members to discuss their own work or related work in discipline. Led by one supervising faculty member. May be repeated for credit. (P/G or letter grading).

190. Research Colloquia in Political Science. (1) Seminar, one hour. Designed to bring together students writing departmental honors theses in seminars. Opportunities to discuss faculty members' theses in discussion of student's progress. Honors content noted on transcript. Letter grading.

190A-191F. Variable Topics Research Seminars for Majors. (4 each) Seminar, three hours. Preparation: two upper-division courses in field in which seminar is offered. Limited to junior/senior political science majors with 3.25 grade-point average in upper-division political science courses. Consult Schedule of Classes for semester offerings to be offered in specific term. Reading, discussion, and development of culminating project. May be applied toward distribution or concentration requirement. May be repeated for credit. P/NP or letter grading. 191A. Political Theory; 191B. International Relations; 191C. Politics; 191D. Comparative Government; 191E. Methods and Models; 191F. Race, Ethnicity, and Politics.

M191DC. CAPP Political Science. (2) Same as Communication M191DC, History M191DC, Public Affairs M191DC, and Sociology M191DC. Seminar. Three hours. Limited to CAPP Program students. Internships in Washington, DC. Focus on development and execution of original empirical research based on experience in Washington, DC-based field placements. Study of various qualitative methods (observation, interviewing, etc.), with comparison to quantitative analysis. Examination of features of solid and significant research; intensive writing. Letter grading.


191E. Political Science. (2) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for maximum of 16 units. Individual contract required. P/NP or letter grading.

191F. Directed Research in Political Science. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for maximum of 16 units. Individual contract required. P/NP or letter grading.

Graduate Courses

Formal Theory and Quantitative Methods

200A. Probability and Inference for Social Science. (4) Lecture, three hours; discussion, one hour; field work, eight hours. Basics in probability, the mathematical framework developed to help us think systematically and logically in face of uncertainty. Letter grading.

200B. Regression Analysis for Social Science. (4) Lecture, three hours; discussion, one hour; field work, eight hours. Requisite: course 200A. Preparation: prior exposure to coding for research design and regression analysis. Basic tools of statistical inference and application to practice of regression analysis. Emphasis on relationship of these statistical tools for drawing causal inference; prediction; and description also covered. Focus on principles of statistical inference, difference between design-based inference and model-based inference, identification versus estimation, building blocks of causal inference, characterization of regression model, diagnostics and extensions of regression model, threats to validity of our estimates. Students become comfortable coding in statistical programming language R. S/U or letter grading.

200C. Causal Inference for Social Science. (4) Lecture, three hours; discussion, one hour; field work, eight hours. Requisites: courses 200A, 200B. Preparation: familiarity with basic and advanced statistics, multivariate calculus, basic linear/matrix algebra. Clarification of conditions under which estimates made using non-experimental data can be given causal interpretation, identification and maximizing credibility of causal claims made from non-experimental evidence. Designs and methods, including experiments, matching, regression, panel methods, difference-in-differences and control methods, instrumental variable estimation, regression discontinuity designs, and sensitivity analyses. Reinforcement of some basic skills from probability and statistics. S/U or letter grading.

200D. Maximum Likelihood for Social Science. (4) Seminar, three hours; field work, eight hours. Introduction to theory and practice of maximum likelihood analysis in political science, including discrete choice models, count data models, etc. models. Lectures combine traditional formal mathematical derivations of various estimators and their properties with Monte Carlo simulations and discussion of applications and practice. S/U or letter grading.

200E. Experimental Design for Social Science. (4) Seminar, three hours; field work, eight hours. Preparation: familiarity with statistics of causal inference at least course 200C. Emphasis on implementation of experimental research in social science. Emphasis on field experiments, though most issues that are covered are relevant for other modes including laboratory, laboratory-in-the-field, and survey experiments. S/U or letter grading.

200F. Advanced Statistical Topics for Social Science. (4) Seminar, three hours; field work, eight hours. Preparation: courses 200A through 200E. Topics vary according to student interest. May be repeated for credit. S/U or letter grading.

200X. Data Analysis Workshop. (4) Seminar, three hours. Enforced requisite: course 200C. Not open for credit to students with credit for course 200Y. Practice in applying statistical techniques to political science data. S/U or letter grading.

200Y-200Z. Data Analysis Workshops. (2–2) Seminar, two hours. Enforced requisite: course 200C. Course 200Y or 200Z is enforced requisite to 200Z. Not open for credit to students with credit for course 200X. Practice in applying statistical techniques to political science data. S/U or letter grading.

201A. Introduction to Formal Political Analysis. (4) Seminar, three hours. Survey of formal political theory to enhance literacy and provide analytical tools without presupposing mathematical background. Model building, collective goods, unanimity and the social contract, voting rules, paradoxes and impossibility theorems, stability, individual liberty and decentralization, strategic manipulation representation, vote trading.

201B. Theory of Collective Choice. (4) Seminar, three hours. Recommended preparation for political science students: course 201A. Open to any student of politics, economics, philosophy, or mathematics with ability for deductive reasoning. Introduction to abstracts of collective action literature, modeling and public and collective-choice processes. Axiomatic method applied to politics and political economy, concept of rationality, and agenda control, choice-set or solution concepts.


203A. Economic Theory and Methods for Political Science. (4) Discussion, three hours. Preparation: knowledge of elementary calculus. Introduction to techniques of economic analysis and survey of major
topics in formal political economy. Investigations of models of regulation, trade protection, collective bar-
gaining, and economic growth as time permits.
233B. Economic Theory and Methods for Political Science II. (4) Discussion, three hours. Requisite:
course 203A. Continuing survey of microeconomic techniques used in formal political science, with focus on
market failures and on modeling individual choice in nonmarket situations. Topics include utility func-
tionals, public goods and allocation mechanisms, col-
lective action, spatial models, structure-induced equi-
lrium, and information asymmetries.
204A. Game Theory in Politics I. (4) Seminar, three
hours. Surveys the world of game theory, with emphasis on uti-
lizing mathematical models to understand political and
economic phenomena. Applications concern political participation, public goods, legislatures, industrial regu-
lation, bureaucracies, interest groups, and party
competition. Designed to help students become in-
formed consumers of game-theoretical literature in
political science. S/U or letter grading.
204B. Game Theory in Politics II. (4) Seminar, three
hours; fieldwork, eight hours. Requisite: course 204A.
Intermediate game theory course. Topics include
games of incomplete information, cheap talk games,
and bargaining theory. Applications concern political participation, public goods, legislatures, bureau-
cracies, conflict, and communication. Designed to help students use game theory in their research. S/U or
letter grading.
204C. Game Theory in Politics III. (4) Seminar, three
hours; fieldwork, eight hours. Requisites: courses 204A,
204B. Advanced game theory course, with em-
phasis on new and/or advanced techniques. Topics
include timing games, stochastic games, and mecha-
nism design. Applications concern bureaucracies,
conflict mediation, and political transitions. Designed to help students use advanced game theory in their research, S/U or
letter grading.
M208B. Topics in Applied Game Theory. (4) (Same as Economics M215.) Lecture, three hours. Prepara-
tion: calculus or introductory probability. Designed for
graduate economics and political science students. Survey and application of major solution concepts to
models of bargaining, oligopoly, cost allocation, and
economic phenomena. Applications concern the liberal position (communitarianism, post-structuralism, group rights theories, etc.). S/U or letter
grading.
215. Liberalism and Its Critics. (4) Seminar, three
hours; discussion, one hour (when scheduled). Exam-
inuation of works of one or more major contemporary
liberal theorists (Rawls, Dworkin, Habermas, Nass-
bbaum, etc.) in light of alternatives which have been
proposed to the liberal position (communitarianism;
post-structuralism, group rights theories, etc.). S/U or
letter grading.
217. Selected Texts in Political Theory. (4) Seminar,
three hours. Critical examination of major problem in
political theory: main attention to the attitudinal
political system, logical and intellectual currents, and
importance of system for present-day political analysis. S/U or letter
grading.
218. Selected Topics in Political Theory. (4) Seminar,
three hours. Critical examination of major problem in
political theory. S/U or letter grading.
219. Workshop: Political Theory. (4) Discussion,
three hours. S/U or letter grading.
International Relations
220A. International Relations Core Seminar I. (4)
Seminar, three hours; fieldwork, eight hours. S/U or
letter grading.
220B. International Relations Core Seminar II. (4)
Seminar, three hours. Further analysis of academic
work in international relations and introduction of
survey of research project in this area. Letter grading.
220C. International Relations Research Seminar. (4)
Seminar, three hours; tutorial meetings, to be ar-
anged. Design, application, and presentation of research project in international relations within com-
bination of seminar and tutorial settings. Letter grading.
222. Seminar: Strategic Interaction. (4) Seminar,
three hours. A strategic move influences the other
person’s choice by affecting his expectations of how
we will behave. Discussion of theories of deterrence,
coercive diplomacy, crisis management, war termina-
tion, and negotiation. Use of various theoretical ap-
proaches to explaining strategic interaction, including
psychology, bargaining theory, and game theory.
223. Politics and Strategies of Modern War. (4)
Seminar, three hours. Analysis of various national se-
curity problems in both their military/technical and
political dimensions. Letter grading.
225. American Foreign Policy. (4) Discussion,
three hours. Discussion of approaches used to explain for-
eign policy-making at individual, small group, bureau-
ocratic, and collective levels. Use of research and
application to selected cases in American foreign policy.
226. Making of American Foreign Policy. (4) Sem-
inum, three hours. Intensive analysis of policy formula-
tion process and substance of selected contemporary
problems in foreign policy. Political and institutional
factors affecting foreign policies; analysis of policy op-
tions. S/U or letter grading.
227. Foreign Policy Process. (4) Seminar, three
hours. Requisites: courses 120A, 220A, 220B. Pastic
ience and policy science approaches to national for-
eign policy process, with primary focus on formulation and
implementation of American foreign policy. S/U or
letter grading.
230. Contending Perspectives on International Po-
litical Economy. (4) Discussion, three hours. Survey of
various theoretical approaches to international politi-
cal economy.
231. International Political Economy I. (4) Seminar,
three hours. Interaction between international trade
and investment and domestic political economics of
both industrialized and industrializing societies.
232. International Political Economy II. (4) Seminar,
three hours. Students assigned to do independent
surfing in setting up and solving simple institutional design,
political economy macro, signaling, and participation
models, as well as two-level game models of do-
mestic politics and international conflict and coopera-
tion, with emphasis on applications in international
political economy and comparative politics.
233A-233B-233C. Political Economy Workshops (4-
4-4). Discussion, two hours. Preparation: successful
completion of major field examinations. Workshops for
students writing or preparing to write dissertations.
Reading and discussion of research in progress pre-
vious to a doctoral defense. UCLA faculty, and ad-
vanced graduate students. Research paper of pub-
ishable length and quality required. S/U or letter
grading.
234A-234B-234C. Workshops: National Security,
Federal Politics, and International Relations (0-0-12).
Discussion, two hours. Preparation: successful com-
pletion of major field examinations. Course 234A is
required to 234B, which is required to 234C. Courses
must be taken in sequence. Workshops for students
preparing for or working on dissertations. Reading and
discussion of research in progress presented by UCLA
faculty, visiting scholars, and advanced graduate stu-
dents. Major research paper required. In Progress
(234A, 234B) and letter (234C) grading.
239. Selected Topics in International Relations. (4)
Seminar, three hours. S/U or letter grading.
Comparative Politics
240A-240B. Seminars: Comparative Politics. (4–4)
Seminar, three hours. Courses 240A is not requisite to
240B. Letter grading. 240A. Survey of ideas and ap-
proaches that have been historically important in field
compative politics, with selection of theories and
methodologies that have comprised field over time.
240B. Survey of contemporary research approaches
and problems in field of comparative politics, with a range of theories and methodologies used by practi-
tioners in the field.
241. African Politics. (4) Seminar, three hours. Survey
of contemporary research approaches and problems in
African politics. S/U or letter grading.
242. Chinese and East Asian Politics. (4) Seminar,
three hours. Survey of contemporary research approaches and
problems in Chinese and East Asian politics. S/U or
letter grading.
243. Japanese and Western Pacific Politics. (4) Seminar,
three hours. Survey of contemporary research approaches and
problems in Japanese and Western Pacific politics. S/U or
letter grading.
244. Latin American Politics. (4) Seminar, three hours.
Survey of contemporary research approaches and problems in
Latin American politics. S/U or letter grading.
245. Middle Eastern Politics. (4) Seminar, three hours.
Survey of contemporary research approaches and problems in
Middle Eastern politics. S/U or letter grading.
246A. Western European Politics. (4) Seminar, three
hours. Survey of contemporary research approaches and
problems in Western European politics. S/U or
letter grading.
246B. Political Development of Modern Europe. (4)
Seminar, three hours; discussion, one hour (when
scheduled). Principal phases of political development
from high feudalism to the present, together with theo-
ries and methodology.
247. Politics of Soviet Union and Post-Soviet Re-
region. (4) Seminar, three hours. Survey of contempo-
yary research approaches and problems in Soviet
Union and post-Soviet region politics. S/U or letter
grading.
247A. Evolution of Soviet and Russian Politics. (4)
Seminar, three hours; discussion, one hour (when
scheduled). Discussion seminar surveying political
evolution of Soviet Union and its transformation.
247B. Domestic Context of Russian Foreign Policy.
(4) Seminar, three hours. Examination of domestic so-
cial, political, bureaucratic, and organizational sources
of Russian foreign and strategic policy. S/U or letter
grading.
248. South Asian Politics. (4) Seminar, three hours.
Survey of contemporary research approaches and problems in
South Asian politics. S/U or letter grading.
251. Political Economy of Economic Reform. (4) Discussion, three hours. Some familiarity with econonics helpful. Principal political and economic arguments for and against political and economic reform and consideration of specific historical issues that arise from this process. Letter grading.

252. Parties and Party Systems. (4) Seminar, three hours; discussion, one hour (when scheduled). Theories and practices of political parties, party systems, and elections in comparative perspective.

253. Political Change in Communist Systems. (4) Discussion, three hours. Examination of political context and consequences of structural reform in Communist systems; theories of post-Leninist political pluralization and convergence.

254A. Institutions and Comparative Politics: Comparative Institutional Analysis. (4) Seminar, three hours; discussion, one hour (when scheduled). Use of advances of rational choice theory and new institutionalism to compare and analyze major institutional structures, including presidentialism vs. parliamenatarism, unicameralism vs. bicameralism, two-party vs. multi-party systems, cadre vs. mass parties, and plurality vs. proportional electoral systems.

254B. Institutions and Comparative Politics: Political Institutions, Delegation, and Policy-Making. (4) Seminar, three hours; discussion, one hour (when scheduled). Analysis of political foundations of policy-making. Characterization of democratic institutions as a series of delegations, from voters to elected officials, within parties and legislatures, and from elected politicians to unelected bureaucrats. Examination of implications of different institutional designs for how those delegations are made and controlled.

255. Seminar: Political Economy of Developing Countries. (4) Seminar, three hours. Interdisciplinary seminar directed toward comparative analysis of political development and modernization. S/U or letter grading.

256. External Sources of Domestic Politics. (4) Discussion, three hours. Theoretical and historical studies of impact of external factors on domestic cleavages, policy, and institutions. S/U or letter grading.

257. Labor and Working-Class Politics. (4) Discussion, three hours. Questions and topics on comparative labor and working-class politics. S/U or letter grading.

258. Comparative Politics Seminar. (2) Seminar, 90 minutes. Biweekly speaker series featuring presentation of unpublished research papers by comparative political scientists, as well as external scholars. Required participation and written assignments. S/U grading.

259. Selected Topics in Comparative Politics. (4) Discussion, three hours. Critical examination of major problems in comparative politics. S/U or letter grading.

American Politics


262A1. Seminar: Political Psychology. (4) Same as Psychology M236A. Seminar, three hours. Introduction to political psychology: psychobiography, personality and politics, mass attitudes, group conflict, political communication, and elite decision making.

261B. Mass Attitudes and Political Behavior. (4) Seminar, three hours. Requisite: course 141B or 260A. Analysis of development and change of political attitudes in mass publics and their relationship to voting, protest, and violence. S/U or letter grading.

261C. Political Communication. (4) Discussion, three hours. Broad survey of research bearing on role of mass media in the American political process. Topics include news interpretation, evolution of media effects research, reporting and advertising as determinants of election outcomes, adversarial versus deferential journalism, and analyses of media bias.

M261D. Seminar: Political Psychology. (4) Same as Psychology M228B. Discussion, three hours. Requisite: course M261A or Psychology 220A. Examination of political behavior, political socialization, racial conflict, mass political movements, and public opinion. S/U or letter grading.

2621E. Critical Problems in Political Psychology. (4) Same as Psychology M228C. Discussion, three hours. S/U or letter grading.

262. Political Parties. (4) Seminar, three hours. Critical examination of literature on party systems and organization. Special attention to political functions, electoral campaigns, and party cadres. S/U or letter grading.


268. Group Theories of Politics. (4) Discussion, three hours. Critical appraisal of group theory approaches to study of political decision making, with special attention to empirical research problems and findings. S/U or letter grading.


270. Legislative Behavior. (4) Seminar, three hours. Analysis of major approaches to study of representative legislative institutions, with special emphasis on assumptions, concepts, methods, and theoretical implications associated with each approach. S/U or letter grading.

271. Executive Politics and Presidency. (4) Seminar, three hours. Analysis of organization and leadership, with emphasis on American Presidency. Special attention to theories of organization and personality and relationships between executive and other institutions and groups. S/U or letter grading.


Race, Ethnicity, and Politics

280A. Race and Ethnic Politics Field Seminar 1. (4) Seminar, three hours. Theory, research methods, and development of paradigms in study of race and ethnic politics. S/U or letter grading.

280B. Research Methods in Race-Ethnic Politics. (4) Seminar, three hours; field work, eight hours. Second course in race-ethnicity politics field seminar sequence. Review, discussion, discussion, and debate of different research methods that are used in race-ethnicity politics scholarship and advantages and disadvantages of different approaches and methodological issues. S/U or letter grading.

289A. Approaches to Study of Race, Ethnicity, and Politics. (4) Seminar, three hours. Analysis of alternative theoretical, methodological, and empirical approaches to study of race, ethnicity, and politics. S/U or letter grading.

289B. Current Research on Race, Ethnicity, and Politics. (4) Seminar, three hours. Exploration of current research on race, ethnicity, and politics. S/U or letter grading.

Special Studies

290. Modern Political Economy. (4) Discussion, three hours. Discussion of implications for understanding politics of thinking of politicians, bureaucrats, producers, consumers, and nations as utility maximizers. Topics include microfoundations for macromodels, forms of political participation, state, government regulation, growth of government, bureaucracy elections, public policy, inflation, S/U or letter grading.

292A. Introduction to Political Inquiry: Problems of Scientific Inquiry and Normative Discourse. (2) Seminar, two hours; discussion, one hour (when scheduled). Design of qualitative and quantitative empirical research projects. S/U or letter grading.

293. Great Ideas in Social Sciences. (2) Seminar, two hours. Vehicle for faculty and visitors to teach research seminars of variable length. Special training opportunities on advanced quantitative methods, including complexity theory, agent-based modeling, experimental economics, social cognitive neuroscience, and evolutionary psychology, to be offered at irregular intervals. May be repeated for credit. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Teaching Political Science. (4) Seminar, to be arranged. Seminar in teaching techniques, including evaluation of each student's own performance as a teaching assistant. Normally to be taken by all new teaching assistants in first term of their assistantships. May be taken only in term in which students are teaching assistants. May not be applied toward MA or PhD course requirements. S/U grading.

495A. Teaching Political Science 1. (4) Seminar, three hours. Intensive training during Spring Quarter. Required of all new PhD students and potential departmental teaching assistants. Practical and theoretical issues in teaching of political science. S/U grading.

495B. Teaching Political Science 2. (4) Seminar, two hours. Requisite: course 495A. Workshop in teaching techniques, including evaluation of each student's own performance as a teaching assistant. Normally to be taken by all new teaching assistants in first term of their assistantships. May be taken only in term in which students are teaching assistants. May not be applied toward MA or PhD course requirements. S/U grading.

501. Cooperative Program. (2 to 8) Preparation: consent of UCLA graduate advisor and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.

596. Directed Individual Study or Research. (2 to 4) Tutorial, to be arranged. May be applied only three times toward minimum course requirement in first two years. May be repeated. S/U or letter grading.

597. Preparation for PhD Qualifying Examinations. (2 to 12) Tutorial, to be arranged. May be repeated. S/U grading.

PHYSICIANS AND BIOBEHAVIORAL SCIENCES

David Geffen School of Medicine
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Psychiatry and Biobehavioral Sciences
310-206-5110

Helena Hansen, MD, PhD, Interim Executive Chair
Barry H. Guze, MD, Vice Chair
Alex J. Kopelowicz, MD, Vice Chair
Ira M. Lesser, MD, Vice Chair
Stephen R. Marder, MD, Vice Chair
James T. McCracken, MD, Vice Chair
Thomas B. Strouse, MD, Vice Chair
Margaret L. Stuber, MD, Associate Chair, Medical Student Education
Bonnie T. Zima, MD, MPH, Associate Chair, Academic Affairs

Overview

The Department of Psychiatry and Biobehavioral Sciences offers interdisciplinary courses related to the mental health professions of the biobehavioral sciences in addition to its programs for psychiatry interns and residents and for medical students.

Enrollment in department courses is limited to registered UCLA students, students registered in programs officially affiliated with UCLA, and students enrolled concurrently through UCLA Extension. Students who meet these requirements, but who are not affiliated with a departmental training program, must also meet required course requisites determined by specific educational programs.

Doctoral Internship Program in Clinical Psychology

The department offers a 12-month Doctoral Internship Program in Clinical Psychology. Students enrolled in clinical psychology doctoral programs at APA-approved universities are eligible to apply. Applications are accepted from September 1 through November 1. The primary goal of the internship is to provide a year of intensive exposure to a wide variety of clinical experiences. The training is designed to maximize the personal growth of each intern. Interns are expected to develop proficiency in an area of focus as well as gain experience outside of their specific area of interest. At the beginning of the year, trainees design a program, both to supplement and complement previous development. Within the learning settings chosen by the trainee, every effort is made to teach the specific techniques necessary to gain competence. The great variety of resources makes both the individualized choice and the acquisition of skills possible. Students interested in this program should contact the program office, 37–357 Semel Institute, 310-206-5110.

Psychiatry and Biobehavioral Sciences

Lower-Division Courses

19. Flat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

79. Applied Positive Neuroscience: Skills for Improving Productivity and Well-Being. (B) Lecture, three hours; discussion, one hour. Not open to students with credit for Community Health Sciences 179. Intrapersonal, interpersonal, and extrapersonal contributions to well-being, and how activity and chemistry of key human regions contribute to each, e.g., influence of mindfulness on prefrontal cortex activity, or how oxytocin system is altered by social interaction. Students learn to recognize relationship between cognitive, social, and emotional competence for healthy development, and how to apply it to their own lives. Through neuroscientific context, introduction to multidisciplinary perspectives on variety of topics that are widely considered significant developmental tasks for young adults, including emotion regulation, managing social relationships, enhancing productivity, and identity development. Letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplementary readings, papers, or other activities. May be repeated for a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

173. Mental Health: Bias, Inequities, and Racism. (4) Formerly numbered 188B. Lecture, three hours. Our brains bias our behaviors to optimize functioning in our environment but often based on premises that are contrary to societal goals of equality. Biases, both implicit and explicit are prevalent, and their existence leads to both overt and covert decision-making based on race, financial status, gender, and disabilities. Focus on biases, inequities, and disparities that surround mental health. Exploration of relevant biases in society and how they arise. Students learn about implicit and explicit bias, and discuss instruments attempting to measure biases including implicit-association test. Exploration of multiple areas related to structural racism and how it contributes to mental health inequities. Address those with mental health disorders, exacerbation of mental health disorders, health inequities because of racism and discrimination, and treatment biases for mental health disorders. Consideration of current and historical research and relevance of public policies and criminal justice system in creating and perpetuating health inequities. P/NP or letter grading.

174. Brain and Behavioral Health: Childhood and Adolescence. (6) Seminar, three hours. Limited to junior/senior Neuroscience or Psychology majors. Integration of problem-based learning approach to teach foundational information about consideration of development and brain and behavioral science to understanding and promotion of child and adolescent mental health. Exploration of integration of developmental psychopathology, applied treatment research, and public policy to identify and dismantle barriers to problems. Focus on set of key topics (e.g., autism, mood disorders, anxiety disorders, and substance use disorders) during childhood and adolescence. Research of childhood and adolescent mental health and public policy literature. Guest facilitators with expertise complement study of emerging treatment advances, applications, and policies. Letter grading.

175. Mindfulness Practice and Theory. (4) Seminar, five hours. Designed for beginners; prior experience with meditation not required. Introduction to mindfulness, including basic mindfulness meditation practices, both sitting and moving, ways to develop positive emotions like gratitude, kindness, and joy, and methods for integrating more awareness and creativity into ordinary activities. Examination of varying meditative traditions as well as scientific effects of mindfulness practice to mental and physical health. Beneficial effects include reduced stress, improved attention, reduced emotional reactivity, and greater mind-body awareness. Development of practical skills of relational mindfulness in interactions with others. Offered in summer only. P/NP or letter grading.

176. Brain and Behavioral Health: Adulthood and Aging. (6) Seminar, five hours. Limited to junior/senior Neuroscience or Psychology majors. Integration of problem-based learning approach to teach foundational information about consideration of development and brain and behavioral science to understanding and promotion of mental health during adulthood and aging. Exploration of integration of developmental psychopathology, applied treatment research, and public policy to identify and dismantle barriers to problems. Focus on set of key topics (e.g., depression, dementia, post-traumatic stress disorder) during adulthood and aging. Research of mental health and public policy literature. Guest facilitators with expertise complement study of emerging treatment advances, applications, and barriers. Letter grading.

177A-177B. Brain and Behavioral Health: Clinical Psychopathology. (4-4) Fieldwork, six hours discussion, one hour. Designed to provide students with integrated set of learning experiences related to mental health and wellness across lifespan. Through applied approach to human and behavioral science, exploration of integration of developmental psychopathology, assessment and treatment research, and public policy to address issues related to psychological health and wellness. Focus on key topics (e.g., different classes of psychiatric illness) during childhood, adolescence, and adulthood offering direct exposure to health-care settings, clinical populations, and interdisciplinary teams that treat them. Students participate in designated health setting under supervision of faculty mentor. Throughout observation of activities in clinical health setting, students see firsthand how brain and behavior science translates into real-world care. In Progress (177A) and letter (177B) grading.

178. Cannabis and Cannabinoids: From Pharmacology to Public Policy. (4) Lecture, three hours. Designed for undergraduate students with biology, human biology, and/or psychology background and graduate students in neuroscience-related programs. Relevant for those considering career in medical science, neuroscience, or policy fields. Offers comprehensive didactic information concerning cannabis plant and relates basic information with clinical and societal use of plant and its extracts. Analysis of pharmacology of exogenous and endogenous cannabinoids at the molecular, cellular, and behavioral levels. Study of physiological and psychologic-
lcial actions of phytoecannabinoids (focusing on THC and CBD) and synthetic cannabinoids and evidence-based research of potential benefits and harms of different classes of cannabinoids, including potential implications for cannabinoid policy including legislation, FDA regulation, and health care services. P/NP or letter grading.

M182. Personal Brain Management. (4) (Same as Neuroscience M161.) Seminar, four hours. Basic overview of brain function and consideration of tools to help students distinguish scientifically validated procedures. Offered in summer only. Letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors College 101. Limited to upper-class USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE topics, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: 188SA. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Drawn as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be taken for credit by eligible undergraduates. Honors contract noted on transcript. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be taken for credit by eligible undergraduates. Honors contract required. Honors content noted on transcript. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be taken for credit by eligible undergraduates. Honors contract required. Honors content noted on transcript. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be taken for credit by eligible undergraduates. Honors contract required. Honors content noted on transcript. P/NP or letter grading.

190. Directed Research in Psychiatry and Biobehavioral Sciences. (2 to 4) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. Individual contract required. P/NP or letter grading.

Graduate Courses

M210. Editorial Board Apprenticeship. (2) (Same as Health Policy and Management M249Q.) Seminar, two hours. Designed for postdoctoral fellows and advanced PhD students. Participation in peer review process for academic journal, Health Psychology, with consideration of interface between behavioral science, health, and medicine. Reading and discussion of submissions and advice on suitability for full review. S/U or letter grading.

226A-226B. Childhood Psychopathology Research Seminars. (2–2) Seminar, 90 minutes. Current research in causes and behavioral manifestations of childhood psychopathology, with emphasis on diagnosis and etiology of childhood disturbances.

M230. Communication of Science. (2) (Same as Bio- mathematics M262.) Lecture, two hours; discussion, one hour. Presentation of various types of scientific articles and their good practice. Details of writing specific articles: methods, results, discussion. Writing of review article. Grant submissions: aims, background, results, design, Risks of amendments. Communication within and outside the context of the academic discipline. Letter grading.

M232. Causal Inference. (4) (Same as Biostatistics M235.) Lecture, three hours; discussion, one hour. Requisites: Biostatistics 200C, 202B, or equivalent. Philosophical foundations for decision analysis, decision analysis, selection bias, confounding, ecological paradox, historical development, potential outcomes, Rubin causal model, propensity scores, competing perspectives of random and nonrandom exogenous factors, structural-equation models, experiments with noncompliance, principal stratification, decision making when causality is disputed, role of ethics in decision making. S/U or letter grading.

M234. Affective Disorders. (2 or 4) (Same as Psychology M280.) Seminar, two hours. General topics related to primary affective disorders (depression, mania, depressive illness), including diagnosis, pharmacology, epidemiology, psychology, phenomenology, biology, and treatment. Students enrolled for 4 units are assigned a more intensive reading list and required to make a presentation or prepare a research paper. 226A-236B-236C. Psychology Interns Seminars. (1–1–1) Seminar, 90 minutes. Current topics in clinical psychology. Group-selected topics for discussion pertaining to psychopathology, diagnostic evaluation, and modalities of treatment. S/U grading.

237. Seminar in Psychobiology. (1) Seminar, one hour per month; discussion, 30 minutes per month. Series of lectures presented the second Wednesday of each month throughout academic year by invited speakers. One hour seminar, two hours discussion. S/U grading.

M238. Survey Research Techniques in Psychocultural Studies. (4) (Same as Psychology M238.) Seminar, three hours. Designed for graduate students. Techniques for conceptualizing, conducting, and analyzing survey data; instruction in qualitative strategies for enhancing survey research on psychocultural problems.

M240. Assessment and Treatment of African American Families. (3) (Same as African American Studies M240.) Seminar, one hour per month; discussion, 30 minutes per month. Series of lectures presented the second Wednesday of each month throughout academic year by invited speakers. S/U or letter grading.


253. Seminar: Child Development. (1) Theories of development, systems of child development, and chronological aspects of child development. Presentations of assigned readings by students plays major role in each session.


257. Legal and Ethical Issues with Vulnerable Populations. (3) Lecture, 90 minutes; laboratory; three and one half hours. Discussion dealing with vulnerable populations (e.g., children, developmentally disabled people, elderly people); philosophies, ethics, ethical codes, issues, and how to resolve them. Use of videotapes and discussion of cases.


M263. Clinical Pharmacology. (2) (Same as Biomathematics M263 and Medicine M263.) Lecture, two hours. Preparation: completion of professional health sciences degree (MD, DDS, DNSc, or PhD). Overview of role of clinical pharmacology, especially as it relates to clinical and translational medicine and to advances in contemporary medicine such as targeting, gene therapy, and genomics. Letter grading.

254. Health and Mental Health Disparities from Psychosocial and Cultural Perspectives. (4) Seminar, three hours. Designed for graduate and medical students, resident physicians, and juniors/seniors (with consent of instructor) interested in learning about gender, sexual, and mental health disparities. Survey course to introduce students to health disparities that exist for ethnic minorities and factors that may contribute to disproportionate prevalence rates. Review and discussion of research literature, with focus on specific diseases such as HIV/AIDS, substance abuse, depression, and breast and prostate cancer. Discussion of stereotypes and myths about healthcare of ethnic minorities. Examination of psychosocial and cultural contexts as potential or contributing factors. S/U or letter grading.

M270. Neural Basis of Memory. (4) (Same as Neuroscience M270.) Lecture, two hours; discussion, one hour. Clinical, biological, psychiatric and physiological data integrated into models for how behavioral phenomena of memory arise. Discussion of invertebrate memory, cortical conditioning, hippocampus and declarative memory, and frontal lobes and primary memory.

M272. Psychological Anthropology. (4) (Same as Anthropology M272.) Seminar, three hours. Various psychological issues in anthropology, both theoretical and methodological. Areas of interest include such things as culture and theory, culture and personality, and culture psychiatry. Discussion of questions relating to symbolic and unconsciousness process as they relate to culture. Topics vary from term to term. May be repeated for credit with topic change. S/U or letter grading.


275. Psychoneuroimmunology Research Seminar. (1) Seminar, one hour. Topics to be centered around current research directions in psychoneuroimmunology (PNI), including social genomics, inflammation, and biological aging. Common molecular and immunological protocols used in PNI and current directions in PNI research, with emphasis on basic immunology and immunological/molecular biology and role of behavioral and psychological factors on immune and cell-aging processes. S/U grading.
293. Professional Development: Presentations and Preparation for Academic Interviews. (2) Seminar, two hours. Exposure to range of professional development opportunities and required/optional skills: Hands-on skills and practice in preparing and delivering presentations for various audiences, and preparing research and/or teaching statements for job applications. S/U grading.

294. Essentials of Clinical Investigation. (2) Lecture, two hours; discussion, two hours. Designed for graduate students. Introduction to initial steps in clinical research through preparation of research proposal. Small working groups develop grant proposal on specific topic. S/U grading.

295A. Substantive Issues in Substance Abuse I. (2) Seminar, two hours; discussion, one hour. Neurobiology and pharmacology of drug abuse, as well as theories of addiction and effects of various substances. Emphasis on social and ethical issues. S/U grading.

295B. Substantive Issues in Substance Abuse II. (2) Seminar, two hours; discussion, one hour. Drug use patterns and treatment issues in specific populations such as women, adolescents, homeless, multiply diagnostized, as well as different ethnic populations. Exploration of drug abuse between drug abuse, sexularity and HIV/AIDS. S/U grading.

295C. Substantive Issues in Substance Abuse III. (2) Seminar, two hours; discussion, one hour. Theoretical perspectives on drug use and abuse as well as policy and ethical aspects of drug abuse research. Research design and analysis issues pertinent to drug abuse research. S/U grading.

296. Research Group Seminar: Practicum. (2) Research group meeting, three hours. Designed for graduate students who wish to conduct research studies. Coverage of (1) publishing process—submitting manuscripts to journals, selecting appropriate journals, frequent reasons for journal rejection of manuscripts, and key points in journal publication, (2) overview of National Institutes of Health (NIH), including organization structure and mission, grant application process, funding mechanisms, and review process, (3) preparing writing grants for submission to NIH, including review of components of successful applications, criteria by which applications are judged, and what to emphasize in each section, (4) grant mechanisms specifically designed for new investigators, (5) human subjects section for grant applications and IRB issues, and (6) preparation of budgets (modular and detailed) and budget justification for NIH submissions. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship fund, active guidance and supervision of regular faculty members responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

402. Journal Club. (1) Seminar, two hours; outside study, two hours. Presentation of participants’ current research. Critical review of recent articles on drug abuse. Training sessions included in areas in which fellows believe they have a recognized need. S/U grading.

403. Individual Case Supervision. (1 to 4) Preparation: submission of written proposal to be structured by instructor and student prior to enrollment; additional information and proposal forms available in Office of Education, 3B-216 Semel Institute. One-to-one supervision of individual therapy cases, including analyses of patient data, supervision of ongoing treatment, informal didactic sessions on personality theory, and applications to patient management. S/U or letter grading.

404. Trauma and Sexual Abuse Research Seminar. (4) Seminar, three hours; discussion, one hour. Design for graduate drug abuse research and student physicians interested in learning about behavioral trauma research. Introduction to DSM-I V TR diagnostically criteria for posttraumatic stress disorder (PTSD), as well as biopsychosocial sequelae. Examination and discussion of child and adult sexual abuse in context of being causative precursors of acute and chronic causes of PTSD. Evaluation of allostatic load, among other biologic variables, within context of physiological markers for PTSD. Review of current modes of treatment, including therapeutic and pharmacologic interventions. Research methods particularly important for trauma research. S/U or letter grading.

407A-407B-407C. Clinical Hypnosis Seminars. (2–2–2) Three two-hour, independently oriented sequence with lecture, discussion, demonstration, practice, and assigned readings. Guest speakers with expertise in specific hypnotic applications and procedures, and video presentations. Guest trainees and faculty members in healthcare professions as well as licensed healthcare providers from community (MCEP credit available) encouraged to enroll. For students in social work, psychology, psychiatry, completion of minimum of one year of supervised training in psychotherapy or behavior therapy required. S/U grading.

407A. Cultural and historical context for hypnosis; development of technical competence in trance induction, deepening, management, and re-altering; and gaining familiarity with trance experiences. 407B. Fundamentals of trance utilization, including diagnosis, creativity, and facilitating exploratory trance experiences. 407C. Application of hypnotic interventions in specific clinical situations and with specific populations.

M242. Functional Magnetic Resonance Imaging (fMRI) Seminar. (2) Same as Neural and Behavioral Sciences M242.) Lecture. 90 minutes. Limited to 10 students. Current topics in functional neuroimaging, with emphasis on novel applications, analysis, and acquisition methods. Presentation and critique of student papers. Overall emphasis on magnetic resonance imaging. Example areas include tractography through diffusion tensor imaging, jittered event-related experimental designs, parallel receiver MR imaging, integrated electrophysiological and image acquisition. S/U grading.

425. Teaching Case Conference. (1) Review of diagnostic and treatment of full spectrum of patients, with expert off-unit consultants. S/U or letter grading.


431A-431B-431C. Pediatric Neuropsychology: Assessment, Diagnosis, and Treatment Planning. (1–1–1) Seminar, one hour. Presentation of didactics on developmental disorders, pediatric syndromes, and conditions. Discussion of research findings and development of methods of assessment in children, with focus on neuropsychological testing. Presentation of differential diagnosis and treatment planning. S/U grading. 431A. Developmental disorders, including autism, Asperger’s, and intellectual disability. 431B. Specific learning disabilities, head injury, low birth weight, tumors, and epilepsy. 431C. Implementation of research from previous two terms in case presentation format, supplemented with various guest speakers.

441. Seminar: Addiction Research. (2) Seminar, two hours; discussion, one hour. Cutting-edge research in neuroscience of addictive behavior, using both animal models and human participants. Neuroscience findings regarding multiple addictive substances (e.g., stimulants, alcohol, nicotine) and related behavioral health issues (e.g., impulsivity, risky decision making). Some lectures provided by nationally recognized invited guest speakers. S/U grading.

449. Parent Training Intervention Workshop. (2) Lecture, 90 minutes; discussion, one hour. Advanced clinical trainees learn behavioral techniques of assessment and treatment of parent/child problems. Lectures, case presentations, and workshops on various skills necessary.

454. Advanced Topics in Neuropsychology. (1) Seminar, one hour. Coverage of topics in even years that involve interface of neuropsychology with other disci-
Faculty Roster

Professors

Howard S. Adelman, PhD
Robert F. Asamow, PhD, in Residence (Della Martin Professor of Psychiatry)
Carrie E. Bearden, PhD, in Residence
Robert M. Bilder, PhD, in Residence (Michael E. Tennenbaum Family Endowed Professor of Creativity Research)
James W. Bisley, PhD (Ethel Scheibel Professor of Neuroscience)
Hugh T. Blair, PhD
Aaron P. Blaisdell, PhD
Susan Y. Bookheimer, PhD, in Residence (Joaquin M. Fuster Professor of Cognitive Neuroscience)
Julienne E. Bower, PhD
Thomas N. Bradbury, PhD
Dean V. Buonomano, PhD
Li Cai, PhD
Alan D. Castel, PhD
Denise A. Chavira, PhD
Patricia Cheng, PhD
Bruce F. Chorpita, PhD
Michelle G. Craske, PhD (Kevin Love Fund Centennial Professor)
Naomi I. Eisenberger, PhD
Craig K. Enders, PhD
Christopher J. Evans, PhD, in Residence (Stefan Hatos Endowed Professor of Psychiatry and Biobehavioral Sciences)
Craig R. Fox, PhD (Harold Williams Professor of Management)
Andrew J. Fuligni, PhD, in Residence
Adriana Galván, PhD
Noah J. Goldstein, MA, PhD (Ho-Su Wu Professor of Management)
Patricia M. Greenfield, PhD
Martie G. Haselton, PhD
Hal E. Hershfield, PhD
Keith Holyoak, PhD
Yuen J. Huo, PhD
Michael R. Irwin, MD, in Residence (Norman Cousins Endowed Professor of Psychoneuroimmunology)
Alicia Izquierdo, PhD
Keri L. Johnson, PhD
Scott P. Johnson, PhD
Jaana H. Juvonen, PhD
Benjamin R. Karney, PhD
Philip Kellman, PhD
Barbara Knowlton, PhD
Anna S. Lau, PhD
Steve S. Lee, PhD
Matthew D. Lieberman, PhD
Zili Liu, PhD
Hongjing Lu, PhD
Vickie M. Mays, PhD
David J. Miklowitz, PhD, in Residence
Martin M. Monti, PhD
Keith H. Nuechterlein, PhD, in Residence
Efrén O. Pérez, PhD
Lara A. Ray, PhD
Steven P. Reise, PhD
Dario L. Ringach, PhD
Theodore F. Robles, PhD
Catherine M. Sandhofer, PhD
Ladan Shams, PhD
Margaret J. Shih, PhD (Neil Jacoby Professor of Management)
Alcino J. Silva, PhD
Annette L. Stanton, PhD
James W. Stigler, PhD
A. Janet Tomiyama, PhD
Miguel M. Unzueta, PhD
Kate M. Wassum, PhD (Bernice Wenzel and Wendell Jeffrey Term Endowed Professor of Behavioral Neuroscience)
Patrick A. Wilson, PhD
Cindy M. Yee-Bradbury, PhD

Professors Emeriti

Paul R. Abramson, PhD
Bruce L. Baker, PhD
Jackson Beatty, PhD
Peter M. Bentler, PhD
Elizabeth L. Bjork, PhD
Robert A. Bjork, PhD
Janet B. Blacher, PhD
William E. Broen, Jr., PhD
Andrew Christensen, PhD
Christine A. Dunkel Schetter, PhD
Michael S. Fanselow, PhD (Staglin Family Professor Emeritus of Psychology)
Charles R. Gallistel, PhD
R. Edward Geiselman, PhD
Rochel Gelman, PhD
Gerald M. Goodman, PhD
Carlos V. Grijalva, PhD
Constance L. Hammen, PhD
Eric W. Holman, PhD
John P. Houston, PhD
Franklin B. Krasne, PhD
Steven R. Lopez, PhD
Donald G. MacKay, PhD
Albert Mehrabian, PhD
Gregory A. Miller, PhD
Hector F. Myers, PhD
Allen Parducci, PhD
L. Anne Peplau, PhD
Rena L. Repetti, PhD
Tara K. Scanlan, PhD
Stanley J. Schein, MD, PhD
David O. Sears, PhD
David Shapiro, PhD
James H. Sidanius, PhD
Shelley E. Taylor, PhD
James P. Thomas, PhD
Jill M. Waterman, PhD
Bernard Weiner, PhD
John R. Weisz, PhD
Nancy J. Woolf, PhD

Associate Professors

Erica A. Cartmill, PhD
Jesse A. Harris, PhD
Katherine H. Karlsgodt, PhD
Ian M. Krajibich, PhD
Carolyn M. Parkinson, PhD (Bernice Wenzel and Wendell Jeffrey Term Endowed Professor of Cognitive Neuroscience)
Jesse A. Rissman, PhD
Jennifer A. Silvers, PhD (Bernice Wenzel and Wendell Jeffrey Term Endowed Professor of Developmental Neuroscience)
Nanthia A. Suthana, PhD, in Residence

Assitant Professors

Avishek Adhikari, PhD

Junior Faculty

Alan D. Castel, PhD
Craig K. Enders, PhD
Michelle G. Craske, PhD
Naomi I. Eisenberger, PhD
Philip Kellman, PhD
Peter M. Bentler, PhD
James H. Sidanius, PhD
Jonathon W. Dorfman, PhD

Adjunct Faculty and Research Affiliates

Robert M. Bilder, PhD
Carrie E. Bearden, PhD
Howard S. Adelman, PhD
Margaret J. Shih, PhD

Psychology / 757
Three undergraduate majors are offered: a Bachelor of Arts (BA) in Psychology, a Bachelor of Science (BS) in Cognitive Science, and a BS in Psychobiology. While the majors overlap in certain fundamental and basic knowledge bases, they differ considerably in their focus (i.e., the extent to which certain areas of psychology and related disciplines are studied) and in terms of the different student interests and needs they satisfy. For nonmajors, the department offers many courses that provide students with new and valuable insights into the understanding of human behavior, including their own.

Honors Courses

Each year the department offers a selection of honors courses, designated with an H suffix. The courses provide close contact with faculty members, emphasize readings in the original literature, student reports, and small group discussions, and may include field or research experience. Contact the College of Letters and Science for information on requirements for College Honors.

Graduate Study

At the graduate level, the department offers training leading to the PhD degree with emphases in the areas of behavioral neuroscience, clinical, cognitive, cognitive neuroscience, computational cognition, developmental, health, learning and behavior, social and affective neuroscience, and quantitative psychology. The graduate program is designed to prepare future psychologists for careers as scientific investigators, college and university teachers, and clinical scientists.

Fieldwork and Research Opportunities

Many research and fieldwork opportunities are open to students who wish to expand their knowledge and broaden their background in the field of psychology. These experiences can be enriching and help bring undergraduate students closer to understanding the importance of research and internships, including their applications in the everyday world. At least one of the following courses is recommended for students planning postgraduate study: Psychology 99, 185, 192, 194A through C194D, 195A, 195B, 196A, 196B, 199A, or 199B. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward the undergraduate degree. Information about these courses and programs is available from the Undergraduate Advising Office.

Only one 4-unit 199 course may be taken per term, and only 16 units of course 199 may be applied toward the degree. Only one 199 course may be taken for a letter grade (additional 199 courses may be taken on a P/NP basis). If approved in advance by the Undergraduate Advising Office, 8 units of course 199 may be applied toward the Psychology 195B/196B requirement for the Cognitive Science major and 4 units of course 199B may be applied toward the elective course requirements for the Psychology major.

Psychology Research Opportunity Programs

The Psychology Research Opportunity Programs (PROPS) represent a vital effort to identify and mentor underrepresented minority and/or low-income students. The purpose of PROPS is to encourage such students to participate in research and pursue graduate studies leading to careers in academia. The recruitment and application process for PROPS takes place each fall quarter. Students selected to participate are awarded stipends for winter and spring quarters, during which time they do research under the mentorship of a psychology faculty member. In addition, students are required to attend weekly seminars covering such topics as graduate school, careers in academia, and research opportunities in various fields of psychology. Prior research experience is not required. This is an excellent opportunity for students to begin their research careers and acquire the needed experience to pursue advanced studies.

Infant Development Program

The Megan E. Daly Infant Development Program (IDP), established in May 1983, is located at the Fernald Center at 320 N. Charles E. Young Drive and has two primary functions: (1) to offer quality group care for infants and toddlers of the students, staff, and faculty of the Psychology Department and other UCLA departments, and (2) to serve as a teaching and research facility for the Psychology Department and the UCLA community. The program’s two classrooms each serve children from three months to three years old and accommodate both cross-sectional and longitudinal investigations of infants, toddlers, their families, and caregivers. In addition, the program serves as a primary internship site for students in the Applied Developmental Psychology (ADP) minor, enabling ADP students to acquire firsthand experience observing and caring for infants and toddlers in a professional group setting.

UCLA Psychology Clinic

The UCLA Psychology Clinic in the Department of Psychology is a major training center for students in the clinical psychology PhD program, one of the top-ranked programs in the country. It provides a broad range of psychological services to children and adults, including assessment and individual, couples, family, and group therapy. Clients cover the entire age range and represent diverse populations in the community.

Student therapists receive very close supervision and utilize research-based cutting-edge psychological interventions. Students and faculty members are also involved in a variety of research projects through the clinic.
Undergraduate Majors

Psychology BA

The Psychology major is the most general of the three majors and offers both broad and in-depth coverage of the fundamental and traditional areas of psychology. It provides students with a strong foundation for postgraduate education in psychology and can serve as excellent background to prepare them for further training in such fields as law, education, government and public policy, business, and many of the health-related professions. Its basic liberal-arts orientation also provides students with an excellent foundation for immediate postbaccalaureate careers in many areas, particularly those in which an understanding of human behavior and its diversity of expression would be an asset.

The requirements described below represent the minimum requirements in satisfaction of the preparation and the major. Additional courses in psychology, statistics, and related sciences, as well as other types of research and fieldwork experiences, are highly recommended if students plan to pursue graduate work in psychology and related fields. Under special circumstances, graduate-level courses can be taken by undergraduate students, although such courses may not be applied toward degree requirements for the major. For additional information, contact the Undergraduate Advising Office.

Learning Outcomes

The Psychology major has the following learning outcomes:

- Demonstrated ability to design an experiment in a field of psychology
- Ability to formulate a hypothesis based on knowledge of current literature
- Demonstrated application of principles of control groups and appropriate methodology
- Demonstrated awareness of major research methods in chosen area of psychology
- Demonstrated ability to apply appropriate statistical methods in analyzing data
- Demonstrated ability to write up results of an experiment
- Ability to relate finding to current literature and interpret them in this context
- Ability to discuss results in front of a group of other students
- Ability to verbally communicate ideas motivating experiments
- Ability to clarify experiment to those not familiar with the methods and answer questions

Entry to the Major

Pre-major

Students need to file a petition in the Undergraduate Advising Office to declare the Psychology pre-major. Psychology pre-majors can petition to declare the Psychology major once they have (1) satisfied all the preparation for the major requirements and (2) are accepted into the major through a competitive application process (for students who entered UCLA as first years) or file a petition to declare the Psychology major (for students who entered UCLA as transfers).

First-Year Students

Students may declare the Psychology pre-major once they have established a 2.5 grade-point average in at least one preparation for the major course.

Students must petition to declare the Psychology major and can do so only after they complete all seven preparation courses for the major courses and submit an application to enter the major by the end of the fall quarter of their third year at UCLA. Admission into the major is based on student academic performance in the preparation courses. Students who have a grade-point average of 2.9 or higher in the preparation coursework and have met all other Psychology pre-major requirements are guaranteed entry into the major after they submit the application by the above deadline. Students with a grade-point average between 2.5 and 2.89 in the preparation coursework enter a competitive application pool and are admitted only if there is space available in the major. Students with a grade-point average below 2.5 in the preparation coursework are not eligible to apply for admission to the major.

Transfer Students

Transfer applicants to the Psychology major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one biology course equivalent to Life Sciences 7A or 15 or Physiological Science 3, one general chemistry or general physics course, one philosophy course, one introduction to psychology course, and one course from statistics (recommended), finite mathematics, calculus, computer science theory, or computer programming in C++.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

After satisfying the preparation for the major requirements, students need to petition to enter the major at the Undergraduate Advising Office.

Policies

Students who repeat more than two preparation courses or any preparation course more than once are denied admission to the major.

Requirements

Preparation for the Major

Required: Life Sciences 7A or 15 or Physiological Science 3; Chemistry and Biochemistry 14A or 17 or 20A or Physics 1A or 5A or 10 or 11; one course from Program in Computing 10A, Statistics 10, or one term of calculus; one course from Philosophy 1, 2, 3, 4, 5, 6, 7, 8, 9, 21, 22, 22W, 23, 31; Psychology 10, 100A, 100B.

The Major

Required: (1) Five core courses, with at least two from each category and a fifth course from either category: (a) Psychology 110, 115 (or M117A, M117B, and M117C), 120A, 120B, and (b) 127A or 127B or 127C, 130 (or one course from 133A through 133I or 161), 135, 150; (2) one laboratory/fieldwork course from 101, 111, M116A, 116B, 121, 126, 131, 136A, 136B, M136C, 151, 186A through 186D; (3) four additional upper-division elective courses (16 units) in psychology.

Honors Program

Students work for one year (fall through spring quarters) with a Psychology Department faculty sponsor on a research project that is the basis of a formal honors thesis. During that year they also participate in a weekly seminar (Psychology 191AH, 191BH, 191CH) in which thesis projects are presented and discussed and other topics of interest are explored with invited faculty members and other guests. Other requirements may apply.

Policies

Preparation for the Major

Each of the courses must be taken for a letter grade (C or better in Psychology 10, 100A, and 100B, C– or better in the remaining courses).

Students cannot take Psychology 100B until they have passed course 100A with a grade of C or better. Psychology 100A and 100B are only open to students who have declared the Psychology pre-major before the term in which they plan to enroll. It is recommended that students with no background in introductory statistics take Statistics 10 before enrolling in course 100A.

The Major

Students who complete Psychology M117A, M117B, M117C receive equivalent credit for course 115 and two upper-division psychology electives. All three courses must be completed to receive psychology elective credit.

Each upper-division course must be taken for a letter grade. A C– or better is required in each core course and in at least one laboratory/fieldwork course. Students must have a 2.9 grade-point average in all upper-division courses elected to satisfy major requirements.

Honors Program

Majors intending to continue study at the graduate level are encouraged to apply for the departmental honors program. Contact the Undergraduate Advising Office during spring quarter for more information and application forms. Satisfaction completion of the program and the other requirements for the major leads to awarding of the degree with honors or high-esteem honors.

Cognitive Science BS

The Cognitive Science major focuses on the study of intelligent systems, both real and artificial. While including a strong foundation in the traditional areas of psychology, the major is interdisciplinary in nature and emphasizes subject matter within cognitive psychology, computer science, mathematics, and related disciplines.

The requirements described below include sufficient preparation if students plan to pursue graduate work in cognitive science or related
fields; however, they may want to include additional advanced courses in psychology and fields related to cognitive science (e.g., computer science, linguistics, mathematics, philosophy, and statistics) as well as other types of research and fieldwork experiences.

Capstone Major
The Cognitive Science major is a designated capstone major. Students are required to produce a paper based on each term of their experience in a research laboratory or approved fieldwork site. Through completion of the capstone experience students are expected to identify a research topic and hypothesis to be tested or a fieldwork project and goals, show that they can organize and integrate information related to the topic or project in a clear manner in their own words, demonstrate ability to find and utilize supporting literature relevant to their project or topic, and successfully relate the paper to their experience in the laboratory or fieldwork setting.

Learning Outcomes
The Cognitive Science major has the following learning outcomes:

• Ability to identify a research topic and hypothesis to test, or a fieldwork project and goals
• Demonstrated organization and integration, in a clear manner and in the student’s own words, of information related to a topic or project
• Demonstrated ability to find and utilize supporting literature relevant to a project or topic
• Successful relation of the paper to the student’s laboratory or fieldwork experience
• Ability to discuss results in front of a peer group; verbally communicate ideas motivating the experiment, make the experiment clear to those not familiar with the methods, and answer questions

Entry to the Major
Pre-major
Students need to file a petition with the Undergraduate Advising Office to declare the Cognitive Science pre-major. They are then identified as Cognitive Science pre-majors until they (1) satisfy the preparation for the major requirements and (2) are accepted into the major through a competitive application process (for students who entered UCLA as first years) or file a petition to declare the Cognitive Science major (for students who entered UCLA as Cognitive Science pre-major transfers). Questions about the major should be directed to the Undergraduate Advising Office.

First-Year Students
Students may declare the Cognitive Science pre-major once they have established a 2.9 grade-point average (GPA) in at least one preparation for the major course.

Students must petition to declare the Cognitive Science major and can do so once they complete all preparation for the major courses and submit an application to enter the major by the end of the fall quarter of their third year at UCLA. Admission into the major is based on student academic performance in the preparation courses. Students must have a minimum 2.9 GPA in preparation coursework and submit the application by the above deadline in order to be admitted to the major. A minimum 3.2 GPA is required for guaranteed admittance to the major.

Students with a GPA between 2.9 and 3.19 in the preparation coursework enter a competitive application pool and are admitted only if there is space available in the major. Students with a GPA below 2.9 in the preparation coursework are not eligible to apply for admission to the major.

Transfer Students
Transfer applicants to the Cognitive Science major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one biology course, one general chemistry or general physics course, two calculus/geometric analysis courses, one general physics course, one philosophy course, one introduction to psychology course, one introduction to cognitive science course, one psychological statistics course, one psychology research methods course, one computer programming course in C++, and one other computer programming course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Policies
Students who repeat more than two preparation courses or any preparation course more than once are denied admission to the major.

Each of the required courses must be taken for a letter grade (C or better in each course and a 2.5 overall grade-point average in the preparation courses) by the end of the summer quarter of the third year to be eligible to petition to declare the Cognitive Science major.

After satisfying the preparation for the major requirements, students need to petition to enter the major at the Undergraduate Advising Office.

Requirements
Preparation for the Major
Required: Life Sciences 7A or 15 or Physiological Science 3; Chemistry and Biochemistry 14A or 17 or 20A or Linguistics 1 or 20 or Physics 1A or 5A or 10 or 11; Mathematics 3A, 3B, and 3C, or 31A or 31AL and 31B; Philosophy 7 or 8 or 9 or 23 or 31; Program in Computing 10A and two courses from 10B, 10C, 15, 16A, 20A, 40A, Psychology 20A, 20B, 30, Statistics 20, 21, and Psychology 10, 85, 100A, 100B.

The Major
Required: (1) Psychology 115 (or M117A, M117B, and M117C), 120A or 120B, and one course from 124A through 124K; (2) one course from 111, M116A, 116B, 121, 186A through 186D, Computer Science 161; (3) five upper-division elective courses (20 units) from Psychology 110, 111, 112A through 116B, 118 through 119Y, 120A, 120B, 121, 124A through 124K (if taken for the major, may not be applied as an elective), 130, 133B, 133C, 133E, 135, 137A, M137B, 137G, 142H, 161, M166, 186A through 186D, 196B (one quarter may be applied if course has not been applied toward capstone requirement), 191CH (if content is approved by the Undergraduate Advising Office and course has not been applied toward the Psychology 195B or 196B requirement); Anthropology 124Q, M124R, 136A, M150, Communication 115, 118, 119, 122, 126, M127, 129, 130, 131, 155, Computer Science 111 through CM186, Linguistics 103 through 185B, Mathematics 110A through 171, Music Industry M103, Neuroscience 102, M145, C177, 180, 181, 182, Philosophy 124 through 138, 154, C154B, 170, 172, 174, 180, 181, Psychiatry M182, Statistics 100A, 100B, 100C, 101B, 101C, 115, C161, C160; and (4) in the junior or senior year, one capstone term of Psychology 195B or 196B (may be fulfilled by taking any one course from 195B or 196B or 196B/194C, provided content is approved by the Undergraduate Advising Office).

Honors Program
Students work for one year (fall through spring quarters) with a Psychology Department faculty mentor on a research project that is the basis of a formal honors thesis. During that year they also participate in a weekly seminar (Psychology 191AH, 191BH, 191CH) in which thesis projects are presented and discussed and other topics of interest are explored with invited faculty members and other guests. Other requirements may apply.

Computing Specialization
Majors may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major, (2) completing four courses from Program in Computing 10A, 10B, 10C, 15, 16A, 20A, 40A, Psychology 20A, 20B, 30, Statistics 20, 21, and (3) completing at least two courses from Psychology 85, 121, 142H, 186A through 186D (one 199 course may be substituted for one of these courses provided project has been approved by vice chair). A grade of C or better is required in each course. Students graduate with a bachelor’s degree in their major and a specialization in Computing. Students planning to enter this specialization should contact the Undergraduate Advising Office.

Policies
Preparation for the Major
Each of the required courses must be taken for a letter grade, and complete with a C or better.

Students cannot take Psychology 100B until they have passed course 100A with a grade of C or better. Psychology 100A and 100B should be taken early in the career; these courses are open only to students who have declared the Cognitive Science pre-major before the term in which they plan to enroll. Students with no background in introductory statistics should take Statistics 10 before enrolling in course 100A.

The Major
Students who complete Psychology M117A, M117B, M117C receive equivalent credit for course 115 and two upper-division cognitive
science electives. All three courses must be completed to receive cognitive science elective credit.

Students must have a 2.0 grade-point average in all upper-division courses selected to satisfy major requirements. With the exception of Psychology 195B and 196B, each course must be taken for a letter grade.

Honors Program
Majors intending to continue study at the graduate level are encouraged to apply for the departmental honors program. Contact the Undergraduate Advising Office during spring quarter for more information and application forms. Satisfactory completion of the program and the other requirements for the major leads to awarding of the degree with honors or high-est honors.

Psychobiology BS
The Psychobiology major is designed for students who plan to go on to postgraduate work in physiological psychology, neuroscience, behavioral aspects of biology, or the health sciences. Psychobiology is the study of behavior from a biological perspective. It includes neural, experimental psychological, natural history, genetic, comparative/evolutionary, and developmental approaches to understanding human and animal behavior.

The requirements described below include sufficient preparation if students plan to pursue graduate work in any of the above fields; however, they may want to include additional advanced courses in psychology and related sciences as well as other types of research and fieldwork experiences.

Learning Outcomes
The Psychobiology major has the following learning outcomes:

- Demonstrated ability to use working knowledge of the nervous system to deduce the consequence of nervous system dysfunctions
- Demonstrated understanding of molecular events at a cellular level by describing the physiological consequences of such events in qualitative and quantitative terms
- Demonstrated ability to utilize knowledge of sensory systems by describing their processes in both quantitative and phenomenological terms
- Demonstrated ability to choose and apply the appropriate quantitative analysis tools to a data set and meaningfully interpret the results of the analysis
- Demonstrated ability to read primary literature in the field and evaluate the validity of conclusions in light of the methodology and statistical analyses used as well as the logic of assertions presented
- Demonstrated ability to communicate the results of laboratory work orally or in writing with appropriate graphic depictions of the data
- Ability to relate work in literature in meaningful ways, explaining the motivation for the study and the interpretation of the results
- Demonstrated thorough knowledge of neuroanatomy, including lobes of the brain, major anatomical landmarks, cranial nerves, and major subcortical structures
- Demonstrated thorough knowledge of the sequence of events that results in an action
- Demonstrated thorough knowledge of sensory systems, including signal transmission, neuroanatomical connections, and response properties of neurons in primary cortical areas
- Ability to analyze the behavior of neurons in circuits and predict how other neurons in the circuit will react when other neurons are depolarized or hyperpolarized

Entry to the Major

Pre-major
Students need to file a petition in the Undergraduate Advising Office to declare the Psychobiology pre-major. They are then identified as Psychology pre-majors until they (1) satisfy the preparation for the major requirements and (2) file a petition to declare the Psychobiology major.

Transfer Students
Transfer applicants to the Psychobiology major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general biology with laboratory for majors, preferably equivalent to Life Sciences 7A, 7B, and 7C; one year of calculus; one year of general chemistry with laboratory for majors; one semester of organic chemistry with laboratory; one introduction to psychology course; one psychological statistics course; and one psychology research methods course. A second semester of organic chemistry or one year of calculus-based physics is strongly recommended but not required for admission. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Required:

Preparation for the Major

Required: Psychology 10, 100A, 100B, and the Life Sciences Core Curriculum.

Life Sciences Core Curriculum

Required: Chemistry and Biochemistry 14A, 14B, 14BL, 14C, and 14D, or 20A, 20B, 20L, 30A, 30AL, and 30B; Life Sciences 7A, 7B, 7C, 23L; Life Sciences 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, and 3C, or 31A or 31AL, 31B, and 32A; Physics 1A, 1B, 1C, 4A, and 4BL, or 5A, 5B, and 5C.

The Major

Required: (1) Ecology and Evolutionary Biology 100 or 129 or Psychology 118, and Psychology 110, 115 (or M117A, M117B, and M117C), M116A or 116B or Neuroscience 101L, 120A or 120B; (2) one course from Psychology 127A, 127B, 127C, 130, 133A through 133L, 135, 150, 161; (3) 16 units of graded elective courses from the following list: Ecology and Evolutionary Biology 112, 113A, 114A (no more than one from this group), Psychology 111, 112A through 112E, M117A, M117B, M117C, 119A through 119Y, 124K, 137A, 137G, 152, 161, 162, 164, M166, 186D, 191CH (only if content is approved by the undergraduate vice chair), Chemistry and Biochemistry 153A, 153L, Computational and Systems Biology M187, Ecology and Evolutionary Biology 100, 102, 105, 106, 110, 111, 115, 117, C119A, 120, 121, 122, 124A (only 4 units may be applied toward the major), 129, C135, 164, 170, Life Sciences 107, Microbiology, Immunology, and Molecular Genetics C185A, Molecular, Cell, and Developmental Biology 100, 104AL, 138, M140, CM156, Neuroscience 102, Physiological Science C130, C144, 146, 147, 166, 173.

Honors Program

Students work for one year (fall through spring quarters) with a Psychology Department faculty sponsor on a research project that is the basis of a formal honors thesis. During that year they also participate in a weekly seminar (Psychology 191AH, 191BH, 191CH) in which thesis projects are presented and discussed and other topics of interest are explored with invited faculty members and other guests. Other requirements may apply.

Policies

Preparation for the Major

Each of the preparation for the major courses must be taken for a letter grade (C or better in Psychology 10, 100A, and 100B, C– or better in the remaining courses) with a 2.0 overall grade-point average. Students cannot take Psychology 100B until they have passed course 100A with a grade of C or better. Psychology 100A and 100B should be taken early in the career; these courses are open only to students who have declared the Psychobiology pre-major before the term in which they plan to enroll. Students with no background in introductory statistics should take Statistics 10 before enrolling in course 100A.

The Major

Students who complete Psychology M117A, M117B, and M117C receive equivalent credit for course 115 and 10 units of upper-division psychobiology electives. All three courses must be completed to receive psychobiology elective credit. Students must have a 2.0 grade-point average in all upper-division courses selected to satisfy major requirements, and each must be taken for a letter grade.
Honors Program
Majors intending to continue study at the graduate level are encouraged to apply for the departmental honors program. Contact the Undergraduate Advising Office during spring quarter for more information and application forms. Satisfactory completion of the program and the other requirements for the major leads to awarding of the degree with honors or highest honors.

Undergraduate Minors

Applied Developmental Psychology Minor
The Applied Developmental Psychology (ADP) minor is designed to (1) provide a coherent, challenging academic program focused on investigating, understanding, and supporting the development of young children and their families; (2) teach undergraduate students how to apply theories, research methods, and research findings to practical concerns; and (3) prepare students to join or receive further training in various child-related professions.

Admission
The minor is open to all enrolled UCLA students (including Cognitive Science, Psychobiology, and Psychology majors) who have an overall grade-point average of 2.0 or better and have applied and been accepted into the program. Qualified students are admitted into one of two annual cohorts (one beginning in fall, the other in spring) to complete three consecutive terms of specialized coursework alongside a hands-on teaching internship (86 hours per term) at one of several UCLA child care centers. For more information about applying to the minor, contact the ADP academic coordinator by e-mail or see the department website. For questions about additional course requirements for the minor, contact a counselor in the Undergraduate Advising Office.

The Minor
Required Lower-Division Course (4 units): Psychology 10.

Required Upper-Division Courses (24 units): Psychology 134A (must be taken concurrently with course 134D), 134B (must be taken concurrently with course 134E), and four additional courses from Education 120, 132, Psychology 127C, 129F, 130, 131, 132A, 132B, 133B through 133I, 134F, 134G, 134I, 134J, 134K, 161, 167, 199A or 199B (content must be approved by the Undergraduate Advising Office), Sociology M174, One of the four additional courses must include either Psychology 130 or one course from 133B through 133I.

Internship Requirement/Fieldwork Component (8 units): Psychology 134C, 134D (must be taken concurrently with course 134A), 134E (must be taken concurrently with course 134B). Students work as interns for three consecutive academic terms at one of several UCLA child care centers serving infants, toddlers, and/or preschool-age children. The internship provides hands-on experience working with young children and opportunities to closely observe children and teachers.

Policies
No more than two courses may be applied toward both this minor and a student’s major.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course, except for the fieldwork component of the internship courses, must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Cognitive Science Minor
The Undergraduate Council of the UCLA Academic Senate voted to suspend admissions to the Cognitive Science minor effective Fall Quarter 2021. Students currently in the minor are not affected by the admissions suspension.

The Cognitive Science minor is designed to introduce students to cognitive science topics as addressed in a number of different disciplines, such as biology, computer science, engineering, linguistics, mathematics, philosophy, and psychology, while allowing them to pursue a more in-depth study of cognitive science topics within specific areas of their own choice.

The minor consists of two parts. In the first part students complete background courses and satisfy a computing programming experience requirement. In the second part they select courses from three clusters of upper-division courses that have been organized to reflect different aspects of cognitive science. Students take five courses from three clusters, with no more than three courses from any one cluster.

Admission
The minor is open to all enrolled UCLA students, other than Cognitive Science majors, who have an overall grade-point average of 2.0 or better. After completing two background courses, students must make an appointment with an adviser in the Psychology Undergraduate Advising Office by e-mail to declare the minor. The three background courses must be completed by the end of the summer quarter of the third year.

The Minor

Required Courses (32 units): Psychology 85; Psychology 120A, 120B, 121, 124A through 124E, 133B, 133C, 133E, 186A through 186D; (2) mind and language cluster—Anthropology M145, Communication 118, 119, 126, M127, Linguistics 120A, 120B, 120C, 130, 132, C135, 185A, Philosophy 124A, 125, 126, C127A, C127B, 129, 170, 172, Psychology 124A.

Policies
No more than two courses may be applied toward both this minor and a student’s major.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Major

Psychology MA, CPhil, PhD
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Psychology

Lower-Division Courses

10. Introductory Psychology. (4) Lecture, four hours. General introduction including topics in cognitive, experimental, personality, developmental, social, and clinical psychology; six hours of psychological research and a grade of C or better required of all departmental premajors. P/NP or letter grading.


19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20A. MATLAB Programming for Behavioral Sciences. (4) Lecture, two hours; laboratory, one hour. Prior programming experience not required. Introduction to MATLAB and programming methods useful in experimental psychology. Reading and writing of code for conducting experiments, analyzing data, and modeling. P/NP or letter grading.

20B. Advanced Topics in MATLAB Programming for Behavioral Sciences. (4) Lecture, two hours; laboratory, one hour. Requisite: course 20A. Introduction of advanced topics in MATLAB programming for behavioral sciences, including Psychtoolbox, advanced MATLAB graphics and input/output, simulations and
modeling, and efficient MATLAB coding. Active programming during class and for homework required. P/NP or letter grading.

30. Web Programming for Psychology. (4) Lecture, one hour; laboratory, three hours. Mailing lists, use of core technologies of Internet, with focus on applications that collect and analyze data. Server side programming includes Perl and MYSQL databases. Client-side programming includes HTML and Java script. P/NP or letter grading.

85. Introduction to Cognitive Science. (4) Lecture, three hours. Exploration of computer metaphor of mind as an information-processing system, focusing especially on neural knowledge representation and thought based on research in cognitive psychology, neuropsychology, and artificial intelligence. Many examples from visual information processing.

88A. Lower-Division Seminar: Stress, Adaptation, and Coping. (4) Seminar, three hours. Enforced requisites: course 10. Limited to freshmen. Physiological and psychological processes related to stresses and strains of daily living and potential relation of these processes to disease states. Examination of multifaceted nature of coping with stressors and exploration of strategies for stress management. May be repeated for credit. P/NP or letter grading.

89H. Honors Contracts. (1 to 2) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. In individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other assigned materials. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. P/NP or letter grading.

97. Variable Topics in Psychology. (4) Seminar, three hours. Enforced requisite: course 10. Study of selected topics in psychology at introductory level; seminar format designed for freshmen/sophomores. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students to carry out independent reading and end in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100A. Psychological Statistics. (4) Lecture, four hours. Requisites: course 10 with a grade of C or better, and one course from Mathematics 2, Program in Computer Science 10A, Statistics 10, or one term of calculus. Designed for majors. Basic statistical procedures and their application to research and practice in various areas of psychology. P/NP or letter grading.

100B. Research Methods in Psychology. (5) Lecture, two hours; laboratory, two hours. Enforced requisites: courses 10 and 100A, with grades of C or better. Introduction to research methods and critical analysis in psychology. Lecture and laboratory topics include experimental and nonexperimental research methods, statistical design and analysis as applied to a broad range of basic and applied research issues. P/NP or letter grading.

101. General Psychology Laboratory. (4) Laboratory, four hours. Requisites: courses 10, 100A, 100B. General laboratory course for psychology students to acquire key concepts in psychology through active participation in enriched environment. Use of current technologies (e.g., Web-based teaching, interactive computer demonstrations) in challenging atmosphere to learn how mind works. P/NP or letter grading.

M107. Asian American Personality and Mental Health. (4) (Same as Asian American Studies M117.) Lecture, three hours. Requisite: course 10. Foundational research on personality and mental health among Asian Americans. Topics include culture, family patterns, achievements, stressors, resources, and immigrant and minority group status. P/NP or letter grading.

110. Fundamentals of Learning. (4) Lecture, three hours; discussion, one hour. Requisites: courses 10, 100A. Designed for juniors/seniors. Experimental findings on animal and human conditioning; retention and transfer of training; relation of learning and motivation; intended to provide empirical basis for theory and research in this area. P/NP or letter grading.

111. Learning Laboratory. (4) Lecture, two hours; laboratory, three hours. Requisites: courses 10, 100A, 100B, 110. Designed for departmental majors. Laboratory experience with techniques in study of learning, especially with animals. Letter grading.

112A. Basic Processes of Motivated Behavior. (4) Lecture, 90 minutes; discussion, 90 minutes. Requisites: courses 10, 100A, 100B. Designed for juniors/seniors. Examination of some basic processes underlying motivated behavior, stressing environmental determinants of behaviors such as feeding, drinking, and reproduction-rejection or selection of physiological mechanisms that contribute to such behaviors. Consideration of topics such as reinforcement, conditioned and unconditioned stimuli, motivational drives, evaluation of evidence obtained in laboratory studies conducted with animals. P/NP or letter grading.


112C. Psychology of Anxiety and Depression. (4) Lecture, two and one half hours; discussion, 30 minutes. Requisites: courses 110 and 115, or Neuroscience M101A, M101B, and M101C. Designed to introduce juniors/seniors to the psychology of anxiety and depression, taking from laboratory and applied research. In addition to overview of major principles from each approach, emphasis on areas in which significant research advances have recently occurred. Examination of concordance and discordance between results from laboratory and applied research. P/NP or letter grading.

112D. Animal Cognition. (4) Lecture, four hours; discussion, 90 minutes. Requisites: courses 10, 100A, 110. Designed for juniors/seniors. Investigation of scientific study of cognition and behavior in animals. Topics include perception and attention, working and reference memory, spatial cognition, timing and counting, concept formation, and abstract reasoning. Most discussions focus on laboratory findings with animals, as viewed from evolutionary framework concerned with natural histories of animals. P/NP or letter grading.

112E. Decision Making and Brain. (4) Lecture, three hours. Requisites: courses 10, 100A, 110. Designed for juniors/seniors. Survey of neural mechanisms of value-based decision making from perspective of neuroscience and economics. Discussion of theoretical models of valuing and decision making from economics and application to problems in social science. Topics include animal models of learning and decision making. P/NP or letter grading.

115. Principles of Behavioral Neuroscience. (4) Lecture, three hours; discussion, one hour. Requisite: course 100A. Life Sciences 2 or 7A or 15. Introduction to students with credit for course M117A (or Molecular, Cellular, and Developmental Biology M117A or Neuroscience M101A or Physiological Science M180A). Designed for juniors/seniors. Survey of neuroscience, microscopy, and neuropharmacology, and their relationship to behavior. P/NP or letter grading.

M116A. Behavioral Neuroscience Laboratory. (4) (Formerly numbered 116A.) (Same as Neuroscience M116A.) Lecture, one hour; laboratory, three hours. Requisites: courses 10, 100A, 100B, and 115, or Neuroscience M116A 116A and 116B. Designed for Psychology, Psychology, and Neuroscience majors. Laboratory experience with various techniques in neuroscience. Hands-on experience with important methodological and experimental approaches in neuroscience. P/NP or letter grading.

116B. Human Neuropsychology Laboratory. (4) Laboratory, four hours. Requisites: courses 10, 100A, 100B, 115. Not open for credit to students with credit for course 116A. Focus on human neural function in health and disease. Concentration on basic and applied research approaches to anxiety and depression, taken from laboratory and applied research. In addition to overview of major principles from each approach, emphasis on areas in which significant research advances have recently occurred. Examination of concordance and discordance between results from laboratory and applied research. P/NP or letter grading.

M117A. Neuroscience: From Molecules to Mind—Cellular and Systems Neuroscience. (5) (Same as Molecular, Cellular, and Developmental Biology M175A, Neuroscience M101A, and Molecular, Cell, and Developmental Biology M180A.) Lecture, four hours; discussion, 90 minutes. Requisites: Chemistry 14C or 30A (14C may be taken concurrently), Life Sciences 7C, Physics 1B or 1B or 52 or 52R. Students must receive grade of C– or better to proceed to next course in series. Cellular neurophysiology, membrane potential, action potentials, and synaptic transmission. Sensory systems and motor system; how assemblies of neurons process complex information and control movement. P/NP or letter grading.

M117B. Neuroscience: From Molecules to Mind—Molecular and Developmental Neuroscience. (5) (Same as Neuroscience M101B, Molecular, Cellular, and Developmental Biology M175B, and Physiological Science M180B.) Lecture, four hours; discussion, 90 minutes. Requisites: course M117A (with grade of C– or better), Life Sciences 7C. Molecular biology of channels and receptors: focus on voltage dependent channels and neurotransmitter receptors. Molecular biology and neurobiology of synaptic transmission, axonal transport, cytoskeleton, and muscle. Classical experiments and modern molecular approaches in development. P/NP or letter grading.


119A. Neuropsychopharmacology of Emotion and Cognition. (4) Lecture, four hours; discussion, 90 minutes. Requisite: course 115 or M117C. Limited to juniors/seniors. Analysis of basic pharmacologic principles, with emphasis on neurochemical modulation of emotional regulation and cognitive processes in normal and diseased state. P/NP or letter grading.

119B. How Brains Learn to Construct Models of Environment. (4) Lecture, three hours. Requisite: course 115 or M117C. Designed for juniors/senior. Every day we encounter something new. As a result of these experiences, our brain builds cognitive models of our environment. This allows us to respond flexibly and efficiently when we encounter something similar in future. This lecture will introduce a simple model of human beings and present several examples of artificial intelligence that can exhibit this simple behavior, and how different regions of brain contribute in different ways to model building. Discussion of how different psychological
disorders can be accounted for by disruptions in this process, providing key neural targets for pharmacological treatments. P/NP or letter grading.

119C. Cognitive Neuroscience. (4) Lecture, three hours. Requisite: course 115 or M117C. Understanding complex mental functions depends on interplay of cognitive neuroscience and psychological behavior. Designed to provide advanced undergraduate students with current understanding of how complex processes of mind may be understood using neuroscience techniques. P/NP or letter grading.

119F. Neural Basis of Behavior. (4) Lecture, three hours. Requisite: course 115. Designed for juniors/seniors. Presentation of current data and theory concerning how neuron circuits produce behavior. Mechanisms of perception, response selection, motor pattern generation, learning, and motivation, with emphasis on operation of these processes in well-defined neural circuits in animals and humans. P/NP or letter grading.

119I. Integration of Face and Brain. (4) Seminar, three hours. Requisite: course 115 or M117C. Faces play major role in social interactions in both humans and nonhuman primates and in other animals as well. Exploration of neuroanatomical, neurophysiological, and neurofunctional underpinnings of face processing (attractiveness, emotional expressions, facial skin, identity recognition) and methods of research that use behavioral responses in neuroimaging techniques, in effects of types of brain damage, in physiological responses, and in clinical and psychological states. Discussion of evolutionary approaches to faces, as well as relationship between specific genetic mutations affecting both brain and facial appearance. P/NP or letter grading.

119L. Brain Bugs: Understanding Brain through Its Flaws. (4) Lecture, three hours. Requisite: course 115 or M117C. Designed for juniors/seniors. Psychology of brain flaws and limitations to understand how brain works by studying errors. Does poorly understanding neuroscience of why brain is poorly suited to perform such tasks as numerical calculations, memorizing lists and names, and making unbiased decisions. Focus on memory (types of memory, false memories, misinformation and memory, memory capacity) and cognitive biases (framing, anchoring, and temporal discounting). Exploration of underlying neural causes of brain flaws and limitations in context of brain’s associative architecture. Basic neurophysiology, synaptic plasticity, cortical plasticity, neural basis of learning and memory, and some computational neural network letter grading.

119K. Neurophilosophy. (4) Lecture, three hours. Requisite: course 115. Philosophy of mind has relied on introspection and thought experiments to explore consciousness, self, and free will. Field of neurophilosophy emphasizes empirical methods of neuroscience to investigate these seemingly impenetrable constructs. Provides students with foundation in neurophilosophy, which includes basic understanding of philosophy of mind, consideration of phenomena including consciousness, volition, and self, and examination of scientific methods available for studying these phenomena. Exploration of student experiences of world and themselves within and demonstration of how alterations in brain functioning due to injury, psychocultural drugs, and dreaming result in alterations in these phenomena. P/NP or letter grading.


120B. Sensation and Perception. (4) Lecture, three hours; discussion, one hour. Requisites: courses 10, 109A. Designed for juniors/seniors. Acquisition of information about physical world through basic sensory mechanisms and perceptual processes. Perception of objects, surfaces, space, motion, and emotions. Consequences of information, computations, and logical mechanisms in audition, audition, and other systems. P/NP or letter grading.

121. Laboratory in Cognitive Psychology. (4) Laboratory, three hours. Requisites: courses 10, 109A, 109B, 120A or 120B. Designed for Psychology and Cognitive Science majors. Laboratory experience with methods and phenomena from research on human perception, memory, and cognition. P/NP or letter grading.

124A. Language as Cognitive Science. (4) Lecture, four hours. Requisites: courses 109A, 109B, one programming course. Designed for junior/senior Cognitive Science majors. What mental mechanisms allow humans to transfer thoughts across minds through language? Through discussion of computational, cognitive, and neural models of language, examine the cognitive and neural mechanisms that underlie the ability to image and analyze visual world is truly remarkable feat. Coverage of anatomy and physiology of visual processing from retina to visual cortex through lectures, extensive reading, and discussions. P/NP or letter grading.

124C. Human Memory. (4) Lecture, two hours; discussion, one hour. Requisite: course 120A or 120B. Designed for juniors/seniors. Thorough introduction to core principles and methods in field of user experience research and design. This relatively new discipline has evolved as psychologists and designers have begun to place greater focus on understanding and anticipating needs of humans using their products. P/NP or letter grading.

124D. Consciousness: Current Debates. (4) Seminar, three hours. Requisites: courses 109B, 115. Designed for juniors/seniors. Review of current issues in research on cognitive neuroscience of consciousness, with focus on modern theories of conscious perception, especially in visual modality so as to reflect its dominance in consciousness research. P/NP or letter grading.

124F. Thinking. (4) Lecture, three hours. Requisite: course 120A or 120B. Analysis of studies of human categorization, reasoning, decision making, problem solving, creativity, and related topics. P/NP or letter grading.

124G. Cognition and Successful Aging. (4) Lecture, three hours. Requisite: course 120A or 120B. Focus on theories and evidence related to age differences in cognitive and psychomotor abilities. Topics include practical implications of such research for instruction, marketing, and witness testimony. P/NP or letter grading.


126. Clinical Psychology Laboratory. (4) Laboratory, four hours. Requisites: courses 10, 100A, 100B, and 127A or 127B or 127C. Designed for departmental majors. Methods, design, and issues in conduct of clinical psychology research. Students develop and conduct research. Content varies by instructor, with concentration on one of following: schizophrenia, mood disorders, anxiety disorders, childhood disor-
ders, psychophysiological methods, observational methods with couples and families. P/NP or letter grading.

127A. Clinical Psychological Science. (4) Lecture, three hours; discussion, one hour. Requisite: course 10. Not open for credit to students with credit for course 127B or 127C. Study of psychological disorders (e.g., depression, anxiety, substance use disorders, schizophrenia) across lifespan, including role of biological, behavioral, social, cognitive, and cultural factors, diagnosis and treatment approaches. Discussion of stigma and practices that support inclusiveness. P/NP or letter grade.

127B. Abnormal Psychology: Biological Bases. (4) Lecture, three hours; discussion, one hour. Requisite: course 10. Not open for credit to students with credit for course 127A or 127C. Study of Biological processes involved in etiology, presentation, and course of psychiatric disorders, and biological targets or mechanisms of treatment. Emphasis on clinical neuroscience and behavioral genetics as scientific modalities to understand mood disorders, substance use disorders, psychosis, and others. P/NP or letter grading.

127C. Abnormal Psychology: Developmental Perspectives. (4) Lecture, three hours; discussion, one hour. Requisite: courses 10 and 100A. Introduction to study of culture and human behavior in general, and culture and mental health in particular. Emphasis on cultural groups that comprise major U.S. ethnic groups (i.e., African Americans, Latinos/Chicanos, Asian Americans, and American Indians). P/NP or letter grade.

129C. Culture and Mental Health. (4) Lecture, two hours; discussion, one hour. Requisite: courses 10 and 100A. Study of cultural diversity and its impact on mental health. Topics include origins of knowledge about functionally important aspects of the environment, ecological and computational issues in perception, research and theory about initial perceptual capacities, and some sensory foundations. P/NP or letter grade.

131E. Perceptual Development. (4) Lecture, three hours. Requisite: courses 10, 100A. Topics include origins and development of perceptual abilities; the role of experience in the development of perceptual abilities; and the role of experience in the development of perceptual abilities. P/NP or letter grade.

132A. Adolescent Development. (4) Lecture, three hours. Requisites: courses 10, 100A. Application of principles of cognitive development, learning, and perception to study of adolescent development. Topics include the development of cognitive, social, and affective domains; the role of experience in the development of cognitive, social, and affective domains; and the role of experience in the development of cognitive, social, and affective domains.

132B. Cognitive Development. (4) Lecture, three hours. Requisites: courses 10, 100A. Major theories, approaches, and issues in study of cognitive development. Readings include original research on important topics such as development of perception, language, thinking, and problem solving, and acquisition of concept and domain-specific language. P/NP or letter grade.

132C. Language Development. (4) Lecture, three hours. Requisites: courses 10, 100A. Application of principles of cognitive development, learning, and perception to study of language development. Topics include first words, first sentences (sounds, meanings, grammatical structures), learning mechanisms, communication skills, and relations between language and thought in children. P/NP or letter grade.

133A. Social and Personality Development. (4) Lecture, three hours; discussion, one hour. Requisites: courses 10, 100A. Theory and research on social and personality development during childhood. Topics include parent/child attachment, temperament, self-control, aggression, sex-typing, self-concept, moral reasoning and behavior, social status and social skills, and peer group relations. P/NP or letter grade.

133B. Social and Personality Development: Adolescence. (4) Lecture, three hours; discussion, one hour. Requisites: courses 10, 100A. Study of adolescent development. Topics include origin, development, and function of social and personality development during adolescence. P/NP or letter grade.

133C. Psychology and Education. (4) Lecture, three hours. Requisites: courses 10, 100A. Application of principles of cognitive development, learning, and perception to educational problems. Topics include general instructional issues, psychology of reading and mathematics, exceptional children, early childhood education, and education of the disadvantaged. P/NP or letter grade.

133D. Psychology and Education: Adolescence. (4) Lecture, three hours. Requisites: courses 10, 100A. Application of principles of cognitive development, learning, and perception to educational problems. Topics include general instructional issues, psychology of reading and mathematics, exceptional children, early childhood education, and education of the disadvantaged. P/NP or letter grade.

133E. Psychotherapy. (4) Lecture, three hours. Requisites: courses 10, 100A. Topics include origins and development of perceptual abilities; origins of knowledge about functionally important aspects of the environment, ecological and computational issues in perception, research and theory about initial perceptual capacities, and some sensory foundations. P/NP or letter grade.

133F. Research in Developmental Psychology. (4) Lecture, three hours. Requisites: courses 10, 100A. Application of principles of cognitive development, learning, and perception to educational problems. Topics include general instructional issues, psychology of reading and mathematics, exceptional children, early childhood education, and education of the disadvantaged. P/NP or letter grade.

134A. Advanced Applied Developmental Psychology. (2) Fieldwork, eight hours per term. Enforced corequisite: course 134B. Designed for Applied Developmental Psychology minors. Fieldwork in applications of developmental psychology to support and illustrate, in applied setting, theories and research findings presented in lecture. P/NP grading.

134B. Fieldwork in Applied Developmental Psychology. (2) Fieldwork, eight hours per term. Enforced corequisite: course 134A. Designed for Applied Developmental Psychology minors. Fieldwork in applications of developmental psychology to support and illustrate, in applied setting, theories and research findings presented in lecture. P/NP grading.

134C. Advanced Fieldwork in Applied Developmental Psychology. (2) Fieldwork, eight hours per term. Enforced corequisite: course 134B. Designed for Applied Developmental Psychology minors. Fieldwork in applications of developmental psychology to support and illustrate, in applied setting, theories and research findings presented in lecture. P/NP grading.

134D. Early Childhood Curriculum. (4) Lecture, three hours. Requisites: course 10, one course from 130 or 133 through 133I, one statistics course. Examination of methods, materials, and philosophies that enhance development of children in context of childcare settings. Topics include issues of multiculturalism, anti-bias curriculum, and special needs adaptations. P/NP or letter grade.

134E. Child, Family, and Community. (4) Lecture, three hours. Requisites: course 10, one course from 130 or 133 through 133I, one statistics course. Exploration of role of early childhood educators within context of diverse racial, ethnic, economic, and cultural backgrounds and impact of these dynamics on children’s development. P/NP or letter grading.

134F. Dynamic Perspectives. (4) Lecture, three hours. Overview of key tasks of parenting and of changes in parent-child relationship from birth through young adulthood. Overview of theories, discourses, and practices of interaction, and examination of parenting across developmental stages. Examination of how parenting and parent-child relationship are affected by family dynamics and contextual factors. Social and cognitive children’s development and their theoretical and empirical foundations to meet children’s developmental needs; build positive and mutually respectful parent-child relationships; and provide positive guidance to promote self-regulation, competence, and socially responsible behavior. P/NP or letter grading.

134G. Effects of Early Adversity and Trauma. (4) Lecture, three hours. Examination of extensive evidence of disruptive impact of early adversity. Study offers insights into causal mechanisms that link early adversity to later impairments in learning, behavior, and both physical and psychological wellbeing. Revisits research on common childhood stressors, individual and contextual factors that put children at risk for developmental deficits, and protective factors that promote successful coping and healthy adjustment. P/NP or letter grading.

135. Social Psychology. (4) Lecture, three hours; discussion, one hour. Requisites: courses 10, 100A. Designed for juniors/seniors. Interrelationships between the individual and his social environment. Social influences on motivation, perception, and behavior. Development and change of attitudes and opinions. Psychological analysis of small groups, social stratification, and mass phenomena. P/NP or letter grading.
M136C. Experiments in Racial and Ethnic Politics.  (4) 
(Same as Political Science M138C.) Lecture, three hours; laboratory, four hours. Required: courses 10, 100A, 100B, 135. Designed for Psychology majors. Research experience with nonexperimental methods for study of social attitudes or behaviors, including fieldwork with survey research, naturalistic observation, or questionnaires. P/NP or letter grading.

M137B. Nonverbal Communication and Body Language. (4) 
(Same as Communication M113B.) Lecture, three hours. Examination of how various forms of nonverbal communication convey meaningful information to perceivers, with focus on both production and perception of multiple communication formats (e.g., affect expression of face and body, gesture, and kinesics), with strong emphasis on body language. Readings from a variety of related fields. P/NP or letter grading.

M137C. Intimate Relationships. (4) 
Lecture, three hours. Required: courses 10, 100A. Limited to juniors/seniors. Integration of cognitive neuroscience, social psychology, and sensory perception research to explore how information is perceived and how social factors shape perception of world around us. Emphasis on neural mechanisms underlying the processing of attention. P/NP or letter grading.

M137I. Social Influence. (4) 
Lecture, three hours. Application of findings from social influence literature to understand influence processes in various social contexts. P/NP or letter grading.

M137J. Self and Identity. (4) 
Seminar, three hours. Required: course 10. Designed for juniors/seniors. Examination of theory and research that addresses self from social psychological perspective. Topics focus on self-knowledge, how self is represented in memory, illusions about self, self-esteem, implicit (subconscious) self, self-regulation, social comparison, self-relevant emotions, and influence of culture on self. P/NP or letter grading.

M137K. Psychology of Emotion. (4) 
Lecture, three hours. Required: course 10. Designed for junior/senior psychology majors. Broad overview of science of human emotion. Covers topics such as history of emotion research, current dominant models of emotion, function of facial expressions, expression of emotion, and the role of social relationships. By regulation of our emotions, whether emotions can make us sick, and what it means to be happy. Exploration of range of perspectives in psychology, including social, cognitive, developmental, and affect, and health, and clinical psychology. Consideration also of cognitive and behavioral neuroscience. P/NP or letter grading.

M137M. Social Cognition. (4) 
(Same as Communication M123.) Lecture, three hours. Survey of research from field of social cognition, with emphasis on understanding cognitive processes involved in interpersonal and small group communication. Topics include attention, interpretation, evaluation, judgment, attribution, and memory processes. Consideration of both controlled and automatic processes. Discussion of roles of motives, goals, and affective variables. P/NP or letter grading.

M138. Electoral Politics: Political Psychology. (4) 
(Same as Political Science M141A.) Lecture, three or four hours; discussion, one hour (when scheduled). Required: courses 10, 100A, 100B. Designed for juniors/seniors. Examination of political behavior, political socialization, personality and politics, racial conflict, and psychological analysis of public opinion on these issues.

M139. Perspectives on Autism and Neurodiversity. (4) 
(Same as Disability Studies M139.) Seminar, three and one half hours. Genealogy of autism as diagnostic category and cultural phenomenon from its historical roots as new, rare, and obscure condition in early 1940s to its current contested status as minority identity and/or global epidemic. Examination of material sourced from various fields and disciplines invested in autism, including psychology, neuroscience, arts and humanities, popular media, anthropology, activism, and critical autism studies. Students encounter and analyze multiple perspectives on autism and put them in conversation with current research and conceptualization paid to ways people on spectrum define, explain, and re-present their own experiences of autism and discussion of what ramifications of these multiple framings are in context of autism as a liberation strategy and disability policy today. Letter grading.

M140. Introduction to Study of Aging. (4) 
(Same as Social Welfare M140.) Lecture, three hours. Designed for juniors/seniors. Perspectives on major features of human aging—biological, psychological, and humanistic. Introduction to information on range of influences on aging to prepare students for subsequent specialization. P/NP or letter grading.

142H. Advanced Statistical Methods in Psychology (Honors). (4) 
Lecture, two hours. Required: courses 100A, 100B. Survey of statistical techniques commonly used in psychology, education, and behavioral and social sciences: correlational techniques, analysis variance, and multiple regression. P/NP or letter grading.

M144. Measurement and Its Applications. (4) 
(Same as Psychology M144.) Lecture, three hours. Required: one course from 100A, Statistics 10, 12, or 13. Selected theories for quantification of psychological, educational, social, and behavioral science data. Classical measurement theory, factor analysis, item response, optimal scaling, ordinal measurement, computer-adaptive, and related theories. Construction of tests and measures and their reliability, validity, and bias for letter grading.

M147A. Psychology of Lesbian Experience. (4) 
(Same as Gender Studies M147A and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M147A.) Lecture, two hours; discussion, one hour. Required: course 10 or Gender Studies 10 or Lesbian, Gay, Bisexual, Transgender, and Queer Studies M114. Designed for juniors/seniors. Review of research and theory in gender studies and psychology to examine various aspects of lesbian experience, impact of heterosexism/stigma, gender role socialization, minority status of women and lesbians, identity development within a multicultural society, changes in psychological theories about lesbians in sociocultural contexts. P/NP or letter grading.

M149. Language Development and Socialization. (4) 
(Same as Anthropology M152P.) Lecture, three hours; discussion, one hour. (When offered). Exploration of processes through which children develop the structures and practices of language and become competent participants in linguistic and social worlds around them. Examination of language use and socialization across childhood, across communities of practice, and across different ethnic and socioeconomic groups. Bridges work from anthropology, psychology, linguistics, and cognitive science, to cross-cultural perspectives on child development and wide range of methodological approaches. Examination of ways in which language development and socialization interface with culture, ethnicity, identity, inequality, education, and cognition. P/NP or letter grading.

150. Introduction to Health Psychology. (4) 
Lecture, three hours. Required: course 10. Areas of health, illness, treatment, and delivery of treatment that can be elucidated by understanding of psychological concepts and research, psychological perspective on these problems, and how psychological perspective might be enlarged and extended in medical area. P/NP or letter grading.

151. Research Methods in Health Psychology. (4) 
Laboratory, four hours. Enforced requisites: courses 10, 100A, 100B, 150. Research methods used in health psychology, including experimental, quasi-experimental, and nonequivalent control group designs. Examples and projects from health psychology. P/NP or letter grading.

152. Mind-Body Interactions and Health. (4) 
Lecture, three hours. Required for junior/senior Psychology and Psychobiology majors. Examination of bidirectional interactions between mind and body and how these interactions influence physical health. Topics include impact of stress, emotions, personality, and social world on biological systems and health. Discussion of mind-body interventions designed to reduce stress and improve health, including scientific research on these interventions. P/NP or letter grading.

161. Behavior and Brain Development. (4) 
Lecture, three hours. Required: courses 10, 100A. Limited to juniors/seniors. Exploration of relationship between brain development and behavior. Examination of how cognitive neuroscience can inform study of development and how developmental approach can advance progress in cognitive and developmental sciences. P/NP or letter grading.

162. Psychology of Addiction. (4) 
Lecture, three hours; discussion (M162H). Lecture, seminar. Survey of topics covering psychological and neurobiological theories of addiction, pharmacological effects of drugs and abuse, etiology, assessment, diagnosis, and treatment. P/NP or letter grading.
164. Puberty and Sleep. (4) Lecture, three hours. Requisite: course 10. Limited to juniors/seniors. Exploration of how normative biological and hormonal changes during adolescence influence sleep behavior and well-being. Focus specifically on puberty and sleep, which both lead to consequential effects on behavior, health, and brain development. P/NP or letter grading.

M165. Psychology of Gender. (4) (Same as Gender Studies M165.) Lecture, three hours. Consideration of psychological literature relevant to understanding contemporary sex differences. Topics include sex-role development and role conflict, physiological and personality differences between men and women, sex differences in intellectual abilities and achievement, and impact of gender on social interaction. P/NP or letter grading.

M166. Neurobiology of Bias and Discrimination. (4) (Same as Neuroscience M187 and Physiological Science M160.) Lecture, four hours. Limited to junior/senior neuroscience, physiological science, and psychology students. Exploration of aspects of mammalian brain function that generate preference, bias, and discrimination. Consideration of research at multiple levels of analysis from genetics to neural circuits to behavior. Discussion of societal implications of these research findings, including their relevance to public policies and criminal justice system. Letter grading.

167. Digital Media and Human Development. (4) Lecture and discussion, four hours. Offered for undergraduate credit by arrangement with juniors/seniors. Examination of social science research on media and technology during development to understand positive and negative roles of technology and media in children's lives. Topics include social media, video games, brain development, and learning with technological tools from age 2 through 18 (and through emerging adulthood). May be repeated for credit. P/NP or letter grading.

168. Organizational Psychology. (4) Lecture, three hours. Introduction to variety of topics within field of organizational psychology, examining organizational behavior from variety of perspectives. Focus on individuals; what motivates them, how do they learn best, how can they manage their careers in this rapidly changing organizational landscape, and how can they develop leadership skills. Focus on groups, entire organizations, or relationships between organizations and external environment: what makes some groups work effectively and some not, how can organizations be sensitive to diversity and inclusion in workplace, what types of societal implications of organizational research findings, including their relevance to public policies and criminal justice system. Letter grading.

M172. Afro-American Woman in U.S. (4) (Same as African American Studies M172 and Gender Studies M172.) Lecture and discussion, three hours. Limited to juniors/senior. Impact of social, psychological, political, and economic forces which impact on interpersonal relationships of Afro-American women as members of larger society and as members of their biological and ethnic group. P/NP or letter grading.

M174. Health Disparities. (4) (Same as Life Sciences M174.) Lecture, three hours. Examination of health disparities and ways in which societal responses to race and ethnicity in combination with variety of other factors create differential quality and access to healthcare resulting in poor health outcomes in racial/ethnic minority populations. Discussion of effects of cultural and social factors on health outcomes, especially among racial and ethnic minority populations. Emphasis on African American communities. Social determinants of health are central themes. P/NP or letter grading.

175. Community Psychology. (4) Designed for junior/senior Psychology majors. Application of psychological principles to understanding and solution of community problems. Topics include community development, community mental health problems, drugs, racism, and rehabilitation of prisoners.

M176SL. Addressing Social Determinants in Racial/ Ethnic Minority Communities to Reduce and Prevent Health Disparities. (4) (Same as Community En- gagement & Research M176SL.) Seminar, two hours; fieldwork, 10 hours. Examination of how adressing social determinants in racial/ethnic minority communities can reduce or eliminate physical and mental health disparities. Currently in racial and ethnic minority communities, the social determinants of individuals can be function of built environment, exposure to pollut- ants and toxins, scarcity of supermarkets or stores with fresh produce and nutritional food, noise levels, and variety of other stressors and unhealthy condi- tions. Health interventions are often focused on indi- vidual-level change or increases in access to health- care with little in way of changing risk environments. Designed to identify and provide opportunities to un- derstand how to address social determinants related to negative health outcomes in racial/ethnic minority neighborhoods and communities and to experience how to use social determinants literature in service of collaborative activities with community organizations. P/NP or letter grading.

177. Counseling Relationships. (4) Lecture, two hours; discussion, two hours. Requisites: courses 10, 100A, and 127A and/or 27 or 127B and 127C. Designed for junior/senior Psychology majors. Conceptual and empirical foundations of psychological counseling: comparison of al- ternative models and processes. Emphasis on counseling approaches in community mental health areas such as drug abuse, suicide prevention, and crisis intervention. P/NP or letter grading.

182A-182B-182C. Principles of Research in Rela- tionship Science. (1-1-1) Seminar, one hour. Intro- duction to research foundation of relationship science e.g., leading theories, common measures and re- search designs, key statistics. Students learn im- portant professional skills in conducting research and in applying to graduate school. P/NP grading.

184A-184B. Psychology Research Opportunity Pro- gram Seminars. (2-2) Seminar, 90 minutes. Designed to bring undergraduate Psychology Opportunity Program (PROPS) students undertaking supervised tutorial research in seminar setting with one or more faculty members to discuss their own work or related work in discipline. Led by one supervising faculty member. P/NP grading.

185. Research Practicum in Psychology. (3) Labora- tory, seven hours. Corequisite: course C194D. Limited to juniors/senior. Practical applications of psych- ological theories and methodologies: acquisition of a research mentor. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward undergraduate degree. May not be applied to- ward core requirements in Psychology Department. Individual contract required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. P/NP grading.

186A. Cognitive Science Laboratory: Introduction to Theory and Simulation. (4) Laboratory, four hours. Requisites: courses 10, 85, 100A, 100B. Program in Computing 10A, 10B. Designed for junior/senior departmental majors. Models of cognition within framework of explanation at multiple levels of abstraction. Examples of elementary models in multiple psycho- logical domains (e.g., visual perception, categoriza- tion, learning, reasoning, and problem solving). Types of models include neural networks and symbolic models. Lectures and discussions interwoven with computer simulations written in MATLAB, P/NP or letter grading.


186C. Cognitive Science Laboratory: Psychophys- iological Theories and Methods. (4) Lecture, two hours; laboratory, two hours. Requisites: courses 10, 85, 100A, 100B. Designed for junior/senior departmental majors. Lectures and laboratory work that examine perceptual measurement procedures (psychophysical methods) and cognitive processing and decision models on which procedures are based, with partic- ular emphasis on signal detection theory and its appli- cations. Letter grading.

186D. Laboratory in Functional Neuroimaging. (4) Laboratory, four hours. Enforced requisites: courses 10, 85, 100A, 100B. Limited to departmental majors. Intro- duction to study of brain with functional resonance im- aging (fMRI). All major aspects to be discussed, from physical basis of MR signal to data analysis. Letter grading.

188A. Special Seminars in Psychology. (3) Seminar, three hours. Limited to juniors/senior. Departmentally sponsored experimental or temporary seminars on se- lected topics in psychology, such as those taught by visiting faculty members. Reading, discussion, and development of culminating project. May be repeated for credit. P/NP or letter grading.

188B. Special Courses in Psychology. (4) Lecture, three hours. Designed for junior/senior majors. Dep- artmentally sponsored experimental or temporary courses on topics of psychological interest, such as those taught by visiting faculty members. Consult Schedule of Classes for topics and instructors. May be repeated for credit. P/NP or letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilita- tors. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin prepa- ration of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisites: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE class. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture or tutorial. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu- dents. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. De- signed as adjunct to upper-division lecture course. In- dividually study with lecture course instructor to explore topics in greater depth through supplemental read- ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re- quired. Contract noted on transcript. Letter grading.

190. Research Colloquia in Psychology. (1) Seminar, one hour. Designed to bring together students under- taking supervised tutorial research in seminar setting with one or more faculty members to discuss their own work or related work in discipline. Led by one su- pervising faculty member. May be repeated for credit. P/NP or letter grading.

191. Select Topics Research Seminars: Psycholo- gy. (1) Seminar, one hour. Limited to juniors/seniors. Research seminar on selected topics in psychology. Reading, discussion, and development of culminating project. May be repeated for credit. P/NP grading.
191A-H. 191BH-191CH. Departmental Honors Research Seminars. (2-2-2) Seminar, two hours. Enforced corequisite: course 198. Course 191A-H is required to 191CH, which is requisite to 191CH. Limited to psychology honors program students. Opportunity for development and analysis of creative ideas through individual research projects with faculty sponsor and discussion of students and faculty. May be repeated for credit. All applications for advanced undergraduate students to assist in courses related to psychology. Students assist in preparation of materials and development of innovative programs under guidance of faculty members and teaching assistants. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward undergraduate degree. May not be applied toward course requirements for Psychology Department major. Individual contract required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. If approved in advance by Undergraduate Advising Office, may be applied toward elective course requirement for any Psychology Department major. Letter grading.

192. Education Practices in Psychology. (4) Seminar, three hours. Limited to juniors/seniors. Training and supervision for advanced undergraduate students to assist in courses related to psychology. Students assist in preparation of materials and development of innovative programs under guidance of faculty members and teaching assistants. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward undergraduate degree. May not be applied toward course requirements for Psychology Department major. Individual contract required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. P/NP grading.

193. Journal Club Seminars: Psychology. (1) Seminar, one hour. Corequisite: course 195A. Forum for advanced undergraduate students. Discussion of readings selected from current literature of particular field or attendance at and write-ups of speakers series. May be repeated for credit. P/NP grading.

194A. Internship Seminars: Psychology. (2) Seminar, two hours. Corequisite: course 195A. Forum for discussion of experiential learning and research career development. Students are exposed to professional literature in clinical science and related fields. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward undergraduate degree. May not be applied toward course requirements for any Psychology Department major. Individual contract required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. P/NP grading.

194B. Research Group Seminars: Psychology. (1) Seminar, one hour. Corequisite: course 196B (3-unit option). Limited to juniors/senior Cognitive Science majors who are part of research group. Discussion of research methods and current literature in field or of research of faculty members or students. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward undergraduate degree. May not be applied toward course requirements for any Psychology Department major. Individual contract required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. P/NP grading.

194C. Research Group Seminars: Cognitive Science. (1) Seminar, one hour. Corequisite: course 196B (3-unit option). Limited to junior/senior Cognitive Science majors who are part of research group. Discussion of research methods and current literature in field or of research of faculty members or students. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward undergraduate degree. May not be applied toward course requirements for any Psychology Department major. Individual contract required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. P/NP grading.

194D. Research Group Seminars: Practicum. (1) Seminar, one hour. Corequisite: course 198. Designed for undergraduate students who are part of research group that meets with graduate students. Discussion of research methods and current literature in field or of research of faculty members or students. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward undergraduate degree. May not be applied toward course requirements for any Psychology Department major. Individual contract required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. Concurrently scheduled with course C96B. P/NP grading.

195A. Community Internships in Psychology. (2) Tutorial, approved community setting, six hours. Corequisite: course 194A. Limited to juniors/seniors. Internship experience of placement supervised setting in community agency or business. Students meet on regular basis with sponsor and provide periodic reports of their experience. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward undergraduate degree. May not be applied toward course requirements for any Psychology Department major. Individual contract with supervising placement sponsor required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. P/NP grading.

195B. Corporate Internships in Cognitive Science. (4) Tutorial, eight hours. Limited to junior/senior Cognitive Science majors. Practical applications of cognitive science through internship experience in supervised setting. Students meet on regular basis with supervisor and provide periodic reports of their experience. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward undergraduate degree. May be applied toward course requirements for Cognitive Science major. Individual contract with supervisor required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. P/NP grading.

195A. Research Apprenticeship in Psychology. (3 to 4) Tutorial, eight hours. Corequisite: course 194B. Limited to juniors/senior Cognitive Science majors. Practical applications of cognitive science through research under guidance of faculty mentor. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward undergraduate degree. May not be applied toward course requirements for any Psychology Department major. Individual contract required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. P/NP grading.

195B. Research Apprenticeship in Cognitive Science. (3 to 4) Tutorial, eight hours. Corequisite: course 194C. Limited to junior/senior Cognitive Science majors. Practical applications of cognitive science through research under guidance of faculty mentor. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward undergraduate degree. May be applied toward course requirements for Cognitive Science major. Individual contract required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. P/NP grading.

195A. Senior Project in Psychology. (4) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research under guidance of psychology faculty mentor. Culminating paper required. Only one 4-unit 199 course may be taken per term. May be repeated for credit. Individual contract required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. Letter grading.

195B. Senior Project in Psychology. (4) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research under guidance of psychology faculty mentor. Culminating paper required. Only one 4-unit 199 course may be taken per term. May be taken only once for letter grade. Individual contract required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. Letter grading.

199A. Senior Project in Psychology. (4) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research under guidance of psychology faculty mentor. Culminating paper required. Only one 4-unit 199 course may be taken per term. May be taken only once for letter grade. Individual contract required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. Letter grading.

Graduate Courses

200A. Pavlovian Processes. (4) Lecture, three hours. Basic principles and characteristics of learning and behavior, including Pavlovian conditioning, instrumental learning, and species-specific behavior. S/U or letter grading.

200B. Instrumental Conditioning. (4) Lecture, three hours. Topics include animal learning and conditioning and application of learning principles to goal-directed behavior, motivational processes, and goal selection in nonhuman animals. S/U or letter grading.


201. Current Issues in Learning and Behavior. (1) Discussion, 90 minutes. Designed for graduate students. Required of learning and behavior students a total of four times (eight in first year and winter of second year). Presentation of papers of current interest in learning, behavior, or applied behavioral analyses by experts in the field. Evaluation of their significance and methodology in detail. May be repeated for credit. S/U grading.

203. Grant Writing for Neuroscientists. (4) Seminar, three hours. Focus on writing and preparing National Research Service Award (NRSN) training grant applications. Covers writing components of grant, which are reviewed and worked on in class. Students end with well-thought-out, written NRSN proposal. Focus on specific aims and research strategy components of grant. S/U or letter grading.

204A. Basic Motivational Processes. (4) Lecture, three hours. Designed for graduate students. Analysis, using behavioral systems approach, of basic motivational behavior such as feeding, drinking, foraging, and reproduction. Same approach also applied to phenomena such as acquired motivation, reinforcement, and drug addiction. Historical survey of behavioral analysis of motivation and goal-directed behavior. S/U or letter grading.

204D. Fear and Anxiety. (4) Lecture, three hours. Preparation: graduate training. Presentation of theoretical and empirical advances, from biological and psychological perspectives, in fear and anxiety. Integration of animal and human research.

205A. Cortical Plasticity and Perceptual Learning. (2) Lecture, three hours. Designed for graduate students. Examination of neural basis of perceptual learning and review of computational models of plasticity and how it relates to different forms of perceptual learning in visual, auditory, and somatosensory modalities. Review of mechanisms of cortical plasticity, including basic features of long-term synaptic plasticity and computational models of cortical processing. Letter grading.

205E. Neural Basis of Reward and Value. (2) Five-week course. Lecture, three hours. Designed for graduate students. Overview of neural systems underlying reward and value. Emphasis on mechanisms of reinforcement learning and cost-benefit or value-based decision making. Readings drawn from primary literatures in animal research. Letter grading.

205F. Physiology of Learning. (2) Lecture, three hours. Designed for graduate students. Search for anatomical loci of engrams. Cell biology of plasticity, including electrophysiological and molecular approaches. Theories of how neural circuitry might be organized to make learning possible. Letter grading.

205K. Vision Neurobiology. (2) Lecture, three hours. Designed for graduate students. Exploration of anatomy, physiology, and computation in visual system components of the retina, visual cortex, and overall performance. Letter grading.

205M. Neuropsychology of Perception. (2) Lecture, three hours (five weeks). Designed for graduate students. Examination of neural substrates of high-level visual processing, including mechanisms and characteristics of electrophysiological responses recorded in primate temporal lobe. Discussion of issues regarding neural representation of knowledge. Letter grading.

205N. Dopamine Prediction Error: Case Study of Reinforcement Learning Theory. (2) Seminar, three hours. Overview of dopamine prediction error—signal exhibited when there is difference between expected outcome and actual outcome—three hours that have been used to describe it. Discussions of papers describing studies that led to discovery of prediction error, its application to temporal difference reinforcement learning (TDL), and challenges to this theory by recent work using optogenetics. Letter grading.


208B. Introduction to Biological Signal Processing. (4) Lecture, three hours. Introduction to basic electronic and computational aspects of a biological signal processing system. Three hours of laboratory. Letter grading.

209. Seminar in Behavioral Neuroscience. (4) Seminar, three hours. Requisite: Neuroscience M203 or consent of instructor. Seminar on topics in Behavioral Neuroscience. May be repeated for credit. S/U or letter grading.

210. Biology of Learning and Memory. (4) (Same as Neuroscience M200G and Neuroscience M220.) Lecture, four hours. Molecular, cellular, circuit, system, neuroanatomy, theory, and models of learning and memory. Cross-disciplinary focus on leading and memory to provide integrative view of subject that emphasizes emerging findings that take advantage of novel groundbreaking models. Letter grading.

212. Evaluation of Research Literature in Physiological Psychology. (1) Discussion, 90 minutes. Papers of current interest presented by members of seminar and their significance and methodology discussed and critiqued in depth. May be repeated for credit. S/U grading.


215B. Human Physiology in Social and Behavioral Sciences. (4) Lecture, three hours. Limited to graduate students. Designed to provide students with understanding of basic anatomy and activities of biological systems that relate psychological factors to health, and interactions between these systems. Letter grading.

216. Psychology of Chronic Disease. (4) Seminar, three hours. Limited to graduate students. Major themes include conceptualization and operationalization of chronic illness theories and frameworks for understanding determinants of adjustment to chronic illness and current research on those determinants, prevalence of psychological disorder in populations with chronic illness, evidence-based psychosocial interventions for chronic illness, and terminal illness and end-of-life care. Readings and discussion across several major chronic diseases (e.g., cardiovascular disease, cancer, HIV/AIDS, rheumatoid arthritis, diabetes). Letter grading.

216B. Psychoneuroimmunology. (4) Seminar, three hours. Limited to graduate students. Introduction to field of psychoneuroimmunology to help students develop conceptual and methodological skills necessary for interpreting research in this area. Letter grading.

216C. Psychology of Women's Health. (4) Seminar, three hours. Limited to graduate students. Examination of theoretical and empirical advances in psychology of women's health. Socioenvironmental context of women's health, stress and depression in women, psychological aspects of gynecological health, major causes of morbidity and mortality for women, and women's health-related behaviors. Letter grading.

216D. Psychology of Aging and Health. (4) Seminar, three hours. Limited to graduate students. Theories and methods in study of aging and adult development, age-related changes in biological systems, and psychosocial aspects of aging. Topics include physical and cognitive changes with age, mental and physical well-being in older adulthood, and socioemotional functioning in older adulthood. Letter grading.

216E. Families, Emotions, and Health. (4) Seminar, three hours. Limited to graduate students. Discussion of theory and research on biological, emotional, social, and psychosocial aspects of families, childhood behaviors in social environments to long-term mental and physical health. Letter grading.

216F. Community Psychology. (4) Seminar, three hours. Limited to graduate students. Social problems focus, with discussion of both conceptual and methodological issues that arise when designing and evaluating community interventions. Issues related to conceptualization of social problems as opposed to problems of individuals. Letter grading.

216G. Biology of Chronic Disease. (4) Seminar, three hours. Limited to graduate students. Examination of basic epidemiology and biology of major chronic diseases (cancer, cardiovascular disease, diabetes), and consideration of practical and logistical issues involved in studying chronic disease populations in behavioral and population research. S/U or letter grading.

216H. Health Behavior Theory and Behavior Change. (4) Seminar, four hours. Overview of research and theory in health behavior and health behavior change. Identification of contribution of health behaviors to overall health, construction of study methods that effectively measure major health behaviors, critical evaluation of health behavior change research, and generation of hypotheses and design research using main health behavior theories. S/U or letter grading.

217. Variable Topics in Health Psychology. (4) Seminar, three hours. Topics vary by instructor within health psychology area of study. Topics may include eugenics, child health psychology, health behavior, and behavior change. May be repeated for credit. S/U or letter grading.

218. Research Methods in Health Psychology. (4) Seminar, three hours. Designed for graduate psychology students. Basic foundation for health psychology graduate students to study various research designs and methods, measurement issues, responsible conduct of research, ethical issues. Letter grading.

219. Health Psychology Lecture Series. (2) Lecture, one hour. Circulation of researchers in health psychology from Los Angeles area present their research, and/or clinical work as part of training program in health psychology.May be repeated for credit. S/U grading.

220. Social Psychology. (4) Lecture, three hours. Designed for graduate psychology students. Intensive consideration of concepts, theories, and major problems in social psychology.


222A. Interpersonal Relations. (4) Discussion, three hours. Requisite: course 220A. Critical review of theory and research on interpersonal relations, with emphasis on friendship, dating, and marriage.

222C. Psychology of Intergroup Relations. (4) Lecture, three hours. Designed for graduate students. In-depth and comprehensive exposure to major theoretical and methodological issues within domain of intergroup relations research. Approaches not simply restricted to research within psychology but across social sciences in general, including anthropology, political science, and sociology. S/U or letter grading.

M222E. Foundations of Organizational Behavior. (4) (Same as Management-PhD M243.) Lecture, three hours. Designed for graduate students. Doctoral-level survey of classic and emerging theories and research in field of organizational behavior, with focus on micro-level topics related to individual and organizational processes within organizations. Exploration of how individual behaviors, cognitions, and perceptions are affected by organizational content, structure, and culture. S/U or letter grading.

222F. Professional Issues in Psychology. (4) Seminar, three hours. Acquisition of skills essential for success in graduate school and academia more broadly, including transition to graduate school, writing, manuscript reviewing, grant writing, teaching and mentoring, academic job market, job negotiating, and giving job talks. Involves combination of guest speakers, lectures, discussions, readings, written exercises, and practical experiences. S/U or letter grading.

223. Seminar: Critical Problems in Social Psychology. (4) (Formerly numbered 222G.) (Same as Communication M234.) Seminar, three hours. Exploration of nascent field of social vision, with emphasis on how observers utilize visible cues in face and body to form impressions of other people and how these perceptions are moderated by existing knowledge structures and motivations. S/U or letter grading.

224. Intervention Science. (4) Seminar, three hours. Exploration of use of science as basis for intervention. Exploration of psychology of social problems, and potential for scientific insights to inform meaningful and lasting solutions to social problems. S/U or letter grading.


226A-226B. Current Literature in Social Psychology. (2–2–2) Discussion, 90 minutes. Course 226A is limited to first-year social psychology students. Courses 226B and 226C are open to nonsocial psychology students with consent of instructor. Recent and current research papers in social psychology presented by members of seminar and their significance and methodology discussed and critiqued in depth. S/U grading.

M229A. Proseminar: Political Psychology. (4) (Same as History M236A and Political Science M261A.) Seminar, three hours. Introduction to political psychology: psychobiography, personality and politics, mass attitudes, group conflict, political communication, and elite decision making.

M229B. Seminar: Political Psychology. (4) (Same as Political Science M261D.) Discussion, three hours. Requisite: course 220B. Examination of political behavior, political socialization, racial conflict, mass political movements, and public opinion. S/U or letter grading.

M230. Critical Problems in Political Psychology. (4) (Same as Political Science M261E.) Discussion, three hours. S/U or letter grading.
M236. Interdisciplinary Relationship Science. (4) (Same as Anthropology M295S, Education M297, and Sociology M270.) Lecture, three hours. Limited to graduate students. Approaches to determining the role of personal and social factors in shaping fundamental biological and psychological processes that underlie the development of intimate relationships, including relationships between parent-child, sibling, and peer, kin relationships, and friendships. S/U or letter grading.

M238. Survey Research Techniques in Psychocultural Studies. (4) (Same as Psychiatry M238.) Seminar, three hours. Designed for graduate students. Techniques for conceptualizing, conducting, and analyzing survey data; instruction in qualitative strategies for enhancing survey research on psychocultural problems.

M239. Qualitative and Mixed Methods in Psychology, Education, and Social Sciences. (4) Seminar, three hours. Designed for graduate students. Substantive examples of qualitative and mixed-method research in culture and human development, both behavioral and neural. Examples illustrate sampling and qualitative research techniques and diverse relations between qualitative and quantitative data useful for research. S/U or letter grading.

M240A. Language and Cognitive Development. (4) Lecture, three hours. Preparation: one undergraduate developmental psychology course in cognitive or language development. Designed for graduate students. Consideration of major topics and concepts, key theories, latest methods, and research findings in development of language and cognition. S/U or letter grading.

M240B. Social and Emotional Development. (4) Lecture, three hours. Preparation: one undergraduate developmental psychology course in social development or related topic. Designed for graduate students. Consideration of major topics and concepts, key theories, latest methods, and research findings in social and emotional development. S/U or letter grading.

M241. Current Developments in Developmental Psychology. (4) Lecture, three hours. Limited to graduate students. Introduction to emerging field of developmental psychology, including cognitive and affective neuroscience. Consideration of major topics and concepts, key theories, latest methods, and research findings. S/U or letter grading.

M242. Developmental Psychology. (4) Lecture, three hours. Limited to graduate students. Introduction to emerging field of developmental psychology, including cognitive and affective neuroscience. Consideration of major topics and concepts, key theories, latest methods, and research findings. S/U or letter grading.

M245. Personality Development and Education. (4) (Same as Education M217C.) Lecture, four hours. Review of research and theory of critical content areas in personality development. Focus on school performance: achievement motivation, self-concept, aggression, sex differences, empathy, and other social behaviors; review of status of emotional behavior in personality theory and development. S/U or letter grading.


M247. Culture, Brain, and Development. (4) (Same as Sociology M248.) Seminar, three hours. General introduction to interrelations of culture, brain, and development, including both social and cognitive development. Special attention to effects of social change on humans and human development. S/U or letter grading.

M248. Brain and Behavioral Development during Adolescence. (4) (Formerly numbered 248.) (Same as Neuroscience M248.) Seminar, three hours. Foundational and emerging work on adolescent brain and behavioral development, including cognition, risk taking, emotion, identity, stress, relationships, and population diversity. Discussions of assigned readings and presentations by guest faculty and students. S/U or letter grading.

M249. Current Issues in Quantitative Psychology. (1) Seminar, 90 minutes. Designed for quantitative graduate students and minors. Research presentations and discussions of current topics in quantitative psychology. May be repeated for credit. S/U grading.


M250B. Advanced Psychological Statistics. (4) Advanced experimental design and planning of investigations.

M250C. Advanced Psychological Statistics. (4) Lecture, three hours. Discussion, two hours. Prerequisite: course 250A. Limited to graduate students. Review of traditional topics in correlation and regression analyses, including model comparison strategies, evaluation of model assumptions, testing mediation and moderation hypotheses, working with categorical variables, general linear model, and logistic regression. Letter grading.

M251A-251B-251C. Research Methods. (4-4-4) Tutorial, to be arranged. Graduate psychology students. Students design and conduct original research projects under supervision of instructor in charge. It is anticipated that many students will complete their project in two terms; the normally three terms allowed). S/U (251A, 251B and S/U or letter (251C) grading.


M254. Mediation, Moderation, and Conditional Process Analysis. (4) Lecture, three hours. Prerequisite: course 250C. Designed for students with previous experience with regression analysis. Application of linear and logistic regression to assess how (mediation) and when (moderation) and interaction of these to examine when certain processes occur (conditional process analysis). S/U or letter grading.

M254C. Bayesian Statistics. (4) Lecture, three hours. Prerequisite: course 250A. Introduction to Bayesian inference. Effective approaches to Bayesian modeling and computation, and Bayesian methods that can be used by applied researchers to solve real-life problems. Covers basic Bayesian inference. S/U or letter grading.

M255. Quantitative Aspects of Assessment. (4) Lecture, four hours. Prerequisites: courses 250A, 250B. Introduction to issues concerning empirical measurement of abstract constructs using both classical and modern empirical techniques. Hands-on approach allows students to develop practical experience. In addition to discussion of issues concerning reliability and validity, topics include exposure to analytic approaches, including item response theory, multiple regression, principal components analysis, exploratory factor analysis, confirmatory factor analysis, path analysis, and structural equation modeling. S/U or letter grading.

M258. Item Response Theory. (4) Lecture, three hours. Prerequisites: courses 250A, 250B. Introduction to item response theory (IRT) measurement models and application techniques. Coverage of major IRT models, including models for dichotomous and polytomous formats. S/U or letter grading.

M260. Introduction to Multilevel Modeling. (4) Lecture, three hours. Prerequisite: course 256A. Advanced topics in analysis of clustered and longitudinal data, including nonlinear models, multilevel mediation, nonhierarchical data structures, meta-analysis, modeling with missing data, and mixture models. Readings in both quantitative and substantive multilevel modeling literature. S/U or letter grading.


M261. Special Problems in Psychological Statistics. (4) Lecture, three hours. Prerequisites: courses 250A, 250B. Special problems in psychological statistics and data analysis.

M262. Quantitative Methods in Cognitive Psychology. (4) (Same as Psychiatry M239.) Lecture, three hours. Requisites: courses 250A, 250B. Number of non-statistical mathematical methods and techniques commonly used in cognitive psychology. Topics include Markov chains, other stochastic processes, computational theory, information theory, frequency analysis, etc.

M261A-261B. Proseminars: Cognitive Psychology. (1-1) Presentation of research topics by students, faculty, and visiting scholars. May be repeated for credit. S/U grading.

M261C. Perception. (4) Lecture, three hours. Concepts, theories, and research in study of perception. Considers the questions: Why do things look, sound, taste, smell, or feel as they do? What is the nature of perceptual systems? How do these systems process information?


M263. Psycholinguistics. (4) Lecture, three hours. Language allows humans to transfer thoughts across minds. To elucidate mental structures, how is the nature of mental cognitive psychology, computational modeling, and neuroscience. Topics include relationship

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between linguistic structure and meaning; parallels between language and other cognitive domains (e.g., statistical learning, Bayesian inference, prediction), and in online language processing; influences of language on thought; language-related processes. 

272E. Advanced Clinical Psychological Methods: Special Problems. (4) Seminar; three hours. Requisites: course 272A or course 401 or 451. May be taken independently for credit. Letter grading.


273A-273B-273C. Professional and Ethical Issues in Clinical Psychology. (2–2–2) Lecture, one hour; discussion, one hour. Designed for graduate clinical psychology students. Year-long course covering a variety of topics necessary for clinical psychologists in their clinical work, including ethical issues, issues concerning the provision of services to clients, and issues concerning professional and ethical issues in clinical psychology. Letter grading.

274. Health Status and Health Behaviors of Racial and Ethnic Minority Populations. (4) (Same as Health Policy and Behavior M274.) Lecture, two hours; discussion, one hour. Designed for limited to graduate students. Overview of physical and mental health behaviors and status of major racial/ethnic groups in the U.S. Where appropriate, discussion of international issues as well. S/U or letter grading.


277A-277B. Advanced Clinical Assessment. (4–4) Lecture, 11 hours; laboratory, 11 hours. Designed for graduate clinical psychology students. Techniques for cognitive and related behavioral problems in a broad perspective as basis for analyzing cause and intervention. Issues related to prevailing policies and practices and new directions for research, policy, practice, and training. S/U or letter grading.

278. Functional Neuroimaging: Techniques and Applications. (3) Lecture, 11 hours. Designed for graduate students. Introduction to understanding functional imaging and how to interpret it. Laboratory visits and design and implementation of functional MRI experiment. S/U or letter grading.

280. Affective Disorders. (2 or 4) (Same as Psychiatry M280.) Seminar, two hours. General topics related to a specific affective disorder (e.g., depression, dysthymia, bipolar disorder). In-depth examination of activation imaging, including MRI and fMRI methods. Data acquisition and analysis, experimental design, and results obtained. Letter grading.

285S. Cognitive Behavior Therapy with Children: Treatment and Systems of Care. (2 or 4) (Same as Psychology M285.) Seminar, two hours. General topics related to a specific affective disorder (e.g., depression, dysthymia, bipolar disorder). In-depth examination of activation imaging, including MRI and fMRI methods. Data acquisition and analysis, experimental design, and results obtained. Letter grading.

291. Trauma and Health. (4) Seminar, three hours. Designed for graduate students. Examination of learning and related behavioral problems in a broad perspective as basis for analyzing cause and intervention. Issues related to prevailing policies and practices and new directions for research, policy, practice, and training. S/U or letter grading.
498. Special Problems in Psychology. (1 to 4) Seminar, one to three hours. Content depends on interests of particular instructor. May be repeated for credit. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.


410A-410B-410C. Clinical Teaching and Supervision. (4–4–4) Clinic, four hours. Preparation: completion of PhD comprehensive examinations, advancement to candidacy or preparation for dissertation research actively under way. Study and practice of knowledge, concepts, and theories on teaching and supervision of applied clinical psychology. Letter grading.

410D-410E-410F. Clinical Assessment Supervision. (4–4–4) Clinic, two hours; other, one hour. Designed for third-year graduate clinical psychology students. Study and practice of knowledge, concepts, and theories on teaching and supervision of psychological assessment. Letter grading.

421. Research in Social Psychology. (2) Discussion, one to four hours. Undergraduate research group of students meets each week for quarter in self-study group to pursue specific topic of their choice that is not covered in other department courses. S/U grading.


495. Presentation of Psychological Materials. (4) Seminar, to be arranged. Supervised practicum in undergraduate teaching. Students serve as discussion section leaders in selected undergraduate courses. S/U grading.

495A. Teaching Assistant Training Seminar: Presentation of Psychological Materials I. (1) Seminar, 90 minutes. Supervised practicum in undergraduate teaching. Focus on discussion and implementation of evidence-based teaching practices. Topics include facilitating active learning, presenting material, providing constructive feedback, and teaching diverse students. Students serve as teaching assistants in course 10, S/U grading.
courses are selected, three electives are required.

Policies
Lower-division courses may not be substituted. If a student has taken a non-public affairs course in statistics or microeconomics, it is recommended that the other public affairs course be taken to satisfy the second lower-division requirement.

By petition only, students may request to use one outside course (not from a Luskin School of Public Affairs unit) as an elective for the minor.

Fieldwork and internship courses, such as Social Welfare 130A, 130B, and Urban Planning M165, may not be applied toward the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

PUBLIC AFFAIRS SCHOOLWIDE PROGRAMS
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José C. Loya, PhD (Urban Planning)
Meredith Phillips, PhD (Public Policy, Sociology)
Ananya Roy, PhD (Social Welfare, Urban Planning)

Overview
The Public Affairs major offers students a rigorous conceptual and empirical foundation that prioritizes capacity for action by students exhibiting high motivations for public service and social change. It combines interdisciplinary training in the social sciences with practical experience addressing public problems. Students will learn theoretical, empirical, and critical foundations of applied social science, qualitative and quantitative research methods, and the history and practice of community engagement.

Public Affairs students traverse the boundary between the classroom and the world through instruction in public engagement and experiential learning that develop students’ capacity to work collaboratively with communities, government agencies, nonprofit organizations, and businesses.

The major serves as a pathway for students pursuing careers serving the public interest in civil society, business, government, or through advanced graduate training in academic or professional programs.

Undergraduate Major
Public Affairs BA
Capstone Major
The Public Affairs major is a designated capstone major. Students pursuing the major are required to complete a three-quarter experiential learning opportunity. The experiential learning capstone consists of three parts: an internship, seminar, and capstone project.

Internships can range from internships in community-based organizations, social enterprise businesses, or regional governments to UCLA Global Internship Program, UCLA Quarter in Washington, or UC Center Sacramento (UCCS) programs.

These experiences are accompanied by a seminar that enables students to reflect on and share their engagement experience with classmates, apply what they have learned in their coursework to their community or public engagement, and analyze how the engagement experience conforms with or differs from what they learned in coursework.

This experiential learning opportunity culminates with a capstone project that integrates what students have learned at their internship site with theory and methods learned in their major coursework.

Learning Outcomes
The Public Affairs major has the following learning outcomes:

• Understanding of how different contexts, institutions, and/or environments influence individual and public life and can create, exacerbate, or reduce inequality and injustice
• Demonstrated familiarity with economic, political, and/or civil society responses to social problems and public issues
• Location of, use of, and critical thinking about quantitative and qualitative evidence for understanding societal problems and/or their solutions
• Formulation of clear and convincing written and oral arguments for varied audiences
• Effective communication with collaborators, policymakers, and/or the public
• Application of theoretical knowledge, analytical methods, and communication skills to an experiential learning capstone

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Entry to the Major
Admission
Students must apply to declare the Public Affairs major. Admission into the major is based on student academic performance and an application process. Consult with Luskin School of Public Affairs undergraduate advisers for any additional admission requirements.

Pre-major
Students entering UCLA directly from high school can select the Public Affairs pre-major on the UCLA admission application, or complete a petition to enter the pre-major once in attendance at UCLA. Transfer students are automatically admitted to the major if they select Public Affairs on the UCLA admission application. See the Transfer Students section for more details.

The Public Affairs major includes six lower-division courses and ten upper-division courses. Students identified as Public Affairs pre-majors have the opportunity to formally apply to declare the Public Affairs major after completing four of the required lower-division courses and the school quantitative reasoning and Writing I requirements. Two of the four required lower-division courses must be Public Affairs 40 and 60, both of which serve as prerequisites for upper-division coursework.

Students may only apply to the Public Affairs major during winter quarter of their first or second year, once they have satisfied the following criteria: (1) Must be in good standing at the time of application. This means students cannot be on probation or subject to dismissal status when they apply. (2) Have completed, with a C or better, at least four of the six required lower-division public affairs courses (including courses taken winter quarter). Completed courses must include Public Affairs 40 and 60. The remaining two courses, if not yet taken, must be taken as soon as possible, and during the third year at the latest. All courses for both the pre-major and the major must be taken for letter grade. (3) Have completed at least 45 letter-graded units (including AP and transfer units, if needed) by the end of winter quarter of the year they apply. (4) Have not exceeded 135 units of coursework (not including AP or other transfer units), by the end of winter quarter of the year they apply.

Transfer Students
Transfer applicants to the Public Affairs major with 90 or more units are considered for admission based on successful completion of the preparation for the major coursework. Students must take all preparation for the major courses for a letter grade, and receive a B grade or better in these courses to be competitive. Transfer credit is subject to department approval. Consult an undergraduate counselor before enrolling in any courses for the major.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.
Requirements

Preparation for the Major

Required: Public Affairs 40, 60, 80, and three courses selected from Public Affairs 10, 20, 30, 50, or 70.

The Major

Required: (1) Two theory courses selected from Public Affairs M109, 110, 111, 112, 113, 114; (2) both research methods courses Public Affairs 115, 116; (3) three-term capstone sequence Public Affairs 187AX, 187BX, 187CX; (4) three additional upper-division public affairs courses.

Honors Program

Students who wish to complete an original research thesis, driven by student-defined interests and independent work, may apply to the Public Affairs honors thesis program in the spring of junior year. Students who are admitted to the program begin background research for their project over the summer and enroll in three contract research courses with their Luskin thesis adviser during their senior year. The sequence (Public Affairs 198A-198B-198C) must be completed over three consecutive quarters, starting in the fall. Students must earn at least a B in Public Affairs 198A to continue with the sequence.

Policies

Preparation for the Major

Each course must be taken for a letter grade. Preparation for the major courses must be completed with a C grade or better.

The Major

Each course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the major.

Honors Program

Admission

To apply to the honors thesis program students must (1) have senior standing by the beginning of the fall quarter in which Public Affairs 198A is taken, (2) have an overall minimum grade-point average of 3.60 or better in the major at the end of winter quarter in the year prior to beginning the thesis, (3) have completed Public Affairs 115 and 116 by the end of spring quarter in the year prior to beginning the thesis with grades of A– or better, (4) have agreement from a faculty member to serve as thesis adviser. To apply, students submit an application containing a short research proposal, information on their academic and research preparation, and confirmation that a Luskin faculty member has agreed to advise their honors thesis during the fall, winter, and spring of the subsequent year. The Public Affairs honors committee selects applicants based on the promise of their proposed research, research-related coursework, and research experience. The selection process is competitive.

Requirements

To qualify for graduation with departmental honors, students must complete a Public Affairs honors thesis deemed to meet the standards of honors or highest honors by the Public Affairs honors committee, and have a cumulative grade-point average of 3.60 or better in the major.

The Public Affairs honors committee, with input from thesis advisers, determine whether students’ theses merit honors or highest honors.

Students may count one honors contract course toward their Public Affairs major elective requirement (with the understanding that no more than one contract course in total may count toward the Public Affairs elective requirement).

Public Affairs

Lower-Division Courses

10. Social Problems and Social Change. (5) Lecture, three hours; discussion, one hour. Introduction to social scientific approaches to study of social problems and their solutions. Using selected contemporary social problems as case studies, drawing on variety of sources (such as scholarly readings, video clips, and guest speakers), exploration of how social problems and their solutions come to be defined, roles that economic, political, educational, and cultural institutions play in perpetuating or solving social problems, and how individuals, social advocates, and communities can lead or impede social change. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discussion at UCLA. P/NP grading.

20. Power, Politics, and Policy Change. (5) Lecture, three hours; discussion, one hour. Introduction to key institutions of government, politics, and policy in U.S., covering their history, contemporary forms, and internal dynamics. Includes various scales and branches of government as well as institutions that exercise power and influence in public decision making and social action, such as corporations, unions, media, social movements, and civil society. Letter grading.

30. Comparative Analysis of Wealth, Policy, and Power. (5) Lecture, three hours; discussion, one hour. Exploration of strategic interactions that give rise to social problems and what can be done to address them, and how different policies have tried (and sometimes failed) to mount effective response. Applications include climate change, anti-vaccination movement, protest and repression, war and formation of states, corruption, and human and drug trafficking. Letter grading.

40. Microeconomics for Public Affairs. (5) Lecture, three hours; discussion, one hour. Introduction to principles of microeconomics with focus on social and policy problems. Study of decisions by firms and individuals, and implications for allocation of resources. Application of economic models to public issues such as social safety net, minimum wage, education, inequality, and poverty. Letter grading.

50. Foundations and Debates in Public Thought. (5) Lecture, three hours; discussion, one hour. Introduction of core concepts of democracy and equality and challenges to implementation posed by race, class, and gender inequality. Review of standards by which political systems can be judged to be democratic and identification of obstacles to their mutual implementation. Focus on inequality, its historical causes and modern consequences. Letter grading.

60. Using Data to Learn about Society: Introduction to Empirical Research and Statistics. (5) Lecture, three hours; discussion, two hours. Not open for credit to students with credit for Economics 41, Political Science 6, Statistics 10, 12, 13, or 15. Introduction to statistics through examination of topics of public interest. Familiarization with research design principles and hands-on data analysis using statistical software. Students learn how to find and organize quantitative data; summarize, display, and interpret data; draw inferences from samples (including understanding margins of error, standard errors, and confidence intervals); test hypotheses about associations between two variables (including tests of proportion, t-tests, chi-squared, correlation); and communicate findings to lay audiences. Letter grading.

70. Information, Evidence and Persuasion. (4) Lecture, three hours; discussion, one hour. Examination of sources and varieties of knowledge produced in social sciences. Evaluation of types of evidence, arguments, and persuasive techniques on social problems and public issues. Examination of public life of evidence and arguments by different actors in social policy-making, persuasion, and propaganda process. Letter grading.

80. How Social Environments Shape Human Development. (4) Lecture, three hours; discussion, one hour. Overview of major theoretical, conceptual, and empirical traditions in study of human development. Exploration of how diverse cultural, social, socioeconomic, and historical contexts interact with biological, cognitive, and psychological processes to affect individuals during key developmental periods (such as early childhood, childhood, adolescence, early adulthood, middle adulthood, and late adulthood). Topics may include historical changes in families, schools, neighborhoods, and workplace; economic conditions of families, schools, and neighborhoods; enduring effects of childhood on adult well-being; and impact of ascribed characteristics such as gender, race, and nationality on individuals’ environments, pathways, and outcomes. Letter grading.

99. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or projects and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or projects and led by lecture course instructor. May be repeated for credit. May not be used toward Public Affairs major capstone requirement; consult with undergraduate adviser. P/NP grading.

99. Student Research Program. (1 to 2) Letter grading. Limited to students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

M109. Introduction to Cities and Planning. (4) (Same as Urban Planning M120.) Lecture, three hours; discussion, one hour. Survey of urban history and evolution in U.S., urban social theory, current growth trends, system of cities, urban economy and economic restructuring, traditional and alternative location theories, urban transportation, and residential location and segregation. Letter grading.
110. Urban Revolution: Space and Society in Global Context. (4) Lecture; three hours, discussion; one hour. Examination of potentialities and challenges of 21st-century urban revolution in global context. Introduction of theoretical frameworks and conceptual methods used by urban studies and planning to study cities and urban transformations, and historical and contemporary analysis of urbanization to learn about key urban problems in context of developing, transitional, and advanced economies. Understanding of urbanizing and civil society that seek to redress urban inequalities. Introduction to key theories of space and utopian visions of urbanism. Letter grading.

111. Microeconomics: Market Failures and Inequality. (4) Lecture; three hours, introduction to policy analysis. Broad focus on evaluating rationale for government intervention in economy, in particular to address market failures and issues of economic inequality. Major emphasis on market failures in context of environmental sustainability, and economic inequality arising from markets for human capital, health, housing, and labor. Students are expected to have working knowledge of basic statistical and economic concepts. Letter grading.

112. Social Movements. (4) Lecture; three hours; discussion; one hour. Introduction to theories, real-life examples, and applied skills for understanding and contributing to social movements. Examination of how and why social movements emerge; how and why people join, lead, stay, or drop out of movements; and strategies and tactics by which social movements enact change. Draws upon wide range of social movements inside and outside of U.S. Letter grading.

113. Policy Analysis: Approaches to Addressing Social Problems. (4) Lecture; three hours; discussion; one hour. Introduction to policy analysis. Designed to train students in logic of public policy analysis, introduce them to general skills required to do policy analysis, and to prepare them in persuasive presentation of their work. Development of skills fundamental to effective policy analysis and argumentation. Letter grading.


115. Using Quantitative Methods to Understand Social Problems and Their Potential Solutions. (5) Lecture; three hours; discussion; two hours. Requisite: course 60 or equivalent introductory statistics course. Course in R preferred. Introduction to multivariate quantitative research models used to answer questions in social science. Students gain practical and in- tuitive understanding of multivariate regression, program evaluation, and research methods, and apply knowledge by analyzing real world data. Focus on practical analytic tools using statistical software. Letter grading.

116. Using Qualitative Methods to Understand Social Problems and Their Potential Solutions. (5) Lecture; three hours; discussion; two hours. Introduction to qualitative research methods with focus on ethnographic observations, interviewing, and focus groups. Students practice conducting variety of qualitative methods. Letter grading.

117. Network Science Using R. (4) Lecture; three hours. No prior knowledge of R required. Designed for juniors and seniors. Network analysis offers framework for understanding how relationships between people, places, and institutions affect public policy outcomes. For example, why individuals decide to protest or vote, amount of education they pursue, or effect of human interaction patterns on decision making. Consider use of network analysis. Weekly introduction of concept from network analysis, followed by working through it using popular statistical programming language R. Letter grading.

117A. Community-Engaged Research Methods. (4) Same as Chicana/o and Central American Studies M129 and Labor Studies M129.) Lecture, four hours. Students are trained in designing, drafting, piloting, and administering surveys. This semester will focus on childhood poverty and criminology. Written in collaboration with labor and community partners serving Latinx, Asian Americans and Pacific Islanders, Black, and Indigenous youth. Letter grading.

117D. Data Analysis for Educational Equity and improvement. (4) Same as Public Policy M126.) Lecture, three hours. Requisite: course 60. Exploration of challenges of making data useful for decision-making from complex and varied data sets. Focus on understanding key public policy debates and critical thinking skills. Letter grading.

117F. Data Analysis for Educational Equity and Improvement. (4) Same as Public Policy M126.) Lecture, three hours. Requisite: course 60. Exploration of challenges of making data useful for decision-making from complex and varied data sets. Focus on understanding key public policy debates and critical thinking skills. Letter grading.

120. Urban Poverty and Public Policy. (4) Lecture; three hours. Introduction to economic and political aspects of urban poverty. Examination of how the poor define poverty and inequality, and the role that government intervention plays in addressing poverty and inequality. Use of explicitly political lens, evaluating roles of policies that impact children. History of social policies and the development and implementation of urban policy. Letter grading.

121. Race, Class, Gender, and Spatial Inequality. (4) Lecture; three hours. Introduction to economic and sociological approaches to analyzing dimensions, causes, and consequences of inequality in society. Introduction to public policy concepts and tools for analyzing key urban, labor, and social policies that may help to alleviate inequality in society. Letter grading.


123. Child Well-Being. (4) Same as Social Welfare M151.) Lecture, three hours. Limited to juniors/seniors. Examination of public child welfare system into child protection system. Impact of welfare reform on child policies and programs in the U.S. Major programs designed to provide safety net for disadvantaged children, including welfare, food stamps, child care, child support, and children’s allowance programs. Review of research and analysis in this area. Overview of social policies and programs that impact children in the U.S. Examination of comparative policies in other countries. P/NP or letter grading.

125. Creating Safe and Welcoming Schools. (4) Lecture; two hours; discussion; one hour. Examination of historical context and causes of school violence, theories, and diverse perceptions of school climate and safety. Special emphasis on impact of school climate on oppressed groups and how social contexts such as poverty and how neighborhood resources influence school safety. Letter grading.


129X. Intergenerational Communication across Lifespan. (4) Same as Gerontology M142XP and Social Welfare M142XP.) Lecture, three hours; fieldwork, one hour. Limited to juniors/seniors. How do you say to your parents in conversation? How do you talk to your grandparents? Does your family talk well to one another as group? How do you communicate well with boss who is 30 years older than you? Individuals of all ages interact with one another, and their interactions have significance throughout their lives. Introduction to psychological, interpersonal, and societal issues related to intergenerational communication across lifespan. Letter grading.

130. Biomedical, Social, and Policy Frontiers in Human Aging. (5) Same as Gerontology M108 and Social Welfare M108.) Lecture, four hours. Limited to juniors/seniors. Course of human aging charted in ways that are based on variety of recent research frontiers. Use of conceptual frameworks to increase relevance of aging to students’ lives and enhance their critical thinking—biopsychosocial approach that is based on recognition that aging is inherently interdis- ciplinary phenomenon, and life course perspective that is distinguished by analytical framework it pro- vides for understanding of individual lives and changing social structures, and allows students to understand how events, successes, and losses at one stage of life can have important effects later in life. Focus on individuals as they age within one particular sociostorical context. Letter grading.


134. Politics of U.S. Health Policy. (4) Lecture; three hours. Students gain firsthand knowledge of the process of health policy making in U.S. primarily through lens of debate over national health care reform culminating in passage of Patient Protection and Affordable Care Act (PPACA). In the 2016 election and beyond, many of opponents to repeal or overturn it. Letter grading.

135. Firearm Violence Prevention Policy. (4) Lecture, three hours. Examination of range of topics connected to contemporary debates about firearm violence in U.S. Exploration of causes and consequences of firearm violence in different contexts. Letter grading.

136. Cannabis Policy and Society. (4) Lecture, three hours. Designed to enable students to formulate responsible opinions on cannabis legalization, industry,
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regulation, and taxation; to defend them with good analysis; and to understand logic behind opinions that may differ from their own. Letter grading.

137. Gangs, Criminal Justice, and Mass Incarceration. (4) Lecture, three hours. Exploration of justice policies that surround gangs, sentencing, prisons, incarceration, and rehabilitation. Students develop understanding of how to communicate knowledge and research regarding criminal justice system, gangs, and mass incarceration. Letter grading.

140. Race, Rights, and Citizenship: Encounters with Bureaucracies. (4) Lecture, three hours. Examination of role of bureaucracies in emergence of, presence of, and expressions of inequality. Exploration of dilemmas that bureaucrats face as they do their jobs, and experiences of residents who interact with bureaucrats. Consideration of how peoples’ experience of bureaucracies is associated with socioeconomic standing, and reflection on how experiences with bureaucracies convey messages about race, citizenship, and belonging. Letter grading.

M142. Latino Social Policy. (Same as Chicana/o and Latino American Studies CM177.) Lecture, three hours; discussion, one hour (when scheduled). Examination of social welfare of Latinos (Chicanos, Puerto Ricans, and Cubans) in U.S. through assessment and critical analysis of policies that affect them. Survey of social, economic, cultural, and political circumstances affecting ability of Latinos to access public benefits and human services. Letter grading.


148. U.S. Housing Policy and Geography of Opportunity. (4) Lecture, three hours. Exploration of contemporary levels of racial inequality through lens of U.S. housing policy. Study includes historical overview of federal policy and ways by which lives in racially segregated, high-poverty neighborhoods constrain opportunity and social mobility; exploration of most prevalent affordable housing policies; and evaluation of their respective program designs and outcomes. Letter grading.

149. International Housing Policy. (4) Lecture, three hours; discussion, one hour. Study of housing policies in diverse range of countries, comparing those with U.S. housing policy in different contexts to better understand how institutional, economic, legal, and cultural contexts shape housing policies around the world. Letter grading.

M153. Parking and City. (Same as Urban Planning CM151.) Lecture, three hours. Requisites: course 40 or Economics 1 or 11. Parking is misunderstood link between transportation and land use. Transportation engineers often assume free parking simply is not there at end of trips, while urban planners treat parking as transportation issue that engineers must study. No profession is intellectually responsible for parking, and everyone seems to assume that someone else is doing hard thinking. Mistakes in planning for parking help to explain why planning for transportation and land use has in many ways gone slowly, subsidy, incrementally wrong. Study of theory and practice of planning for parking and examination of how planning for parking in U.S. has become planning for free parking. Exploration of new ways to improve planning for parking, transportation, and land use. Letter grading.

154. Green Transportation. (4) Lecture, three hours. Introduction to transportation planning and policy from environmental perspective. How to encourage alternatives policy. Examination of policies in different contexts to better understand how institutional, economic, legal, and cultural contexts shape housing policies around the world. Letter grading.

M157. Building Environment and Health. (Same as Urban Planning CM157.) Lecture, three hours. Exploration of important linkages between urban-built environment and public-health outcomes using ecological, urban planning, and community-based lenses through theory and series of case studies. Knowledge of these linkages is used to propose ecological solutions to issues at nexus of built environment and public health. Letter grading.

158XR. Trees in City. (4) Lecture, three hours. Introduction of foundational urban ecological concepts using case of urban trees. Includes wide range of disciplines as well as practitioner and community organized efforts to understand social and ecological implications of urban vegetation. Students partner with environmental nonprofit located in Los Angeles. Letter grading.


M160. Urban Sustainability. (4) Same as Urban Planning M161.) Lecture, three hours. In 21st century, majority of Earth’s population now lives in urban areas and virtually no part of globe remains untouched by human activity. Cities constitute crucibles of most pressing social and environmental challenges but are also potential centers of innovative addressing those challenges. Examination of theory and practice from urban sustainability perspective for articulations of urban sustainability and how it might be achieved. Letter grading.

M161. Environmental Justice through Multiple Lenses and Environmental Movements. (4) Same as Urban Planning M167.) Lecture, three hours. Examination of intersection between race, economic class, and environment in U.S., with focus on issues related to social justice. Because environmental inequality is a highly complex phenomenon, multidisciplinary and multilayered approach taken, using alternative ways of understanding, interpreting, and taking action. P/NP or letter grading.

M164. Science, Technology, and Public Policy. (4) (Same as Electrical and Computer Engineering CM182 and Public Policy CM182.) Lecture, three hours. Recent and continuing advances in science and technology are raising profoundly important public policy issues. Consideration of selection of critical policy issues, each of which has substantial ethical, social, economic, political, scientific, and technological aspects. Letter grading.

M165. Advanced Technology: Public Policy, Regulation, and Law. (4) (Same as Public Policy CM175.) Lecture, three hours. Examination of cutting-edge public policy and regulatory issues implicated by advanced technologies such as artificial intelligence, drones, autonomous vehicles, blockchain/Biotech, etc. Exploration of whether and how such new technologies should be regulated. Exploration of how policymakers should balance need to promote investment and innovation against need to protect public against potential misuse and abuse of these new technologies. Exploration of many issues raised by these technologies, such as privacy, national security, network neutrality, intellectual property rights, and more. Letter grading.

170. Civil Society, Nonprofit Organizations, and Philanthropy: Comparative Perspectives. (4) Seminar, three hours. Increased importance of nonprofits, rise of philanthropy, and (re-)discovery of civil society have moved this set of institutions closer to center of policy agendas. Introduction of historical and historical background. Examination of organizational performance and impact. Exploration of key policy issues. Comparative perspective between U.S. and other countries and fields. Letter grading.

172. Development and Its Governance. (4) Lecture, three hours. Exploration of how economics, institutions, and politics interact to constrain and shape development strategies—emphasizing tension between normative visions of good economic policy and good governance and practical challenge of identifying practical ways of fostering change in specific settings. Focus on challenges of development in low- and middle-income settings, with exploration of governance challenges within U.S. Letter grading.


175. Communications and Conflict in Public Affairs. (4) Lecture, four hours. Interactive course that prepares students for successful work with collaborators, policymakers, and public. Students gain interpersonal skills, cultural competency; learn effective communication, conflict resolution, and negotiate their interests successfully; learn to engage constituents and build community around shared goals. P/NP or letter grading.

M176XP. Making Films about Food. (5) (Formerly numbered M176SL.) (Same as Community Engagement and Social Change M176XP and Food Studies M176.) Lecture, three hours. Documentary video production and distribution. Students work on assignments in pairs and small groups to create 8-10 minute video about one of several local food issues, partnering organizations with environmental, healthy, local, sustainable food. Consideration, through video production, of challenges posed by existing farming, ranching, and distribution methods, and strategies these groups are pursuing to create more sustainable food pathways. Students look at social media communication strategies to help think through intervention in face of historically entrenched industrial food production and regulations that remain favorable to mass-produced, processed food items. P/NP or letter grading.

M179A. Social Movements in Theory and Practice. (4) (Same as Public Policy M179.) Lecture, three hours. Social movement is group of people pressuring for political or social change over long periods of time. Study focuses on how mass movements form, when and where they are likely to form, what types of tactics they choose, how those tactics affect their success, and role new technologies play. Weekly focus on one specific topic, such as nonviolence or social media, with historic and current movements used as case studies. Letter grading.

180. Lawyers, Law, and Public Affairs. (4) Lecture, three hours. Interplay between public affairs, public policy, and law represents one of most significant and fundamental aspects of American democracy. Students gain tools necessary for understanding how law shapes public policy, and how public policy shapes law. Covers key tools for understanding legal reasoning and shows how those tools operate in various substantive legal policy areas. Letter grading.

187AX-187BX-187CX. Experiential Learning Capstone. (5-5-5) (Formerly numbered 187A-187B-187C.) Lecture, two hours; discussion, one hour. Course 187 AX is requisite to 187BX, which is requisite to 187CX. Limited to and required for senior Public Affairs majors. Students apply public affairs course concepts and methods to internships or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.
189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191A. Variable Topics Seminar: Public Affairs. (4) Seminar, three hours; outside study, nine hours. Emerging issues in public affairs. May be repeated for credit. Letter grading.

M191DC. CAPPP Washington, DC, Research Seminar. 2 units. Letter grading. Emerging issues in public affairs. May be repeated for a maximum of 4 units. Individual honors contract required. Limited to students in College Honors Program. Directed through Center for American Politics and Public Policy’s program in Washington, DC. Focus on development and execution of original empirical research based on experiences from Washington, DC-based field placements. Study of variety of qualitative methods (observation, interviewing, etc.), with comparison to quantitative analysis. Examination of features of solid and significant research; intensive writing. Letter grading.

M191R. Variable Topics Seminar: Public Policy. (4) (Same as Policy CM191R.) Seminar, three hours; when scheduled outside study, eight hours. Emerging issues in public policy. May be repeated for credit. P/NP or letter grading.

195. Community or Corporate Internships in Public Affairs. (2 or 4) Tutorial, to be arranged; fieldwork, six to 12 hours. Limited to juniors/seniors. Internship in supervised setting in corporate, governmental, or nonprofit/community organization setting related to Public Affairs. Students meet with instructor and provide periodic reports of their experience. Individual contract with supervising faculty member required. May be repeated for credit. May not be used toward Public Affairs major capstone requirement; consult with under-graduate advisor. P/NP or letter grading.

195CE. Community or Corporate Internships in Public Affairs. (4) Tutorial, to be arranged; fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship in corporate, governmental, or nonprofit settings coordinated through Center for Community Engagement. Students complete weekly written assignments, attend biweekly meetings with graduate student instructor, and write final research paper. May be repeated for credit. May not be used toward degree or concentration. Internship in supervised setting in corporate, governmental, or nonprofit/community organization setting related to Public Affairs. Students meet with instructor and provide periodic reports of their experience. Individual contract with supervising faculty member required. May be repeated for credit. May not be used toward Public Affairs major capstone requirement; consult with undergraduate advisor. P/NP or letter grading.

M195DC. Quarter in Washington, DC, Internships. (4) (Same as Community Engagement and Social Change M195DC, History M195DC, Political Science M195DC, and Sociology M195DC.) Tutorial, four hours. Limited to junior/senior Quarter in Washington program students. Internships in Washington, DC, through Center for American Politics and Public Policy. Students meet on regular basis with instructor and provide periodic reports of their experience. Individual contract with supervising faculty member required. P/NP grading.

196. Research Apprenticeship in Public Affairs. (2 to 4) Tutorial, three hours per week per unit. Limited to juniors/seniors. Research apprenticeship for upper-division students under guidance of faculty mentor. May be repeated for credit. Individual contract required. P/NP grading.

198A-198B-198C. Honors Research in Public Affairs. (4-4-4) Tutorial, to be arranged. Limited to seniors. Research apprenticeship for upper-division students under guidance of faculty mentor. May be repeated for credit. Individual contract required. P/NP grading.

199. Directed Research or Senior Project in Public Affairs. (2 to 6) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for a maximum of 16 units. Individual contract required. P/NP or letter grading.

PUBLIC HEALTH
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Catherine A. Sugar, PhD (Biostatistics, Statistics and Data Science)

Overview
The profession of public health is responsible for the protection, preservation, and promotion of the health of communities and populations. Although the health problems of today differ from those of the past and will differ from those of the future, the professionals who make up the field need to be trained to respond to broad community problems utilizing the basic ideas of prevention of disease and promotion of well-being. This goal can be achieved only with assessments of the health status of the population through data gathering and analysis, as well as knowledge of how health risk and protective factors such cultural, social, environmental, individual factors influence rates of disease and death in societies and communities.

Undergraduate Study
Through the completion of program requirements, including a culminating capstone experience, students demonstrate mastery of foundational domains and competencies as established by the Council on Education in Public Health (CEPH). Students trained in public health practices and core concepts are well-equipped to support the development of programs, policies, practices, advocacy, research and data analysis that can improve overall population health. Graduate-level study in public health and its related fields is highly encouraged for motivated students.

Undergraduate Majors
Public Health BA
Capstone Major
The Public Health major is a designated capstone major. The goal of the capstone is to provide a culminating experience for students in which they complete an integrative, scholarly, or applied project that reflects the knowledge and skills gained in the program to a public health problem or issue.

Learning Outcomes
The Public Health major has the following learning outcomes:

- Demonstrated knowledge of concepts and applications of basic statistics
- Demonstrated knowledge of foundations of biological and life sciences
- Demonstrated knowledge of history and philosophy of public health; and its core values, concepts, and functions across the globe and in society
- Demonstrated knowledge of basic concepts, methods, and tools of public health data collection, use, and analysis; and why evidence-based approaches are an essential part of public health practice
- Demonstrated knowledge of concepts of population health; and basic processes, approaches, and interventions that identify and address major health-related needs and concerns of populations
- Demonstrated knowledge of underlying science of human health and disease, including opportunities for promoting and protecting health across the life course
- Demonstrated knowledge of socioeconomic, behavioral, biological, environmental, and other factors that impact human health and contribute to health disparities
- Demonstrated knowledge of fundamental concepts and features of project implementation including planning, assessment and evaluation
- Demonstrated knowledge of fundamental characteristics and organizational structures of the U.S. health system and differences between systems in other countries
- Demonstrated knowledge of basic concepts of legal, ethical, economic, and regulatory dimensions of health care and public health policy; and the roles, influences, and responsibilities of different agencies and branches of government
- Demonstrated knowledge of basic concepts of public health-specific communication, including technical and professional writing and use of mass media and electronic technology
- Demonstrated proficiency in oral and written communication of public health information through a variety of media to diverse audiences
- Demonstrated proficiency locating, using, evaluating, and synthesizing public health information
Entry to the Major

Admission

Admission to the Fielding School of Public Health is by application and competitive—using courses, grades, grade-point averages, and essays as minimum standards for consideration. Only a limited number of students are admitted each year. Applicants are not automatically accepted into the major.

First-year applicants must apply for major standing at the end of winter quarter of their sophomore year. Late applications are not accepted. While recommended, pre-major standing is not required to apply for the major. A copy of the major application is available on the program website.

Transfer students admitted to UCLA under another major are not eligible to apply for the Public Health BA. Transfer students interested in public health are encouraged to pursue the minor instead.

Pre-major

Incoming first-year students may be admitted as pre-majors. All other students admitted as first years must first meet with an academic advisor in the Undergraduate Student Services Office, A1-269 Center for Health Sciences, before requesting pre-major standing.

Transfer Students

Transfer applicants to the Public Health BA major with 90 or more units must complete the following preparatory courses prior to admission to UCLA: one general biology course with laboratory, one general chemistry course, and one introductory statistics course. Public Health 50A and 50B must be taken at UCLA upon admission to the University.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: (1) Introduction to Public Health — Public Health 50A, 50B; (2) Principles of Scientific Knowledge — Chemistry and Biochemistry 14A or 17, Life Sciences 7A or 15, Statistics 10 or 13; (3) Health and Society — one course from an approved list available on the school website; (4) Cultural Competency — one course from an approved list available on the school website; (5) Communication Fundamentals — Communication 1 or any approved Writing II course.

The Major

Required: (1) Foundations of Public Health Knowledge and Practice — Biostatistics 120, Community Health Sciences 120, Environmental Health Sciences 120, Epidemiology 120, Health Policy and Management 120; (2) Public Health Electives — three upper-division courses (minimum of 12 units) selected from the school’s undergraduate course offerings; (3) Community Engagement — Public Health 195CE or an approved course; (4) Capstone Experience — Public Health 185A, 185B.

Honors Program

To receive School Honors, students must complete all upper-division courses in the major with an overall grade-point average of 3.5 or better. For highest School Honors, students must also complete a senior thesis. The senior thesis may be satisfied by completing either Public Health 198 or a departmental 198 course. The 198 course may not be counted as an elective course toward the major and must be supervised by an Academic Senate faculty member from the school. Highest honors is awarded if the faculty sponsor deems the work superior.

Policies

Preparation for the Major

Each course must be taken for a letter grade.

The Major

No more than 4 units from courses numbered 195 to 199 may be applied toward the elective requirement.

Public Health BS

Capstone Major

The Public Health major is a designated capstone major. The goal of the capstone is to provide a culminating experience for students in which they complete an integrative, scholarly, or applied project that reflects the knowledge and skills gained in the program to a public health problem or issue.

Learning Outcomes

The Public Health major has the following learning outcomes:

- Demonstrated knowledge of concepts and applications of basic statistics
- Demonstrated knowledge of foundations of biological and life sciences
- Demonstrated knowledge of history and philosophy of public health; and its core values, concepts, and functions across the globe and in society
- Demonstrated knowledge of basic concepts, methods, and tools of public health data collection, use, and analysis; and why evidence-based approaches are an essential part of public health practice
- Demonstrated knowledge of concepts of population health; and basic processes, approaches, and interventions that identify and address major health-related needs and concerns of populations
- Demonstrated knowledge of underlying science of human health and disease, including opportunities for promoting and protecting health across the life course
- Demonstrated knowledge of socioeconomic, behavioral, biological, environmental, and other factors that impact human health and contribute to health disparities
- Demonstrated knowledge of fundamental concepts and features of project implementation including planning, assessment and evaluation

- Demonstrated knowledge of fundamental characteristics and organizational structures of the U.S. health system and differences between systems in other countries
- Demonstrated knowledge of basic concepts of legal, ethical, economic, and regulatory dimensions of health care and public health policy; and the roles, influences, and responsibilities of different agencies and branches of government
- Demonstrated proficiency in oral and written communication of public health information through a variety of media to diverse audiences
- Demonstrated proficiency locating, using, evaluating, and synthesizing public health information

Entry to the Major

Admission

Admission to the Fielding School of Public Health is by application and competitive—using courses, grades, grade-point averages, and essays as minimum standards for consideration. Only a limited number of students are admitted each year. Applicants are not automatically accepted into the major.

First-year applicants must apply for major standing at the end of winter quarter of their sophomore year. Late applications are not accepted. While recommended, pre-major standing is not required to apply for the major. A copy of the major application is available on the program website.

Transfer students admitted to UCLA under another major are not eligible to apply for the Public Health BS. Transfer students interested in public health are encouraged to pursue the minor instead.

Pre-major

Incoming first-year students may be admitted as pre-majors. All other students admitted as first years must first meet with an academic advisor in the Undergraduate Student Services Office, A1-269 Center for Health Sciences, before requesting pre-major standing.

Transfer Students

Transfer applicants to the Public Health BS major with 90 or more units must complete the following preparatory courses prior to admission to UCLA: one general biology course with laboratory, one general chemistry course, and one year of calculus; one year of general chemistry and one year of calculus-based physics are recommended. Public Health 50A and 50B must be taken at UCLA upon admission to the University.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.
Requirements

Preparation for the Major
Required: (1) Introduction to Public Health—Public Health 50A, 50B; (2) Advanced Foundations of Scientific Knowledge—Chemistry and Biochemistry 14A, 14B, 14BL, 14C, 14CL, 14D, or 20A, 20B, 20L, 30A, 30AL, 30B; Life Sciences 7A, 7B, 7C, 23L; Life Sciences 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, 3C, and Statistics 10 or 13; Physics 1A, 1B, 1C, 4AL, and 4BL, or 5A, 5B, and 5C; (3) Health and Society—one course from an approved list available on the school website; (4) Communication Fundamentals—Communication 1 or any approved Writing II course.

The Major
Required: (1) Foundations of Public Health Knowledge and Practice—Biostatistics 120, Community Health Sciences 120, Environmental Health Sciences 120, Epidemiology 120, Health Policy and Management 120; (2) Public Health Electives—three upper-division courses (minimum of 12 units) selected from the school’s undergraduate course offerings; (3) Community Engagement—Public Health 195CE or an approved course; (4) Capstone Experience—Public Health 158A, 158B.

Honors Program
To receive School Honors, students must complete all upper-division courses in the major with an overall grade-point average of 3.5 or better. For highest School Honors, students must also complete a senior thesis. The senior thesis may be satisfied by completing either Public Health 198 or a departmental 198 course. The 198 course may not be counted as an elective course toward the major and must be supervised by an Academic Senate faculty member from the school. Highest honors is awarded if the faculty sponsor deems the work superior.

Policies
Preparation for the Major
Each course must be taken for a letter grade.

The Major
No more than 4 units from courses numbered 195 to 199 may be applied toward the elective requirement.

Undergraduate Minor

Public Health Minor
The Public Health minor is designed for students who wish to learn more about core public health functions, including the assessment and monitoring of the health of communities and populations at risk to identify health problems and priorities, the formulation of public policies designed to solve identified local and national health problems and priorities, the assurance that all populations have access to appropriate and cost-effective care, and the evaluation of the effectiveness of that care.

Admission
To enter the Public Health minor, students must be in good academic standing with an overall grade-point average of 2.0 or better, have completed 90 or more units, and apply to the Fielding School of Public Health Student Affairs Office, A1-269 Center for Health Sciences. Acceptance to the minor is competitive and based on grade-point average and an application essay.

The Minor
Required Lower-Division Courses (10 units): Introduction to Public Health—Public Health 50A, 50B.
Required Upper-Division Courses (20 units): Foundations of Public Health Knowledge—three courses selected from Biostatistics 100A, Community Health Sciences 100, Environmental Health Sciences 100, Epidemiology 100, or Health Policy and Management 100; (2) Public Health Electives—two upper-division courses (minimum of 8 units) selected from the school’s undergraduate course offerings.

Policies
No more than 4 units from courses numbered 195 to 199 may be applied. Students may complete all five department 100-level courses for the minor.
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.
Each minor course must be taken for a letter grade, and students must have a minimum grade of C (2.0) in each and an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

PUBLIC HEALTH SCHOOLWIDE PROGRAMS

Jonathan and Karin Fielding School of Public Health
16059 Center for Health Sciences
Box 951772
Los Angeles, CA 90095-1772

Public Health
310-825-5524

Overview
The profession of public health is responsible for the protection, preservation, and promotion of the health of communities and populations. Although the health problems of today differ from those of the past and of the future, the professionals who make up the field need to be trained to respond to broad community prob-

Graduate Majors
Biostatistics MPH

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Community Health Sciences MPH

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Doctor of Public Health

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Environmental Health Sciences MPH

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.
Epidemiology MPH

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Health Management MPH

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Health Policy MPH

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Master of Public Health

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Articulated Degree Programs

Articulated degree programs permit no credit overlap; students must complete degree requirements separately for each degree.
- Master of Public Health/Doctor of Medicine
- Master of Public Health/Latin American Studies MA

Concurrent Degree Programs

Concurrent degree programs allow students to reduce the number of courses required for two degrees, since some courses may apply to both degrees.
- Master of Public Health/Asian American Studies MA
- Master of Public Health/Juris Doctor
- Master of Public Health/Master of Public Policy
- Master of Public Health/Master of Social Welfare

Public Health

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

50A. Introduction to Public Health I (5) Lecture, four hours; discussion, one hour. Systematic exploration of history, philosophy, development, and scope of public health in U.S. and globally. Emphasis on scientific, social, and legal basis for public health practice including strategies for advancing individual, community, and environmental public health. Survey of core public health functions and essential services with special focus on population health, health equity, environmental justice, and financing of health services. Letter grading.

50B. Introduction to Public Health II. (5) Lecture, four hours; discussion, one hour. Requisite: course 50A. Exploration of contemporary public health issues and challenges in U.S. and elsewhere with goal to acquaint students with current public health functions, issues, policies, practices, and current strategies for advancing people's health. Letter grading.


99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

M106. Health in Chicano/Latino Population. (4) (Same as Chicana/o and Central American Studies CM106L) Lecture, four hours; discussion, one hour. Designed for juniors/seniors. Examination of Chicano/Latino health status through life expectancy, causes of death, reportable diseases, services utilization, provider supply, and risk behaviors within demographic/immigration changes. Binational review of health effects in U.S. and Mexico. letter grading.

C150. Fundamentals of Public Health. (4) (Formerly numbered 150.) Lecture, four hours; discussion, one hour. Limited to nonmajors. Not open for credit to students with credit for course 50A. Exploration of foundations of public health by examining public health challenges at local, national, and global levels, and current strategies for advancing public health. Analysis of current public health issues and modern public health policies and practices. May be concurrently scheduled with course C201. Letter grading.

185A. Public Health Capstone I. (4) Seminar, three hours; discussion, one hour. Limited to Public Health majors. Enrollment by consent of school. Culuminating experience for students to apply acquired content knowledge and skills to public health problem or issue. Students bring accumulated public health knowledge, skills, and experience to individual or group project theme that is approved by instructor. Required weekly written assignments, participation in review and discussion of other students' work, and development of scope of work to outline what is to be completed in course 185B. In Progress grading (credit to be given only on completion of course 185B).

185B. Public Health Capstone II. (4) Seminar, three hours; discussion, one hour. Enforced requisite: course 185A. Students continue independent, or group work related on theme developed in course 185A. Students share in-progress work and continue to receive guidance from instructor and peer feedback. Students participate in school-organized poster session by presenting project outcomes to school and campus community. Letter grading.

1885A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


1885C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 1885B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S courses. Individual contract with faculty mentor required. May not be repeated. Letter grading.

195CE. Community and Corporate Internship in Public Health. (4) Tutorial, to be arranged. Workweek, eight to 10 hours. Limited to Public Health minors. Internship in corporate, governmental, or nonprofit setting coordinated through Center for Community Engagement. Students complete weekly written assignments, attend biweekly meetings with graduate student coordinator, and write final research paper. Faculty of record and graduate student instructor construct series of reading assignments that examine issues related to working in field of public health. Individual contract with supervising faculty member required. Letter grading.


198. Honors Research in Public Health. (4) Tutorial, one hour. Limited to Public Health majors or minors. Development and completion of honors thesis or comprehensive research project under direct supervision of faculty member. May be repeated for credit. Individual contract required. Letter grading.

199. Directed Research in Public Health. (4) Tutorial, one hour. Limited to Public Health majors or minors. Supervised individual research or investigation under guidance of faculty mentor. Culuminating paper or project required. May be repeated for credit. Individual contract required. Letter grading.

Graduate Courses

200A-200F. Foundations in Public Health. (8) Lecture, seven hours; discussion, one hour. Introduction to foundational concepts, definitions, historical milestones, and methods related to five core disciplines of public health. Using traditional lecture presentations, active-learning case-based classroom discussions, lab sessions, and community projects, students learn essential knowledge about public health as well as skills needed to be effective public health professionals. Students develop and written presentation skills for relevant audiences, data analytic and presentation skills, and multidisciplinary team-building skills working with students from throughout school of public health. Letter grading.

C201. Fundamentals of Public Health. (4) Lecture, four hours; discussion, one hour. Limited to school of public health graduate students. Exploration of foundations of public health by examining public health challenges at local, national, and global levels, and current strategies for advancing population health.
Analysis of current public health issues and modern public health policies and practices. May be concurrently scheduled with course C150. Letter grading.

M273. Responsible Conduct of Research in Global Health. (Same as Epidemiology M273.) Lecture, two hours. Requisite: Community Health Sciences 200. Introduction to fundamental principles of public health ethics, current ethical procedures, guidelines, and requirements, and ethical issues facing public health professionals working in developing countries. History of public health issues, unique ethical issues of research in developing countries, analysis of ethical implications of informed consent, responsibility to study community, mechanisms of study approval, role of funders, and role and responsibilities of review boards. S/U or letter grading.

299. Strategies for Success for Doctoral Students. (2) Seminar, two hours. Interactive seminar, with focus on research process, tips for success in academia, and important tools for leadership designed for all doctoral students in School of Public Health. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

401. Public Health as Profession. (4) Lecture, four hours. Limited to Fielding School of Public Health graduate students. Introduction to interprofessional collaboration, team building, leadership, communication, cultural humility, and implicit bias, while supporting professional development and growth of Master of Public Health (MPH) students. Focus on development of strong collaborative skills with opportunities to practice benefiting students entering public health workforce. MPH students participate in systems-based health-care course with dental, medical, and nursing students. Letter grading.

475. Pedagogy: Essential Skills and Innovative Strategies. (2) Seminar, two hours. Designed for School of Public Health doctoral students. Interactive seminar with focus on developing teaching materials for courses and acquisition of skills and tools that help students to become successful and innovative instructors. Active learning methodologies and competencies-based approach to instruction. S/U or letter grading.

490. Public Speaking Mastery for Public Health Professionals. (2) Lecture, two hours. Lectures with in-class exercises, or in-class presentations followed by coaching feedback. Topics focus on developing range of communication skills necessary for students to become confident and effective public speakers. Master’s and doctoral students in programs housed in School of Public Health who are interested in learning how to prepare and deliver impactful, compelling presentations with confidence and professionalism are encouraged to enroll. S/U or letter grading.

495. Preparation for Teaching Public Health. (2) Seminar, two hours. Designed for graduate students. Prepares individuals who will serve as teaching assistants for courses in Fielding School of Public Health. Study of methodologies in teaching public health, including implementing active learning strategies, effectively communicating goals for student learning, developing course materials that are consistent with expectations for student learning, creating inclusive teaching environment, and dealing with difficult situations. S/U grading.

PUBLIC POLICY
Meyer and Renee Luskin School of Public Affairs
3250 Public Affairs Building
Box 951656
Los Angeles, CA 90095-1656

Public Policy
310-825-7667
Department e-mail
Mark A. Peterson, PhD, Interim Chair

Faculty Roster

Professors
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Neal Halffon, MD, MPH
S. Jody Heymann, MD, PhD
Susanne Lohmann, PhD
Megan Mullin, PhD (Meyer and Renee Luskin Endowed Professor of Innovation and Sustainability)
Aaron L. Panofsky, PhD
Mark A. Peterson, PhD
Thomas H. Rice, PhD
Gary M. Segura, PhD
Manisha Shah, PhD (Franklin D. Gilliam, Jr. Professor of Social Justice)
Michael A. Stoll, PhD
Brian D. Taylor, PhD
John D. Villaseñor, PhD
Lynne G. Zucker, PhD

Professors Emeriti
Albert Carnesale, PhD
Robert Dallek, PhD
Franklin D. Gilliam, Jr., PhD
Arleen Leibowitz, PhD
Barbara J. Nelson, PhD
Fernando M. Torres-Gil, PhD
Charles E. Young, PhD

Associate Professors
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Natalie D. Bau, PhD
Darin E. Christensen, PhD
Michael C. Lens, PhD
Meredith Phillips, PhD
Zachary C. Steinert-Threlkeld, PhD
Wesley E. Yin, PhD
J. Christopher Zepeda-Millán, PhD

Assistant Professors
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Jasmine D. Hill, PhD
Emily K. Weisburst, PhD

Senior Lecturer SOE
Kenya L. Covington, MCP, PhD

Lecturers
Michelle Dennis, MPA, CPFO
Kimberly S. Ling Murtaugh, PhD
Joseph S. Pernam, MPP, PhD
Steven E. Zipperstein, JD

Adjunct Professor
Helmut K. Anheier, PhD

Adjunct Assistant Professors
Siddharth Kara, MBA, GDL
Joshua Schank, PhD

Overview
The Department of Public Policy is an interdisciplinary unit composed of faculty members from various disciplines, some of whom hold joint appointments in other UCLA departments. Its goal is to foster an understanding of the theory and practice of public policy in the many fields in which it applies. Examples include education, health care, unemployment and training, drug policy and crime, economic development, national security, and the environment. The department offers the Master of Public Policy (MPP) degree and participates in the undergraduate minor in Public Affairs.

Undergraduate Study
The undergraduate minor in Public Affairs familiarizes students with key issues in public policy. Both programs have a heavy applied orientation. For additional information on the minor, see the Public Affairs minor.

Graduate Study
The MPP degree program is designed to train professionals in both public- and private-sector policy analysis and implementation, and offers coursework in such areas as microeconomics, statistics, political processes, and public and nonprofit management.

Concurrent degree programs allow students to combine study for an MPP with work toward a JD in the School of Law, an MBA in the Anderson Graduate School of Management, an MD in the Geffen School of Medicine, an MPH in the Fielding School of Public Health, or an MSW in the Department of Social Welfare.

Graduate Major
Master of Public Policy

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Concurrent Degree Programs
Concurrent degree programs allow students to reduce the number of courses required for two degrees, since some courses may apply to both degrees.

- Master of Public Policy/Doctor of Medicine
- Master of Public Policy/Juris Doctor
- Master of Public Policy/Master of Business Administration
- Master of Public Policy/Master of Public Health
• Master of Public Policy/Master of Social Welfare

Public Policy

Lower-Division Courses

10A. Introduction to Public Policy. (5) Lecture, three hours; workshops and outside study, three hours. Overview of principal topics of contemporary policy analysis, developing their applications with examples from instructor’s own research, visits, small student projects, or field trips. P/NP or letter grading.

10B. California Policy Issues. (4) Lecture, three hours; outside study, nine hours. Application of policy analysis to California issues. Guest lectures from practitioners and academics along with readings and videos. Student research reports and oral presentations required. Letter grading.

10C. Public Policy for Crime, Cannabis, and Other Drugs. (5) Lecture, three hours; outside study, twelve hours. Application of policy analysis, including critical analysis, problem solving, and substantive policy research, to develop knowledge and understanding about drug and crime policy, with focus on cannabis. Guest lectures by instructors and guest academics and practitioners, including writings from academic literature and policy reports. P/NP or letter grading.

10D. Public Policy and Urban Homelessness. (5) Lecture, three hours; outside study, film review, and field/volunteer work, nine hours. Application of policy analysis to issues and policies concerning homelessness. Guest lectures from local policymakers. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussing the critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89H. Honors Seminars. (1) Seminar, three hours. Limited to 20 majors as assigned as adjunct to lower-division course lecture. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors and departmental honors programs. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. Open for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult: Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

105. Leadership in Public Interest. (4) Lecture, three hours. Examination of prevailing models, theories, and practices of leadership in public settings and application of them through case studies, films, and situational articles. Participation in group projects and discussions designed to improve understanding of role of leadership in mobilizing people groups to do difficult work. Introduction to theories of leadership, examination of leadership and group dynamics, and challenge of leadership in times of stress and change. Letter grading.

112. Politics of U.S. Health Policy. (4) Lecture, three hours. Every modern nation faces similar health system challenges, such as promoting health and longevity, providing effective treatments, balancing benefits and burdens of medical technology, and controlling healthcare costs that grow faster than national income. U.S. seems uniquely disadvantaged with lower life expectancy, problematic quality of medical services, lack of millions, and highest costs in world, hampering families, businesses, and government. What political dynamics produced this result and influence possibility and direction of ongoing policy change? Examination of meaning of health and healthcare, including current status, organization, and financing of U.S. health-care system; and factors that affect national health policy and implementation of healthcare reform: framing of problems, role of public opinion, influence of interest groups, composition and organization of Congress, and opportunities for and applications of presidencial leadership. P/NP or letter grading.


M120. Race, Inequality, and Public Policy (4) (Same as African American Studies M120). Lecture, three hours; discussion, one hour. Background in economics, sociology, or urban studies preferred but not required. Survey course to examine major debates and current controversies concerning public policy responses to social problems in urban America. Letter grading.

CM126. Data Analysis for Educational Equity and Improvement. (4) (Same as Public Affairs M117D). Lecture, three hours. Requisite: Public Affairs 60. Exploration of challenge of making data useful for decision-making from cleaning data and deciding which analyses to conduct; to conducting those analyses carefully, thoughtfully, and in reproducible ways; to displaying results, interpreting them, and communicating them clearly. Focus on challenge of making survey data useful to educators. Can use these data to reflect on school districts and policies and teach subjects and school school students’ experience. Concurrently scheduled with course CM226. Letter grading.

M127. Understanding Public Issue Life Cycle. (4) (Same as Political Science M142D). Lecture, three or four hours; discussion, one hour (when scheduled). Recommended preparation: Political Science 10, 40, and another course from one of the following: 3, 15, 11, or 101. Examination of how public issue life cycle is shaped by (1) economic and political incentives of various actors—business, news media, mass public, organized interests. Congress, regulatory agencies, and courts and (2) ideology, cognitive biases, and ethical reasoning. P/NP or letter grading.

C135. Crime and Public Policy. (4) Seminar, three hours. Crime is one of most costly social problems faced by societies across world. Examination of crime trends, criminogenic factors that influence them, and policy initiatives that influence them, largely in U.S. context. Criminal justice policy community is increasingly focused on best and evidence-based practice, and often derives implications and policy recommendations from existing empirical research. Focus on empirical and theoretical research on determinants of crime offending, and effects of policy interventions meant to address criminal offending. Concurrently scheduled with course C235. Letter grading.

CM171. International Development. (4) (Same as Economics M112A). Lecture, three hours. Requisite: Economics 102 or 111. Why are some countries rich, while other countries are poor? What can policymakers do to redress the current distribution of current research on these questions. Study of both methodologies used to answer questions in development economics, like natural experiments and randomized controlled trials, as well as connections between development of states and institutions, education, growth, culture, and gender. Reading intensive, seminar-style course. Students are expected to read academic articles in economics and actively participate in discussions. Students also learn how to use data to evaluate policies. Concurrently scheduled with course C271. P/NP or letter grading.

CM175. Advanced Technology: Public Policy, Regulation, and Law (4) (Same as Political Science M165). Lecture, three hours. Examination of cutting-edge public policy and regulatory issues implicated by advanced technologies such as artificial intelligence, drones, autonomous vehicles, blockchain/bitcoin, etc. Exploration of whether and how such new technologies should be regulated. Exploration of how policymakers should balance need to promote investment and innovation against need to protect against potential misuse and abuse of these new technologies. Exploration of many issues raised by these technologies such as privacy, national security, network neutrality, intellectual property right, and more. Concurrently scheduled with course C275. Letter grading.

CM177. Network Science Using R. (4) (Same as Public Affairs M117B). Lecture, three hours. No prior knowledge of R required. Designed for juniors and seniors. It is the network offers framework for understanding how relationships between people, places, and institutions affect public policy outcomes. For example, why individuals decide to protest or vote, amount of education people pursue, or extent to which they live together or interact. Persuasion in ecosystems can be all considered using network analysis. Weekly introduction of concept from network analysis. Followed by working through it using popular student-friendly software. Concurrently scheduled with course CM277. Letter grading.

CM179. Social Movements in Theory and Practice. (4) (Same as Public Affairs M179A). Lecture, three hours. Social movement is group of people pressuring for or against political or social change over long periods of time. Study focuses on how mass movements form, when and where they are likely to form, what types of tactics they choose, how those tactics affect public policy and role new technologies play. Weekly focus on one specific topic, such as nonviolence or social media, with historic and more recent movements used as examples. Concurrently scheduled with course C279. Letter grading.

CM182. Science, Technology, and Public Policy. (4) (Same as Electrical and Computer Engineering CM182 and Public Affairs M164.) Lecture, three hours. Recent and continuing advances in science and technology are raising profoundly important public policy issues. Consideration of selection of critical policy issues, each of which has substantial ethical, social, ecological, economic, and other significant aspects. Concurrently scheduled with course CM282. Letter grading.

C183. Science Policy and Expertise. (4) Lecture, three hours. Introduction to social science of science and expertise by course considered three overlapping themes: social conditions that affect production of scientific knowledge, debates about expertise and democracy in technical and policy decision-making, and current controversies about expertise and autonomy of science (e.g., conflicts of interest in funding of biomedical research and recent charges of politicization of science). Concurrently scheduled with course C283. Letter grading.

187. Research Seminar: Public Policy. (4) Seminar, three hours; outside study, nine hours. Requisite: course 10A or Public Affairs 10. Limited to and required of seniors in Public Affairs minor. Production of research project that examines in depth one particular policy issue in its social context, including political pressures involved and problems of implementation. Emphasis on skills of data acquisition, analysis, conceptualization, and written analysis and presentation. Letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Program 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Seminar, three hours. Limited to students in College Honors and departmental honors programs. Designed as adjunct to upper-division undergraduate courses. Lecture course instructor to explain topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward credit with topic change. P/NP or letter grading.

191A. Variable Topics Research Seminars: Public Policy. (4) Seminar, three hours; outside study, nine hours. Examination of particular subfields of policy studies (e.g., international policy, crime policy, policy history) in depth, with specific topics to be identified by instructor. Reading, discussion, and development of culminating project. Must be taken for credit if applied toward Public Affairs minor. May be repeated for credit with topic change. P/NP or letter grading.

CM191B. Variable Topics Seminar: Public Policy. (4) (Same as Public Affairs M191P) Seminar, three hours; discussion, one hour; outside study, eight hours. Emerging issues in public policy. May be repeated for credit. Concurrently scheduled with course C291B, P/NP or letter grading.

CM191C. Variable Topics in Global Studies and Public Policy. (4) (Same as Global Studies M161.) Seminar, three hours. Examination of one or more topics related to public policy and global studies. May be repeated for credit with topic change. Concurrently scheduled with course C291G. P/NP or letter grading.

197. Individual Studies in Public Policy, (2 or 4) Tutorial, four hours. Preparation: 3.0 grade-point average. Limited to juniors/seniors. Individual intensive study, with special attention to the individual's professional, career faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

201. Principles of Microeconomic Theory I. (4) Lecture, three hours; discussion, one hour; outside study, eight hours. First course in two-term sequence (see course 204) to prepare students for economic analysis of public policy, with review of economic principles and basic microeconomic theory and policy applications. Consumer theory and demand, production theory and supply, equilibrium of product and factor markets. Letter grading.

201A. Microeconomic Analysis for Public Health and Policy. (4) (Same as Health Policy M203A.) Lecture, four hours. Requisite: Mathematics 3A or 3B or 31A. Basic concepts of microeconomics, with emphasis on their application to actual situations and their use in problem solving and focus on theory of choice. Extensive use of differential calculus. Letter grading.

202. Politics and Policymaking. (4) Lecture, three hours; discussion, one hour; outside study, eight hours. Designed to provide background necessary to develop strategies for shaping policy through different institutional structures: legislators, bureaucracy, courts, and media. Consideration of models of decision-making and delegation and their application to real-world cases. Letter grading.

203. Statistical Methods of Policy Analysis I. (4) Lecture, three hours; discussion, one hour; outside study, eight hours. First course in two-term sequence (see course 202). Review of statistical principles useful to policy research and analysis. Topics include descriptive statistics, expectations, univariate distribution, probability, covariance and correlations, statistical independence, random sampling, estimators, unbiasedness and efficiency, statistical inference, confidence intervals, and hypothesis testing. Letter grading.

204. Principles of Microeconomic Theory II. (4) Lecture, three hours; discussion, one hour; outside study, eight hours. Requisite: course 201. Second course in two-term sequence (see course 201) covering both theory and policy applications. Topics include monopoly, factor markets, general equilibrium, welfare economics, externalities, public goods, uncertainty, and intertemporal optimization. Letter grading.

204A. Microeconomic Analysis for Public Health and Policy. (4) (Same as Health Policy M203B.) Lecture, four hours. Requisites: course 201A, and one course from Mathematics 3A, 3B, or 31A. Basic concepts of microeconomics with emphasis on their application to actual situations and their use in problem solving and focus on theories of firms and markets. Extensive use of differential calculus. Letter grading.

205. Qualitative Methods for Policy Analysis. (4) Lecture, three hours. Introduction to use of qualitative methods in policy analysis. Students gain exposure to techniques of interviewing, participant observation/ethnography, comparative-case studies, and archival research. Consideration of research design matters including questions and situations for which qualitative methods are ideally suited, and how to use qualitative data when they are best available. Focus maintained on methodological and interpretative methods for policy research including sampling and inferences, instrument design, directed inductive analysis, data gathering and coding under time pressure, and professional ethics. Letter grading.

206. Political Economy of Policy Adoption and Implementation. (4) Lecture, three hours; outside study, nine hours. Analysis of how policy is formed, adopted, and implemented. How policies are formulated, by whom, how policy agendas are set, how to define relationships between politicians, bureaucrats, lobbyists, and media experts. Letter grading.


209. Management in the 21st Century. (4) Lecture, three hours; outside study, nine hours. Examination of major public programs and their relationship to issues of access and cost. S/U or letter grading.

210. Principles of Microeconomic Theory I. (4) Lecture, three hours; discussion, one hour; outside study, eight hours. First course in two-term sequence (see course 204) to prepare students for economic analysis of public policy, with review of economic principles and basic microeconomic theory and policy applications. Consumer theory and demand, production theory and supply, equilibrium of product and factor markets. Letter grading.

201. Microeconomic Analysis for Public Health and Policy. (4) (Same as Health Policy M203A.) Lecture, four hours. Requisite: Mathematics 3A or 3B or 31A. Basic concepts of microeconomics, with emphasis on their application to actual situations and their use in problem solving and focus on theory of choice. Extensive use of differential calculus. Letter grading.

212. Child Welfare Policy. (4) (Same as Social Welfare M290J.) Lecture, three hours. Development of social policy as it affects children and families of different cultural backgrounds and as it is given form in public welfare policies and programs for mentally ill, with emphasis on political, economic, ideological, and sociological factors that affect views of mentally ill and services they are provided. S/U or letter grading.

214. Poverty, Poor, and Welfare Reform. (4) (Same as Social Welfare M290K.) Lecture, three hours. Policy issues that affect poverty and public assistance in relation to their interaction with schools and community, with emphasis on impact of policy across federal, state, and local levels. S/U or letter grading.

215. Health Policy. (4) (Same as Social Welfare M290M.) Lecture, three hours. Introduction to contemporary issues in healthcare financing and delivery, providing historical perspective on emergence of these issues. Examination of major public programs and their relationship to issues of access and cost. S/U or letter grading.

216. Public Policy for Children and Youth. (4) (Same as Social Welfare M290N.) Lecture, three hours. Policy issues that affect children and young people in relation to their interaction with schools and community, with emphasis on impact of policy across federal, state, and local levels. S/U or letter grading.

217. Graduate Seminar in Environmental Economics and Policy. (4) (Same as Earth and Planetary Sciences M217.) Seminar, four hours. Preparation: under-graduate-level statistics, basic undergraduate microeconomics. Introduction to applied scholarship in environmental economics. Enables graduate students to become more proficient consumers and producers of social science research that explores questions of environmental policy and sustainability broadly constructed. Topics include health and economic impacts of climate change, adaptation to climate change, efficient and equitable design of environmental policies (e.g., cap and trade, carbon taxes). Development of detailed research proposal and short presentation. Letter grading.

219. Research Design and Methods for Social Policy. (4) (Same as Urban Planning M204.) Lecture, three hours; outside study, nine hours. Limted to graduate students. How to become more sophisticated consumers and producers of qualitative and quantitative policy research. In first half of course, formal principles of research design; in second half, various data collection methods, including ethnography, comparative-case studies, and archival research. Letter grading.

220. Transportation, Land Use, and Urban Form. (4) (Same as Urban Planning M250.) Lecture, three hours. Historical evolution of urban form and transportation systems, intrametropolitan location theory, recent trends in urban form, spatial mismatch hypothesis, jobs/housing balance, transportation in strong central city and polycentric city, neotraditional town planning and development, transit finance; current issues in highway finance; priority setting and distribution, mode split traffic assignment, critique of traditional travel forecasting methods and new approaches to travel behavior analysis. Letter grading.

221. Travel Behavior Analysis. (4) (Same as Civil Engineering M287 and Urban Planning M283.) Lecture, three hours. Requisites: courses 201A or M201A, and 203, or Urban Planning 207 and 220B. Descriptions of travel patterns in metropolitan areas, recent trends and projections into future, overview of travel forecasting methods, transportation planning distribution, mode split traffic assignment, critique of traditional travel forecasting methods and new approaches to travel behavior analysis. Letter grading.

222. Transportation Infrastructure, Finance, and Policy. (4) (Same as Urban Planning M252.) Lecture, three hours. Overview of transportation finance and economics; concepts of efficiency and equity in transportation finance; historical evolution of highway and transit finance; current issues in highway finance; pri
vate participation in road finance, toll roads, road costs and cost allocation, truck charges, congestion pricing; current issues in transit finance; transit fare and subsidy policies to promote a greener economy, promote electric vehicles, and reduce vehicle travel. History and legal frameworks of environmental regulation. Analytical methods to quantify CO2 emissions and estimate emissions reductions. Focus on climate change, but consideration of other environmental consequences of transportation, from air pollution to stormwater runoff. Letter grading.

224A. Introduction to Geographic Information Systems. (4) Lecture, three hours; preparation: one graduate-level statistics course, familiarity with one packaged statistical program. Principles of Geographic Information Systems (GIS) and applied techniques of using spatial data for mapping and analysis. Topics include data quality, data manipulation, spatial analysis, and information systems. Use of mapping and spatial analysis to address planning problem. Letter grading.

224G. Advanced Geographic Information Systems. (4) Studio, one course; same as course M224A. Advanced topics in geographic information systems (GIS) utilizing geoprocessing tools in ArcMap, map design, and spatial analysis for graduate students. Letter grading.

225. Education Policy and Education Inequality. (4) Seminar; three hours; outside study, nine hours. Preparation: statistics background through multiple regression analysis. Limited to graduate students. Examination of how poverty, race, gender, and ethnic disparities in educational success. Topics include international and national comparisons of educational outcomes, private and public school choice, school accountability, interactions among variables to improve school or teacher quality, and pre-school interventions, and supplemental educational services. Letter grading.

226. Data Analysis for Educational Equity and Improvement. (4) Lecture, three hours; outside study, nine hours. Use of political economy perspective to analyze forces that have shaped rise and characteristics of nonprofit sector and its constituent elements. Examination of social history of nonprofit sector in U.S. Exploration of legal and policy environments and distinct organizational forms. Comparison of perspective between U.S. and other countries: S/U or letter grading.


228B. Global Public Affairs: Governing in Interconnected World. (4) Same as Social Welfare M215 and Urban Planning M231.) Lecture, three hours; outside work, nine hours. Conceptually, focus on interplay between three major institutional complexes of modern, globalizing societies and organizations that operate within them: state, market, and civil society. Study moves between abstract theory and concrete examples, and case studies of where these institutions and organizations have come from, and helps chart their present trajectories. From perspective of governance, assessment of roles and configurations of institutions and organizations to address today’s challenges. S/U or letter grading.

229. Law and Management of Nonprofit Organizations. (4) (Same as Management M225L.) Lecture, three hours. Introduction to important legal, financial, and management issues confronting nonprofit organizations. Topics include how to start nonprofit tax-exempt organizations, qualifying and maintaining tax-exempt status under IRC Code Section 501(c)(3), corporate-governance activity, incorporation, bylaw development, restrictions, and strategic planning, fundraising, nonprofit accounting, and employment law. S/U or letter grading.

M230. Immigration Policy and Activism. (4) (Same as Chicana/o and Central American Studies M278.) Seminar, three hours. Highlighting roles of race, gender, sexuality, and citizenship status, exploration of how immigrant rights activists organize for legalization and against deportations, and border militarization. Letter grading.

M231. Politics of Hood. (4) (Same as Chicana/o and Central American Studies M206.) Seminar, three hours. Limited to graduate students. Study of intersectionality and community organizing in contemporary Los Angeles communities. Focus on key debates and texts on connections between race, gender, sexuality, and citizenship. Review of key articles and books exploring Chicana/o identity, labor, family, sexuality, and activism through Marxist theoretical framework. S/U or letter grading.

232. Chicana/o and Intersectional Marxism. (4) (Same as Chicana/o and Central American Studies M257.) Seminar, three hours. Examination of intersectionality of critical problems impacting people who live in hood including poverty, incarceration, gentrification, welfare, public education, health disparities, and segregation, among other political issues. S/U or letter grading.

M232. Chicana/o and Intersectional Marxism. (4) (Same as Chicana/o and Central American Studies M257.) Seminar, three hours. Examination of intersectionality of critical problems impacting people who live in hood including poverty, incarceration, gentrification, welfare, public education, health disparities, and segregation, among other political issues. S/U or letter grading.

M233. Immigration Policy and Politics. (4) Seminar, three hours. Introduction to politics of immigration. Examination of development and dynamics of immigration policymaking in historical and contemporary perspective. Focus on issues including creation of illegal immigration, border militarization, detention, deportation, public debate, and political behavior, and assimilation. Letter grading.

234A. Voting Rights Policy and Law I. (Formerly numbered M296A.) Clinic, three hours. Collaborative course taught from interdisciplinary perspective, exposure to voting rights. In-depth study of methodology and statistical approach to document presence or absence of vote dilution or vote denial in different communities. Focus on process and legal principles of federal Voting Rights Act and California Voting Rights Act led by leading voting rights attorney. May be repeated for credit. S/U or letter grading.

234B. Voting Rights Policy and Law II. (Formerly numbered M296B.) Clinic, three hours. Requisite course 234A. Collaborative course taught from interdisciplinary perspective of social science research, civil rights, and voting rights. Exposes students to voting right act, case law, history, research, and implementation. Faculty guest experts from across campus provide their perspective on how to study, research, and document various aspects related to voting rights. Includes factors such as history of discrimination against minority group in areas of employment, education, housing, and political representation. Focus on practical aspects of voting rights law. Students learn in greater detail legal theory relevant to bringing successful voting rights challenges, and how to assemble and present social science evidence. Students read case law on prior Voting Rights Act decisions, volunteered on voting rights projects, and worked in teams on aspects of lawsuits. S/U or letter grading.

234C. Voting Rights Policy and Law III. (Formerly numbered M296C.) Clinic, three hours. Requisites: including preparation and fieldwork courses. Examination of the history perspective of social science research, civil rights, and voting rights. Exposes students to voting rights act although, case law, history, research, and implementation. Faculty guest experts from across campus provide their perspective on how to study, research, and document various aspects related to voting rights. Includes factors such as history of discrimination against minority group in areas of employment, education, housing, and political representation. Students continue work on all aspects of voting rights cases including preparation of expert research reports, legal argumentation and filings, depositions, and other case-related matters. S/U or letter grading.

235. Crime and Public Policy. (4) Seminar, three hours. Crime is one of most costly social problems faced by societies across world. Examination of crime trends, criminogenic factors that lead to policy initiatives that influence, largely in U.S. context. Criminal justice policy community is increasingly focused on best and evidence-based practice, and criminal justice implication for, and validation from existing empirical research. Focus on basic empirical and theoretical research on determinants of criminal offending and effectiveness, and effects of policy interventions meant to deter or reduce criminal offending. Concurrently scheduled with course C135. Letter grading.

236. Criminal Justice Policy on Trial. (4) Seminar, three hours. Survey of several criminal justice policy areas including labor market effects of incarceration, bias in policing and sentencing, cash bail, and drug policy. Introduction to recent research. Students engage in discussions about current research, develop and present policy proposal. Letter grading.

M240. Theories of Regional Economic Development I. (4) (Same as Geography M230A and Urban Planning M236A.) Lecture, three hours; discussion, one hour. Introduction to theories of location of economic activity, trade, and other forms of contact between regions, process of regional growth and decline, reasons for different levels of regional growth, and processes related to housing production and Affirmatively Furthering Fair Housing. Letter grading.

M241. Introduction to Regional Planning. (4) (Same as Urban Planning M230.) Lecture, three hours. Critical and historical survey of evolution of regional planning theory and practice, with emphasis on relations between regional planning and development within Western and public philosophy. Major concepts include regions and regionalism, territorial community, and social production of space. Letter grading.

M243. Community Development and Housing Policies: Roles of State, Civil Society, and Nonprofits. (4) (Same as Social Welfare M290U and Urban Planning M275J.) Lecture, three hours; outside study, nine hours. Designed for graduate students. Examination of role of U.S. housing policy and role of government assistance in community development. Focus on housing or economic development? Should interventions be directed toward inner city housing markets or through neighborhood strategies? What lessons can be learned from experiences of other countries? Letter grading.

M243B. Housing Policy and Planning. (4) (Same as Urban Planning M296D.) Lecture, three hours. Study of housing policy and planning focused partly on California housing policy. Consideration of experiences from other states and countries and to what extent they are relevant here. Specific topics likely include policies such as social housing, rent control, and housing finance, issues of household formation, housing supply, housing submarkets, and gentrification, as well as planning processes related to housing production and Affirmatively Furthering Fair Housing. Letter grading.
M244. Shared Mobility Policy and Planning. (4) (Same as Urban Planning M255.) Lecture, three hours. Introduction to planning, analysis, and management of shared mobility, with particular focus on public transit. Overview of shared mobility policy and planning context; introduction to transportation planning and project evaluation processes; high-speed rail and airports and aviation; public transit policy and planning; taxi and ride-sharing; car sharing; scooters; impact of transforms planning; taxis and ADA paratransit, ride-hailing, car- 

beke-, and scooter-share; implications of vehicle auto-

mation and shared mobility in the years ahead. Letter grading.

M247B. Comparative Perspective on States, Markets, and Civil Society. (4) (Same as Social Welfare M248X and Urban Planning M210B.) Lecture, two and one half hours. Analysis of US and European models of aging societal problems, such as climate change, pov-

ey, migration, security, mobility, pollution, or trade re-

tations. Contemporary governance is complex set of rules, laws, and regulations involving rights and re-

sponsibilities of three institutional complexes of modern societies (state, market, and civil society), in-

terests that guide them, and legitimacy and resources they command. Actors often reach across systemic, jurisdic-

tional, and national boundaries; their relation-

ships can be cooperative, neutral, or fraught with con-

flict, and governance outcomes can vary significantly. These are fundamentally challenges that, consequently, require significant governance readi-

ness. Lectures, debates, in-class exercises, and stu-

dent presentations. Exploration of several issues in more depth: state capacities, democ-

racy, crisis management, governance innovation, and specific policy fields such as infrastructure or global finance. S/U or letter grading.

CM250. Environmental and Resource Economies and Policy. (4) (Same as Urban Planning M267.) Lecture, three hours. Requisites: courses 204 and 208, or Urban Planning 207 and 220B. Survey of ways econo-

mics is used to define, analyze, and resolve prob-

lems of environmental management. Overview of ana-

tical questions addressed by environmental econo-

mists that bear on public policies. Concurrently scheduled with course C115. Letter grading.

251. Public Budgeting and Finance. (4) Lecture, three hours; outside study, nine hours. Limited to graduate students. How financial resources are allo-

rated through budget processes at federal, state, and local levels of government in the U.S. and how much each level of government finances its operations and capital investment programs, with particular attention to Cali-

fornia. Students are organized into small groups to fa-

cilitate the understanding of budgetary rules and to inter-

pret information to class. Based on assigned readings, de-

velopment of budget strategy matrix outlining best practices budget strategies to use in various re-

sources. Letter grading.

252. Today’s Los Angeles and Institutions and Lead-

ers that Make It Work. (4) Seminar, four hours. Focus on institutions and leaders that make up Los Angeles region and influence its policies and quality of life. In-

stitutions studied include political, governmental, busi-

ess, economic, media, labor, citizen advocacy, edu-

cational, cultural, sports and entertainment, and philanthropic sectors; and how they combine to affect region. Exploring how leadership and institutional structures in each of these sectors advance or constrain progress; how Los Angeles addresses issues such as transportation, real estate development, housing affordability, homelessness, poverty, and health care, among others; and how it can better do so. Letter grading.

M253. Lesbian, Gay, Bisexual, and Transgender Law and Public Policy Research. (4) (Same as Law M267.) Lecture, three hours; outside study, nine hours. Master’s level public policy research to lesbian, gay, bisexual, and transgender (LGBT) legal issues. Topics include LGBT identity, sexual orientation, gender identity, sexu-

al orientation; discrimination at workplace; discrimination of sexual orientation and gender identity; violence against LGBT communities; and the role of the legal profession in the protection of LGBT rights. Students are expected to read articles in academic journals and actively par-

ticipate in discussions. Students also learn how to use data to evaluate policies. Concurrently scheduled with course CM171. S/U or letter grading.

C271. International Development. (4) Lecture, three hours. Why are some countries poor while other coun-

tries are poor? What can policymakers do to reduce poverty? Discussion of current research on these questions. Study of both methodologies used to an-

swer key economic development questions. Analysis of natural experiments and randomized control trials, as well as relationship between development and institutions, 

education, growth, culture, and gender. Reading inten-

sive, seminar-style course. Students are expected to read academic articles in economics and actively par-

ticipate in discussions. Students also learn how to use data to evaluate policies. Concurrently scheduled with course CM171. S/U or letter grading.

272. Tools for Causal Inference. (4) Seminar, three hours. Students strengthen critical analysis of empiri-

cal evidence. Review of purpose and objectives of im-

pact evaluation. Evaluation of common but often problematic approaches: cross-sectional and before-

after comparisons, and case studies of program bene-

ficiaries. Examination of suite of experimental and quasi-experimental approaches: randomized con-

trolled trials, matching, propensity scores, and difference-in-differences. Letter grading.

273. Survey Analysis. (4) Seminar, three hours. Explo-

ration of large-sample size survey use in public policy and public administration research. Topics in-

clude social-psychology of survey response (espe-

cially with regard to attitudes and evaluations), issues of question wording and context, interviewer effects, and attempts to understand the randomized experiments and unobstructed measures of behaviors and attitudes; general issues of quantitative research including model specification, random and systematic errors, measurement error, causal anal-

ysis, and alternative meanings of statistical impor-

tance; and practical considerations in survey analysis including questionnaire construction, sampling and data collection, weighting, variable coding and trans-

formations, scale construction, reliability, and missing values. Students construct and pretest online survey specific to each one’s interests. Letter grading.

274. Social Media and Public Policy. (4) Lecture, three hours. Discussion of social media’s role in public dis-

course and public policy, in U.S. and overseas, has been far-reaching and dramatic. Exploration of posi-

tive and negative impacts of social media on individ-

ual well-being. Topics include the spread of information, the use of social media for political activity, the use of social media in political processes, and ways that political organiza-

ations use social media as platform for disseminating fake news, spreading misinformation, and inciting vio-

lence. Consideration of whether social media should impose content rules on social media companies (as Federal Communications Commission does for broad-

casters) or whether the content must be left to the dis-

cretion of captive intermediaries. Letter grading.

275. Advanced Technology: Public Policy, Regula-

tion, and Law. (4) Lecture, three hours. Examination of cutting-edge public policy and regulatory issues im-

pacted by advanced technologies such as artificial intelligence, drones, autonomous vehicles, blockchain/Bitcoin, etc. Exploration of how public policy and regulatory condi-

tions of service as self-regulatory model should be re-

lied on. Exploration of how to measure relative impact of social media versus money/campaign contributions on political outcomes. Letter grading.

CM270. Economic Principles and Economic Develop-

ment in Indigenous Communities. (4) (Same as American Indian Studies M270.) Seminar, two hours; outside study, nine hours. Exploration of demand for health in-

surance, policies for public insurance (Medicaid and Medicare), uninsured, and health insurance reform. Ex-

amination of effects of managed care on health and costs, consumer protection movement, and rise of competitive health care industry. Letter grading.

M270. Economic Principles and Economic Develop-

ment in Indigenous Communities. (4) (Same as American Indian Studies M270.) Seminar, two hours; outside study, nine hours. Exploration of demand for health in-

surance, policies for public insurance (Medicaid and Medicare), uninsured, and health insurance reform. Ex-

amination of effects of managed care on health and costs, consumer protection movement, and rise of competitive health care industry. Letter grading.

M270A. Introduction to Programming and Data Mat-

terials. (4) (Same as Socio-behavioral Data Science M270A.) Lecture, three hours. Fundamental skills of data manage-

ment. Development of strong foundation in R pro-

gramming language. R is most popular language for statistical analysis and one of most popular languages for data science applications (e.g., web-scraping, in-

teractive maps, network analysis). Students become proficient in data management and R programming through weekly problem sets, completed in groups. No prior experience with R required. S/U or letter grading.

M270B. Fundamentals of Programming. (4) (Same as Education M260B.) Lecture, three hours. Recommended prerequisite: course in programming/data science sequence designed for students who do not have programming background. Uses primarily R programming language. Organized around three main programming paradigms that are fundamental across modern object-oriented program-

ming languages (e.g., Python, Javascript). Topics in-

clude organizing files, folders, and scripts; reading (im-

porting) and writing (exporting) data; using Git and 

GitHub for version control and collaboration; iteration and Law. (4) Lecture, three hours. Fundamental skills of data manage-

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gramming language. R is most popular language for statistical analysis and one of most popular languages for data science applications (e.g., web-scraping, in-

teractive maps, network analysis). Students become proficient in data management and R programming through weekly problem sets, completed in groups. No prior experience with R required. S/U or letter grading.

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ment. Development of strong foundation in R pro-

gramming language. R is most popular language for statistical analysis and one of most popular languages for data science applications (e.g., web-scraping, in-

teractive maps, network analysis). Students become proficient in data management and R programming through weekly problem sets, completed in groups. No prior experience with R required. S/U or letter grading.
maps). Students become proficient in programming concepts/concepts through weekly problem sets, completed in groups. S/U or letter grading.


C278. Social Movements in Theory and Practice. (4) Lecture, three hours. No lab. Students are encouraged to pursue advanced coursework and research opportunities. S/U or letter grading.

M280A. Research and Development Policy. (4) (Same as Management-PhD M251.) Lecture, three hours. Examination of research and development policy and process as well as an approach to organization of research and development processes. Discussion of the role of science in shaping policy and the role of policy in shaping science. S/U or letter grading.

C287. Political Environment of American Business. (4) (Same as Management M293A.) Lecture, three hours. Evaluation of the political environment in which businesses operate, including an examination of the political process, legislation, and regulations that affect businesses. S/U or letter grading.

M288. Policy Analysis of Emerging Environmental Technologies. (4) (Same as Urban Planning M288.) Lecture, three hours. Acquisition and utilization of economic, financial, planning, and policy analysis tools needed to evaluate factors that drive market adoption from early to middle market phases. Rooftop solar, electric vehicle, and energy efficiency as focal examples, with emphasis on role of policy and planning incentives added to spur adoption. Letter grading.

C291A. Special Topics in Public Policy. (4) Seminar, three hours. Emerging issues in public policy. May be repeated for credit. Letter grading.

C291B. Variable Topics Seminar: Public Policy. (4) Seminar, three hours. Exploration of current issues in public policy, with emphasis on role of policy and planning. Letter grading.

M291C. Special Topics in Public Affairs. (4) (Same as Social Welfare M203X and Urban Planning M210A.) Seminar, three hours; outside study, nine hours. Emerging issues in public policy. May be repeated for credit. Concurrently scheduled with course CM191B. S/U or letter grading.

C291G. Special Topics in Global Studies and Public Policy. (4) Seminar, three hours. Examination of one or more topics related to public policy and global studies. May be repeated for credit with topic change. Concurrently scheduled with course CM191G. Letter grading.


297B. Public Policy Analysis Lectures. (2) Lecture, two hours. Limited to second-year MPP students. Venue for policymakers, practitioners, and academics to present, discuss, and analyze current policy questions. Attending, formally analyzing, and engaging with policy professionals at these lectures adds to understanding of public and policy-related topics. S/U grading.

M297C. Current Issues in Public Affairs. (2) (Same as Social Welfare M297B and Urban Planning M297B.) Lecture, one to two hours. Introduction to wide range of current issues in public affairs. Luskin School faculty present material from their research and teaching. Assigned readings are distributed in advance of each meeting. S/U grading.

C297D. Public Policy Student-Initiated Special Topics. (2) Seminar, three hours. Student-initiated and -facilitated special topics on emerging issues in public policy. May be repeated for credit. S/U grading.

M297F. Career Planning and Management. (2) (Same as Social Welfare M297F and Urban Planning M297F) Tutorial, six hours. Designated to meet professional development needs of first-year Public Policy, Social Welfare, and Urban Planning students. Development of career management skills while balancing busy life of graduate student. More than just deciding on chosen career path, career planning and management involves taking concrete steps to become career ready. Students gain fundamental career management skills to be competitive on job market, including creating a professional resume and identifying potential employers. Opportunities to learn professional development skills and assist in career planning strategies. S/U grading.

297P. Public Policy Seminar Series. (2) (Formerly numbered 297C.) Seminar, two hours; discussion, one hour. Weekly social science research lectures covering range of policy-relevant topics and discussion of research findings with professor. Examination of quality and relevance of research findings and connections between research and public policy, and real-world policy problems. S/U grading.

A298A. Applied Policy Project I. (2) Seminar, 90 minutes; outside study, four and one half hours. Requisite: course 298B. Limited to MPP students. First course of year-long sequence designed to ensure that students and their teams are fully prepared to launch their projects at the end of Winter Quarter. Students form teams that are assigned to seminars and instructors, identify clients, select and refine policy questions motivating their projects, and develop and refine basic work plans, learn about various methods of data collection, and complete and submit all necessary forms required for human subjects research. S/U grading.

A298B. Applied Policy Project II. (2) Seminar, three hours; outside study, six hours. Preparation: completion of MPP core curriculum, two policy cluster courses, and internship (unless waived). Requisite: course 298B. Third semester in four-course sequence in which students prepare major public policy projects and papers that are case studies of policy evaluation and implementation and are equivalent to professional master’s theses. Papers build on prior core courses, internship experience, and policy cluster courses. In Progress grading (credit to be given only on completion of course 298C).

A298C. Applied Policy Project III. (2) Seminar, three hours; outside study, six hours. Preparation: completion of MPP core curriculum, two policy cluster courses, and internship (unless waived). Requisite: course 298B. Fourth course in four-course sequence in which students prepare major public policy projects and papers that are case studies of policy evaluation and implementation and are equivalent to professional master’s theses. Papers build on prior core courses, internship experience, and policy cluster courses. Conclusion of written report started in course 298B. Letter grading.

A298D. Applied Policy Project IV. (2) (Formerly numbered 298C.) Seminar, two hours. Preparation: completion of MPP core curriculum, two policy cluster courses, and internship (unless waived). Requisite: course 298B. Fourth course in four-course sequence in which students complete research and report writing for their year-long projects, conduct oral presentations of their applied policy projects, and give written feedback on other student presentations. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

496. Public Policy Internships. (4) Fieldwork, four hours. Public policy internships for Master of Public Policy (MPP) and MPP/dual degree students. May not be repeated for credit. S/U grading.

596. Directed Studies. (2 to 8) Individual study, to be arranged. Letter grading.

Radiation Oncology
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Radiological Sciences

Overview

The Department of Radiation Oncology includes clinical divisions at the UCLA Medical Plaza and the UCLA Medical Center, UCLA Santa Monica Medical Center, and West Los Angeles VA Medical Center and includes the Division of Brachytherapy, Division of Molecular and Cellular Oncology, and Medical Radiation Physics. Laboratory, clinical, and translational research are facilitated at all locations.

The primary clinical mission of the department is the management of patients who have cancer. The purpose of using radiation therapy, rather than or in addition to surgery, is to preserve function and/or cosmesis while eliminating the cancer. Other activities include total body irradiation before bone marrow transplantation, stereotactic body radiotherapy, brachytherapy-therapy, and stereotactic radiosurgery for A-V malformations, meningiomas, and malignant intracranial lesions. Research interests include clinical trials, radiation biology, radiation modifiers, molecular biology, immunology, and applied physics. Knowledge of the disease in question, the comparative efficacy of radiation therapy and other methods, radiation biology and pathophysiology, and the physical characteristics of various radiations is essential.

The educational programs serve medical, dental, basic science (biology and physics), nursing, and radiation therapy students, and community and postgraduate physicians; there also is a four-year program for residents who are qualifying for certification in radiation oncology by the American Board of Radiology.

For more details on the Department of Radiation Oncology and courses offered, see the department website.

Radiation Oncology faculty information is available from the department.

Radiation Oncology

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Course

199. Directed Research in Radiation Oncology. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

RADIOLOGICAL SCIENCES

Overview

The Department of Radiology is committed to offering its trainees high-level instruction, unique experience, and comprehensive evaluation necessary to succeed in all systems practicing diagnostic radiology, combining outstanding patient care and excellence in clinical imaging, research, and educational programs with state-of-the-art technology.

The Diagnostic Radiology program currently has 48 resident positions and is conducted at five major teaching hospitals within and associated with the Geffen School of Medicine. Rotating through all five facilities, the resident gains a broad exposure to all types of disorders, both the commonplace and unusual. The 48-month program leads to eligibility for examination and certification by the American Board of Radiology.

The Interventional Radiology Integrated residency program offers quality medical educational experience in image-based diagnosis, image-guided procedures, and peri- and postprocedural patient care. The five-year residency curriculum concentrates on diagnostic radiology during the first three years and interventional radiology during the last two years, leading to dual certification in interventional and diagnostic radiology.

The programs aim to guide residents in attaining mastery of the clinical skills needed to become highly accomplished radiologists. Residents are provided with outstanding and comprehensive education and educational experiences with the purpose of developing advocates for the practice of radiology, who will serve as critical interdisciplinary team members by providing ethical, professional, and valuable medical expertise to patients and colleagues.

For more details on the Department of Radiological Sciences, see the department website.

Radiology, Study of

Interdepartmental Program

College of Letters and Science

378 Kaplan Hall
Box 951511
Los Angeles, CA 90095-1511

Study of Religion

310-206-8799

Carol A. Bakhos, PhD, Chair

Faculty Committee

Carol A. Bakhos, PhD (Near Eastern Languages and Cultures)
Stephanie Baikwill, PhD (Asian Languages and Cultures)
John P. Carriero, PhD (Philosophy)
Jeffrey J. Guhin, PhD (Sociology)
Stephanie W. Jamison, PhD (Asian Languages and Cultures)
Eleanor K. Kaufman, PhD (Comparative Literature, English, European Languages and Transcultural Studies)
Terence D. Keel, PhD (African American Studies, Society and Genetics)
Gina V. Konstantopoulos, PhD (Near Eastern Languages and Cultures)
Diego Loukota Sanclemente, PhD (Asian Languages and Cultures)
Ronald V. Vroon, PhD (Slavic, East European, and Eurasian Languages and Cultures)
Luke B. Yarbrough, PhD (Near Eastern Languages and Cultures)

Overview

The undergraduate major in Study of Religion equips students to understand and compare creatively the worldwide varieties of core convictions, stories, texts, rituals, and practices known collectively as religion. Students complete courses in a wide range of departments in which religious phenomena are analyzed, including anthropology, art history, Asian languages and cultures, classics, comparative literature, English, history, Near Eastern languages and cultures, philosophy, political science, and world arts and cultures/dance. Students can anticipate gaining versatile intellectual tools for approaching, analyzing, and appreciating the deep roots, human motivations, and history of the formation of religious traditions in their respective cultural contexts.

Within this interdepartmental program, students may focus in depth on one or more specific religions. Students may wish to select this major in combination with a second major field, a minor, or related language study.
Undergraduate Major

Study of Religion BA

Capstone Major

The Study of Religion major is a designated capstone major. Students must complete an advanced seminar that provides unique opportunity to work closely with a faculty member on a focused topic of research. Through their capstone work students are expected to demonstrate their ability to plan and carry out a major project, apply subject matter and research methods knowledge to produce a paper or other research project, and organize information into a coherent and persuasive form for oral presentation to their peers.

Learning Outcomes

The Study of Religion major has the following learning outcomes:
- Demonstrated ability to plan a major project that concludes with writing a cogent and convincing document
- Application of knowledge of a wide-ranging bibliography and of methods of research to thoroughly prepare for seriously engaging an interviewee or for writing the prospectus describing the major project
- Development of skills essential to taking oral histories or doing field research in Los Angeles’ multicultural population
- Ability to organize research data into a coherent and persuasive form for oral presentation to peers
- Demonstrated empathy as a critic of a wide array of religious traditions, institutions, and practices

Entry to the Major

Transfer Students

Transfer applicants to the Study of Religion major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one history of religions course, one philosophy of religion course, and two courses from sociocultural anthropology, Buddhism, history of Western civilization, Asian civilizations, civilizations of Africa, and history of China.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Study of Religion M4 or 11, and two courses from Ancient Near East 10W, Anthropology 3, Asian M60, History 1A, 1B, 1C, 9A, 9C, 9D, 9E, M10A, 10B, 11A, 11B, Philosophy 2, 21, Study of Religion M10, M50, M60A through M60E, M60W, M61, M61W.

The Major


Student are encouraged to select courses that focus on a specific religious tradition or traditions, or on a set of thematic issues important to the study of religion.

Honors Program

Students admitted to honors should take three Study of Religion 198 courses under the guidance of the sponsoring professor. The first 198 course should be taken in spring quarter of the junior year, the second during the following fall quarter, and the third during winter quarter of the senior year. The three courses count as part of the regular requirement of 12 upper-division courses. The program culminates in an honors thesis.

Policies

The Major

During their senior year students must complete the capstone seminar, Study of Religion 191.

A course may be taken twice, on different topics, for credit toward the major where repetition is allowed by the department offering the course. A maximum of two upper-division courses in an ancient language relevant to the course of study may be applied toward the major requirements with consent of the adviser.

A maximum of 12 units of special studies courses (197, 198, 199) approved by the advising major must be taken for a letter grade.

Honors Program

The honors program provides exceptional students with an opportunity to do independent research under the tutorial guidance of a faculty member.

To qualify for admission students should have a minimum grade-point average of 3.4. The 198 courses designed for the program and the thesis topic should be approved by the committee in charge of the major.

For more information, contact the student affairs officer or the faculty adviser at the program address.

Undergraduate Minor

Study of Religion Minor

Admission

To enter the Study of Religion minor, students must have an overall grade-point average of 2.0 or better.

The Minor

Required Lower-Division Courses (4 to 10 units): Study of Religion M4 or 11, or M50 and M60A or M60W.


Student are encouraged to select courses that focus on a specific religious tradition or traditions, or on a set of thematic issues important to the study of religion.

Policies

A course may be taken twice, on different topics, for credit toward the minor where repetition is allowed by the department offering the course. A maximum of 4 units of special studies courses (197, 198, 199) approved by the adviser may be applied toward the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Study of Religion

Lower-Division Courses

M4. Introduction to History of Religions. (5) (Same as History M4.) Lecture, three hours; discussion, two hours. Comparative study of eight major religious traditions, with emphasis on their beginnings and subsequent decisive changes in their respective historical developments and interactions. Equips students with intellectual tools necessary for thinking analytically, empathetically, and comparatively about fascinating human phenomena identified as religious, such as sa-
M10. Introduction to Judaism. (5) (Same as Jewish Studies M10.) Lecture, three hours; discussion, one hour. Judaism’s basic beliefs, institutions, and practices. Translation of biblical and rabbinic texts, history of the Jewish people and the Jewish State. P/NP or letter grading.

M11. Religion in Los Angeles. (5) Lecture, four hours. Introduction to varieties of religious experience in Los Angeles and its environs. Presentations, required readings, and (where possible) site visits to examine selected faith traditions and spiritual practices throughout the City of Angels. Recognizing that spiritual traditions have interacted with each other in significant ways that shaped sacred material and encountered. Foundational academic orientations within study of religion (anthropological, historical, psychological, sociological, etc.) used as framework to examine and interpret almost unparalleled religious diversity of Los Angeles. P/NP or letter grading.

M20. Introduction to Islam. (5) (Same as Islamic Studies M20.) Lecture, three hours; discussion, one hour. Genesis of Islam, its doctrines, and practices, with readings from Qur’an and Hadith; schools of law and thought; Islamic reform and modernism. P/NP or letter grading.

M40. Christologies East and West. (5) (Same as Slavic M40.) Lecture, three hours; discussion, one hour. Survey of major historical periods of Christianity—Early, Orthodox, Roman Catholic, Protestantism, comparing how history, dogma, culture, and community structures develop in those three traditions. P/NP or letter grading.

M50. Origins of Judaism, Christianity, and Islam. (5) (Same as Middle Eastern East M50B and Middle Eastern Studies M50B.) Lecture, three hours; discussion, one hour. Examination of three major monotheisms of Western tradition, Christianity, Judaism, and Islam, and their historical and comparative development, teachings, and ritual practices of each tradition up to and including medieval period. P/NP or letter grading.

M60. Religion in Classical India: Introduction. (5) (Same as South Asian M60.) Lecture, three hours; discussion, one hour. Introduction to historical development and contemporary practice of religions in South Asia. Examination of independent and majorly textually based religions introduced to region, including Hinduism, Buddhism, Islam, and Christianity. P/NP or letter grading.

M60W. Introduction to Buddhism. (5) (Same as Asian M60W.) Lecture, three hours; discussion, one hour. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course M60B. Knowledge of Asian languages not required. Introduction to historical development and majorly textually based religion introduced to region, including Hinduism, Buddhism, Islam, and Christianity. P/NP or letter grading.

M61. Introduction to Zen Buddhism. (5) (Same as Asian M61.) Lecture, three hours; discussion, one hour. Knowledge of Asian languages not required. Introduction to Zen and other fundamental cultural and religious concerns in East Asia. Topics include role of Zen within Buddhist thought and practice, artistic and literary arts, society, and culture. P/NP or letter grading.

M61W. Introduction to Chinese Religions. (5) (Same as Chinese M61W.) Lecture, three hours; discussion, one hour. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course M60B. Knowledge of Chinese not required. General survey of religious life in China, with emphasis on everyday religious practice over doctrine, and themes common to Buddhism, Daoism, and Confucianism. P/NP or letter grading.

M62C. Bahá’í Faith in Iran: 20th-Century Iran and the Bahá’ís. (4) (Same as Iranian M62C.) Lecture, three hours; discussion, one hour. Emphasis on mystical and social principles. May be taken independently for credit. P/NP or letter grading.

M63D. Islam in West, with focus on U.S. and France. Analysis of major writings by Báb, Bahá’u’lláh, and ‘Abdu’l-Bahá. Emphasis on mystical and social principles. May be taken independently for credit. P/NP or letter grading.

M67. Demons, Fear, and Uncanny in Historical and Contemporary Asia. (5) (Same as Ancient East M67.) Lecture, three hours; discussion. Demonstration of place of demons and fear in different societies and cultures in ancient world: Mesopotamia; ancient Egypt, Greece, and Rome; and Biblical and early Jewish contexts. Investigation into why demons and monsters existed in these cultures; how they were opposed or protected against; and what these different societies feared, and how that fear was represented. As demons and monsters evolved in different cultural contexts, especially specific fears and norms, studying them allows for examination of societies that constructed them. Examination of how fear of threats such as disease, illness, and death, was expressed in society; fears of foreign and of women. Critical examination of wide range of primary source texts, addressing core question of how different societies construct unique meanings of term religion and its relationship to such categories as science and magic, as well as to other domains of social experience. Examination of how study of religion has interacted with other academic fields, especially biblical studies, anthropology, sociology, psychology, and evolutionary biology. P/NP or letter grading.
contemporary discourses such as human rights, feminism, and contemporary reform movements. Primary sources include excerpts from Qur’an, Qur’anic interpretation, cultural politics, and reformism. Strong focus on analytical and writing skills through in-class assignments and discussion. Letter grading.

110. Religion and Violence. (4) Seminar, three hours; discussion, one hour. Focus on political actions that once served as meaningful and relevant frameworks. Understanding physical reality and human life for inhabitants of Nile Valley. General principles as well as developments through time (circa 3000 BC to 300 CE). Topics include mythology, temple and cult, magic, and personal piety. P/NP or letter grading.

M132. Ancient Egyptian Religion. (5) (Same as Anient Near East M130.) Lecture, three hours; discussion, one hour (when scheduled). Preparation: one course. Study of selected works of Kierkegaard on philosophy of religion, with emphasis on interpretation of texts. P/NP or letter grading.


M131C. History of Religion in U.S. (4) (Same as History M142C.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Course study of people's experience in U.S. Examination of number of religious traditions that have been important in this country, with emphasis on relating developments in religion to other aspects of American culture. P/NP or letter grading.

150. Women, Gender, and Religion. (4) Seminar, four hours. Investigation and consideration of roles, status, and representations of women and gender in one or more religious traditions. Examination of how cultural contexts and social as well as social realities (as far as they can be known) for women and men in particular historical periods and shape and are shaped by these religious traditions, including discussions regarding ritual practices, sexual reproduction, religious authority, marriage and family life, fertility, conceptions of body, public life, and/or literary representations of gender (including those of divine). Variety of approaches to be included, including feminist, literary, historical, sociological, and anthropological. P/NP or letter grading.

M155. Angels, Demons, and End of World: Magic, Mysticism, and Apocalypse in Jewish Traditions. (4) (Same as Jewish Studies M155.) Lecture, three hours. Focus on popular Jewish traditions of magic, mysticism, apocalypse, and various contours of Judaism’s textual and material traditions in antiquity. Examination of texts from Hebrew Bible to modern discussions of Kabbalah and end of world, concentrating on Jewish antiquity. Discussion of texts, including Hebrew Bible, Dead Sea Scrolls, extra-biblical Jewish texts, New Testament, and rabbinic and later Jewish literature. Discussion of sociocultural context in order to decipher features and functions of magic, mysticism, and apocalypse in antiquity and modernity. P/NP or letter grading.

160. Religion, Film, and Media. (4) Lecture, four hours. Examination of complex relationship between religious traditions and various media (e.g., print, film, photography, television, etc.) as they have interacted in specific historical and cultural contexts. Illumination of role of media in forming and expressing religious ideas, practices, and identities. Topics may include representations of religious groups, visual and aural identity, identity formation, interreligious conflict, religious education, and use of media technologies for propaganda or proselytizing purposes. Historical, sociological, and anthropological approaches used in concert with various methodologies currently within media studies. P/NP or letter grading.

M161A. Chinese Buddhism. (4) (Same as Chinese CM160.) Lecture, three hours; discussion, one hour. Knowledge of Chinese introduction and development of Buddhism in China, interaction between Buddhism and Chinese culture, rise of Chinese schools of Buddhism. Letter grading.

M161B. Japanese Buddhism. (4) (Same as Japanese CM160.) Lecture, three hours; discussion, one hour. Knowledge of Japanese not required. Development of Buddhism in Japan in its cultural context, with emphasis on key ideas and teachings. Letter grading.

M161C. Korean Buddhism. (4) (Same as Korean CM160.) Lecture, three hours; discussion, one hour. Knowledge of Korean not required. Introduction and development of Buddhism in Korea, interactions between indigenous and exogenous traditions, Korean syntheses of imported Buddhist theological systems and meditative techniques, and independent Son (Zen) schools of Korea. Letter grading.

M161D. Buddhism in India. (4) (Same as South Asian CM160.) Lecture, three hours; discussion, one hour. Knowledge of Indian languages not required. Overview of social and doctrinal history of Buddhism from its conception of the dharma and based not only on texts but on archaeological, art historical, and inscriptional sources. Examination of both formal doctrine and actual practices and on what learned Buddhist scholars wrote and what ordinary Buddhists did, saw, and made. Letter grading.


M173C. Shinto, Buddhism, and Japanese Folk Religion. (4) (Same as History M173C.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Social dimension of various Vajrayana, Zen, and Shintoist religious traditions, religious nationalism, Buddhism’s medieval Reformation and Zen’s relationship to warrior culture, folk religious aspects such as shamanism, ancestor worship, and millennarianism, religion, politics, and the media. P/NP or letter grading.

M174D. Indo-Islamic Interactions, 700 to 1750. (4) (Same as History M174D.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Historical introduction to Muslim communities of what eventually became nations of India, Pakistan, and Bangladesh. Topics include social, political, religious, and cultural history. P/NP or letter grading.

M174E. Indo-Islamic Interactions, 1750 to 1950. (4) (Same as History M174E.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of interplay of factors that, for Christian missionaries to Islamic madrasa schools and colonial rebellions, gave shape to multifaceted Muslim reformation in context of colonial modernity. P/NP or letter grading.

M175. Topics in Philosophy of Religion. (4) (Same as Philosophy M175.) Lecture, four hours; discussion, one hour. Requisite: Philosophy 21 or 22. Intensive investigation of one or two topics or works in philosophy of religion, such as attributes of God, arguments for or against existence of God, or relation between religion and ethics. Topics announced each term. May be repeated for credit with consent of instructor.

177. Variable Topics in Religion. (4) Seminar, three hours. Interdisciplinary approach to some major topics in study of religion, such as shamanism, ethnography, sociology, politics, mysticism, ideology of the religious, and religion and politics. May be repeated for credit with topic change. P/NP or letter grading.

M178. Variable Topics. (4) (Same as Middle Eastern Studies M178.) Seminar, three hours. Interdisciplinary approach to some major topics in study of religion and Middle Eastern studies. May be repeated for credit with topic change. P/NP or letter grading.

M179. Topics in Moral Philosophy: Evil. (4) (Same as Philosophy M152B.) Lecture, three to four hours; discussion, one hour (when scheduled). Preparation: one philosophy course. Exploration of philosophical issues raised by topic of evil actions and/or evil people. Issues may include nature of evil, problem of evil and theodicies, responsibility for evil and problem of free will, causal and motivational explanation, diverse, variant responses to evil such as forgiveness and punishment. P/NP or letter grading.

180. Religion and Modern Critical Thought. (4) Lecture, four hours. Examination of how various traditions of modern critical thought inform academic study of religion, with primary focus on philosophical analysis of religious belief and practice and its relation to other areas of theoretical discussion, such as philosophy of language, ethics, metaphysics, ethics, practice theory, and political theory. Topics may include nature of religious experience and its epistemic status, embodiment and religious self, relationship between knowledge, faith, and doubt, nature and function of religious language, relationship between science and religion, religious belief and standards of rational discourse, theoretical approaches to problems of scientific and competing truth claims, formation of religious and secular in modernity. P/NP or letter grading.

M182A. Ancient Jewish History. (4) (Same as History M182A and Jewish Studies M182A.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of social, political, and religious developments. P/NP or letter grading.

M182B. Medieval Jewish History. (4) (Same as History M182B and Jewish Studies M182B.) Lecture, three hours; discussion, one hour (when scheduled).
Program e-mail
Muriel C. McClendon, PhD, Humanities, Arts, and Social Sciences Chair
Craig A. Merlic, PhD, Schools Chair
Faculty Committee
Tama W. Hasson, PhD (Integrative Biology and Physiology)
Beth A. Lazazzera, PhD (Microbiology, Immunology, and Molecular Genetics)
Muriel C. McClendon, PhD (History)
Craig A. Merlic, PhD (Chemistry and Biochemistry)
Overview
The Research Practice subject area includes interdisciplinary courses in the practice of research. Hosted by the Undergraduate Research Center—Sciences and the Undergraduate Research Center for Humanities, Arts and Social Sciences, research practice courses cover the development of research questions and the application of methodological, as well as forms of qualitative and quantitative analysis, and research communications and publications. The courses combine theory and practice, and emphasize experiential learning. Students do not just gain knowledge and skills in their discipline; they also develop an understanding of how knowledge is created and applied across the university.
Research practice courses expand on important skills for success in research, and also explore how research skills integrate into a variety of careers. Research practice courses are not associated with any department; students in any major can enroll. Some courses are associated with a research, journal, or scholarship program, and acceptance into that program is required to enroll. Other courses have an open enrollment. For more information see Research Practice—UCLA Undergraduate Research.

Research Practice
Lower-Division Courses
18. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.
19. Bruins Study Tours: Introduction to Higher Education Research through Course-Based Collaborative Research Project. (2) Seminar, two hours. Course-based research experience that introduces students to higher education institutional research, assessment, and accreditation. Students collaborate on research assessment project that is used toward campus instructional improvements and its accreditation documentation. P/NP grading.

97AXA. PEERS Freshman Seminar: Succeeding in Science. (Formerly numbered Ecology and Evolutionary Biology 97AXA) Seminar, one hour. Limited to students in Program for Excellence in Education and Research in Sciences (PEERS). Series of lectures, workshops, and discussions to enhance student success in sciences by developing critical academic survival skills, acquainting students with practice of science, and highlighting opportunities available to participate in research as undergraduate students. P/NP grading.
97B. PEERS Sophomore Seminar: Pathways in Majors, Careers, and Entry into Research. (Formerly numbered Ecology and Evolutionary Biology 97B) Seminar, one hour. Limited to students in Program for Excellence in Education and Research in Sciences (PEERS). Series of lectures and workshops to enhance student success in sciences by acquainting students with practice of science, opportunities available to participate in research as undergraduate students, and careers available to students with science degrees. P/NP grading.
97CX. Transfer Success and Pathways to Undergraduate Research for Life Sciences Majors. (4) Seminar, one hour. Limited to new transfer students. Designed to provide essential academic skills for life science transfer students and promote engagement in university research including instruction on securing research opportunities and skills necessary for research and professional success, communication of research, and exploring research resources and life science careers. P/NP grading.
97DX. Research Unwrapped: Introduction to Research in Sciences. (1) Seminar, two hours. Exposes students to university research and wide array of research practices in sciences. Introduction to benefits of undergraduate research, scientific method, information and publication search strategies, science communication, and degree and careers requiring research experience. P/NP grading.
99. Student Research Program, (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses
102. Research Practice: Research Revealed. (2) (Formerly numbered 191A) Seminar, two hours. Limited to students participating in Research Revealed undergraduate research preparation program. Students are prepared to conduct their own research, apply to research programs and faculty members. Topics vary by term. P/NP grading.
103. Research Practice: Student Research Forum. (2) Lecture/activities, four hours. Designed to promote deep engagement in university research, including instruction on research opportunities, skills necessary for research and professional success, exploring research internships on and off campus, and communication of research across all disciplines. P/NP grading.

105. Effective Science Communication. (2) Seminar, two hours. Effectively communicate science in essential for careers in science, technology, engineering, and mathematics. Designed to strengthen and practice skills in sharing science, emphasis on writing communication and presentations, drawing on story-telling techniques to craft more compelling talks. Students have many hands-on experiences with presenting their research in formats, for different audiences, and with different objectives. P/NP grading.

110A. Careers in Libraries and Archives. (2) Formerly numbered Honors Collegium 101M.) Seminar, two hours. Students prepare to achieve goals beyond UCLA. Participants reflect on values and interests, and learn what is required for effective applications to graduate school, scholarships, and more. Review of process of applying for nationally competitive awards such as Truman, Rhodes, Marshall, and others. Students learn to craft effective curricula vitae, strong personal statements, and compelling research proposals. Students learn to solicit strong letters of recommendation. Skills are preparation for scholarship/fellowship application process, as well as graduate school and job application process. P/NP grading.

120. Research Today: Sources, Tools, and Strategies. (2) Seminar, two hours. Research is process of exploration, experimentation, and discovery. Study is designed to help students engage with this process and prepare for research-intensive honors thesis. Students collaborate with mentors, experts across UCLA campus as they develop their own approach to research. P/NP grading.

130. Integrity in Science Research. (2) Seminar, two hours. Limited to students in funded research programs, or those majoring in professional tracks. Exploration of research integrity and discussion of important ethical issues that impact scientific investigation. Presentation of major issues in field of research ethics and integrity. Students work together in small groups to present and lead discussions on ethical dilemmas. Focus on research integrity issues that impact broad group of undergraduate researchers at UCLA campus. Student presentations are topical in nature, and vary from year to year based on recent ethical events. P/NP grading.

182. Developing Your Research Skills: Reading, Writing, and Sharing Academic Research in Humanities and Social Sciences. (4) Seminar, three hours; workshop, three hours. Designed for visiting juniors and seniors in Mellon Mays Undergraduate Fellowship program who are engaged in multi-year research projects in humanities and social sciences at home institutions. Focus on development of three important research skills: reading scholarly writing, writing for scholarly audiences, and presenting research for academic and general audiences. Students are supported in producing seven to eight pages of polished writing in form of literature review, thesis chapter, or another meaningful unit of writing as agreed upon with instructor. Students learn to write abstract and present work orally and visually. Approaches reading, writing, and sharing academic research as ongoing, iterative processes. Students gain necessary tools to succeed in all parts of research process. Concludes with symposium in which work is presented. P/NP grading.

192A. UCLA Undergraduate Science Journal. (2) Seminar, two hours. Designed to guide students through critical aspects of preparing UCLA Undergraduate Science Journal for publication. These aspects of writing, reviewing, editing, and formatting articles for publication are essential to research process for sharing findings and engaging with broader scientific and engineering community. Students develop teamwork and project management skills that can help in future career paths. May be repeated for maximum of 10 units. P/NP grading.

192B. Undergraduate Research Journal for Humanities and Social Sciences. (2) (Formerly numbered Honors Collegium 101C.) Seminar, two hours. Limited to students on editorial board of Aleph Journal. Students participate in workshops to assess, edit, and publish journal articles. May be repeated for maximum of 10 units. P/NP grading.

193. Variable Topics: Research Practice Journal Club. (2) (Formerly numbered Neurobiology M171 and Physiological Science M171.) Seminar, two hours. Limited by application. Centered on presentation and critical analysis of scientific journal articles, and presentation of students’ own research, intensive literature-based training program which increases student confidence and scientific literacy, and facilitates transition to postgraduate study. May be repeated for maximum of 10 units. P/NP grading.

194A. Mellon Mays Undergraduate Fellows Research Seminar. (2) (Formerly numbered Honors Collegium 101J.) Seminar, two hours. Limited to current Mellon Mays undergraduate fellows. Designed to support students in their research, and in preparation for graduate school and professional careers. May be repeated five times for credit. P/NP grading.

194B. Research Seminar: Writing Research Proposals and Graduate Applications. (2) Seminar, two hours. Research seminar for undergraduates applying in full for science, technology, engineering, and mathematics (STEM) PhD or MS programs. Designed to support students in their research, and in preparation for graduate school and professional careers. Letter grading.

194C. Mastering Oral Presentation of Your Research. (2) Seminar, two hours. Examination of best practices in oral presentation of scientific research. Familiarization with rubric used to evaluate oral research presentations given by graduate students and peers. Students present their research, tailored to diverse audience of science majors, and give feedback to their peers. Oral and written feedback is used to help students revise their talks. Culminates with seminar research presentation by each student. Letter grading.

195. Research Activities. (4) Tutorial, 12 hours. Designed to provide academic context for off-campus, remote work at research institutions outside of UCLA. Students work independently with graduate student mentor to learn about research teams, discuss management of research protocols and data, and work weekly on science writing, culminating in production of research abstract and assembly of research paper. May be repeated for credit up to two consecutive quarters. Individual contract required. Letter grading.

Graduate Course

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.
20B, 20L, 30A, 30AL), (2) Life Sciences 7A, 7B, 7C, 23L, (3) Mathematics 3A, 31A or Life Sciences 30A, and (4) Physics 1A, 1B, 4AL, 4BL (or 5A, 5B, 5C). Prior participation in a supervised experience in schools is recommended.

To enter the minor, students must be in good academic standing with an overall grade-point average of 2.0 or better. Students must consult with the academic coordinator responsible for the minor to plan a coherent program to complete both the minor and their major, prior to filling a petition to enter the minor.

The Minor
Required Lower-Division Courses (6 to 8 units): Science Education 1XP or 10XP or 15XP, and Earth, Planetary, and Space Sciences 1 (Earth, Planetary, and Space Sciences 101 or C113 or Atmospheric and Oceanic Sciences 101 or 102 or 103 may be substituted for course 1).

Required Upper-Division Courses (22 units minimum): (1) Education 127, (2) Science Education 100XP, (3) at least three units selected from Chemistry and Biochemistry 192A, 192B, Life Sciences M192A, 192B, 192C, 192D, 192E, Physics 192M, 192S, 192S, 192E, and 192S, 192E, (4) at least one and no more than two courses selected from Education M102, M103, 104A, 105B, 106A, 107A, 107B, M108, C111, 123, 126, M131A, 132, M136, 139, 141.

Policies
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor, and at least 16 units must be taken in residence at UCLA.

Each minor course, except Science Education 1XP, 10XP, or 15XP, must be taken for a letter grade, with a grade of C or better in each, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Science Education
Lower-Division Courses
1XP. Classroom Practices in Elementary School Science. (2) (Formerly numbered 15SL) Seminar, 90 minutes; fieldwork, three hours per week for eight weeks. Introduction for prospective science teachers to field of elementary education and teaching and learning of science in elementary school classrooms. Pairs of students are placed in local elementary school classrooms to observe, participate, and assist mentor teachers in instruction. Discussion of learning in middle school culture, cognitive development of students at this level, and best means to teach appropriate science concepts at this level. P/NP grading.

15XP. Exploration of K-12 Classroom Practices in Science Education. (2) Seminar, two hours; fieldwork, two hours. Introduction to field of K-12 science education including equity and access, pedagogy, and career exploration. Examination of broad range of student developmental levels and science learning progressions from kindergarten to high school. Pairs of students are placed in local elementary, middle, or high school classrooms to observe, participate, and assist mentor teachers in instruction. Students engage in fieldwork lesson study including identifying Next Generation Science Standards (NGSS), lesson development, lesson implementation, and lesson reflection. P/NP grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

Upper-Division Courses
400XP. Classroom Practices in High School Science. (Formerly numbered 100SL) Seminar, three hours; service learning fieldwork, three hours. Recommended requisite: course 1XP or 10XP. Introduction for prospective science teachers to field of secondary education and teaching and learning of science in high school classrooms. Pairs of students are placed in local high school classrooms to observe, participate, and assist mentor teachers in instruction. Discussion of learning in high school culture, cognitive development of students at this level, and best means to teach appropriate science concepts at this level. Letter grading.

189. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Seminar, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Seminar (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Overview
The Department of Slavic, East European, and Eurasian Languages and Cultures offers a wide array of courses in the languages and cultures of Russia and of central and eastern Europe. Instruction is offered in Czech, Hungarian, Polish, Romanian, Russian, Serbian/Croatian, and Ukrainian to provide students with the necessary linguistic skills to pursue advanced work in the literature, culture, history, politics, and social structures of these areas. Students have the choice of several majors and minors and the opportunity to enhance their knowledge and skills through programs of study abroad.
Undergraduate Study

The department offers three majors: (1) Central and East European Languages and Cultures, (2) Russian Language and Literature, and (3) Russian Studies. The equivalent of a major in Central and East European Languages and Cultures or Russian Language and Literature is normally required for admission to the department graduate program and is used to determine the number of courses in Russian literature and/or linguistics that students majoring in Russian Studies are expected to make up in order to receive graduate degrees in the department. Students not majoring in Central and East European Languages and Cultures or Russian Language and Literature who intend to pursue graduate study in the department are strongly encouraged to take courses in Russian literature and linguistics during their undergraduate years to reduce the number of makeup courses required. Qualified seniors may also take graduate courses numbered below 220 with consent of the instructor and the graduate and undergraduate advisers.

Undergraduate Majors

Central and East European Languages and Cultures BA

The major in Central and East European Languages and Cultures is designed to provide students with a mastery of one language of central or eastern Europe and familiarity with the literature, as well as general background in the cultural, political, and social history of the Slavic peoples.

Capstone Major

The Central and East European Languages and Cultures major is a designated capstone major. Students must complete a capstone seminar and present their final paper in the department annual Undergraduate Research Conference. Students draw on their previously acquired subject matter knowledge and skills to plan a research project and write a substantial academic paper. They also gain experience engaging in scholarly discourse, preparing appropriate media for public presentation, and submitting their work to an academic journal.

Learning Outcomes

The Central and East European Languages and Cultures major has the following learning outcomes:

- Incorporation of knowledge acquired to formulate an independent study topic and research project
- Selection and use of original sources in a Central and East European language or Russian to prepare a thesis
- Acquisition of skills relating to development of discourse and argument that is clear, reasoned, reflective, informed by evidence, and aimed at deciding what to believe
- Determination of what information should be developed and analyzed

- Completion of conference presentation that includes fielding audience questions
- Mastery of oral communication including interpersonal communication, presentation, and discussion
- Editing of the research paper into a journal article, and submission of it to an academic journal

Entry to the Major

Transfer Students

Transfer applicants to the Central and East European Languages and Cultures major with 90 or more units must complete the following introductory course prior to admission to UCLA: one culture, history, or civilization course on one or more European nations.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Central and East European Studies 91 or Slavic 90.

The Major

Required: (1) One three-quarter (12 to 15 units) introductory central and East European language sequence, or one 12-unit intensive introductory central and East European language course, to be selected from Czech 101A, 101B, 101C, Hungarian 101A, 101B, 101C, Polish 101A, 101B, 101C, Romanian 101A, 101B, 101C, 103, Serbian/Croatian 101A, 101B, 101C, 103, or Ukrainian 101A, 101B, 101C; (2) one three-quarter (12 to 15 units) language sequence to be selected from Czech 102A, 102B, 102C, Hungarian 102A, 102B, 102C, Polish 102A, 102B, 102C, Romanian 102A, 102B, 102C, Serbian/Croatian 102A, 102B, 102C, or Ukrainian 102A, 102B, 102C, or any three courses from Russian 100A, 100B, 100C, 101A, 101B, 101C, 102A, 102B, 102C, 103A, 103B, 103C, 103A, 140A; (3) three courses (12 units) from the following list (187 courses are 2 units each; no more than 8 units may be from the 187 series): Central and East European Studies 120, 125, 126, Czech 155, 187A through 187M, History 120A through 120D, Hungarian 187A through 187M, Polish 152A, 152B, 152C, 187A through 187M, Romanian 152, 187A through 187M, Russian CM124G, Serbian/Croatian 187A through 187M, Ukrainian 152, 187A through 187M; one of the three courses may be selected from Russian M118, 119, 120, 124C, 124D, 124N, 124T.

During their senior year, students must also take Slavic 191TA, 191TB, and 191TC in which they complete a capstone senior thesis.

Honors Program

The honors program is designed for exceptional departmental majors who wish to complete a research project that culminates in an honors thesis.

The honors program is a three-term sequence (Slavic 198A, 198B, 198C), taken in addition to requirements for the major.

Policies

The Major

Students may petition to substitute courses after consulting with the undergraduate adviser. Each major course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

Honors Program

Admission

The honors program is open to majors with a 3.5 grade-point average in upper-division courses in the major and a 3.0 overall GPA. Students should apply for admission by spring quarter of their junior year. At the time of admission, students must have completed at least two upper-division courses in their major. Prior to admission to the honors program, students must identify a faculty adviser, who must be a regular member of the UCLA faculty; the faculty adviser must commit to mentoring the student for the duration of the program. Students must also write a two-page proposal of the project, to be approved by the faculty adviser and submitted with the application form.

Requirements

The courses must be taken during senior year (fall, winter, and spring terms respectively). Students pursuing departmental honors must submit the contract for each course by the end of the tenth week of the previous quarter. The sequence culminates in the submission of a thesis. Students who enroll in the honors program are exempt from taking the standard thesis course sequence (Slavic 191TA, 191TB, 191TC).

The honors thesis is intended to be a substantial piece of original scholarship at least 40 pages in length exclusive of front matter, appendices, and bibliography (25 pages to satisfy the regular capstone senior thesis major requirement). Students are required to use a Slavic, east European, or Eurasian language in their research, with the scope of the language work to be determined in consultation with their faculty adviser. Evaluation of the honors thesis is made by the faculty adviser.

To qualify for graduation with departmental honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.5 or better in upper-division courses required for the major and an overall GPA of 3.0 or better, and (3) complete Slavic 198A, 198B, 198C with grades of B or better.

To qualify for graduation with departmental highest honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.8 or better in upper-division courses required for the major and an overall GPA of 3.5 or better, and (3) complete Slavic 198A, 198B, 198C with grades of A- or better.

Honors and highest honors are recorded on the final transcript and diploma after students successfully complete the program.

In the event that a student does not complete the departmental honors program or qualify for
departmental honors/highest honors, their paper may count toward the regular capstone senior thesis requirement for their major (25 pages minimum to satisfy requirement).

**Russian Language and Literature BA**

The Russian Language and Literature major is designed to provide students with basic mastery of the Russian language and familiarity with the classics of Russian literature. Students typically begin to study Russian in their first year, but those contemplating a Russian major later in their academic program can fulfill the Russian language requirement by combining regular coursework with summer programs or with the University of California Education Abroad Program (EAP) in Moscow, which is open to students who have completed the equivalent of one or more years of study (level 1 on the American Council on Teaching of Foreign Languages [ACTFL] scale). Students interested in this program should consult with the undergraduate adviser as early as possible.

**Capstone Major**

The Russian Language and Literature major is a designated capstone major. Students must complete a capstone seminar and present their final paper in the department annual Undergraduate Research Conference. Students draw on their previously acquired subject matter knowledge and skills to plan a research project and write a substantial academic paper. They also gain experience engaging in scholarly discourse, preparing appropriate media for public presentation, and submitting their work to an academic journal.

**Learning Outcomes**

The Russian Language and Literature major has the following learning outcomes:

- Incorporation of knowledge acquired to formulate an independent study topic and research project
- Selection and use of original sources in Russian or a related language to prepare a thesis
- Acquisition of skills relating to development of discourse and argument that is clear, reasoned, reflective, informed by evidence, and aimed at deciding what to believe
- Determination of what information should be developed and analyzed
- Completion of conference presentation that includes fielding audience questions
- Mastery of oral communication, including interpersonal communication, presentation, and discussion
- Editing of the research paper into a journal article, and submission of it to an academic journal

**Entry to the Major**

**Transfer Students**

Transfer applicants to the Russian Language and Literature major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of Russian and one Russian civilization course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

**Requirements**

**Preparation for the Major**

**Required:** Russian 6 or 20 or equivalent proficiency, one course from 25, 25W, 90A, 90B, or 90BW.

**The Major**


During their senior year, students must also take Slavic 191TA, 191TB, and 191TC in which they complete a capstone senior thesis.

**Honors Program**

The honors program is designed for exceptional departmental majors who wish to complete a research project that culminates in an honors thesis.

The honors program is a three-term sequence (Slavic 198A, 198B, 198C), taken in addition to requirements for the major.

**Policies**

**The Major**

Students may petition to substitute courses after consulting with the undergraduate adviser.

Each major course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

**Honors Program**

**Admission**

The honors program is open to majors with a 3.5 grade-point average in upper-division courses in the major and a 3.0 overall GPA. Students should apply for admission by spring quarter of their junior year. At the time of admission, students must have completed at least two upper-division courses in their major. Prior to admission to the honors program, students must identify a faculty adviser, who must be a regular member of the UCLA faculty; the faculty adviser must commit to mentoring the student for the duration of the program. Students must also write a two-page proposal of the project, to be approved by the faculty adviser and submitted with the application form.

**Requirements**

The courses must be taken during senior year (fall, winter, and spring terms respectively). Students pursuing departmental honors must submit the contract for each course by the end of the tenth week of the previous quarter. The sequence culminates in the submission of a thesis. Students who enroll in the honors program are exempt from taking the standard thesis course sequence (Slavic 191TA, 191TB, 191TC).

The honors thesis is intended to be a substantial piece of original scholarship at least 40 pages in length exclusive of front matter, appendices, and bibliography (25 pages to satisfy the regular capstone senior thesis major requirement). Students are required to use a Slavic, east European, or Eurasian language in their research, with the scope of the language work to be determined in consultation with their faculty adviser. Evaluation of the honors thesis is made by the faculty adviser.

To qualify for graduation with departmental honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.5 or better in upper-division courses required for the major and an overall GPA of 3.0 or better, and (3) complete Slavic 198A, 198B, 198C with grades of B– or better.

To qualify for graduation with departmental highest honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.8 or better in upper-division courses required for the major and an overall GPA of 3.5 or better, and (3) complete Slavic 198A, 198B, 198C with grades of A– or better.

Honors and highest honors are recorded on the final transcript and diploma after students successfully complete the program.

In the event that a student does not complete the departmental honors program or qualify for departmental honors/highest honors, their paper may count toward the regular capstone senior thesis requirement for their major (25 pages minimum to satisfy requirement).

**Russian Studies BA**

The major in Russian Studies is designed for students who wish to complement mastery of the language with an array of courses on Russian history, politics, literature, and culture.

**Capstone Major**

The Russian Studies major is a designated capstone major. Students must complete a capstone seminar and present their final paper in the department annual Undergraduate Research Conference. Students draw on their previously acquired subject matter knowledge and skills to plan a research project and write a substantial academic paper. They also gain experience engaging in scholarly discourse, preparing appropriate media for public presentation, and submitting their work to an academic journal.
Learning Outcomes
The Russian Studies major has the following learning outcomes:

- Incorporation of knowledge acquired to formulate an independent study topic and research project
- Selection and use of original sources in Russian or a related language to prepare a thesis
- Acquisition of skills relating to development of discourse and argument that is clear, reasoned, reflective, informed by evidence, and aimed at deciding what to believe
- Determination of what information should be developed and analyzed
- Completion of conference presentation that includes fielding audience questions
- Mastery of oral communication including interpersonal communication, presentation, and discussion
- Editing of the research paper into a journal article, and submission of it to an academic journal

Entry to the Major
Transfer Students
Transfer applicants to the Russian Studies major must have 90 or more units to complete the following introductory courses prior to admission to UCLA: two years of Russian and one Russian civilization course. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements
Preparation for the Major
Required: Russian 6 or 20 or equivalent proficiency, one course from 25, 25W, 90A, 90B, or 90BW.

The Major

During their senior year, students must also take Slavic 191TA, 191TB, 191TC in which they complete a capstone senior thesis.

Honors Program
The honors program is designed for exceptional departmental majors who wish to complete a research project that culminates in an honors thesis.

The honors program is a three-term sequence (Slavic 198A, 198B, 198C), taken in addition to requirements for the major.

Policies
The Major
Students may petition to substitute courses after consulting with the undergraduate adviser. Each major course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

Honors Program
Admission
The honors program is open to majors with a 3.5 grade-point average in upper-division courses in the major and a 3.0 overall GPA. Students should apply for admission by spring quarter of their junior year. At the time of admission, students must have completed at least two upper-division courses in their major. Prior to admission to the honors program, students must identify a faculty adviser, who must be a regular member of the UCLA faculty; the faculty adviser must commit to mentoring the student for the duration of the program. Students must also write a two-page proposal of the project, to be approved by the faculty adviser and submitted with the application form.

Requirements
The courses must be taken during senior year (fall, winter, and spring terms respectively). Students pursuing departmental honors must submit the contract for each course by the end of the tenth week of the previous quarter. The sequence culminates in the submission of a thesis. Students who enroll in the honors program are exempt from taking the standard thesis course sequence (Slavic 191TA, 191TB, 191TC).

The honors thesis is intended to be a substantial piece of original scholarship at least 40 pages in length exclusive of front matter, appendices, and bibliography (25 pages to satisfy the regular capstone senior thesis major requirement). Students are required to use a Slavic, east European, or Eurasian language in their research, with the scope of the language work to be determined in consultation with their faculty adviser. Evaluation of the honors thesis is made by the faculty adviser.

To qualify for graduation with departmental honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.5 or better in upper-division courses required for the major and an overall GPA of 3.0 or better, and (3) complete Slavic 198A, 198B, 198C with grades of B or better.

To qualify for graduation with departmental highest honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.8 or better in upper-division courses required for the major and an overall GPA of 3.5 or better, and (3) complete Slavic 198A, 198B, 198C with grades of A– or better.

Honors and highest honors are recorded on the final transcript and diploma after students successfully complete the program.

In the event that a student does not complete the departmental honors program or qualify for departmental honors/highest honors, their paper may count toward the regular capstone senior thesis requirement for their major (25 pages minimum to satisfy requirement).

Undergraduate Minors
Central and East European Studies Minor
The Central and East European Studies minor is designed for students who wish to augment their major program of study in the College of Letters and Sciences with exposure to a variety of disciplines pertinent to the study of central and eastern Europe, including language, literature, history, political science, folklore, ethnomusicology, and women’s studies.

Admission
To enter the minor students must be in good academic standing (2.0 minimum grade-point average) and file a petition with the department counselor in 322B Kaplan Hall, 310-825-5856.

The Minor
Required Lower-Division Course (5 units): Central and East European Studies 91 or Slavic 90.

Required Upper-Division Courses (28 to 31 units): (1) One three-quarter introductory central and east European language sequence, or one 12-unit intensive introductory central and east European language course, to be selected from Czech 101A, 101B, 101C, Hungarian 101A, 101B, 101C, Polish 101A, 101B, 101C, Romanian 101A, 101B, 101C, 103, Serbian/Croatian 101A, 101B, 101C, 103, or Ukrainian 101A, 101B, 101C (students who demonstrate sufficient fluency in one of these languages through departmental testing are exempt from this three-course sequence and must replace it with a minimum of 12 units of language courses from item 3); (2) one course dealing directly with the target culture to be selected from Central and East European Studies M120, 125, 126, Czech 155, History 120A through 120D, Polish 152A, 152B, 152C, Romanian 152, Russian CM124G, Serbian/Croatian 154, or Ukrainian 152; (3) 12 units of second-year or higher-level language courses to be selected from Czech 102A, 102B, 102C, 187A through 187M, Hungarian 102A, 102B, 102C, 187A through 187M, Polish 102A, 102B, 102C, 187A through 187M, Romanian 102A, 102B, 102C, 187A through 187M, Serbian/Croatian 102A, 102B, 102C, 187A through 187M, Ukrainian 102A, 102B, 102C, 187A through 187M (187 courses are 2 units each) OR three courses dealing directly with any central and east European culture to be selected from Central and East European Studies M120, 125, 126, Czech 155, History 120A through 120D, Polish 152A, 152B, 152C, Romanian 152, Russian CM124G, Ukrainian 152.

Policies
With approval of the undergraduate adviser, other related upper-division courses may be applied toward the minor.
Russian Language Minor

Admission
To enter the Russian Language minor, students must have an overall grade-point average of 2.0 or better.

The Minor
Required Lower-Division Courses (9 to 17 units): Russian 6 or 20 or equivalent proficiency, one course from 25, 25W, 90A, 90B, or 90BW.
Required Upper-Division Courses (20 to 23 units): Students select one of the following options: (1) Russian 101A, 101B, 101C and two additional Russian language or literature courses; (2) Russian 100A, 100B, 100C and two additional Russian language or literature courses; or (3) five Russian language and literature courses selected from 102A, 102B, 102C, 103A, 103B, 103C, 107A, 107B, 107C, 130A, 130B, 130C, 140A through 140D, with a minimum of three courses in Russian language.

Policies
Students may petition to substitute courses after consulting with the undergraduate adviser.

Russian Literature Minor

Admission
To enter the Russian Literature minor, students must have an overall grade-point average of 2.0 or better.

The Minor
Required Lower-Division Courses (9 to 17 units): Russian 3 or 10 or equivalent proficiency, one course from 25, 25W, 30, 31, 90A, 90B, or 90BW.
Required Upper-Division Courses (20 units): Five courses in Russian-related fields, with a minimum of three courses selected from History M127A through 127D, Political Science 128A, 128B, 156A.

Policies
Students may petition to substitute courses after consulting with the undergraduate adviser. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Russian Studies Minor

Admission
To enter the Russian Studies minor, students must have an overall grade-point average of 2.0 or better.

The Minor
Required Lower-Division Courses (9 to 17 units): Russian 3 or 10 or equivalent proficiency, one course from 25, 25W, 30, 31, 32, 90A, 90B, or 90BW.
Required Upper-Division Courses (20 units): Five courses in Russian-related fields, with a minimum of three courses selected from History M127A through 127D, Political Science 128A, 128B, 156A.

Policies
Students may petition to substitute courses after consulting with the undergraduate adviser. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Major

Slavic, East European, and Eurasian Languages and Cultures MA, CPhil, PhD

The graduate program provides advanced training in Slavic literatures and linguistics leading to the MA and PhD degrees in Slavic, East European, and Eurasian Languages and Cultures. The primary task of the department faculty is to develop and refine the critical and analytic skills of its students in preparation for productive careers in college teaching and research in the Slavic field. Alternative career tracks include language teaching, business, translation, interpreting, librarianship, and government service.

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcement, other publications, and websites of the schools, departments, and programs.

Bulgarian Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101A-101B-101C. Elementary Bulgarian. (5–5–5) Lecture, five hours. Course 101A is recommended preparation for 101B, which is recommended preparation for 101C. Each course may be waived with consent of instructor. Basic courses in Bulgarian language. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Central and East European Studies Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

31. Introduction to Slavic, East European, and Central Asian Cultures through Film. (5) Lecture, three hours; discussion, one hour. Interdisciplinary introduction to diversity of languages and cultures represented in Department of Slavic, East European, and Eurasian Languages and Cultures through medium of film. P/NP or letter grading.
Upper-Division Courses

101A-101B-101C. Introduction to Czech Language (3-3-3) Lecture, five hours. Course 101A is recommended preparation for 101B, which is recommended preparation for 101C. Each course may be waived with consent of instructor. Beginning Czech courses with strong cultural component. P/NP or letter grading.

102A-102B-102C. Advanced Czech. (4-4-4) Lecture, three hours. Recommended preparation: course 101C may be waived with consent of instructor. Course 102A is recommended preparation for 102B, which is recommended preparation for 102C. Each course may be waived with consent of instructor. P/NP or letter grading.


185. Survey of Czech Literature from Middle Ages to Present. (4) Lecture, three hours. Lectures and readings in English. P/NP or letter grading.

187A. Advanced Tutorial Instruction in Czech. (2) Tutorial, one hour; laboratory, one hour. Enforced requisites: course 102C or Czech placement test. Tutorial and guided independent study of advanced Czech: advanced conversation, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

187B-187M. Advanced Tutorial Instruction in Czech. (2 each) Tutorial, one hour; laboratory, one hour. Preparation: prior course in sequence or Czech placement test. Tutorial and guided independent study of advanced Czech: advanced conversation, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit with topic change. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Design as adjunct to upper-division lecture course. In- dividual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

Hungarian

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

19HC. Honors Contracts. (1) Tutorial, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.
89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for credit. Individual contract required. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101A-101B-101C. Elementary Lithuanian. (4-4-4) Lecture, three to four hours. Course 101A is recommended preparation for 101B, which is recommended preparation for 101C. Each course may be waived with consent of instructor. Introduction to grammar; in-depth development of vocabulary and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

102A-102B-102C. Advanced Hungarian. (4-4-4) Lecture, three hours. Recommended preparation: course 102A. Course 102B is recommended for 102C. Each course may be waived with consent of instructor. Tutorial, one hour; laboratory, one hour. Preparation: prior course in sequence or Hungarian placement test. Tutorial and guided independent study of advanced Hungarian: advanced conversational, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

197. Individual Studies in Hungarian. (2 to 4) Tutorial, four hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Approved by permission of major and signed reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Honors Seminars. (1) Seminar, three hours. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminate many paths of discovery at UCLA. P/NP grading.

Upper-Division Courses

101A-101B-101C. Elementary Lithuanian. (4-4-4) Lecture, five hours. Course 101A is recommended preparation for 101B, which is recommended preparation for 101C. Each course may be waived with consent of instructor. Introduction to grammar; in-depth development of vocabulary and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

102A-102B-102C. Advanced Lithuanian. (4-4-4) Lecture, three hours. Recommended preparation: course 101B (may be waived with consent of instructor). Course 102B is recommended for 102C. Each course may be waived with consent of instructor. Tutorial and guided independent study of advanced Lithuanian: advanced conversational, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

199HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Lithuanian

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1) Seminar, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101A-101B-101C. Elementary Polish. (5-5-5) Lecture, five hours. Course 101A is recommended preparation for 101B, which is recommended preparation for 101C. Each course may be waived with consent of instructor. Basic courses in Polish language. P/NP or letter grading.

102A-102B-102C. Advanced Polish. (4-4-4) Lecture, three hours. Recommended preparation: course 101C (may be waived with consent of instructor). Course 102B is recommended preparation for 102C, which is recommended preparation for 102C. Each course may be waived with consent of instructor. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Lithuanian

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1) Seminar, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101A-101B-101C. Elementary Lithuanian. (4-4-4) Lecture, five hours. Course 101A is recommended preparation for 101B, which is recommended preparation for 101C. Each course may be waived with consent of instructor. Introduction to grammar; in-depth development of vocabulary and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

102A-102B-102C. Advanced Lithuanian. (4-4-4) Lecture, three hours. Recommended preparation: course 101B (may be waived with consent of instructor). Course 102B is recommended preparation for 102C. Each course may be waived with consent of instructor. Tutorial and guided independent study of advanced Lithuanian: advanced conversational, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Polish

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.
maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Graduate Course

C280. Variable Topics in Polish Literature. (4) Seminar, three hours. Reading knowledge of Polish recommended but not required. May be repeated for credit with topic change. Concurrently scheduled with course C180. S/U or letter grading.

Romanian

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

90H. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

90. Introduction to Romanian Civilization. (4) Lecture, three hours. Introductory survey of social and cultural institutions of Romanian people and their historical background. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101A-101B-101C. Elementary Romanian. (5–5–5) Lecture, five hours. Course 101A is recommended preparation for 101B, which is recommended preparation for 102C. Each course may be waived with consent of instructor. Basic courses in Romanian language, P/NP or letter grading.

102A-102B-102C. Advanced Romanian. (5–5–5) Lecture, five hours. Recommended preparation: course 101C (may be waived with consent of instructor). Course 102A is recommended preparation for 102B, which is recommended preparation for 102C. Each course may be waived with consent of instructor. Differences between oral and written discourse, expansion of students' general and academic vocabulary, and increase of range of grammatical structures for use in speaking and writing. Cultural information to be included in readings. P/NP or letter grading.


152. Survey of Romanian Literature. (4) Lecture, three hours. Lectures and readings in English. Survey of Romanian literature from Middle Ages to present. P/NP or letter grading.

187A. Advanced Tutorial Instruction in Romanian. (2) Tutorial, one hour; laboratory, one hour. Enforced requisite: course 102C or Romanian placement test. Tutorial and guided independent study of advanced Romanian: advanced conversation, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

187B-187M. Advanced Tutorial Instruction in Roman-ian. (2 each) Tutorial, one hour; laboratory, one hour. Preparation: prior course in sequence or Romanian placement test. Tutorial and guided independent study of Advanced Romanian: advanced conversation, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

Russian

Lower-Division Courses

1. Elementary Russian. (5) Recitation, five hours; lab-oratory, one hour. P/NP or letter grading.

2. Elementary Russian. (5) Lecture, five hours; lab-oratory, one hour. Requisite: course 1 or Russian placement test. P/NP or letter grading.

3. Elementary Russian Recitation. (5) Lecture, five hours; laborato-ry, one hour. Requisite: course 2 or Russian place-ment test. P/NP or letter grading.

4. Intermediate Russian. (5) Lecture, five hours; labora-tory, one hour. Requisite: course 3 or Russian place-ment test. P/NP or letter grading.

5. Intermediate Russian. (5) Lecture, five hours; labora-tory, one hour. Requisite: course 4 or Russian place-ment test. P/NP or letter grading.


10. Intensive Elementary Russian. (12) Lecture, 19 hours. Intensive basic course in Russian language equivalent to courses 1, 2, 3, 5-5-5. P/NP or letter grading.

15A-15B. Accelerated Elementary Russian. (8–7) Recitation, five hours; laboratory, two hours. Material of first-year Russian course to be covered in two terms, with extensive use of language laboratory and the Russian Room. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

90A. Introduction to Russian Civilization. (5) Lecture, three hours; discussion, one hour. Introduction to Russian culture and society from earliest times to 1917. P/NP or letter grading.

90B. Russian Civilization in 20th Century. (5) Lecture, three hours; discussion, one hour. Not open for credit to students with credit for course 90BW. Survey of literature, theater, cinema, television, press, music, and arts. Emphasis on contemporary period, with constant reference to Russian and early Soviet antecedents. P/NP or letter grading.

90BW. Russian Civilization in 20th Century. (5) Lecture, three hours; discussion, one hour. Not open for credit to students with credit for course 90BW. Survey of literature, theater, cinema, television, press, music, and arts. Emphasis on contemporary period, with constant reference to Russian and early Soviet antecedents. Weekly discussions focus on varied approaches to writing addressing class topics. Five short papers required. Satisfies Writing II requirement. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100A-100B-100C. Literacy in Russian. (4–4–4) Lecture, three hours. Course 100A or Russian placement test is enforced requisite to 100B or 100C. Russian placement test is enforced requisite to 100C. For students who speak Russian but have difficulty reading and writing. Focus on improving reading and
writing skills, increasing vocabulary, and developing speaking skills required for academic discourse. P/NP or letter grading.

110A-101B-101C. Third-Year Russian, (5-5-5) Lecture, three hours; discussion, two hours. Enforced requisites: course 6 or Russian placement test. Course 101A or Russian placement test is enforced requisite to 101B; course 101B or Russian placement test is enforced requisite to 101C. Advanced grammar, reading, and conversation, with strong multimedia component. P/NP or letter grading.

102A-102B-102C. Topics in Advanced/Superior Russian. (4-4-4) Lecture, three hours. Enforced requisites: course 101B or Russian placement test. Course 102A or Russian placement test is enforced requisite to 102B; course 102B or Russian placement test is enforced requisite to 102C. Discussion and composition, with emphasis on vocabulary development and review of selected grammar topics. Readings in fiction and nonfiction, films, and videos, and use of Internet. Each course may be taken independently and may be repeated for credit. P/NP or letter grading.

103A-103B-103C. Russian for Native and Near-Native Speakers. (4-4-4) Lecture, three hours. Course 103A is not required to 103B, which is not required to 103C. Improvement of oral and written language skills, emphasis on correct and diversified use of language and addressing individual grammatical difficulties. May be repeated for credit with topic and/or instructor change. P/NP or letter grading.

103A, Russian International Identity. Readings in literature, philosophy, criticism, film. 103B, Literature and Film. Film adaptations of Russian literature. Readings and screenings. 103C, Special Topics.

107A-107B-107C. Russian for Social and Cultural Studies. (4-4-4) Lecture, three hours. Recommended preparation: third-year Russian. Lectures and readings in Russian. Exploration of texts and media in social science and culture, with emphasis on stress, conversation, and Internet. Each course may be taken independently and may be repeated for credit. P/NP or letter grading.

106. Russian for Business: Language and Culture. (4) Lecture, three hours. Discussion of economics and business in Russia, language of advertising, business and official correspondence. P/NP or letter grading.


111A-111B-111C. Russian Flagship Program Abroad: Superior Russian. (5-5-5) Lecture, three hours. Enforced requisite: course 110 or equivalent coursework as determined by department. Course 111A is enforced requisite to 111B, which is enforced requisite to 111C. Designed for students with advanced proficiency. Development of skills in Russian phonetics, conversation, and grammar. Acquisition of advanced syntactical structures and expansion of lexicon is on formal and interpersonal and presentational modes. Letter grading.

112A-112B-112C. Russian Flagship Program Abroad: Russian Language and Culture. (4-4-4) Lecture, three hours. Enforced requisite: course 110 or equivalent coursework as determined by department. Course 112A is enforced requisite to 112B, which is enforced requisite to 112C. Taught in Russian. Critical reading, analysis, and discussion of Russian literature, with emphasis on Russian cultural and intellectual norms. Readings and essays, with emphasis on formal and academic writing. Letter grading.

113A-113B-113C. Russian Flagship Program Abroad: Professional and Academic Russian and Experiential Learning. (5-5-5) Lecture, three hours. Internship or equivalent coursework as determined by department. Course 113A is enforced requisite to 113B, which is enforced requisite to 113C. Taught in Russian. Use of discourse practices (speaking, listening, reading, and writing) to participate effectively in discussions of professional topics and situations outside of course. Opportunity to communicate in Russian in authentic contexts by participating in courses with local students, providing service to community, or interning in one business. Letter grading.

M118. History of Russian, Origins to Rise of Muscovy. (4) Same as History M127A. Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Kievan Russia and its culture, Appanage principalities and towns; Mongol invasion; unification of Russian state by Muscovy, Autocracy and its Servitors; sefdom; P/NP or letter grading.

119. Golden Age and Great Realists. (4) Lecture, three hours. Designed for juniors/seniors. Russian majors are advised to take this course in their sophomore year. Lectures and readings in English. Survey of 19th-century Russian literature. P/NP or letter grading.

120. Literature and Revolution. (4) Lecture, three hours. Designed for juniors/seniors. Russian majors are advised to take this course in their sophomore year. Lectures and readings in English. Major works of the 20th century (Belyi, Pasternak, Bulgakov, Solzhenitsyn, and others) from prerevolutionary avant-garde to the present. P/NP or letter grading.

121. Russian Pop Culture. (5) Lecture, three hours. Designed for juniors/seniors. Lectures and readings in English. Overview of Russian popular culture today, with examination of status of Russia’s classical traditions for artists and audiences working in modern Russia. Death of one tradition and attempts at creation of another lead away from written word into neighboring forms of expression, primarily visual. Consideration of battles of modern storytelling with cinema, television, animation, music videos, and Internet. Letter grading.

122. Siberia. (5) Lecture, three hours. Introductory survey in which current cultural and ecological issues are situated in their geographical and historical background, including analysis of Siberian human geography before first contact with European colonizers and continuing interaction and competition among different cultural groups. Reading in English of selection of literary works by well-known 20th-century Siberian writers whose texts serve as locus for closer examination of Siberian literature and icon and ecological network within which it exists. Letter grading.


124D. Studies in Russian Literature: Dostoevsky. (4) Lecture, three hours. Lectures and readings in English. In-depth reading of major fictional works such as Crime and Punishment, Notes from the Underground, and The Brothers Karamazov. Concurrently scheduled with course C224D. P/NP or letter grading.

124M124G. Studies in Russian Literature: Gogol. (Formerly numbered C124G.) (Same as Ukrainian CM124G.) Lecture, three hours. Lectures and readings in English. Major Russian plays and living tradition of performance from classical to avant-garde. P/NP or letter grading.

M127. Women in Russian Literature. (4) Same as Gender Studies M127. Lecture, three hours. Designed for juniors/seniors. Lectures and readings in English. Introduction to alternative tradition of women’s writings in Russia and Soviet Union. Emphasis on images of women’s experiences and expressions as compared with those found in works of contemporary male writers. P/NP or letter grading.

128. Russian Science Fiction. (4) Lecture, three hours. Readings in English. Introduction to Russian science fiction from the 20th century (DoAndroids Dream of Electric Sheep as compared with those found in works of contemporary male writers. P/NP or letter grading.

129. Animation and Music Video. (5) Lecture, three hours; discussion, one hour. Designed for juniors/seniors. Lectures and readings in English. Humanities have recently passed through so-called visual turn: traditional emphases on language(s) in field have been reconsidered in light of society’s increasing visual workings. New attitude toward our own changing culture (i.e., toward its future) has equal value if applied retrospectively to multiple cultures of one eras/time empire. In territory where many tongues or traditions needed to be ironed out, visual often plays special role in social cohesion. Because of past politics and today’s profit-driven events, small fickle forms of visual narratives remain. Designed to enhance much better than ponderous grandeur of feature-length cinema. Letter grading.

130A-130B-130C. Russian Poetry. (4-4-4) Lecture, three hours. Preparation: third-year Russian recommended. Lectures and readings in Russian. May be repeated for credit with topic and/or instructor change. 130A. Introduction to Analysis of Russian Poetic Form. Role of biography, politics, history, and form in interpreting poetic texts. 130B, Poetry of Russian Neoclassicism, Romanticism, and Realism. Major works of late 18th and 19th centuries in their historical and cultural contexts. 130C, Russian Poetry in the 20th Century. Major poetic schools from early modernism (symbolism, futurism, acmeism) to contemporary avant-garde.

131. History of Russian Cinema. (4) Lecture, three hours. Overview of most prolific nation in world’s largest nation to show how cinema struggled under incepted capitalism in Russia, how moviemaking on other side of world departed from path marked out by Hollywood and London, how films operate as form of nationalism, how characters, relationship between word and image in those acts of persuasion, how even frightening dogma cannot escape importance of audience. 131A. History of Russian Cinema. (4) Lecture, three hours. Preparation: third-year Russian recommended. Lectures and readings in English. History of Russian cinema, from prerevolutionary era to the present, and cultural contexts.

M132. Comparative Media Studies. (4) Same as Comparative Literature M132.) Lecture, three hours. History, form, and function of various media. Grounded in political and commercial experience of western Europe, comparative investigation of media technologies, today’s burgeoning markets, and yes-
terday's tragic abuses. Development of media form(s) and content across various times, places, and cultures, with special attention to Slavic phenomena. Letter grading.

140A-140D. Russian Prose Fiction. (4 each) Lecture, three hours. Preparation: third-year Russian recommended. Lectures and readings in Russian. May be repeated for credit with topic and/or instructor change. Reading and analysis of Russian Narrative Prose. Close analysis of genre, narrative, and rhetorical strategies and interplay of literature, history, and culture. 140B. Russian Romantic Prose. Karamzin, Pushkin, Gogol, and others. 140C. Great Realists, Dostoevsky, Tolstoy, and others. 140D. 20th-Century Modernism.


187A. Advanced Tutorial Instruction in Russian. (2) Tutorial, one hour; laboratory one hour. Enforced prereq: course 102C or Russian placement test. Tutorial and guided independent study of advanced Russian: advanced conversation, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

187B-187M. Advanced Tutorial Instruction in Russian. (2) Each tutorial, one hour; laboratory, one hour. Preparation: prerequisite: sequence or Russian placement test. Tutorial and guided independent study of advanced Russian: advanced conversation, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191. Variable Topics Research Seminars: Russian Literature. (4) Seminar, three hours. Requisite: course 6. Reading and discussion of selected authors; culminating seminar paper required. May be repeated for credit with topic and/or instructor change. P/NP or letter grading.

Graduate Courses

201A-201B-201C. Russian: Vocabulary, Pronunciation, Style. (4-4-4) Lecture, three hours. Requisite: course 129B or Russian, Reading, and analysis of texts with focus on vocabulary, pronunciation, and style, respectively, in three consecutive terms. S/U or letter grading.


211A. Literature of Medieval Rus'. (4) Lecture, three hours. Required for MA (literature). Survey of the literature from its beginning through the Kievan and Muscovite periods up to.


212B. 19th-Century Russian Literature: Age of Realism. (4) Lecture, three hours. Required for MA (literature). Survey devoted to emergence of critical and psychological realism, beginning with early works of Turgenev, Goncharov, and Dostoevsky, moving to major novels of Tolstoy, Dostoevsky, and Saltykov-Shchedrin, and concluding with works of the presym- bolist period, especially short stories of Chekhov. S/U or letter grading.

213A. 20th-Century Russian Literature, 1890 to 1920. (4) Lecture, three hours. Required for MA (literature). Lectures and readings in major literary trends of modernist period, such as decadence, symbolism, futurism, acmeism, and ornamental school. Analysis of representative works such as Bely, Khelebnikov, Pasternak, Platonov, and others. S/U or letter grading.


214. Contemporary Russian Literature. (4) Lecture, three hours. Requisites: courses 213A, 213B. Re- quired for PhD (literature). Close readings in selected texts of contemporary Russian poetry and drama, with attention to metrics, stanza forms, rhyme, and development of various verse types from the 18th into the 20th century.

217. Studies in Russian Literature: Nabokov. (4) Lecture, three hours. Lectures and readings in English. Russian novelist (The Gift), American novelist (Lolita), autobiographer (Speak Memory), and critic. Concurrently scheduled with course C124N. S/U or letter grading.

218. Seminar: 19th-Century Russian Literature. (4) Seminar, three hours. Requisites: courses 212A, 212B. Selected authors and works from 19th-century poetry, prose, and drama. May be repeated for credit with consent of instructor and graduate advisor.

219. Seminar: 20th-Century Russian Literature. (4) Seminar, three hours. Requisite: course 213A. Selected authors and works from 20th-century poetry, prose, and drama. May be repeated for credit with consent of instructor and graduate advisor. S/U or letter grading.

221. Seminar: Russian Literary Criticism. (4) Seminar, three hours. Requisites: courses 211B, 212A, 212B, 213A. Detailed study of specific school of literary criticism, single literary critic, or period in Russian literary history as reflected in literary criticism. Si- multaneous or similar phenomena in literary criticism in West. May be repeated for credit with consent of in- structor and graduate advisor. S/U or letter grading.

226. Seminar: History of Russian Culture. (4) Discus- sion, three hours. Reading and discussion on selected topics in history of Russian culture.

Serbian/Croatian

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (3) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu- dents. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. De- signed as adjunct to upper-division lecture course. Indi- vidual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (su- pervised research or other scholarly work), three hours per week per unit. Enrolled research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; contact Undergraduate Research Center. May be repeated. P/NP grading.
Upper-Division Courses

101A-101B-101C. Elementary Serbian/Croatian. (5–5) Lecture, five hours. Course 101A is recommended preparation for 101B, which is recommended preparation for 101C. Course may be waived with consent of instructor. Basic courses in Serbian/Croatian. P/NP or letter grading.

102A-102B. Advanced Serbian/Croatian. (4–4) Lecture, three hours. Recommended preparation: course 101A (may be waived with consent of instructor). Course 102A is recommended preparation for 102B, which is recommended preparation for 102C. Each course may be waived with consent of instructor. P/NP or letter grading.


154. South Slavic Literature. (4) Lecture, three hours. Lectures and readings in English. Survey of South Slavic literature from Middle Ages to the present. P/NP or letter grading.

187A. Advanced Tutorial Instruction in Serbian/Croatian. (1) Tutorial, one hour; laboratory, one hour. Enforced prerequisite: course 102C or Serbian/Croatian placement test. Tutorial and guided independent study of advanced Serbian/Croatian: advanced conversational, vocabulary development, review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

187B-187M. Advanced Tutorial Instruction in Serbian/Croatian. (2) Each Tutorial, one hour; laboratory, one hour. Preparation: prior course in sequence or Serbian/Croatian placement test. Tutorial and guided independent study of advanced Serbian/Croatian: advanced conversational, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to seniors. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

190. Introduction to Slavic Civilization. (5) Lecture, three hours; discussion, one hour. Introductory survey of social and cultural institutions of Slavic peoples and their historical background. P/NP or letter grading.

199. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

CM114. Teaching and Learning of Heritage Languages. (4) Same as Asian CM124 and Near Eastern Languages CM114.) Lecture, three hours. Consideration of issues relevant to heritage language learners (HLL) and to heritage language (HL) instruction. Readings and discussion on such topics as definitions of HLL and HL, classroom and sociolinguistic context, evaluation of instructional materials; historical, sociolinguistic, and sociocultural profile of HLLs, particularly HL groups most represented among UCLA students; institutional and instructor attitudes toward HLLs; impact of modern technology and expectations on HL curriculum and teaching approaches; similarities and differences between HLs and foreign language learners (FLs) regarding teaching methods and materials, diagnostic testing and needs analysis; use of oral/aural proficiency as springboard for literacy instruction; optimization of instruction of mixed HL and FL classes. Action research component included. Concurrently scheduled with course CM214. P/NP or letter grading.

188A. Introduction to Eurasia. (2) Lecture, 90 minutes. Experimental or temporary courses in East Euro- pean and Eurasian studies, such as those taught by resident or visiting faculty. May be repeated for credit with topic change. P/NP or letter grading.

188B. Languages of Eastern Europe and Eurasia. (2) Lecture or tutorial, 90 minutes. Program-sponsored experimental or temporary courses, such as those taught by resident or visiting faculty. May be repeated for credit with change in language or language level. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191A. Senior Capstone Thesis in Slavic Languages and Literatures. (2) Seminar, three hours. Limited to senior departmental majors. Planning and completion of senior capstone thesis. Introduction to research methodologies and presentation of subject, student's target language for research required. Verbal and written presentations required. Letter grading.

191TB-191TC. Senior Capstone Thesis in Slavic Languages and Literatures. (2-4) Seminar, three hours. Course 191TA is enforced requisite to 191TB, which is enforced requisite to 191TC. Limited to senior departmental majors. Editing and completion of senior capstone thesis. Use of student target language for research required. Letter grading.

191TC. Honors Research in Slavic, East European, and Eurasian Languages and Literatures. (4) Tutorial, three hours. Limited to senior departmental honors program students. Development of research bibliography and survey of literature in field of Slavic, East European, and Eurasian languages and cultures. Topics chosen through consultation with faculty mentor. Students meet regularly with faculty adviser to review progress and discuss research. Individual contract required. Letter grading.

198A. Honors Research in Slavic, East European, and Eurasian Languages and Literatures. (4) Tutorial, three hours. Limited to senior departmental honors program students. Completion of honors thesis in field of Slavic, East European, and Eurasian languages and cultures. Topics chosen through consultation with faculty mentor. Students meet regularly with faculty adviser to review progress and discuss research. Individual contract required. Letter grading.

198B. Honors Research in Slavic, East European, and Eurasian Languages and Literatures. (4) Tutorial, three hours. Enforced requisite: course 198A. Limited to senior departmental honors program students. Development of research bibliography and survey of literature in field of Slavic, East European, and Eurasian languages and cultures. Topics chosen through consultation with faculty mentor. Students meet regularly with faculty adviser to review research, discuss drafts of thesis chapters, and write research. Individual contract required. Letter grading.

Graduate Courses

200A. Literary Proseminar. (4) Seminar, three hours. Required for MA (literature). Designed to prepare in-coming graduate students for scholarly work by intro-ducing them to resources (departmental, intramural, and extramural), methodologies, and techniques for analysis of literary materials and cultural studies. Letter grading.


CM214. Teaching and Learning of Heritage Lan-guages. (4) Seminar, three hours. Consider-ation of issues relevant to heritage language learners (HLLs) and to heritage language (HHL) instruction. Readings and discussion on such topics as definitions of HLLs and HHLs; linguistic, demographic, sociolinguistic, and sociocultural profile of HLLs, particularly HLL groups most represented among UCLA students; institutional and instructor attitudes toward HHLs; im-pact of student motivation and expectations on HL curriculum and teaching approaches; similarities and differences between HLLs and foreign language learners (FLLs); comparing teaching methods among-nerals; diagnostic testing and needs analysis; use of oral/aural proficiency as springboard for literacy in-struction; optimization of instruction of mixed HL and FL classes; Action research components included. Concurrently scheduled with course CM114. S/U or letter grading.

M229. Introduction to Slavic Bibliography. (2) (Same as Information Studies M229C.) Introduction to Slavic and East European bibliography for the humanities and social sciences. Emphasis to be determined by requirements and background of enrolled students. Topics include relevant library terminology and con-cepts; survey of languages and translation systems; acquisition of Slavic and East European library materials; Slavic and East European scholarship in the West; relevant reference sources, archival resources, and research materials of the Conference on Central Europe; compilation of bibliographies. S/U grading.


281. Seminar: Slavic Linguistics. (4) Seminar, three hours. Selected topics in comparative and historical Slavic linguistics. May be repeated for credit with con-sent of instructor and graduate adviser.

375. Teaching Apprentice Practicum. (1 to 4) Semi-nar, to be arranged. Preparation: apprentice person-sonnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guid-ance and supervision of faculty member respon-sible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Teaching Slavic Languages at College Level. (4) Seminar, 90 minutes; discussion, 90 minutes. De-signed for graduate students. Theory and practice of language teaching. Discussion of contemporary lan-guage teaching methodology as well as problems of pedagogical grammar. S/U grading.

596. Directed Individual Study or Research. (2 to 6) Tutorial, to be arranged. S/U grading.

597. Preparation for MA Comprehensive Examina-tion or PhD Qualifying Examinations. (2 to 8) Tuto-rial, to be arranged. S/U grading.


Ukrainian

Lower-Division Courses

19. Flat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu-dents. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. De-signed as adjunct to upper-division lecture course. In-dividual study with lecture course instructor to explore topics in greater depth through supplemental read-ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re-quired. Honors content noted on transcript. Letter grading.

187A. Advanced Tutorial Instruction in Ukrainian. (2 each) Tutorial, one hour; laboratory, one hour. Preparation: prior course in sequence or Ukrainian placement test. Tutorial and guided inde-pendent study of advanced Ukrainian: advanced con-versation, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

187A-187M. Advanced Tutorial Instruction in Ukrainian. (2) Tutorial, one hour; laboratory, one hour. Preparation: prior course in sequence or Ukrainian placement test. Tutorial and guided independent study of advanced Ukrainian: advanced conversation, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu-dents. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. De-signed as adjunct to upper-division lecture course. In-dividual study with lecture course instructor to explore topics in greater depth through supplemental read-in-gs, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re-quired. Honors content noted on transcript. Letter grading.

Upper-Division Courses

101A-101B-101C. Elementary Ukrainian. (5—5—5) Lecture, five hours. Course 101A is recommended preparation for 101B, which is recommended prepara-tion for 101C. Each course may be waived with con-sent of instructor and graduate adviser. 101B. Advanced Ukrainian. (4—4—4) Lecture, three hours. Recommended preparation: course 101C (may be waived with consent of instructor). Course 101B is recommended preparation for 102B, which is recommended preparation for 102C. Each course may be waived with consent of instructor. De-velopment of advanced reading, writing, and editing skills. P/NP or letter grading.


152. Ukrainian Literature. (4) Lecture, three hours. Lectures and readings in English. Survey of writers, lit-erary trends, and issues in Ukrainian literature from the late 18th century to the present. Special attention to works of such major figures as Koltayevsky, Shevchenko, Franko, Ukrainka, and Tychyna.

C180. Variable Topics in Ukrainian Literature. (4) Seminar, three hours. Reading knowledge of Ukrainian recommended but not required. Topics include major writers, genres, or periods. May be repeated for credit with topic change. Concurrently scheduled with course C280. P/NP or letter grading.

187A. Advanced Tutorial Instruction in Ukrainian. (2) Tutorial, one hour; laboratory, one hour. Preparation: two years of Ukrainian and/or Ukrainian place-ment test. Tutorial and guided independent study of advanced Ukrainian: advanced conversation, compo-sition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

187A-187M. Advanced Tutorial Instruction in Ukrainian. (2 each) Tutorial, one hour; laboratory, one hour. Preparation: prior course in sequence or Ukrainian placement test. Tutorial and guided inde-pendent study of advanced Ukrainian: advanced con-versation, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

SOCIAL SCIENCE

Interdepartmental Program
College of Letters and Science
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Los Angeles, CA 90095-7174

Social Science
310-825-3565
Juliet A. Williams, PhD, Chair

Faculty Committee
Andrew Apter, PhD (Anthropology, History)
Robin L.H. Derby, PhD (History)
Kelly A. Kay, PhD (Geography)
Tamar Kremer-Sadlik, PhD (Anthropology)
Overview
The Division of Social Sciences is home to leading researchers working to advance understanding of human societies around the globe. With over 250 faculty members housed in more than 15 departments and programs, the division encourages students to explore diverse perspectives and approaches to the study of social life.

The Social Science Interdepartmental Program offers the Master of Social Science (MSS) self-supporting degree. Drawing from current theories, methods, and professional practices from across the social sciences, students develop proficiency with quantitative and qualitative research methods used to address complex social problems. The intensive one-year curriculum emphasizes creative problem-solving and collaborative research practices. Graduates will be prepared for academic and professional careers.

Graduate Major

Master of Social Science Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Social Science Lower-Division Courses

19. Flat Lux Freshman Seminars. (1 Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2 Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

110A. Social Science in Context: Perspectives and Methods in Study of Culture and Society. (4 Lecture, three hours. Introduction to social science perspectives and methods for study of culture and society through combination of theoretical discussions and practical exercises. Students gain understanding of interaction of persons, societies, cultures, environ-ments, and time. Examination of relationships between language, culture, and society to gain insights into processes of social reproduction of identities, power relations, and inequality. Students are exposed to working parts of social research: ethics of studying people and communities, gathering and analyzing of data (e.g., observations, interviews, and surveys), and interpretation and presentation of findings. Students gain informed critical awareness and attitudes towards just society, intercultural understanding, informal and active citizenship, ethical research practices, and lifelong learning. Letter grading.

110B. Social Science in Context: Understanding New Zealand from Colonialism to Neoliberalism. (4 Lecture, eight hours (four weeks). Offered as part of summer UCLA Travel Study Program to New Zealand. Examination of New Zealand's history, culture, and society. Focus on historical events and social processes as well as axes of difference such as ethnicity and class and ways in which they have shaped and continue to influence cultural, political, social structures, and norms and values in New Zealand. Students learn to employ social science theories and concepts to gain deeper understanding of issues New Zealand faces. Through readings, class discussions, field trips, which provide valuable firsthand experiences, local guest speakers, and unique opportunity of exploring forces that shape society and culture in context of one of most celebrated democracies in world, students gain greater insight into social and political relations and events elsewhere in world, including U.S. Letter grading.

188. Academic Innovation in Industry. (1 Lecture, one hour (for workshops, for apprentices), to be arranged. Preparation: apprentice per semester. Overview and training in strategies for evaluating research evidence, and for selecting and synthesizing results of studies that adopt different research methodologies. Descriptive statistics, inferential statistics, probability, statistical tests, correlation, and causation, and regression analysis. The intensive one-year curriculum emphasizes creative problem-solving and collaborative research practices. Graduates will be prepared for academic and professional careers.

Graduate Courses

M240. Data and Society. (4) (Same as Digital Humanities M221.) Seminar, three hours. Introduction to way data and computing technologies increasingly play pivotal role in shaping society. Through students pose critical questions about social impact of data, while also gaining literacy in engaging digital and data tools. Students learn to recognize historically and institutionally produced biases in science and research design is encouraged with how to work with data for social justice aims. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4 Seminar, to be arranged. Preparation: apprentice personnel (associate, colleague, or fellow). Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated. P/NP grading.

400A-400B. Social Science Research and Perspectives. (4–4 Seminar, three hours. Exploration of contribution of social science research to addressing complex social problems, and place and purpose of scholarly inquiry. Development of essential research, writing, and analytic skills. Letter grading.

401. Qualitative Social Science Research Methods. (4 Seminar, three hours. Introduction to range of qualitative approaches to social science research and analysis through combination of theoretical discussions and practical experience. Examination of practical and epistemological issues in qualitative research in workshop format. Covers practical workings of qualitative research: gathering data through interviews, focus groups, observation, questionnaires, and archival research; strategies for recording, coding, and analyzing qualitative data; and evaluating and presenting qualitative research. Prepares students to undertake research using qualitative methods through collaborative class research project. Letter grading.

402. Qualitative Data Analysis in Social Science. (4) Lecture, two and one half hours; discussion, one hour. Introduction to fundamentals of data analysis and statistics, focusing on application of statistical methods in social problems research. Students develop skills and strategies for evaluating research evidence, and for selecting and synthesizing results of studies that adopt different research methodologies. Descriptive statistics, inferential statistics, probability, statistical tests, correlation, and causation, and regression analysis. The intensive one-year curriculum emphasizes creative problem-solving and collaborative research practices. Graduates will be prepared for academic and professional careers.

403. Quantitative Evidence and Analysis in Social Science. (4 Seminar, three hours; laboratory, one hour. Introduction to research methods. Data collection; data quality; data tabulation; and statistical analyses. Students develop skills and strategies for evaluating research evidence, and for selecting and synthesizing results of studies that adopt different research methodologies. Descriptive statistics, inferential statistics, probability, statistical tests, correlation, and causation, and regression analysis. The intensive one-year curriculum emphasizes creative problem-solving and collaborative research practices. Graduates will be prepared for academic and professional careers.

404. Research Design in Social Science. (4) Lecture, three hours. Introduction to main components of research projects, focusing on research questions, theoretical frameworks, and methodology. Research design. Students design feasible research plan for individual project. Students identify research methodology to address research question; identify existing data for original analysis; compare theoretical frameworks for social scientific analysis of data; assess relevant evidence and literature; and explore approaches to data analysis. Students submit assignments, and complete research proposal. Letter grading.

410. Engaged Social Science. (4) Seminar, three hours. Exploration of theory and practice of engaged social science following its historical development from policy studies and related fields to more activist modalities of critique and intervention. Drawing on classic and contemporary studies in sociology, anthropology, political science, environmental studies, and social justice, to engage students in larger debates about politics of knowledge in relation to issues such as poverty, racism, public health, refugees, gang culture, gender hierarchies, public education, and citizenship. Letter grading.

419. Data Analysis. (4) Lecture, three hours. Workshop in which students develop research and analysis skills related to establishing and executing data analysis plan. Students engage in intensive peer-review process, working collaboratively in small groups. Students receive detailed feedback from instructor, teaching assistants, and faculty readers, and are expected to routinely revise their work. Students refine their presentation skills and prepare three- to five-minute presentation. Letter grading.

420. Research Design and Analysis. (4) Seminar, three hours. Guided completion of major research paper (MRP). Students receive detailed feedback from instructor, revise literature review, finalize analysis, tighten rhetoric, and improve organization of manuscript to transform it into final research paper. Letter grading.

430. Community-Based Research. (4) Lecture, three hours; fieldwork, two hours. Study of principles, ethics, and methods of community-based research (CBR), and place and purpose of community inquiry. Working in teams, students conduct small-scale research projects in collaboration with local community organizations. Teams work closely with instructors and organization agents on all aspects of research design,
execution, and data analysis. Students apply quantitative and qualitative research methods acquired in courses 401 and 402 to research projects. Attendance at research site meetings, team meetings, and weekly on-campus class meetings required. Each team produces and submits final research report to community partner by end of quarter. Letter grading.

430A. Community-Based Research, Part 1. (4) Lecture, three hours; fieldwork, two hours. Part 1 of 2-part series. Students learn principles, ethics, and methods of community-based research (CBR), and place and purpose of scholarly inquiry. Working in teams, students conduct small-scale research projects in collaboration with local community organizations. Research projects are selected in consultation with instructor and community organization to be completed within quarter. Teams work closely with instructors and organization agents on all aspects of research. Teams develop research design, data collection methods and protocols, recruit participants, and engage in data collection. Students apply quantitative and qualitative research methods skills acquired in courses 401 and 402 to their research projects. Students are expected to attend meetings at research sites, team meetings, and weekly class meetings on campus. Letter grading.

430B. Community-Based Research, Part 2. (4) Lecture, three hours; fieldwork, two hours. Part 2 of 2-part series. Focus on data analysis and writing of final report. Working in teams, students develop data analysis plan, identify units of analysis, develop coding scheme, determine statistical inquiries, and conduct data analysis (including statistical analyses of quantitative data and coding of qualitative data) and interpretation of results. Work is divided fairly among team members with each team member contributing based on their skills and talents. Teams work closely with instructors and organization agents on all aspects of research and write-up. Students are expected to attend all meetings at research sites, team meetings, and weekly class meetings on campus. Each team produces and submits final research report to instructor and community partner. Letter grading.

Undergraduate Minor

Social Thought Minor
Admission
The Social Thought minor is limited to students who formally apply and are admitted. To apply, students must meet with the academic adviser, and submit an application, a letter of recommendation from a faculty mentor, and an application essay to the College Academic Counseling Office, A316 Murphy Hall. For more information, see the minor website.

To enter the minor, students must have an overall grade-point average of 2.0 or better and apply for admission only after successfully completing the following lower-division requirements: Clusters 21A and 21B, or two courses from German 56, Honors Collegium 20, 21W, 55, 57, 83W, Philosophy 6, Political Science 10, Sociology 10.

The Minor

Policies
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. No more than two courses (8 to 10 units) may be applied toward both this minor and a major or minor in another department or program. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Social Thought
Lower-Division Courses
189. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

88H. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

88HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses
189A. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

200A-200B. Research Colloquia in Social Thought I, II. (2–2) Seminar, two hours. Corequisite for course 190A; course 190A; course 199B. Limited to juniors/seniors. Required of students in Social Thought minor. Designed to bring together students undertaking supervised senior thesis work in seminar setting with one or more faculty members to discuss their work or related work in Social Thought minor. Led by one supervising faculty member. Course 190A may be repeated for credit. P/NP grading.

199A-199B. Directed Research or Senior Thesis in Social Thought I, II. (4–4) Tutorial, to be arranged. Corequisite for course 190A; course 190A; for 199B: course 190B. Limited to juniors/seniors. Required of students in Social Thought minor. Supervised indi-
Adjoint Assistant Professors
Khush E. Cooper, MSW, PhD
Ayako Miyashita Ochoa, JD

Fieldwork Consultants
Laura Alongi, LCSW
Larthia R. Dunham, MSW
Woo K. (Toby) Hur, MSW
Tranishia L. James, LCSW
Hector R. Palencia, LCSW
Michelle Talley, MSW

Overview
The primary objectives of the Department of Social Welfare graduate program are to prepare leaders for the profession of social work and to develop the empirical base for all facets of practice. In response to changing demographic trends and the emergence of new social problems, the department provides leadership in the areas of policy, practice, and research and in the development of an innovative curriculum for training students and professionals to meet the service needs of a multicultural clientele.

The educational program is based on the premise that all students need to acquire a common body of knowledge and basic skills, and a common understanding of the philosophy and values of the profession. These then form a sound foundation for the development of more specialized knowledge and skills along the lines of each student’s interests and the needs of the field.

Students are encouraged to take advantage of the resources within UCLA by selecting elective courses in related disciplines. In addition, as a department within the Luskin School of Public Affairs, the program affords students instructional opportunities in the other affiliated departments—Public Policy and Urban Planning.

Beyond national opportunities in the profession of social work, there is increasing demand for qualified and experienced social workers to serve in the international field, where many social service programs are conducted under the auspices of the United Nations, the U.S. government, and national sectarian organizations. Graduates of the doctoral program generally secure appointments at major universities or research centers.

The challenge to the department, the profession, and those who join us as students is to prepare to forge the paths, build the bridges, and shape the future to ensure that all individuals, families, and communities enjoy better education, better health care, better job training, and better economic futures.

Graduate Majors

Master of Social Welfare

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Concurrent Degree Program
Concurrent degree programs allow students to reduce the number of courses required for two degrees, since some courses may apply to both degrees.
- Master of Social Welfare/Asian American Studies MA
- Master of Social Welfare/Juris Doctor
- Master of Social Welfare/Master of Public Health
- Master of Social Welfare/Master of Public Policy

Social Welfare PhD

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Social Welfare

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100A. Introduction to Social Welfare: Policies and Programs. (4) Lecture, four hours. Origin and development of major U.S. social welfare programs and policies guiding them, with emphasis on analysis of policy developments/issues related to provision of social welfare services. Study of historical and current responses of profession to major social problems. P/NP or letter grading.

100B. Social Welfare Policy: Overview. (4) Lecture, four hours. Requisite: course 100A. Review of existing policy regarding major social issues in field of social welfare. Examination of discrepancy between need and capacity of social agencies to address need. Exploration of differential impact of policy on various populations. P/NP or letter grading.

101. Social Welfare in Multicultural Society. (4) Lecture, four hours. Social policy viewed from perspective of various cultural groups. Students to become aware of their own cultural perspective and learn to recognize...
nize similarities and differences in values, perspectives, and beliefs across cultural groups. P/NP or letter grading.


103. Introduction to Direct Practice with Individuals, Families, and Groups. (4) (Same as Gerontology M106B.) Lecture, four hours. Requisite: courses 100A, 100B, 101. Description and demonstration of basic skills employed in direct social work practice via casework process. Students practice these skills in writing, attending community agencies, and video or audio exercises. P/NP or letter grading.

M104C. Diversity in Aging: Roles of Gender and Ethnicity. (4) (Same as Chicana/o and Central American Studies M106B, Gender Studies M104C, Gerontology M104A, and Public Affairs M113.) Lecture, four hours. Exploration of complexity of variables related to diversity of aging population and variability in aging process. Examination of gender and ethnicity within context of both physical and social aging, in multidisciplinary perspective utilizing faculty from variety of fields to address issues of diversity. Letter grading.

104D. Public Policy and Aging. (4) (Same as Gerontology M104E.) Lecture, four hours. Topics include theories of aging, economic factors, changing roles, social relationships, and special populations. Weekly seminars organized around key aspect of social gerontology. P/NP or letter grading.

105. Social Welfare Policy in Modern America: Historical Perspectives. (4) Lecture, three hours; outside study, nine hours. Historical overview of American social policy dealing with three core societal problems: poverty, sickness, and joblessness. Programs developed by governments to ameliorate these problems have typically been public insurance programs or cash transfers such as unemployment insurance, welfare, and Social Security. Students and others will learn about the history of contemporary aging policy. Exploration of current policy issues affecting elderly. P/NP or letter grading.

M104E. Social Aspects of Aging. (4) (Same as Gerontology M104E.) Lecture, four hours. Topics include theories of aging, economic factors, changing roles, social relationships, and special populations. Weekly seminars organized around key aspect of social gerontology. P/NP or letter grading.

106. Research-Seminar: Observation: Social Welfare. (4) Seminar, three hours; discussion, one hour; outside study, eight hours. Didactic component with focus on development of basic skills in the areas of research. Students select one field of observation experience (module) from a number of field settings. P/NP or letter grading.

107. Field Practicum: Social Welfare. (4) Lecture, three hours; discussion, one hour; outside study, eight hours. Requisite: a field practicum component. Students are placed in a specific agency where they combine observation of agency functions with participation in specific agency tasks and roles under instructional supervision of an agency mentor and a UCLA faculty member. P/NP or letter grading.

M108. Biomedical, Social, and Policy Frontiers in Human Aging. (5) (Same as Gerontology M108 and Public Affairs M120.) Lecture, four hours. Limited to juniors/seniors. Growing numbers of people of all ages with disabilities are leading active and productive lives in American communities. Many others are struggling to lead such lives. Who are people with disabilities in contemporary America? How has U.S. responded over time to various needs and aspirations of people with disabilities? What demands have been made over time by disability advocates? How has government addressed demands of advocates for various disability populations? What do others know about extent to which public policies and programs are responsive to people in need? How do demographics, economics, and politics continue to influence evolving public policy responses? P/NP or letter grading.

115. Child Welfare Policy in America. (4) (Formerly numbered 151.) (Same as Public Affairs M124.) Lecture, three hours. Limited to juniors/seniors. Examination of public child welfare system in the U.S. Review of social policies and programs for children, including discussion of orphanages, foster care, and adoptions. Transformation of public child welfare system into child protection system. Impact of federal law and policy reform on child policies and programs in the U.S. Major programs designed to provide safety net for disadvantaged children, including foster care, child care, child support, and children's allowance programs. Review of research and analysis in this area. Overview of social policies and programs that impact children in the U.S. Relationship of compensatory policies in other countries. P/NP or letter grading.

162. Health Policy and Services. (4) Seminar, three hours. Limited to juniors/seniors. Contemporary issues in healthcare financing and delivery and historical perspective on these issues. Role of government in healthcare and ways controversy about this role continues to shape and constrain public policy in health. Major public programs, notably Medicare and Medicaid, and their relationship to issues of access and cost for diverse vulnerable populations. Various public and private approaches to healthcare reform and ways of thinking about their predicted impact, cost, and political feasibility. Issues in current healthcare system - chronic illness and debate about public and private approaches to long-term care reform. Social work roles in healthcare policy and practice. P/NP or letter grading.

163. Prevention of Risky Substance Use and Related Problems. (4) Lecture, four hours. Limited to juniors/seniors. Prevention of substance use and related harms from illegal and illegal substances is major concern of parents and communities. Examination of research related to patterns of drug use and related harm (such as crime and mental health disorders) and effectiveness of interventions to reduce these harms. Through review of science-based programs and policies, evaluation of effectiveness of evidence-based interventions to increase student knowledge, skills, and expertise in determining effective intervention to reduce drug-related harm, using most up-to-date information. P/NP or letter grading.

164. HIV Prevention in U.S. and Developing World. (4) Lecture, three hours. Limited to juniors/seniors. Examination of various approaches to HIV prevention, drawing on infectious disease paradigms from public health and theories of behavior change from fields of psychology, sociology, and communications. Sexual behavior and injection drug use in the U.S. and internationally. Promising technologies to reduce HIV transmission, and legal, cultural, ethical, and moral dilemmas in allocation of prevention resources. P/NP or letter grading.

M165. Disability Policy and Services in Contemporary America. (4) (Same as Disability Studies M130 and Gerontology M156.) Lecture, three hours. Limited to juniors/seniors. Growing numbers of people of all ages with disabilities are leading active and productive lives in American communities. Many others are struggling to lead such lives. Who are people with disabilities in contemporary America? How has U.S. responded over time to various needs and aspirations of people with disabilities? What demands have been made over time by disability advocates? How has government addressed demands of advocates for various disability populations? What do others know about extent to which public policies and programs are responsive to people in need? How do demographics, economics, and politics continue to influence evolving public policy responses? P/NP or letter grading.
188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 888X course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Individual honor content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors and departmental honors programs. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honor contract required. Honors content noted on transcript. Letter grading.

191. Variable Topics Research Seminars: Social Welfare. (4) Seminar, three hours; outside study, nine hours. Examination in depth of particular subfield of social welfare (e.g., child welfare, children and youth, nonprofit, health, mental health). Limits of investigation set by individual instructor. May be repeated for credit with topic change. Letter grading.

194. Internship Seminars: Social Welfare. (1) Seminar, one hour; outside study, three hours. Corequisite: course 194. Not open to freshmen. Introduction to topics relevant to psychosocial determinants of children’s lives and their resources in children and families, with opportunity to gain breadth and depth of knowledge in seminar setting. May be repeated for credit. P/NP or letter grading.

195. Community Internships in Social Welfare. (2) Tutorial, four hours. Corequisite: course 194. Not open to freshmen. Introductory course in community-based child health and advocacy. Students learn about community resources for children and families through services provided by local community agencies. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for credit. Individual contract with supervising faculty member required. Letter grading.

199. Directed Research in Social Welfare. (2 or 4) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culling paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

203A-203B-203C. Integrative Seminars. (4–4–4) Seminar, two and one half hours. Integrative courses that bring together theory and practice of social work in various social welfare settings. May include identification of problem areas and populations-at-risk requiring further examination. S/U or letter grading.

M203X. Special Topics in Public Affairs. (4) Same as Public Policy M201C, and Urban Planning M210A. Seminar, three hours; outside study, nine hours. Advanced seminar on emerging issues across public policy, social welfare, and urban planning. May be repeated for credit. S/U or letter grading.

M206A. Homelessness: Housing and Social Service Issues. (4) Same as Urban Planning M270. Lecture, 90 minutes; discussion, 90 minutes; one field trip. Review of current status of homelessness; who homeless are, what services and housing are available, existing and proposed programs—appropriate architecture, management, and sources of funding. Outside speakers include providers of services to homeless. Letter grading.

210. Foundations of Social Work Practice I. (4) Lecture, two and one half hours. Corequisite: course 401A. Framework for all social work practice—purpose, values, knowledge, and skills—and core processes of practice are taught. This includes problem formulation, definition, assessment, contracting, and beginning professional action with and on behalf of clients. Introduction to evaluation of outcomes. Letter grading.

210B. Foundations of Social Work Practice II. (4) Lecture, two and one half hours. Corequisite: course 401B. Weighing and carrying out evidence-supported practices based on differential assessment of people and the following intervention approaches: case management, motivational interviewing, crisis intervention, cognitive, task-centered, and solution-focused therapies, as well as intervention appropriate for family functioning, small group processes, and environmental modification (advocacy and community organization). Continued evaluation of outcomes. Letter grading.

210C. Foundations of Social Work Practice III. (4) Lecture, two and one half hours. Corequisite: course 401C. Core concepts of social work practice in organizational, community, and policy settings. Exploration of leadership style and development of personalized group work skills. Role of macro practice in agency-based social work in advancing strategies of organizational and social change. Interface and interaction among policy decisions, community needs, and program implementation of social justice, including decision making, intervention, and application of research and critical thinking. Letter grading.

211A. Human Behavior in Social Environment: Theoretical Perspectives in Social Work and Social Welfare. (4) Lecture, two and one half hours. Introductions to terminology and scope of systems framework that underlies social work practice interventions. Students learn how to identify and assess small- and large-scale forces that influence problems presented by clients. Letter grading.

211B. Human Behavior in Social Environment: Theoretical Perspectives in Social Work and Social Welfare II. (4) Lecture, two and one half hours. Explores various contemporary theories of social work practice, covering various perspectives on roots and significance of racism and other forms of oppression that continue to influence social work practice, covering various perspectives on roots and significance of racism and other forms of oppression in U.S. (and other societies) today. Forces contributing to initiation and maintenance of oppression and inequality across social categories such as race, ethnicity, gender, sexuality, religion, ability, and age. Letter grading.


Through intergroup dialogue, students learn to explore social group identity, conflict, community, and social justice. S/U grading.

213A. Social Welfare Research Methods. (4) Lecture, two and one half hours. Introduction to various research methodologies, including experimental and quasi-experimental designs, survey research methods, qualitative methods, and single and group-based research designs. Ethics and research design pertaining to social welfare and social science research. Students learn and practice formulating research problems, research questions, and hypotheses and learn how to critically review theory and research. Measurement, sampling procedures, and basic descriptive statistics. Letter grading.

213B. Applied Statistics in Social Welfare. (4) Lecture, two and one half hours; discussion, one hour. Core statistics course builds on research methods taught in course 213A, and designed to help students develop basic understanding of descriptive and inferential statistical approaches. Introduction to statistical reasoning, with emphasis on how to use statistics to help us understand world. Topics include numerical and graphical summaries of data, data acquisition and experimental design, probability, hypothesis testing, confidence intervals, correlation, and regression. Letter grading.

214A. Foundations of Social Welfare Policy. (4) Lecture, two and one half hours. Overview of key areas of social welfare policy. Roots of American social welfare policy, how the policy process works, and the social welfare policy structure. Path of social welfare policy development, birth of profession of social work and how it has paralleled major social policy issues from early colonial settlements to present day. Specific events and important individuals that have influenced social policy affecting vulnerable populations, such as racial and ethnic minorities, women, children, the poor, and other diverse populations. Examination of role of social research in informing social welfare policy. Letter grading.

214B. Leadership for Social Change. (4) Lecture, two and one half hours. Exploration of the role of leadership and social policy elements for effective social change in dynamic and diverse society. Builds on foundations of social welfare history and policy development, examination of elements of policy advocacy and competencies for effective social work leadership in organizational and community settings and integration of research and theory in addressing and resolving complex social problems. Letter grading.

M215. Global Public Affairs: Governing in Interconnected World. (4) (Same as Public Policy M228B and Urban Planning M231). Lecture, three hours; outside study, nine hours. Conceptually, focuses on interplay between the three major institutional complexes of modern globalization: globalizing societies and organizations that operate within them: state, market, and civil society. Study moves between abstract theory and concrete examples, often sense of where these institutions and organizations have come from, and helps chart their present trajectories. From perspective of governance, assessment of roles and configurations of institutions and organizations to address today’s challenges. S/U or letter grading.

223. Seminar: Social Work Profession. (2) Seminar, two hours. Nature and role of social work in contemporary society; relationships with other professions; probable future trends in profession; social work ethics, professional organizations, certification licensing; professional responsibility for continued self-critique and improvement of profession. Letter grading.

229A. Craft of Social Welfare Scholarship I. (4) Lecture, three hours; outside study, nine hours. Limited to PhD students. Exploration of one problem for study—its history, current state of knowledge about why problem exists, and various ways to conceptualize and study it. Survey of several problems and alternative ways in which problems have been conceptualized and studied to understand how scholars use theory and empirical evidence to advance what is known, what is yet unknown, where there are important gaps in understanding particular problems, and what might be done to solve them. Letter grading.
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229B. Craft of Social Welfare Scholarship II. (4) Lecture, three hours; outside study, nine hours. Enforced requisite: course 229A. Limited to PhD students. Continued narrative on student focus on one social welfare research problem, moving from understanding of evolution and context of general problem to more detailed and intensive review of research literature on specific researchable question to deepen student understanding of meaningful implications. Corequisite: required social work practicum. Advanced-level, critical analysis of role of public child welfare worker in relationship to consumer, agency, and community. Further development of social worker's critical thinking and context of public child welfare practice. Clinical case management explored as intervention in its own right in addition to its use as mechanism for linking children and families to other services and programs, and identification of forms of intervention. Interpretation of current public child welfare events, trends, terms, and laws and their relationship to direct practice issues. S/U or letter grading.

229C. Craft of Social Welfare Scholarship III. (2) Lecture, 90 minutes; outside study, four and one half hours. Enforced requisite: course 229B. Limited to PhD students. Focus on craft of scholarly writing for publication to help students develop effective narrative frame for presentation, make choices about extent of detail and shape of literature review, and achieve cogent presentation and conclusion. Consideration of elements of effective professional writing. Letter grading.

231A. Family Systems Interventions. (4) Lecture, two and one half hours. Application of theories and techniques to families for couples and for individuals in the context of social work practice. Examples of social work practice with couples and families may include developing relationship skills for those struggling with mental illness; support for family members impaired or frail elderly; parent education and skill development for welfare recipients; individual, couple, and family interventions for victims of abuse; bereavement support groups helping families to recover from experiences with substance abuse, domestic violence, sexual difficulties, and more. S/U or letter grading.

231B. Advanced Social Welfare Practice. (4) Lecture, two and one half hours; outside study, nine hours. Corequisite: required social work practicum. Advanced-level, critical analysis of theories, concepts, and principles underlying social casework practice. Specific attention to deviation and stress as conditions affecting functioning of individuals and groups and to diagnostic knowledge and competence required in rehabilitation and prevention. S/U or letter grading.

231E. Advanced Social Welfare Practice: School Social Work. (4) Lecture, two and one half hours; outside study, nine hours. Integration of theory and practice as they pertain to work with school-age children. Biopsychosocial/ecological assessment of students (including, but not limited to, differences due to ethnic and/or cultural diversity and to students who are learning disabled, behaviorally disturbed, gifted, learning handicapped), ecological intervention settings. Biopsychosocial/ecological assessment of students (including, but not limited to, differences due to role of liaison between pupils, family, school, and community. Use of discussion, videos, current literature, and case presentation to explore impact of school social workers as change agents. S/U or letter grading.

231F. Advanced Social Welfare Practice: Cognitive-Behavioral Theories and Methods. (4) Lecture, two and one half hours; outside study, nine hours. Corequisite: required social work practicum. Advanced-level, critical analysis of key contributors, essential concepts, core theories, current controversies, and recent research findings in contemporary cognitive-behavioral therapy; case conceptualization from cognitive-behavioral perspective; specific cognitive and behavioral assessment methods and intervention techniques and their typical applications; contextual considerations, including human diversity and other sociocultural and developmental factors, in arriving at case conceptualizations and treatment plans. S/U or letter grading.

231G. Advanced Social Welfare Practice: Substance Abuse Intervention. (4) Lecture, two and one half hours; outside study, nine hours. Corequisite: required social work practicum. Advanced-level, critical analysis of major intervention approaches—individual, family, group, and environmental—to treating substance abuse and dependency. Specific attention to skills and self-awareness to integrate biological, psychosocial, and psychological factors in assessing and intervening with substance-using clients and target populations. S/U or letter grading.

231J. Advanced Social Welfare Practice: Child Welfare. (4) Lecture, two and one half hours; outside study, nine hours. Corequisite: required social work practicum. Advanced-level, critical analysis of role of public child welfare worker in relationship to consumer, agency, and community. Further development of social work practice. Critical case management explored as intervention in its own right in addition to its use as mechanism for linking children and families to other services and programs, and identification of forms of intervention. Interpretation of current public child welfare events, trends, terms, and laws and their relationship to direct practice issues. S/U or letter grading.

231K. Advanced Social Welfare Practice: Mental Health. (4) Lecture, two and one half hours; outside study, nine hours. Corequisite: required social work practicum. Advanced-level, critical analysis of various roles that social workers occupy in health settings and strategies for providing care that is consistent with knowledge and values of social work practice. Exposure to range of interventions applicable to most common mental health problems and barriers to service. Corequisite: required social work practicum. S/U or letter grading.

231M. Advanced Social Welfare Practice: Health. (4) Lecture, two and one half hours; outside study, nine hours. Corequisite: required social work practicum. Advanced-level, critical analysis of various roles that social workers occupy in health settings and strategies for providing care that is consistent with knowledge and values of social work practice. Exposure to range of interventions applicable to most common mental health problems and barriers to service. Corequisite: required social work practicum. S/U or letter grading.

231N. Early Childhood Mental Health. (4) Lecture, two and one half hours; outside study, nine hours. Corequisite: required social work practicum. Advanced-level, critical analysis of theoretical models related directly to practice with diverse population of older adults. Presentation of comprehensive tools for multidimensional geriatric assessment. How to engage in collaborative treatment planning across range of late-life problems and address impediments to treatment. Theoretical underpinnings and most effective practice models to enable students to serve needs of older clients and their families as they adjust to late-life transitions, as well as to health and mental health problems most prevalent for older adults. Client populations range from well elderly to physically frail and/or demented from diverse backgrounds. S/U or letter grading.

231P. Advanced Social Welfare Practice: Gerontology. (4) Lecture, two and one half hours; outside study, nine hours. Corequisite: required social work practicum. Advanced-level, critical analysis of theoretical models related directly to practice with diverse population of older adults. Presentation of comprehensive tools for multidimensional geriatric assessment. How to engage in collaborative treatment planning across range of late-life problems and address impediments to treatment. Theoretical underpinnings and most effective practice models to enable students to serve needs of older clients and their families as they adjust to late-life transitions, as well as to health and mental health problems most prevalent for older adults. Client populations range from well elderly to physically frail and/or demented from diverse backgrounds. S/U or letter grading.


M241E. Nonprofit Organizations and Philanthropy: Management and Policy. (4) (Same as Public Policy M228 and Urban Planning M288.) Lecture, three hours; outside study, nine hours. Increased importance of nonprofit organizations—as service providers, vehicles of humanitarian and charitable work, and a forum for political advocacy—has led to a special emphasis on the theoretical bases of practice with associated knowledge and skills. How to engage in collaborative treatment planning across range of late-life problems and address impediments to treatment. Theoretical underpinnings and most effective practice models to enable students to serve needs of older clients and their families as they adjust to late-life transitions, as well as to health and mental health problems most prevalent for older adults. Client populations range from well elderly to physically frail and/or demented from diverse backgrounds. S/U or letter grading.

241H. Advanced Social Welfare Practice: Institution Systems Mapping. (4) Lecture, two and one half hours; outside study, nine hours. Corequisite: required social work practicum. Designed to familiarize students with the use of geographic data in community practice. Development of skill base for community practice that provides students with tools necessary to organize and present community data effectively for political, legal, and social justice in communities. How to use geographic information systems (GIS) to inform community practice. S/U or letter grading.

241I. Advanced Social Welfare Practice: Community Mapping. (4) Lecture, two and one half hours; outside study, nine hours. Corequisite: required social work practicum. Conceptual framework and analytic tools for understanding and organizing features of human services. Human service organizations work on people to improve, sustain, or prevent decline of well-being. Because of their function these organizations must spend time and money on such activities as fund raising from other organizations. Examination of these attributes, theoretical perspective to study them, and analysis of factors that shape nature of work they do. Explanation of determinants of relationships between workers and clients by looking at such variables as policy environ-
241L. Advanced Social Welfare Practice: Grant Writing. (4) Lecture, two and one half hours; outside study, nine hours. Corequisite: required social work practicum. Designed to teach beginning social workers learning necessary skills to construct functional grant proposals. Application of problem-solving knowledge to development of human service grants. Various steps in writing grant proposals and opportunity to design and write grant proposals. S/U or letter grading.

241J. Advanced Social Welfare Practice: Community Practice. (4) Lecture, two and one half hours; outside study, nine hours. Corequisite: required social work practicum. Designed to deepen student knowledge of community practice methods and empirical base that supports these methods in field of social welfare. Theory, practice, and research methods related to major community practice approaches in context of evidence-based philosophies and processes. Development of skills to address community problems using best available data by applying course concepts to student case study. S/U or letter grading.

242. Resilience, Risk, and Thriving among Children and Families. (4) Lecture, two and one half hours. Core course for Bachelor of Social Work and Family Well-Being area of concentration. Introduction to advanced study of child and family well-being from social work perspective. Conveys seminal knowledge of key settings—and experiences that impact children and family functioning. Drawing from resilience theory and empirical research, review of aspects of contexts such as parenting and family systems, schools, and neighborhoods—that serve as risk and protective factors for healthy child development. Emphasis on prevention efforts to ensure healthy development for all youth, stop family violence, and increase social connections for professional roles. Instructs social workers who serve, advocate for, and empower children and families around relevant social and economic justice issues. Letter grading.

249A. Introduction to Lukin PhD Research. (4) (Formerly numbered M208A.) Lecture, one hour; discussion, two hours. Requisite of first-year PhD students. Introduction to design and execution of public affairs research; exploration of subfields of public affairs scholarship and approaches to research on contemporary topics in social welfare and urban planning. Preparation and filing of PhD program of study. Letter grading.

249B. Introduction to Qualitative Research. (4) (Formerly numbered M249B.) Same as Urban Planning M208B.) Lecture, three hours; outside study, nine hours. Requisite: course M249A. Required in first or second year of PhD program. Introduction to qualitative methodology: theories, logic, design, and practice of qualitative research by studying its varied methodologies. Letter grading.

249C. Logic of Inference and Causation. (4) (Formerly numbered 249C.) Same as Urban Planning M208C.) Seminar, three hours. Requisite: courses M249A, M249B. Required in first or second year of PhD program. Development of research hypotheses and understanding of threats to validity, review of critiques of traditional methods and of alternative approaches to scholarship. Letter grading.

251A. Advanced Social Welfare Practice: Domestic and Street Violence against Women. (4) Lecture, two and one half hours. Designed for second-year MSW students in macro and clinical social work. One most pervasive aspect of women’s existence has been violence against them as consequence of their gender. Factual information and critical examination of theories, research, and clinical and policy practices in social work regarding various forms of violence against women and girls in their homes, workplaces, and communities. Conducted and developed by various U.S. service members, veterans, and their families, following longest wars in U.S. history. Exploration of macro- and micro-level interventions in social work practice to address impact of violence on communities and individuals. Letter grading.

251B. Advanced Social Welfare Practice: Military Social Work. (4) Lecture, two and one half hours. Designed for second-year MSW students. Foundational understanding of contemporary social welfare issues experienced by U.S. service members, veterans, and their families, focusing on military personnel. Overview of different modes of military service and identifications (i.e., active duty, reserve, and veteran) along with cumulative experiences for family members. Examination of family life cycles and military policies and approach to families. Use of trauma-informed care, care for caregivers, and provider self-care also addressed. S/U or letter grading.


258. Research Capstone I: Project Development. (4) Seminar, five hours; outside study five hours. Students develop unique context for leadership which gives them personal obstacles (ontological constraints) to exercise of their natural self-expression, in any situation, regards to practices of ethics (ontological constraints) to exercise of leadership. Using leadership project and diverse study group as laboratory, students practice and develop skills to operate with integrity, which are ontological constraints, reflect critically, listen authentically, and speak to those they are leading in way that promotes shared vision and inspires others to contribute. S/U or letter grading.

281A-281B-281C. Advanced Social Welfare Research. (2-2-2) Discussion, two hours. Individual or group research projects requiring intensive examination and analysis of social program area, directed toward development of new theories and techniques for social work practice. In Progress (281A, 281B) and S/U or letter (281C) grading.

284A-284B-284C. Doctoral Research Apprentice (2 to 4 each) Tutorial, to be arranged. Limited to PhD students. Exposures students to processes of conducting research in social welfare. Students develop range of research skills and understanding of ethical procedures in research. Students participate in various activities depending on specific research project with which they work. Activities include research tasks such as conducting literature reviews, developing research questions and collecting data, cleaning and preparing data, analyzing data, and writing research findings for conference and journal submissions. Students work closely with their faculty mentor and other graduate students. Introduction to process of conducting research in social sciences. In Progress (284A, 284B) and S/U (284C) grading.

285A-285B-285C. Research in Social Welfare. (4–4–4) Discussion, three hours. Review of areas of research concern to social workers, with special attention to design, instrument construction, data collection, data processing, data reduction, analysis, and interpretation. Designed to provide foundational knowledge of research process and skills necessary for conducting research in social sciences. In Progress (285A, 285B) and S/U (285C) grading.


285E. Research in Gerontology. (4) Lecture, three hours. Overview of research in aging. Development of research questions, selecting appropriate theoretical frameworks, conducting literature reviews, selecting appropriate research design, identifying sampling methods. Special considerations in aging research, including health screening, questionnaire design, and recruitment issues. Letter grading.

285F. Research in Health. (4) Lecture, three hours. Research in area of health policy and services. Discussions of readings about range of research from field of health services. Identification of research design issues, design of research instruments, analysis of strengths and limitations of current approaches to health services research, consideration of alternative roles for social work practitioners in arena of health services. Letter grading.

285G. Research in Mental Health. (4) Lecture, three hours. Research methods in mental health. Application of experimental designs, survey research methods, ethnographic methods, content analysis, focus group designs, and observational methods. Operation of data collection and selection of methods of appro-
private measures for research in mental health. Practice in critiquing published research related to mental health issues. Letter grading.

285H. Program Evaluation Research. (4) Lecture, three hours. Examination of current social welfare programs to address social history of nonprofit sector in U.S. Exploration of political economy perspective to analyze forces that shape and sustain organizations, including social justice and inequalities, and issues of racial, ethnic, and gender diversity. S/U or letter grading.

286 & 286A. Research Methods. (4) Seminar, three hours. Basic concepts underlying research methods. Students analyze and critique examples of research designs. S/U or letter grading.

286B. Advanced Research Methods. (4) Seminar, three hours. Advanced concepts underlying research methods. Evaluating and differentiating approaches to research problems; assessment of strengths and limitations of research designs. S/U or letter grading.

288. Social Policy, Power, and Public Policy. (4) Lecture, two and one half hours; discussion, one hour. Examination of social policy challenges to achieving social, economic, and political goals. S/U or letter grading.

290G. Psychotropic Drugs and Medications: Harm Reduction Policies. (4) Lecture, two and one half hours. Examination of government policies concerning the medical and social use of psychoactive drugs, including hallucinogens, stimulants, and benzodiazepines. S/U or letter grading.

290H. Juvenile Justice Policy. (4) Lecture, three hours. Examination of public policy toward juveniles, with emphasis on political, economic, ideological, and sociological factors that affect children and families. S/U or letter grading.

290I. Child Welfare Policy. (4) Same as Public Policy M213J. Lecture, three hours. Examination of key policy issues in the social service delivery system, with an emphasis on children and families. S/U or letter grading.

290K. Mental Health Policy. (4) Same as Public Policy M213K. Lecture, three hours. Examination of key policy issues in the mental health system, with an emphasis on mental illness and services they provide. S/U or letter grading.

290L. Poverty, Poor, and Welfare Reform. (4) Same as Public Policy M213L. Lecture, three hours. Examination of major policy issues concerning poverty and social welfare policy directed toward poor in U.S. S/U or letter grading.

290M. Health Policy. (4) Same as Public Policy M215M. Lecture, three hours. Introduction to contemporary issues in health care financing and delivery, with an emphasis on policy issues in health care. S/U or letter grading.

290N. Public Policy for Children and Youth. (4) Same as Public Policy M214N. Lecture, three hours. Policy issues that affect children and adolescents in relation to their school and community, with an emphasis on policy processes at the national and state levels. S/U or letter grading.

290P. Aging Policy, Elderly and Families. (4) Same as Public Policy M261P. Lecture, three hours; outside study, nine hours. Examination of social policy affecting older adults. S/U or letter grading.

291B. Social Work Practice. (4) Same as Public Policy M291B. Lecture, three hours. Introduction to various forms of social work practice, with an emphasis on social work practice with vulnerable populations. S/U or letter grading.

291C. Social Work Policy. (4) Same as Public Policy M291C. Lecture, three hours; outside study, nine hours. Examination of social policy affecting older adults. S/U or letter grading.

291D. Social Work Research. (4) Same as Public Policy M291D. Lecture, three hours. Introduction to various forms of social work research, with an emphasis on social work research with vulnerable populations. S/U or letter grading.

291E. Lesbian, Gay, Bisexual, and Transgender Health, Law, and Public Policy. (4) Lecture, two and one half hours. Examination of public policies that affect the rights and well-being of LGBT communities, including the rights of LGBT individuals and those living with serious medical conditions. S/U or letter grading.


293. Research Methods in Social Work. (4) Lecture, three hours; fieldwork, one hour. Examination of research methods and their applications in social work research. Letter grading.


296. Research Methods. (4) Lecture, three hours. Examination of research methods and their applications in social work research. Letter grading.

297. Research Methods in Social Work. (4) Lecture, three hours; fieldwork, one hour. Examination of research methods and their applications in social work research. Letter grading.

298. Research Methods in Social Work. (4) Lecture, three hours; fieldwork, one hour. Examination of research methods and their applications in social work research. Letter grading.

299. Advanced Social Work Research Methods. (4) Lecture, three hours; fieldwork, one hour. Examination of advanced research methods and their applications in social work research. Letter grading.
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Wayne W. Grody, MD, PhD
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Christopher M. Kelly, PhD
Russell Korobkin, JD (Richard C. Maxwell Professor of Law)

Hannah L. Landecker, PhD
Rachel C. Lee, PhD
Megan M. McEvoy, PhD
Christina G.S. Palmer, PhD, in Residence
Aaron L. Panosky, PhD
Alexandra M. Stern, PhD
Stefan Timmermans, PhD

Professors Emeriti
Joan B. Silk, PhD
Matthew Norton Wise, PhD

Associate Professors
Patrick Allard, PhD
Naniba’ A. Garrison, PhD
Terence D. Keel, PhD
Jessica W. Lynch, PhD

Assistant Professors
Danielle J. Carr, PhD
Adys Mendizabal, MD, MS
Nicholas E. Shapiro, PhD
Bharat J. Venkat, PhD

Adjunct Assistant Professor
Michelle A. Rensel, PhD

Overview

The Human Biology and Society majors provide a rigorous interdisciplinary education in current issues at the intersection of human biology, genetics, and society where bridging the institutional divide between the life sciences and human sciences (humanities and social sciences) is necessary.

The teaching strategy emphasizes the value of synthetic, integrative thinking. Learning can best be organized synthetically around the sorts of knowledge and skills required to investigate and address such problems rather than by building up from the stepwise sequences of traditional disciplines.

The majors provide an important integrative space where different ways of knowing in the human and life sciences are explored, interrelated, and applied. Core and capstone courses emphasize problem-based learning about pressing issues that inextricably link society, culture, and biology, such as medical privacy rights, gene patents, regulation of stem cell research, and to have them interact and work together to form a deep understanding of the issues at the intersection of human social systems, evolutionary biology, and genetics.

The minor in Society and Genetics provides undergraduate students with the opportunity to understand and probe the complex problems and possibilities presented by modern genetics, with special attention to their social context and content.

Society and Genetics, Institute for / 813

Learning Outcomes

The Human Biology and Society major has the following learning outcomes:

• Demonstrated strong foundation of knowledge in social science and evolutionary biology and genetics
• Skills to critically analyze and evaluate qualitative and quantitative data and social biological theories
• Formulation of effective and convincing written and oral arguments that integrate biological and social evidence
• Work well in multidisciplinary teams
• Skills at communicating across disciplines and leveraging knowledge from multiple perspectives
• Demonstrated proficiency in at least one area of concentration at the interface between biology and society
• Integration of ethical, legal, and societal concerns in planning, conducting, and assessing research
• Use of societal and biological information to critically assess complex real-world problems and to employ interdisciplinary skills to help solve them

Entry to the Major

Admission

Admission to the Human Biology and Society BA major is by application and competitive, using courses, grades, grade-point averages, and personal statements as minimum standards for consideration. Only a limited number of students are admitted each year. Applicants are not automatically accepted into the major.

Students must apply for major standing at the beginning of spring quarter of their sophomore year. Applications submitted after the spring quarter deadline are considered during fall quarter of the junior year only as space in the program permits. No applications are considered after fall quarter of the junior year.

Pre-major standing is not required to apply for the major. A copy of the major application is available on the department major web page.
Pre-major
Incoming first years may be admitted as pre-majors on acceptance to UCLA. All other students must first complete Society and Genetics 5, M71A, or M72A, and then contact the undergraduate counselor in 3360 Life Sciences to request pre-major standing.

Transfer Students
Transfer applicants to the Human Biology and Society BA major with 90 or more units must complete the following preparatory courses prior to admission to UCLA: one year of general biology (the equivalent of Life Sciences 7A, 7B, and 7C), introductory chemistry, one statistics course, one anthropology human evolution course, and four introductory social sciences or history courses. Society and Genetics 5 must be taken at UCLA once a transfer student is admitted to the University.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements
Preparation for the Major

Required: One core course from Society and Genetics 5, M71A, or M72A; and Anthropology 1, Chemistry and Biochemistry 14A or 14AE, Life Sciences 7A, 7B, 7C, Statistics 10 or 13, and four social theory courses (minimum of 16 units) from African American Studies 1, M5, 6, American Indian Studies M10, Anthropology 3, Asian American Studies 10 or 10W, 20 or 20W, 40 or 40W, 50 or 50W, Chicana/o and Central American Studies 10A, 10B, Clusters M1A through 800C, English M30, Environment M30, Gender Studies 10, Geography 3, History 3A, 3B, 3C, 3D, 12A, 12B, 12C, Honors Collegium 70A, Labor Studies M1A, M1B, M1CW, 10, Molecular, Cell, and Developmental Biology 50, 60, Philosophy 3, 4, 6, 7, 8, 22 or 22W, Political Science 10, 40, Public Affairs 10, 20, 30, 80, Society and Genetics 125, Sociology 1, or M5.

The Major


Students may additionally choose course options in the subfocus areas of cell development, microbiology and immunology, molecular biology and genomics, psychology, and physiology and mental health.

Optional Subfocus Areas
The subfocus options are designed and recommended for students who intend a career in medicine or allied health services or are planning to go on to graduate school in the life or health sciences.

Students may optionally select any subfocus area as part of the required elective courses for the major.

Cell Development: Molecular, Cell, and Developmental Biology 138, 165A, 168
Ecology and Evolutionary Biology: Three courses from Anthropology 124P, 124S, 126Q, 128P, Ecology and Evolutionary Biology 100, 116, 120, 121, C126, 129, 130, C135, 175, 176
Microbiology and Immunology: Microbiology, Immunology, and Molecular Genetics 101, C185A, and one course from 103AL, 106, 107, 158, or 168
Molecular Biology and Genomics: Molecular, Cell, and Developmental Biology 144, 172, and one course from CM156, Human Genetics CM124, C144, Microbiology, Immunology, and Molecular Genetics C122, or 158
Physiology: Physiological Science 111A, 111B, and one course from 147, 149, or 177
Population Genetics: Two courses from Ecology and Evolutionary Biology C135, Human Genetics CM124, Society and Genetics 120, and one course from Ecology and Evolutionary Biology 120, 121, or Human Genetics C144
Psychology and Mental Health: Three courses from Psychology M107, 112A, 112B, 115, 127A, 129C

Honors Program
To receive departmental honors, students must take each course in the major for a letter grade and complete all upper-division courses in the major with an overall grade-point average of 3.5 or better. For highest departmental honors, students must complete a research project and receive a grade of A or better in Society and Genetics 108, 197, or 199.

Policies
Preparation for the Major
Each course must be taken for a letter grade, and students must complete all pre-major courses with a cumulative minimum grade-point average of 2.9.

The Major
Each course must be taken for a letter grade and passed with a grade of C- or better, and all courses must be completed with a cumulative minimum grade-point average of 2.9.

Human Biology and Society BS

Learning Outcomes
The Human Biology and Society major has the following learning outcomes:

• Demonstrated strong foundation of knowledge in social science and evolutionary biology and genetics
• Skills to critically analyze and evaluate qualitative and quantitative data and social biological theories
• Formulation of effective and convincing written and oral arguments that integrate biological and social evidence
• Demonstrated broad comprehension of mathematical, physical, and life sciences as preparation for medical school
• Work well in multidisciplinary teams
• Skills at communicating across disciplines and leveraging knowledge from multiple perspectives
• Demonstrated proficiency in at least one area of concentration at the interface between biology and society
• Integration of ethical, legal, and societal concerns in planning, conducting, and assessing research
• Use of societal and biological information to critically assess complex real-world problems and to employ interdisciplinary skills to help solve them
• Use of societal and biological information to critically assess complex real-world problems and to employ interdisciplinary skills to help solve them

Entry to the Major
Admission
Admission to the Human Biology and Society BS major is by application and competitive, using courses, grades, grade-point averages, and personal statements as minimum standards for consideration. Only a limited number of students are admitted each year. Applicants are not automatically accepted into the major.
Students must apply for major standing at the beginning of spring quarter of their sophomore year. Applications submitted after the spring quarter deadline are considered during fall quarter of the junior year only as space in the program permits. No applications are considered after fall quarter of the junior year.

Pre-major standing is not required to apply for the major. A copy of the major application is available on the department's major web page.

Pre-major

Incoming first years may be admitted as pre-majors on acceptance to UCLA. All other students must first complete Society and Genetics 5, M71A, or M72A, and then contact the undergraduate counselor in 3360 Life Sciences to request pre-major standing.

Transfer Students

Transfer applicants to the Human Biology and Society BS major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general biology with laboratory for majors, preferably equivalent to Life Sciences 7A, 7B, and 7C, one year of calculus, one year of general chemistry with laboratory for majors, and one semester of organic chemistry with laboratory.

Transfer applicants must also complete at least two of the following introductory courses prior to admission to UCLA: one statistics course, one anthropology human evolution course, and to admission to UCLA: one statistics course, one year of calculus-based physics for majors, and one semester of organic chemistry with laboratory.

Transfer students must first complete Society and Genetics 5, M71A, or M72A, and then contact the undergraduate counselor in 3360 Life Sciences to request pre-major standing.

Required:

The Major


Students may additionally choose course options in the subfocus areas of cell development, microbiology and immunology, molecular biology and genomics, physiology, and psychology and mental health.

Optional Subfocus Areas

The subfocus options are designed and recommended for students who intend a career in medicine or allied health services or are planning to go on to graduate school in the life or health sciences.

Students may optionally select any subfocus area as part of the required elective courses for the major.

Cell Development: Molecular, Cell, and Developmental Biology 138, 165A, 168

Ecology and Evolutionary Biology: Three courses from Anthropology 124P, 124S, 126Q, 128P, Ecology and Evolutionary Biology 100, 116, 120, 121, C126, 129, 130, C135, 175, 176

Microbiology and Immunology: Microbiology, Immunology, and Molecular Genetics 101, C185A, and one course from 103AL, 106, 107, 158, or 168

Molecular Biology and Genomics: Molecular, Cell, and Developmental Biology 144, 172, and one course from CM156, Human Genetics CM124, C144, Microbiology, Immunology, and Molecular Genetics C122, or 158

Population Genetics: Two courses from Ecology and Evolutionary Biology C135, Human Genetics CM124, Society and Genetics 120, and one course from Ecology and Evolutionary Biology 120, 121, or Human Genetics C144

Psychology and Mental Health: Three courses from Psychology M107, 112A, 112B, 115, 127A, 129C

Honors Program

To receive departmental honors, students must take each course in the major for a letter grade and complete all upper-division courses in the major with an overall grade-point average of 3.5 or better. For highest departmental honors, students must complete a research project and receive a grade of A or better in Society and Genetics 108, 197, or 199.

Policies

Preparation for the Major

Each course must be taken for a letter grade, and students must complete all pre-major courses with a cumulative minimum grade-point average of 2.5.

The Major

Each course must be taken for a letter grade and passed with a grade of C– or better, and all courses must be completed with a cumulative minimum grade-point average of 2.0.

Undergraduate Minor

Society and Genetics Minor

Admission

Admission to the Society and Genetics minor is by application and competitive, using courses, grades, grade-point averages, and personal statements as minimum standards for consideration. Applicants must be in their junior year and have an overall grade-point average of 2.5 or better. Only a limited number of students are admitted each year. Applicants are not automatically accepted into the minor.

Students must apply for admission to the minor at the beginning of fall quarter of their junior year. No applications are considered after that.

Information about the application process is available on the minor website and by consultation with the undergraduate counselor in 3360 Life Sciences.

The Minor

Required Upper-Division Courses (30 to 34 units): Society and Genetics 101 (or if Life Sciences 107 has been completed, one course...
from the approved list of electives), 102, 191S, and at least four additional upper-division elective courses (minimum 16 units) from the approved list.


Policies

Students may petition to have a course not on the approved list applied toward the four- course elective requirement. Contact the under- graduate counselor in 3360 Life Sciences.

A minimum of 20 units applied toward the mi- nor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade of C— or better. Successful completion of the minor is indicated on the transcript and diploma.

Society and Genetics

Lower-Division Courses

5. Integrative Approaches to Human Biology and Society. (4) Lecture, three hours; discussion, one hour. Introduction to concept of problem-based ap- proaches to study of biology and society and areas of concentration, such as bioethics and public science policy, evolutionary biology, culture, and behavior, his- torical and social studies of life sciences, medical ge- netics and public health, and population genetics and history, and central thematic issues shared across concentrations, such as commercialization of life and public understanding of science. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

M71A-M71B-M71CW. Biotechnology and Society. (5–6–6) (Same as Clusters M71A-M71B-M71CW) Course M71A is enforced requisite to M71B, which is enforced requisite to M71CW. Limited to first-year freshmen. M71A-M71B, Lecture, three hours; dis- cussion, two hours. Exploration of methods, applications, and implications of biotechnology, and of ethical, soci- al, and political implications as well as biological un- derpinnings. P/NP or letter grading. M71CW. Special Topics. Seminar, three hours. Enforced requisite: course M71B. Topics include in-depth examination of ethics and human genetics, bioweapons and bio- fense, sex and biotechnology. Satisfies Writing II re- quirement. Letter grading.


M72A-M72B-M72CW. Sex from Biology to Gen- dered Society. (5) Lecture, three hours; dis- cussion, two hours. Examination of many ways in which sex and sexual identity shape and are shaped by bio- logical, social, psychological, and cultural factors. The course approaches from a variety of perspectives of anthropology, biology, medi- cine, and sociology. Specific topics include biological origins of sex differences, intersex, gender identity, gender inequality, hormones, sexual differences, sex, gender, and law; politics of science research. M72CW. Special Topics. Seminar, three hours. Enforced requisite: course M72B. Topics may include political debates about sex and gender, sex segregation, social construction of gender, and reproductive technologies. Satis- fies Writing II requirement.

98. Honors Seminars. (1) Seminar, three hours. Lim- ited to 20 students. Enforced requisite to lower- division courses. Course 98A is enforced requisite to 105A. Exploration of problems of human identity that are inherently biological and social. Topics vary and may include race, ethnicity, and social constructs. Students must be in good academic standing and en- rolled in minimum of 12 units (excluding this course), Individual contract required; consult Undergraduate Research Center. May be repeated for 4 units. Letter grading.

98HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. De- signed as adjunct to lower-division lecture course. In- dividual study with faculty sponsor to explore topics in greater depth. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (su- pervised research or other scholarly work), three hours per week per unit. Entry-level research for lower- division students under faculty mentor. Students must be in good academic standing and en- rolled in minimum of 12 units (excluding this course), Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

101. Genetic Concepts for Human Sciences. (5) Lecture, three hours; discussion, one hour. Not open for credit to students with credit for Life Sciences 4. Focused treatment of selected complex genetic con- cepts from molecular biology, population and quanti- tative genetics, and evolutionary biology, with em- phasis on gene-environment interaction at various levels and in exploration of notion of co- evolution of genetic and social science con- cepts portrayed through real-world issues and re- search problems. Current research on cancer, immune system and development, and how this research is perceived and debated in the media. Letter grading.

102. Societal and Medical Issues in Human Genet- ics. (5) Lecture, three hours; discussion, two hours. Sequence of entire human genome is now known. Consideration of how this knowledge impacts con- cepts of ourselves as individuals and of our place in biological universe, concepts of race/ethnicity and gender, ability of DNA-based forensics to identify spe- cific individuals, ownership and commodification of genes, issues of privacy and confidentiality, issues of genetic discrimination, issues of predictive genetic testing. Discussion of human cloning for reproductive and therapeutic purposes, including implications for biomed- ical ethics. Discussion of role of whole genome se- quencing in clinical setting. Human Genome Project influence on medicine and on our concepts of self and identity. Letter grading.

105A. Ways of Knowing in Life and Human Scient- ifics. (4) Lecture, three hours; discussion, one hour. En- forced requisite: course 5 or M71A or M72A. Course 105A is not requisite to 105B. Introduction to study of epistemology to train students to recognize different ways of knowing what we know. In life and human sci- ences, instruments and methods are used to study, measure, and experiment. Exploration of how they are manifested in technology, that cut across disciplines to help students evaluate explanatory models, standards of proof, and qualitative versus quantitative studies. Explorations may include DNA sequencing, tissue cul- tures, bioinformatics, statistics, photography and cinema, charts, trees, and databases. DNA se- quencing is used to study gene functions, evolutionary patterns, and disease and plays role in legal context to reconstruct aspects of human history or to trace iden- tiities of historical figures such as Thomas Jefferson and Genghis Khan. Discussion of practical and theoretical issues surrounding genetic research on history of hu- mans, including challenges of using ancient and modern DNA, population genetic theory, and ethical implications of genetic research for understanding ethnicity. Letter grading.

121. Race, Science, and Citizenship. (4) Seminar, three hours. Early development of scientific method and systematic exclusion of those in subordinate so- cial groups from scientific practice. Interrogation of bi- naries that prop up scientific knowledge construction, and consideration of how norms and values em- bedded in Western science compare with indigenous or local knowledge systems. How medical research is
motivated by competing assumptions of racial hierarchy and equality. Examination of governments’ use of science to classify racially inferior and contami- nated foreigners as threats to socionatural order. Ex- ploration of how people use knowledge about their embodied experiences to demand rights and accept responsibility for their own health and vitality, either in opposition to or alliance with scientific experts. How context shapes science in society and technology bring to light some central concerns of social and political theory. Letter grading.

125. Critical Study of Health, Sickness, and Healing in Global Contexts, (Same as Anthropology M118F, Sociology M136.) Lecture, three hours; discussion, one hour. Introduction to sociocultural, historical, and global study of health and sickness. Use of case studies of globally important infectious diseases (diarrheal diseases, influenza, HIV/AIDS) to analyze factors, including key dimensions of diversity (class, gender, urban/rural development) that influence how populations variably encounter, experience, understand, and cope with sickness. Special focus on relationships between Western medicine and traditional and alternative approaches to healing. Letter grading.

M126. Genes, Disease, and Culture, (Same as Anthropology M126F.) Seminar, three hours; discussion, one hour (when scheduled). Introduction to genes, disease, and culture. Introduction to basic concepts in human genetics, expanding upon evolu- tionary theory and selection in Anthropology M118F and survey of both inherent and infectious disease on global level. Wide range of topics include gene-culture co-evolution, niche construction theory, cultural perceptions of health, and loss of genetic diversity. Environmental determinism, and evolutionary origins of disease. Course is broken down into genes and genomics, Mendelian disease, complex disease, and in- fectious disease. Discussion of selected readings that integrate cultural perceptions with biological/genetic phenomena. P/NP or letter grading.


M132. Food Cultures and Food Politics, (Same as English M118F and Food Studies M132.) Lecture, four hours; discussion, one hour (when scheduled). Requi- site: English Composition 3. Introduction to interdisci- plinary field of food studies, with focus on how litera- ture, art, science, and visual culture addresses political dimensions of food and agriculture in specific contexts. P/NP or letter grading.

M133. Environmental Sociology, (4) Same as Environ- ment and Science, Technology, and Society M115.) Lecture, three hours; discussion, one hour. Relationship between soci- ety and environment. Analysis in detail of interrela- tions between social factors (such as class, race, gender, ethnicity, etc.) and social systems (such as pollution, waste disposal, sustainability, and global warming). P/NP or letter grading.

134. Food and Health in Global Perspective, (4) Lecture, three hours. Study problematizes and adds depth to common-sense understandings of healthy and unhealthy consumption by examination of rela- tionship between food and health, from critical and holistic perspective, that accounts for interplay of bi- ology and culture within broader historical, social, and global contexts. Topics include what is meant by health, especially in terms of diet; relationship be- tween food practices and evolutionary biology, as well as particular environments of societies, cultural sys- tems, and their health trajectories; how major global major foods have come to their dominance and consequences for health; and influences of food pro- duction, distribution, and preparation on health. Letter grading.

M136. Eating Society: Science and Politics of Food from Individual to Planetary Health, (4) Same as Food Studies M136 and Sociology M136.) Lecture, three hours; discussion, one hour. Questions of food and health are both individual and social. Students gain tools for understanding relationships between in- dividual eaters, medicine, and social organization of eating. How have diet and disease been shaped by pasteurization, processing, and food safety practices; One Health approaches that encompass human and animal health, discussing examples such as antibiotic-resistant infectious disease as effects of large-scale agriculture; planetary health frameworks that link individual human meta- bolic health to issues of sustainable agriculture, for ex- ample; understanding how diets die to environment; and resilience of cultural food systems in face of environmental pollution as issue of reproduc- tive health. Letter grading.

141. Nature versus Nurture: Genes and Environ- ment, (4) Seminar, three hours. Comprehensive and practical examination of emerging science of gene-en- vironment interaction. Discussion of primary compo- nents of field, including role of metabolic pathways in modern society, and importance and influence of environmental influences in human disease. Explora- tion of selected hot topics in field such as importance of epigenetics and of microbiome. Course is highly useful for further study in medical field or public health. Letter grading.

M142. Primate Genetics, Ecology, and Conserva- tion, (4) Same as Anthropology M128S.) Seminar, three hours. Focus on genetic research on wild pri- mates at different geographic scales, using readings from primary literature on primate genetics, ecology, and behavior. Study of paternity and kinship, intrapop- ulation variation, population genetics, biogeography, systematics, phylogenetics/phylogenomics and compar- ative genomics. Utility and appropriateness of var- ious markers considered for different research ques- tions, e.g., mitochondrial and nuclear genes, Y-chromosome, as well as GWAS and ge- nomic/next generation sequencing platforms, and epi- genetic markers. Discussion of methods in fieldwork and lab work, including sampling techniques, collec- tion techniques, wet lab techniques, software analysis packages, and statistical analyses. Introductory-level understanding of genetics expected; study further illu- minates areas relevant to case studies analyzed. Letter grading.

M143. Amazon in Anthropocene, (4) Same as An- thropology M143.) Seminar, three hours. Consider- ation of major issues faced in Amazon region today using lenses of biological anthropology, paleoecology, primatology, cultural anthropology/ethnogra- phy, history, comparative literature, film studies, po- litical science, and environmental science. Analysis of Amazon paleogeography and ecology over time to highlight charismatic species, biodiversity, and habitat types. Focus on human migration into Amazon, diver- sity of indigenous groups today, and historic/present interactions with contemporary themes. European ex- peditions that carved out political boundaries within Amazon. Study of historic/current effects of human economy and land use on ecology. Exploration of changing power dynamics, and resilience of different cultural practices and technologies. Topics include rubber boom, indigenous resistance to oil exploration, hydroelectric dams and clean energy, deforestation arc, and international land grab for soy plantations. Highlights value of different kinds of knowledge and expertise for interdisciplinary solutions for current crises in Amazon. Letter grading.

M144. Stress and Social Inequality, (4) Same as Sociology M144.) Lecture, three hours; discussion, one hour. Integrative view of health dispar- ities, one of most pressing problems of society, through investigation of stress as a factor in biopsychosocial status (SES) on health and disease, using specific lens of stress biology. Topics include introduction to funda- mentals of physiology of stress, integration of litera- ture on poverty and SES, sociobiological and psychosocial consequences of poverty, and introduction of con- cepts of life course by following stress biology through childhood development and into adulthood. Letter grading.

146. Evolution in Anthropocene, (4) Lecture, three hours; discussion, one hour. Recommended requi- site: Life Sciences 7A, 7B, 7C. Study of evolution across world and tree of life that is being altered at in- creasingly rapid pace by humans. Exploration of incredible stories of surprising, amazing, sometimes heart- breaking ways humans are changing life, and how these things alter human culture, fashion trends, and human productivity. Humans are leaving on other species, and astounding ways they have altered their evolutionary course to keep pace. Letter grading.

M150. Superheroes of Superheroes: Exploring Limits of Form and Function, (4) Same as Ecology and Evolu- tionary Biology M150.) Lecture, four hours, one hour. Requisite: Life Sciences 1 and 4, or 7A and 7B. Combines topics posed in popular graphic novels, movies, and television with primary scientific literature to explore bizarre phenomena in natural world and delve into basic scientific theory and principles. Topics covered include evolution, genetics, physiology, bio- mechanics, brain-machine interfacing, and artificial in- telligence among others. Students synthesize primary literature on diverse subjects presented. Letter grading.

160. Politics of Heredity, (4) Seminar, three hours. Ex- ploration of intersection of politics and genetics in liberal democracies and totalitarian regimes. How ge- netics has been used to consolidate and undermine political authority, and how political authority has been employed to both promote and restrict genetics. Con- sideration of several historical episodes such as rise to power in Soviet Union of T.D. Lysenko, peasant agron- omist who rejected Mendelism in favor of quasi-La- marckian approach to genetics; participation of genet- icists in creation of racial state in Nazi Germany; and debates over compulsory sterilization of mental defec- tives in Canada and USA in 1920s to 1940s. Contemporary cases such as controversies over genetically modified foods and regulation and governance of reprogrammable technologies, and rise of disease advocacy groups as important players in de- termining funding and direction of genetic research. Letter grading.

161. Controversy and Behavior Genetics, (4) Semi- nar, three hours. Behavior genetics is controversial and seeks genetic links to intelligence, personality, mental illness, and criminality, among many other traits. It explores differences between individuals, men and women, or racial groups, and what social policies might do about those differences. It can lead to issues of causes and effects of controversy in behavior genetics using critical sociology and history. Consideration of scien- tific disputes between behavior geneticists and their critics can inform the critical understanding of behavior genetics as group of scientists, and public reception of behavior genetics and disputes about its social and policy implications. Letter grading.

164. Biotechnology and Society, (4) Seminar, three hours. Nosologies of bodily integrity, privacy, right to life, and to choose to die have created perception that our bodies are protected by law, that somehow we possess rights to our own bodies, and our bodies, en- compassing not only our physical being but intangible information contained within our materialized forms. Question of whether these rights to our own bodies exist and are secured by common and Constitutional law in light of recent developments in biotechnology.
texts as well as commentaries and documentaries speaking to current events. Consideration of demar- cation of science from pseudoscience, conditions turning scientific misconduct into a public controversy, science’s relationship to different publics and political cultures, crises of trust in contemporary science and efforts to reconstruct scientific integrity, and weaponization of science and pseudoscience in mis- information campaigns and conspiracy theories. Through engaging these complex matters, students become better armed to understand and advance productive relationships between science and political life.

175. Current Directions in Social and Historical Study of Science. (4) Seminar, three hours. Prepara- tion: some familiarity with field of science and technol- ogy. Seminar brings together classroom discussions of recent work in history and social study of science and technology, with spe- cial emphasis on recent developments, possible future directions, and questions of disciplinarity and interdis- ciplinarity. Topics may include histories of recent and emerging science; biocapital, biobitechcrony, biosecu- rity, and/or biopolitics; social and historical ap- proaches to finance and money; and social and histor- ical approaches to risk, preparedness, and safety.

Lecture grading.

180. Special Courses in Sociology and Genetics. (4) Lecture, three hours. Departmentally sponsored ex- perimental or temporary courses on selected topics, such as those taught by visiting faculty members. May be repeated for credit with topic change. Letter grading.

M183. Being Human: Identity and Mental Illness. (5) (Same as Disability Studies M183 and Honors Colle- gium K183) Seminar brings together classroom discus- sions of identity and mental illness through different approaches to nature and treatment of mental disorder, from biomedical accounts of brain- based pathology (and identity) to Mad Pride move- ment emphasis on mental diversity. Enduring philo- sophical questions regarding personal identity, con- sciousness, and mental health are investigated through consideration of conditions such as dissociative identity disorder, trauma, psychosis, autism, and depression. P/NP or letter grading.

188. Special Courses in Society and Genetics. (4) Seminar, three hours. Departmentally sponsored ex- perimental or temporary courses on selected topics, such as those taught by visiting faculty members. May be repeated for credit with topic change. Letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Colloquium 101E. Limited to junior/senior USIE facilita- tors. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin prepa- ration of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Enforced corequisite: Honors Colloquium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SB. Limited to junior/senior USIE facilitators. Indi- vidual study in regularly scheduled meetings with facul- ty mentor while facilitating USIE 885 course. Indivi- dual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through independent research, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu- dents. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. De- signed as adjunct to upper-division lecture course. In- dividual study with lecture course instructor to explore topics in greater depth through independent read- ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re- quired. Honors content noted on transcript. Letter grading.

190. Research Colloquia in Society and Genetics. (1) Seminar, one hour. Limited to juniors/seniors. De- signed to bring together advanced undergraduate stu- dents undertaking independent research to discuss their own work or related work in society and genetics. May be repeated once for credit with topic change. P/NP grading.

191. Variable Topics Research Seminars: Perspec- tives in Society and Genetics. (5) Seminar, three hours. Enforced requisites: courses 101 (or Life Sci- ences 4), M102. Discussion of genetics and society from historical perspective. How science of genetics itself is deeply social. Study of how biologists and an- thropologists have conceptualized relations of genes and (social) environment. Reading of accounts of human nature, human flourishing, and dignity that seem to privilege or challenge genetic approaches to identity and treatment of mental illness. Culminating paper required. May be repeated once for credit with topic change. Letter grading.

191B. Capstone Seminar: Human Biology and Soci- ety. (6) Seminar, three hours. Enforced requisites: courses 105A, 105B. Students bring their accumu- lated interdisciplinary knowledge and methodological skills to bear in analyzing and interpreting a single issue, problem or section of biology and society. Student peers, whose major studies fall within different concentrations, share and learn from each others’ multiple perspectives while working together on one topic presented in class. Topics vary and come from major concentra- tions. Culminating project is team writing assignment, such as grant proposal, report to Congress on con- temporary issue, or business plan for new kind of company or nonprofit firm addressing issues in human biology and society. Letter grading.

191S. Capstone Seminar: Society and Genetics. (5) Seminar, three hours. Enforced requisites: courses 101 (or Life Sciences 4), M102. Discussion of genetics and society from historical perspective. How science of genetics itself is deeply social. Study of how biolo- gists and anthropologists have conceptualized relations of genes and (social) environment. Reading of accounts of human nature, human flourishing, and dignity that seem to privilege nature as something that can guide ethical thought and action. How these accounts would encourage or discourage people from manipulating their genetic inheritance. Consideration of what is new in current discussions of promise and peril of genetics in relation to society. Culminating paper required. May be repeated once for credit with topic change. Letter grading.


195CE. Community or Corporate Internships in So- ciety and Genetics. (4) Tutorial, to be arranged; field- work, eight to 10 hours. Limited to juniors/seniors. In- ternship in corporate, governmental, or nonprofit set- ting coordinated through Center for Community Learning. Students complete weekly written assign- ments, attend biweekly meetings with graduate stu- dent coordinator, and write final research paper. Fac- ulty sponsor and graduate student coordinator con- struct series of reading assignments that examine issues related to internship site. May be repeated for credit consistent with Center for Community Learning. Individual contract with supervising faculty member required. Letter grading.
196. Research Apprenticeship in Society and Genetics. (2 to 4) Tutorial, six hours. Limited to juniors/seniors. Entry-level research opportunities in society and genetics under guidance of faculty mentor. May be repeated for maximum of 4 units. Individual contract required. P/NP or letter grading.

197. Individual Studies in Society and Genetics. (2 to 4) Tutorial, to be arranged. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned readings and tangible evidence of mastery of subject matter (paper or other product) required. May be repeated for credit. Individual contract required. Letter grading.

199. Directed Research in Society and Genetics. (2 to 4) Tutorial, six to 12 hours. Preparation: submission of written proposal outlining study or research to be undertaken due to undergraduate advisor for department approval. Studies to involve laboratory research, not primarily literature surveys or library research. Proposal to be developed in consultation with instructor. Limited to juniors/seniors. Department majors may enroll with sponsorship from department faculty members or preapproved outside faculty members. Other juniors/seniors may enroll only with department faculty sponsors. Supervised individual research under guidance of faculty mentor. At end of term, culminating paper describing progress of project and signed by student and instructor must be presented to department. May be repeated for credit. Individual contract required. Letter grading.

Graduate Course

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

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Jennie E. Brand, PhD
Rogers Brubaker, PhD (UCLA Foundation Professor)
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Roger Waldinger, PhD
Edward T. Walker, PhD
Wei-hsin Yu, PhD
Min Zhou, PhD

Professors Emeriti
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Ronald M. Andersen, PhD (Fred W. and Pamela K. Wasserman Professor Emeritus of Health Services)
Kenneth D. Bailey, PhD
Richard A. Berk, PhD
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Duane W. Champagne, PhD
Robert M. Emerson, PhD
Oscar Grusky, PhD
David J. Halle, PhD
M. Nicolette Hart, PhD
John C. Heritage, PhD
Jack Katz, PhD
Barbara B. Lal, PhD
Ivan H. Light, PhD
David E. Lopez, PhD
Michael Mann, PhD
William M. Mason, PhD
Ruth M. Milkman, PhD
Anne R. Pебley, PhD (Fred H. Bixby Professor Emerita of Population Policy)
Jeffrey Prager, PhD
Jerome Rabow, PhD
William G. Roy, PhD
Emanuel A. Schegloff, PhD
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Giovanni Rossi, PhD
Desi M. Small-Rodriguez, PhD

Overview
Sociology is the study of the organization, dynamics, and consequences of social life. The scope of the discipline is as broad and diverse as social life itself. Sociologists study social interaction and relationships, organizations and institutions, communities and whole societies. The methods of sociological investigation are also varied: sociologists immerse themselves in the daily life of groups, interview group participants, examine recorded interaction, interpret historical documents, engage in quantitative analysis of data, and conduct large surveys. The methods and concepts of sociology yield powerful insights into the social processes shaping lives, problems, and possibilities in contemporary society. The ability to identify and understand these processes—a capacity that C.W. Mills called the “sociological imagination”—is valuable preparation for personal and professional participation in a changing and complex world.

The Department of Sociology faculty includes internationally renowned scholars who address topics ranging in scope from the organization of face-to-face interaction to the consequences of globalization. The department boasts outstanding teachers—six of whom have won Distinguished Teaching Awards—and excellently trained teaching assistants, many of whom have also won awards. The select honors program has a record for training students in the fundamentals of research and generating honors theses of substantial accomplishment.

Career Prospects
In addition to contributing to a liberal arts education, the Sociology major prepares individuals for a broad range of career options and graduate and professional studies. The analytic perspectives and skills gained in the major are a foundation for careers in business, data science, education, law, public health, and social welfare. The major also supplies a foundation for students intending to pursue graduate work in sociology and related fields. Employment opportunities available to the graduate with a Bachelor of Arts (BA) degree in Sociology also include work in community service organizations and government agencies, and human resources.

The Doctor of Philosophy (PhD) in Sociology usually leads to a career in research and/or teaching. Although most sociologists are employed by universities, there are increasing ca-
Undergraduate Major

Sociology BA

Learning Outcomes

The Sociology major has the following learning outcomes:

- Critical evaluation of social and political arguments using empirical data
- Effective and convincing formulation of written and oral arguments that integrate sociological evidence
- Demonstrated understanding of the difference between an individual-level and collective-level explanation of behavior
- Demonstrated understanding of the major sociological methods, including interviewing, ethnography, conversation analysis, content analysis, survey design, and statistical analysis, the types of questions they can be used to answer, and their limitations
- Demonstrated familiarity with several major classical contemporary sociological theoretical perspectives and how they can be used to analyze contemporary or historical events or phenomena
- Understanding of some ways in which biographies are shaped by institutions, patterns of social inequality, or cultural practice

Entry to the Major

Pre-major

Only students with fewer than 90 units completed (excluding Advanced Placement units/credit) may declare the Sociology pre-major once they complete either Sociology 1 or 20 with a grade of C or better.

First-Year Students

Students must petition to declare the Sociology major. If Sociology 101 or 102 has already been completed, a grade of C– or better is required. Grades in any other completed sociology major courses before taking other upper-division sociology elective courses.

Transfer Students

Transfer applicants to the Sociology pre-major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one introduction to sociology course and one statistics course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Sociology 1, 20, and one course from Political Science 6, Statistics 10, or 13.

The Major

Required: Eleven upper-division courses, including (1) two theory courses—Sociology 101, 102; (2) one methods course from Sociology 106A, 106B, 110, 111, 112, 113, CM124A, 191H, or Statistics 112; (3) one course from each of the following core areas: (a) Interactions—Sociology 111, CM124A, CM125, 126, 130, 132, 133, 134, 140, or 152, (b) Institutions and Social Processes—Sociology 116, 121, 139, 140, 143, 151, 158, 172, 173, M174, M175, M176, or 181B, (c) Power and Inequality—Sociology 115, 122, 123, M139, 147A, M155, 156, 157, M161, M162, M164, M165, M166, M181A, 182, 183, 185, or 186; and (4) any five upper-division sociology elective courses.

Honors Program

The honors program in sociology provides opportunity for outstanding students to undertake an independent year-long research project under the guidance of a faculty member. Students who successfully complete the honors program graduate with departmental honors.

After acceptance into the honors program, students are required to take courses 191H, 198A, 198B, and 198C (honors thesis seminars) which may be applied as electives toward the major requirements.

Computing Specialization

Majors in Sociology may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the major, (2) completing Program in Computing 10A, 10B, 10C, and (3) completing Sociology 111, 113. Each course must be taken for a letter grade. Students graduate with a bachelor’s degree in sociology and a specialization in Computing.

Policies

Preparation for the Major

A minimum grade of C is required in each preparation for the major course. Students with a grade-point average less than 2.0 in the preparation coursework are not eligible for admission to the major. Students who repeat any preparation course more than once are automatically denied admission to the major.

The Major

Students should complete course 101 and the core courses before taking other upper-division sociology courses.

Graduate Major

Sociology MA, CPhil, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Sociology

Lower-Division Courses

1. Introductory Sociology. (5) Lecture, four hours; discussion, one hour. Survey of characteristics of social life, processes of social interaction, and tools of sociological investigation. P/NP or letter grading.

M5. Social Organization of Black Communities. (5) (Same as African American Studies M5.) Lecture, four hours; discussion, one hour; field trips. Analysis and interpretation of social organization of black communities, with focus on origins and development of black communities, competing theories and research findings, defining characteristics and contemporary issues. Letter grading.

10. Social Thought and Origins of Sociology. (5) Lecture, three hours; discussion, two hours. Introduction to history of social thought, with special emphasis on theoretical precursors to development of discipline of sociology. Exposition and analysis of selected social theorists and concepts, especially from the 17th to 19th centuries. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20. Introduction to Sociological Research Methods. (5) Lecture, three hours; discussion, one hour. Introduction to methods used in contemporary sociological research, with focus on issues of research design, data collection, and analysis of data. Fieldwork may be required. Letter grading.

40. American Racism: Psychosocial Analysis. (5) Lecture, four hours; discussion, one hour. Examination of long-standing history of American racism, beginning with institution of slavery, Jim Crow legislation, separate but equal doctrine, Brown versus Board of Education, Civil Rights legislation of 1960s, and Obama presidency. Focus on persistence over time of racist beliefs and mechanisms through which racism becomes passed on from one generation to next. Racism toward African Americans and harms it has inflicted on African American community, as well as on nation as whole. Examination of psychology and sociological racism through video clips, social scientific texts, essays by prominent American humanists, and American literature that deals centrally with racism. P/NP or letter grading.

51. Sociology of Migration. (5) Lecture, three hours; discussion, one hour. Introduction to fundamental theories, themes, and research methods in sociological research on comparative study of international migration. Examination of theoretical debates and empirical analysis of causes and consequences of transnational migration in countries of origin and destination, with focus on issues of race, ethnicity, social networks, development, citizenship, and state in comparative context. Letter grading.
M72A–M72B–M72CW. Sex from Biology to Gendered Society. (6–6–6)

Freshmen. Letter grading. M72A–M72B–M72CW. Course M72A is enforced requisite to M72B, which is enforced requisite to M72CW. Limited to first-year freshmen. Letter grading. M72A–M72B–M72CW.

Introduction to topics in greater depth through supplemental readings, papers, or other activities led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading. M72A–M72B–M72CW.

Honors content noted on transcript. Letter grading. M72A–M72B–M72CW. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities led by instructor in which students participate. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.


Field Research Methods I. (6) Lecture, two hours; discussion, two hours; fieldwork, eight to 10 hours. Research and practice in the field; field notes on their experiences in and observations of intensive internship field placement. Readings focus on fieldwork roles and relations, observing and describing, interviewing, field interviewing, ethnographic issues, and preliminary data analysis. Fieldwork and extensive field notes required. Letter grading.

Field Research Methods II. (6) Lecture, two hours; discussion, two hours; fieldwork, 10 hours. Required with Field Research Methods I. Analysis and presentation of both field notes and unstructured interview data from student field placement. Use of techniques of qualitative data analysis, including, qualitative analysis, lytic, and grounded theory methods, to analyze these materials and to write ethnographic paper. Letter grading.

Comparative and Historical Methods. (4) Lecture, three hours. Recommended requisite: course 101. Introduction to range of comparative and historical methods alongside broader questions and issues in this area of sociology. Students learn about using theories to analyze real-world cases; making comparisons between societies and other social units; developing sociological explanations and historical events; and generalizing about social patterns and changes over time. P/NP or letter grading.

Social Networks. (4) Lecture, three hours; laboratory, one hour. Analysis of how social networks create the social world and their unexpected effects. Topics include job search, firm efficiency, and social movements. Visual- ization programs, computer simulations, and research projects. P/NP or letter grading.

Introduction to Mathematical Sociology. (4) Lecture, three hours; laboratory, one hour. Requisites: Mathematics 2, 3A (course whose content includes in- troductions to probability theory, matrix algebra, and differential and integral calculus). Mathematical treatment of several sociological phenomena, such as occupational mobility, population growth, organizational structure, and friendship patterns, each covered in some detail, including initial development and subsequent evaluation and modification (empha- sizing both deductive and computational aspects of mathematics). Letter grading.

Statistical and Computer Methods for Social Research. (4) Lecture, three hours; laboratory, one hour. Requisite: Statistics 10. Continuation of Statistics 10, covering more advanced statistical techniques such as regression analysis of single and multiple factor analysis. Content varies. Students learn how to use computer and write programs analyzing prepared data sets. P/NP or letter grading.

Social Data Science. (4) Lecture, three hours; discussion, one hour. Data analysis, and way social theory and data are linked. Covers data and comput- ing environment, regression analysis, causal anal- ysis, and machine learning. Offers tools for conducting quantitative analyses of social phenomenon, including emerging computational methods. Integrates sub- stance and method. Draws on literature in social in- equally to demonstrate applications of studied methods. P/NP grading.

Environmental Sociology. (4) Same as Environment 133 and Sociology 133. Lecture, three hours; discussion, one hour. Relationship between society and environment. Analysis in detail of interrelations between social factors (such as class, race, gender, and religion) and environmental factors (such as pollution, waste disposal, sustainability, and global warming). P/NP or letter grading.


Family Demography. (4) Lecture, three hours; discussion, one hour. Examination of demographic behaviors, such as marriage, divorce, and child- bearing, associated with family and household organi- zation. Sociological approach to understanding causes and consequences of trends and differentials in family formation and dissolution. P/NP or letter grading.

Simulating Society: Exploring Artificial Com- munities. (5) Same as Honors Colloquium M148. Seminar, three hours; computer laboratory, one hour. Examination of social behavior through computer sim- ulations of behavior in artificial communities. P/NP or letter grading.

Pramie Societies. (4) Lecture, three hours; dis- cussion, one hour. Limited to juniors/seniors. Selected topics on diverse behaviors and cultural forms of pri- mate cultures, including, baboons, chimpan- zees, and gorillas. Examination of primate socio- ecology, sexual competition, demography and kin- ship, politics, communication, and interactions within and between societies for our lives as human primates. P/NP or letter grading.

Disability Rights Law. (4) Same as Disability Studies M149. Lecture, four hours. Examination of disability-related issues impacting people of all ages across wide spectrum of settings in both public and private sectors—from preschool to high education, from military to workplace, and from intensely urban environments to online and virtual worlds. Topics range from persistent and recurring disputes to novel controversies fueled by social movements and changing times. P/NP or letter grading.

Sociology of Religion. (4) Lecture, three hours; discussion, one hour. Examination of classic and con- temporary research in sociology of religion. Analysis of definitions of religion, role of religion in modern life, and role of categories like Islam in con- temporary U.S. politics. Focus on complicated ques- tions of what it means to be religious, what something is religious; does that mean they are moral, in- God, or are part of community of believers? Students gain better sense of how to think and talk about reli- gion. P/NP or letter grading.

Sociology of Violence. (4) Lecture, three hours; discussion, one hour. Examination of macro-, meso-, and micro-level theories of violence, why states orga- nize violence, why civilizations participate in violence, and physical, structural, and cultural explana- tion of how various social categories such as race, ethnicity, religion, class, gender, and sex are impli- cated in violence and examination of cases of inter- state war, genocide, civil war, terrorism, and pogroms from around world.

Social Change. (4) Lecture, three hours; dis- cussion, one hour. How does social change occur? This course is for students interested in sociology about structure (degree to which individual’s actions are constrained by social forces) and agency (degree to which individuals can choose their own course of action). Major theories (Marxist, Weberian, demo- graphic, and strategic action) of social change take different views of structure and agency. Consideration of these theoretical issues in context of social change by considering empirical examples. P/NP or letter grading.

Conversational Structures I, II. (4–4) Same as Communication M144A-M144B. Lecture, three hours; discussion, one hour. P/NP or letter grading. CM124A-M124B. Limited to 10 students. CM124A. Formerly numbered CM124A. Introduction to various structures employed in organization of conversational interaction, such as turn-taking, ac- tion sequencing, and repair. Concurrently scheduled with course C244A. CM124B. Requisite: course M124A. Consideration of some more expanded se- quence structures, story structures, topical se- quences, and overall structural organization of single conversations.

Study of Norms. (4) Same as Communication M125. Lecture, four hours; dissuc- sion, one hour. Designed for juniors/seniors. Practices of communication and social interaction in number of more contextualized sites. Some interest in social structure. Set- ting varies but may include emergency services, police and courts, medicine, news interviews, and political oratory. Concurrently scheduled with course C258. P/ NP or letter grading.

Study of Norms. (4) Lecture, three hours; dis- cussion, one hour. Properties of norms, of normatively governed conduct, of lay and professional methods for describing, producing, using, and validating norms in contrasting settings of socially organized activities; relevance of these properties for programmatic problems of analytic sociology. Fieldwork required. P/NP or letter grading.

Mind and Society. (4) Lecture, two and one half hours; discussion, one hour. Requisite: course 1. Study of social production of modes of thought and forms of knowledge. Study of ways in which bodies of knowledge and cognitive styles are produced, used, and transformed in everyday, organizational, and ex- traducial contexts. P/NP or letter grading.

Sociology of Emotions. (4) Lecture, three hours; discussion, one hour. Requisite: course 1. Designed for juniors/seniors. Sociological theories and explana- tions of social conditions shaping and producing emo- tional experiences; effects of individual expression of emotions on social conditions; relations between theories of emotions, abstracts, and other activities; social construction of emotions. P/NP or letter grading.
129. Sociology of Time. (4) Lecture, three hours; discussion, one hour. Conceptualizations of time seen from scientific, philosophical, historical, and sociological perspectives, linear time in primordial, ancient, and medieval societies; ritual, the sacred, and experience of the eternal; structuring of urban, modern, and postmodern societies by clock, calendar, and schedule; future value orientation and notion of progress; see, labor, and social domination. P/NP or letter grading.

130. Self and Society. (4) Lecture, three hours; discussion, one hour. Examination of social processes shaping self-definition, enaction of self and personal identity. P/NP or letter grading.

131. Careers in Sociology. (4) Lecture, three hours. Limited to juniors/seniors. Examination of possible career paths for Sociology majors, including such fields as business, nonprofit sector, government, healthcare, entertainment, and other areas. Development of career-relevant materials and skills. Letter grading.

132. Social Psychology: Sociological Approaches. (4) Lecture, three hours; discussion, one hour. Survey of contribution of sociologists to theory and research in social psychology, including theories of social control; conformity and deviation; reference groups; and interaction process. P/NP or letter grading.

133. Collective Behavior. (4) Lecture, three hours; discussion, one hour. Requisite: course 1, Designed for juniors/seniors. Characteristics of crowds, mobs, publics, social movements, and revolutions; their relation to social role in deviant and changing social organization. P/NP or letter grading.

134. Culture and Personality. (4) Lecture, three hours; discussion, one hour. Requisite: course 1. Designed for juniors/seniors. Theories of relations of variation in personality and culture in everyday life, in primitive, modern, and postmodern societies, and influence of social role on behavior. P/NP or letter grading.

135. Sociology of Body. (4) Lecture, three hours; discussion, one hour. Examination of body as social construction and as part of social historical context. Students gain understanding of how bodies become gendered, raced, classed, and sexualized in ways that create and reinforce social institutions and relations of power. Analysis of reciprocal processes of structuration: how body is shaped by social expectations and symbolic exchange, how meanings are attached to bodies and different body parts, and how body shape is shaped by sociocultural interactions. Critical evaluation of embodiment experience, and contribution of sociological theories and data to understanding. P/NP or letter grading.

M136. Eating Society: Science and Politics of Food from Individual to Planetary Health. (4) (Same as Food Studies M136 and Society and Genetics M136.) Lecture, three hours; discussion, one hour. Questions of food and health, individual and group life, in primitive, modern societies, and influence of social role on behavior. P/NP or letter grading.

141A. Migration and Labor in Mexico-U.S. Context. (5) Seminar, 20 hours. Mexico-U.S. migration is largest and oldest continuous international population flow of contemporary world. This migration, prompted by swift economic transformations, rural and urban Mexicans from every corner of Mexico have joined this migratory flow, settling well beyond southwestern region and spreading to destinations beyond border. Migration is both binding U.S. and Mexico stronger than ever, putting this complex and multifaceted phenomenon at top of bilateral agenda. Examination of sociological dynamics of international migration and labor as they apply to Mexico-U.S. context, including demographic, political, and economic dynamics of migration, economic and social infrastructures that support cross-border mobility, and connections of migration with national, regional, and local labor markets. Comparative insights to contrast this flow with other contemporary population streams. Offered in summer only. Letter grading.

141B. Migration and Labor in Mexico-U.S. Context: Research Seminar. (5) Seminar, 10 hours; fieldwork, 10 hours. Development of qualitative micro-study and research paper on migration and labor in Mexico-U.S. context. Students responsible for research design and implementation so students become familiar with commonly employed qualitative methods of research. Designed to help students understand basic of methodological reasoning, how to formulate research questions, and how to frame and investigate one particular issue related to migration and labor. How to make ethical decisions about conducting research. Development of student ability to identify primary and secondary research literature and primary research culminating in final research paper to be presented to faculty members and peers. Offered in summer only. Letter grading.


M144. Stress and Society: Biology and Inequality. (5) Lecture, three hours; discussion, one hour. Integrative view of health disparities, one of most pressing problems of society, through investigation of effects of socioeconomic status (SES) on being speciﬁc lens of stress biology. Topics include introduction to fundamentals of physiology of stress, integration of literature on poverty and SES with studies on physiologic consequences of poverty. Lecture and discussion of concepts of life course by following stress biology through childhood development and into adulthood. Letter grading.

145. Sociology of Deviant Behavior. (4) Lecture, three hours; discussion, one hour. Examination of leading sociological approaches to study of deviation and general survey of major types of deviation in American society. P/NP or letter grading.

147A. Sociology of Crime. (4) Lecture, three hours; discussion, one hour. Survey of major sociological theories of social origins, organization, and meanings of crime and criminal behaviors. P/NP or letter grading.

147B. Sociology of Criminal Justice. (4) Lecture, three hours; discussion, one hour. Examination of structures and routine decision-making processes of key criminal justice institutions, including police, courts, probation and parole, jails and prisons. P/NP or letter grading.

M148. Sociology of Mental Illness. (4) (Same as Dis- ability Studies M148.) Lecture, three hours; discussion, one hour. Analysis of major sociological and psychological models of madness. Study of social processes involved in production, recognition, labeling, and treatment of mental illness. P/NP or letter grading.

149. Youth, Trouble, and Juvenile Justice. (4) Lecture, three hours; discussion, one hour. Examination of processes through which youth become involved in juvenile justice system. Analysis of this system as people-processing and people-changing institution as context for considering critical issues in juvenile justice. P/NP or letter grading.

M150. Sociology of Aging. (4) (Same as Gerontology M150.) Lecture, three hours; discussion, one hour. Study of sociological processes shaping definition, understanding, and response of contemporary society. Topics include race, class, and gender in aging over life course; interpersonal relations and social worlds of aged; caregiving relations and institutionalizations concerned with aged and aging. Letter grading.

151. Comparative Immigration. (4) Lecture, three hours; discussion, one hour. Survey of immigration experience on ethno-racial groups that migrated voluntarily to this country, with emphasis on immediate postimmigration settlement. P/NP or letter grading.

152. Comparative Acculturation and Assimilation. (4) Lecture, three hours; social science, one hour. Requi- site: course 151. Comparison of acculturation and assimilation of Europeans, Africans, Mexicans, and Asians in the U.S., with emphasis on long-term cultural and social consequences of immigration. P/NP or letter grading.

M153. Chinese Immigration. (4) (Same as Asian American Studies M153C.) Lecture, three hours; discussion, one hour. Survey of sociological studies of Chinese immigration, with focus on international context, organization, and institutions of Chinese America and its interactions with social environment. P/NP or letter grading.

154. Race and Ethnicity in Latin America. (4) Lecture, three hours; discussion, one hour. Role of race and ethnicity in political, economic, and social lives of Latin American nations. P/NP or letter grading.
168. Organizations and Society. (4) Lecture, three hours; discussion, one hour. Sociological analysis of organizations and their social environment. Introduction to basic theories, concepts, methods, and re- search on behavior of organizations in society. P/NP or letter grading.

169. Law and Society. (4) Lecture, three hours; discussion, one hour. Specific topics may include law in pre-industrial and industrialized societies, legalization of contemporary social relations, participants’ experiences of legal processes, ways of perceiving of justice, social movements toward equal justice, roles of lawyers and judges, and social impact of court decisions. P/NP or letter grading.

170. Medical Sociology. (4) Lecture, three hours; discussion, one hour. Requisite: course 1. Provides majors in Sociology and other social sciences, as well as students preparing for health sciences careers, with understanding of health-seeking behavior and interpersonal and organizational relations that are involved in receipt and delivery of health services. P/NP or letter grading.

171. Occupations and Professions. (4) Lecture, three hours; discussion, one hour. Description and analysis of representative occupations and professions, with emphasis on contemporary U.S. P/NP or letter grading.

172. Entrepreneurship. (4) Lecture, three hours; discussion, one hour. Requisite: course 1. Description and analysis of entrepreneurship, with special reference to historical origins, images of entrepreneurs, and gender and ethnic minority participation, legal and illegal forms, public and private auspices. P/NP or letter grading.

173. Economy and Society. (4) Lecture, three hours; discussion, one hour. Sociology of economic life, with emphasis on principal economic institutions of the U.S. P/NP or letter grading.

174. Sociology of Family. (4) Lecture, three hours; discussion, one hour. Theory and research dealing with modern family. Its structure, functions, historical changes, variant family patterns, family as institution, and influence of contemporary society on family. P/NP or letter grading.

175. Sociology of Education. (5) Lecture, four hours; discussion, one hour. Study of how U.S. educational system both promotes socioeconomic opportunities and maintains socioeconomic inequalities: historical and theoretical perspectives on role of education in U.S. society; trends in educational attainment; ways in which family background, class, race, and gender affect educational achievement and participation between and within schools; effects of education on socioeconomic attainment, family, health, attitudes, and social participation; educational policies to improve school quality and address socioeconomic inequalities. Letter grading.

176. Sociology of Mass Communication. (4) Lecture, four hours; discussion, one hour. Study of the relationship between mass communication and social organization. Topics include history and organization of major media institutions, social forces that shape production of mass media news and entertainment, selected studies in content, and effects of media on society. P/NP or letter grading.

177. Sociology of Caribbean. (4) Lecture, three hours; discussion, one hour. Limited to juniors/seniors. Historical sociology of Caribbean, with emphasis on colonialism and decolonization, development and underdevelopment, race-making institutions and evolution of race relations, nationalism and migration. P/NP or letter grading.

180A-180Z. Special Topics in Sociology. (4 each) Lecture, three hours; discussion, one hour. Limited to juniors/seniors. Study of selected topics of sociological interest. Course content varies with topics and instructors. May be repeated for credit and may be applied as elective units toward Sociology major. P/NP or letter grading.

181A. Sociology of Global China. (4) Lecture, three hours; discussion, one hour. Designed for juniors/ seniors. Analyses of how domestic developments create impetus for China’s global expansion, and assesses global China’s internal and external consequences. Concrete case studies include Belt and Road Initiative, soft power and cultural diplomacy, internal colonization of Hong Kong and Xinjiang, China in Africa, U.S.-China trade war, and New Cold War. P/NP or letter grading.

181B. Sociology of Contemporary China. (4) Lecture, three hours; discussion, one hour. Designed for juniors/seniors. Survey of changes in Chinese society from beginning of 20th century to present. Topics include social mobility and inequality, family and household, and population. Emphasis on changes post-Reform and opening in present. Focus on interaction of economic and political change and family organization. Contrasts and similarities between China and West, China’s place in social sciences, and challenges due to social organization that originated from studying Western societies. May be taken independently for credit. P/NP or letter grading.

182. Political Sociology. (4) Lecture, three hours; discussion, one hour. Contributions of sociology to study of political life, including analysis of political aspects of social systems, social context of action, and social bases of power. P/NP or letter grading.


185. American Society. (4) Lecture, three hours; discussion, one hour. Analysis of major institutions in the U.S. in historical and international perspective, with emphasis on topics such as industrialization, work, society, politics, community, family, religion, and American culture. Theories of social change, conflict, and order applied to case of the U.S. P/NP or letter grading.

186. Latin American Societies. (4) Lecture, three hours; discussion, one hour. Social structure and social conflict in Latin America, with special attention to racial and class structures and dilemmas of economic and political development. Country and specific focus varies each term. P/NP or letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SC. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced prerequisite: course 188SA or B. May be applied toward minor in International Studies. Individual study in regularly scheduled meetings with faculty mentor to discuss individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors consent noted on transcript. P/NP or letter grading.
189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study under course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.


M191DC. CAPPP Washington, DC, Research Seminars. (8) (Same as Communication M191DC, History M191DC, Political Science M191DC, and Public Affairs M191DC.) Seminar, three hours. Limited to CAPPP Program students. Seminars for undergraduates in Center for American Politics and Public Policy's program in Washington, DC. Focus on development and execution of original empirical research based on evidence from Washington, DC-based field placements. Study of variety of qualitative methods (observation, interviewing, etc.), with comparison to quantitative analysis. Examination of features of solid and significant research; intensive writing. Letter grading.


191F. Undergraduate Seminar: Sociology of Globalization. (5) Seminar, three hours. Limited to juniors/senior, Great extension of social relations across globe has occurred. What are causes and mechanisms of this process, and how far has it transformed human societies, and how far will it go in future? Economic, cultural, political, and military aspects of globalization, extent to which global expansion of capitalism, nation-state system, and American imperialism reinforce or undercut each other, producing new lines of division and conflict across world. Reading, discussion, and development of culminating project. Letter grading.

191H. Honors Seminars: Sociology. (4) Seminar, three hours. In-depth introduction to process of producing scholarly sociological research for students who intend to write an undergraduate thesis for departmental honors. Letter grading.

191I. Undergraduate Seminar: Health and Inequality. (5) Seminar, three hours. Limited to juniors/seniors. During past century, social inequalities in health and survival were widening in the U.S. as in other developed societies. Broad overview of these trends and their causes. Reading, discussion, and development of culminating project. Letter grading.

191J. Undergraduate Seminar: Mexican Society. (5) Seminar, three hours. Selected topics on contemporary Mexican society and vital transformations it has undergone in recent years. Reading, discussion, and development of culminating project. Letter grading.

191K. Undergraduate Seminar: Cigarettes and Western Civilization—Sociological History of Smoking. (5) Seminar, three hours. Limited to juniors/seniors. Use of history of tobacco and cigarette smoking to explore important themes in sociology, history, and culture. History of tobacco from its roots in Native American culture, its contribution to foundation of European colonies in New World, its cultural incorporation in many areas of life, and its influence in way of life and health consequences, and its demise as legitimate soft drug for modern urban people. Letter grading.


191M. Undergraduate Seminar: Social Ecology. (5) Seminar, three hours. Limited to juniors/seniors. Fundamentals of sociological approach to social ecology, also known as human ecology. Study of adaptation of population to its environment. Topics include density, maintaining personal space, space and territoriality, and effects of environment on humans. Reading, discussion, and development of culminating project. Letter grading.

191N. Undergraduate Seminar: Urban and Suburban Sociology in New York City. (5) Seminar, eight hours. Limited to students in summer UCLA Travel Study Program. Cutting-edge urban issues in country's largest city, including New York's attempt to plan for city of 9.2 million, rebuilding of World Trade Center, Robert Moses (New York's master builder), urban economic development, green New York, transportations, urban politics, house and architectural styles, including New York's famous skyscrapers, historic preservation, crime and police departments, ghetto, education, housing, and search for affordable housing. Offered in summer only. Letter grading.

191NY. Undergraduate Seminar: Urban and Suburban Sociology in New York City. (5) Seminar, eight hours. Limited to students in summer UCLA Travel Study Program. Cutting-edge urban issues in country's largest city, including New York's attempt to plan for city of 9.2 million, rebuilding of World Trade Center, Robert Moses (New York's master builder), urban economic development, green New York, transportations, urban politics, house and architectural styles, including New York's famous skyscrapers, historic preservation, crime and police departments, ghetto, education, housing, and search for affordable housing. Offered in summer only. Letter grading.

191O. Undergraduate Seminar: Ideas of Love in Historical Perspective. (5) Seminar, three hours. Limited to seniors/minors. Specific case studies for undergraduate students in Center for American Politics and Public Policy's program in Washington, DC. Focus on development and execution of original empirical research based on experiences from Washington, DC-based field placements. Study of variety of qualitative methods (observation, interviewing, etc.), with comparison to quantitative analysis. Examination of features of solid and significant research; intensive writing. Letter grading.


191Q. Undergraduate Seminar: Communication in Medical Care. (5) Seminar, three hours. Limited to juniors/seniors. Sociology dimensions of patient care in primary care context. Use of microsociological methods to examine main facets of American primary care medical visits, including detailed analysis of interactional conduct of those visits and development of microanalytical constructs into quantitative measures. Emphasis on direct contact with empirical materials and development of observational and analytic skills. Letter grading.

191R. Undergraduate Seminar: Social Culture. (5) Seminar, three hours. Limited to juniors/seniors. Introduction to classic theoretical approaches and contemporary developments in study of social worlds and secondary socialization. Emphasis on such themes as literature, journalism, film/television, art, architecture, music, dance, and museums. Discussion of such topics as contemporary validity of distinction between high and popular culture, relationship of mainstream and marginal culture, how culture expresses and reinforces social inequality, organizational culture, and how to pursue process and decipher meaning in cultural objects. Reading, discussion, and development of culminating project. Letter grading.

191S. Undergraduate Seminar: Sociology of Gender. (5) Seminar, three hours. Limited to juniors/seniors. Study of relationship between social construction of gender and social organization in general, with particular attention to shock-based civic militarism characteristic of the West. Topics include honor, discipline, bureaucracy, conscription, logistics, total war, guerilla war, terrorism, and counterinsurgency. Reading, discussion, and development of culminating project. Letter grading.

191T. Variable Topics Research Seminars: Socioculture. (5) Seminar, three hours. Limited to juniors/seniors. Study of selected topics of sociocultural interest. Reading, discussion, and development of culminating project. Instructor Schedule and faculty members and instructors. May be repeated for credit and may be applied as elective units toward Sociology major. Letter grading.

194. Research Group Seminars: Sociology. (2) Seminar, two hours. Designed for undergraduate students who are part of research group. Discussion of research methods and current literature in field. May be repeated for credit. P/NP grading.

M194DC. Quarter in Washington, DC, Research Seminars. (Same as History M194DC and Political Science M194DC.) Seminar, three hours. Limited to Quarter in Washington students and other students enrolled in UC Washington Center programs. Seminar for undergraduate students to participate in Center for American Politics and Public Policy's program in Washington, DC. Focus on development and execution of original empirical research based on experiences from Washington, DC-based field placements. Study of variety of qualitative methods (observation, interviewing, etc.), with comparison to quantitative analysis. Examination of features of solid and significant research; intensive writing. Letter grading.

195. Community or Corporate Internships in Sociology. (4) Tutorial, three hours. Limited to juniors/seniors. Internship in community agency or business to be supervised jointly by Center for Community Learning and faculty adviser. Students meet on regular basis with instructor and provide weekly reports of their experience. Normally only 4 units of internship are allowed. Individual credit with supervising faculty member required. P/NP or letter grading.

195CE. Community and Corporate Internships in Sociology. (4) Tutorial, to be arranged; fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship in corporate or government settings supervised jointly by Center for Community Learning. Students complete weekly written assignments, attend biweekly meetings with graduate student coordinator, and complete final research paper. Faculty sponsor and graduate student coordinator construct series of reading assignments that examine issues related to internship site. May be repeated for credit with consent of Center for Community Learning. No more than 4
201A. Writing, 201B-201C. Proseminars: Sociology. (2–2–2) Seminar, two hours every other week. Required of first-year graduate students. Introduces to range of theoretical and research interests represented by department faculty members. S/U grading.

202A-202B. Theory and Research in Sociology. (4–4) Lecture, two hours; discussion, two hours. Required of first-year graduate sociology students. Examination of interrelations of theory, method, and substance in exemplary sociological works, with analytical and skills-centered orientation. In Progress (202A) and S/U or letter (202B) grading.

203. How to Write a Lot. (4) Seminar, three hours. Designed to help graduate students develop regular and productive writing practices. Appropriate for students in their second year or beyond who have one full draft of their MA paper written and want to revise and publish it in a timely manner. Development of regular writing schedules and protecting them from competing demands. Learning of specific genres of writing for academic audiences, books, and op-eds. Editing of students’ own work and that of classmates. S/U or letter grading.

204. Topics in Sociological Theorizing. (4) Seminar, four hours. Examination of selected issues and problems in classical or contemporary sociological theory. S/U or letter grading.

205. Family and Social Change. (4) Lecture, three hours. Examination of change in family household organization, with major focus on relations among economic institutions, family structure, and content of family life. Consideration of concepts, theories, and data about kinship. S/U or letter grading.

206. Understanding Fertility: Theories and Methods. (4) (Same as Community Health Sciences M202.) Lecture, three hours. Preparation: one formal or social demography course. Requisite: Biostatistics 100A. Application of demographic theories and methods to description and interpretation of fertility and related social and proximate determinants of fertility, with emphasis on understanding key proximate determinants. For advanced students interested in population, demography of health, and social demography. Letter grading.


210C. Intermediate Statistical Methods III. (4) Lecture, three hours; discussion, one hour. Requisite: course 210A. Statistical methods used in social research, with focus on problems for which classical linear regression model is inappropriate, including categorical data, structural equations, longitudinal data, incomplete and erroneous data, and complex samples. S/U or letter grading.

211A-211B. Comparative and Historical Methods. (4) Lecture, three hours. In Progress (211A) and S/U or letter (211B). Strategies of Research and Conceptualization. Topics include relationship of theory and fact to social sciences, logic of comparative and historical analysis, and substantive paradigms of comparative and historical analysis. Reading includes methodological examination of basic works in representative problem areas. 211B. Research Techniques. Requisite: course 211A. Topics include problem of evidence, quantitative and qualitative data, and the production of data analysis, including use of manuscript census, content analysis, collective biography, and secondary analysis.

212A. Quantitative Data Analysis. (4) Lecture, three hours; discussion, one hour. Enforced requisites: courses 210A, 210B. Course 212A is enforced requisite to 212B. Analysis and interpretation of primarily nonexperimental quantitative data, with focus on sample survey research. Development of routine practice at utilizing statistical methods encountered in previous courses, culminating in term paper in style of American Sociological Review or similar journal article. Topics include classical design and analysis, correlation, log-linear analysis, ordinary least squares regression, regression with interactions, robust regression, diagnostic procedures, and methods for handling complex sample survey data. Includes comparison and grading of credit to be given only on completion of course 212B.

212B. Quantitative Data Analysis. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 212A. Analysis and interpretation of primarily nonexperimental quantitative data, with focus on sample survey and census data. Extensive practice at utilizing statistical methods encountered in previous courses, culminating in term paper in style of American Sociological Review or similar journal article. Topics include missing data; binomial, multinomial, and ordinal logistic regression; factor analysis and scale construction; methods for causal inference, including fixed effects and propensity score matching; and primer on advanced topics, including structural equations and multilevel models. S/U or letter grading.

212C. Study Design and Other Issues in Quantitative Analysis. (4) Lecture, three hours. Designed for graduate and undergraduate students who have had some exposure to statistics and quantitative methods. Introduction to study design, including expressing longitudinal and cross-sectional designs, regression models, and other designs. Discussion of suitability of various design classes for specific analytic goals, as well as their comparative strengths and weaknesses. S/U or letter grading.

M213A. Introduction to Demographic Methods. (4) (Same as Biostatistics M208, Community Health Sciences M208, and Economics M208.) Lecture, four hours. Preparation: introductory statistics course. Introduction to methods of demographic analysis. Topics include demographic rates, standardization, decomposition of differences, life tables, survival analysis, cohort analysis, birth interval analysis, models of population growth, stability, and density, population projection, and demographic data sources. Letter grading.

213B. Applied Event History Analysis. (4) Lecture, four hours. Preparation: prerequisite of response models. Requisites: courses 210A, 210B. Introduction to regression-like analyses in which outcome is event time. Topics include logit models for discrete-time event history models; piecewise exponential hazards models; proportional and nonproportional hazards; parametric survival models; heterogeneity; multi-level survival models. S/U or letter grading.

M213C. Population Models and Dynamics. (4) (Same as Community Health Sciences M209.) Lecture, three hours. Requisite: course 213A. Population models and their dynamics in population processes. How demographic models are used in estimating population size, age structure, and associated population dynamics. Computer simulations of demographic processes to gauge conclusions from demographic models. Estimation of demographic models in human population and broader relevance of demographic analysis to study of any population or system, including health and social systems. S/U or letter grading.

216A. Survey Research Design. (4) Lecture, three hours. Recommended prerequisite: course 210A. Post, present, and future of survey research; survey modes; survey errors; survey sampling; response rates; questionnaire design; reliability and validity of survey items; survey administration, and ethics and costs. Letter grading.

216B. Survey Research Design. (4) Lecture, three hours. Enforced requisite: course 216A. Practical application of survey design skills. Students design and implement individual survey data collection projects and collectively review and evaluate their projects’ results and challenges. Letter grading.


217B-217C. Ethnographic Fieldwork. (4–4) Seminar, three hours. Recommended prerequisite: course 217A. Theories and techniques of ethnographic fieldwork. Kinds of problems amenable to ethnographic approaches, methods, and techniques for doing fieldwork, and ethical problems involved in such research. In Progress (217B) and letter (217C) grading.

220. Self and Society. (4) Lecture, three hours. Examination of social and cultural construction definition and experience of the self, embodied interactional practices through which the self is constructed in everyday and institutional contexts, formation and transformation of self during life course, and construction of collective identity. Letter grading.

222. Foundations of Ethnomethodological, Phenomenological, and Analytic Sociologies. (4) Lecture, three hours. Designed for graduate students. Basic issues, methods, and topics of ethnomethod-
M225A. Applications of Economic Theory: California Population Research Topical Seminar Series. (4) (Same as Economics M204A.) Seminar, three hours. Limited to California Center for Population Research (CPCR) graduates who have examined of issues such as demography, health, aging, labor, and broad array of topics concerned with effects of economic, social, and political transformations on human behavior both in U.S. and in other countries. \( \text{S/U or letter grading.} \)

226A-226B. Introduction to Theory and Major Empirical Research in Social Demography. (4–4) Lecture, two hours; discussion, one hour. Requisite: course 210A. Students will examine topics in social demography and related varieties of inquiry. Central themes such as interactions between human societies, their economic, political, and social systems. S/U or letter grading.

227. Sociology of Knowledge. (4) Lecture, three hours. Designed for graduate students. Presentations by affiliated faculty in second part. S/U production of ordinary interaction in first part; guest presentations by affiliated faculty in second part. \( \text{S/U or letter grading.} \)

233. Foundations of Political Sociology. (4) Lecture, three hours. Designed for graduate students. Study of field of political sociology, oriented around critical theoretical traditions and contemporary exemplars. Special attention to competing perspectives on power, theory of state, and relationship of class structure to politics. \( \text{S/U or letter grading.} \)


236A. International Migration. (4) Lecture, three hours. Comprehensive overview of key current theoretical debates in study of international migration, with focus on exploration of possibilities of comparative (historical and cross-national) research programs in field, linking North America and other global experiences of immigration. \( \text{S/U or letter grading.} \)

236B. International Migration. (4) (Same as Geography M224.) Lecture, three hours. Further exploration of key current theoretical debates in study of international migration, with emphasis on working both theoretical debates of field and empirical data and case studies on which those debates hinge, to encourage students to undertake research in field. \( \text{S/U or letter grading.} \)

236C. International Migration. (4) Lecture, three hours. Designed for students beginning or undertaking original research in field of international migration. Outside lectures, discussions, and presentations of student projects; circulation of completed or draft student papers. \( \text{S/U or letter grading.} \)

237. Seminar: Theory and Research in Comparative Social Analysis. (2) Seminar, two hours. Designed for graduate students. Emphasis on one issue of particular importance for comparative analysis of capitalism and socialism, North America and Western Europe, developed capitalist and socialist countries and Third World, and implications for theory construction and social research. \( \text{S/U or letter grading.} \)

238. Sociology of Gender and Sexuality. (4) (Same as Gender Studies M238.) Seminar, three hours. Designed for graduate students. Analysis of current American feminist theory relevant to sociologists. Exploration of critiques of second wave feminism by working class feminists and/or feminists of color, feminist scholars from other countries, and recent so-called antifeminist directions of feminism. \( \text{S/U or letter grading.} \)

242B-244C. Conversation Analysis II, III. (4–6) Lecture, three hours; discussion, two hours. \( \text{S/U or letter grading.} \)

242D. Selected Topics in Culture and Society. (4) Lecture, three hours; discussion, one hour. Introduction to various structures employed in organization of conversational interaction, such as turn-taking, action sequencing, and repair; Concurently scheduled with course CM124A. \( \text{S/U or letter grading.} \)

243. Comparative Ethnicity, Race, and Nationalism. (4–4) Lecture, three hours. Introduction to comparative analysis of ethnic, race, and nationalism through close reading of key theoretical and empirical works. S/U or letter grading.

244. Sociology of Emotions. (4) Lecture, two hours; discussion, one hour. Designed for graduate students. Emphasis on interrelations of culture, brain, and social behavior. S/U or letter grading.

245. Cultural Sociology: Classical and Contemporary Approaches. (4) Lecture, one hour; discussion, two hours. Exploration of classical approaches to cultural life in terms of works of Durkheim, Weber, Marx, offbeat, and radical; and living traditions they have spawned. Examination of current interests at constructing new cultural sociology. \( \text{S/U or letter grading.} \)

246. Sociology of Culture. (4) Seminar, three hours. Theoretical and methodological issues in structural approaches to culture. Perspectives include cultural economy, political economy, and production of culture. \( \text{S/U or letter grading.} \)

247. Sociology of Emotions. (4) Lecture, two hours; discussion, one hour. Designed for graduate students. Sociological theories of emotional expression; experiential approaches to emotions: motivational, cognitive, physiological, and behavioral; repression, social oppression, and emotions; creativity and expression, and long-term effects on emotions; specific emotions; cultural differences in emotional expression; measurement of emotions. \( \text{Letter grading.} \)

248. Selected Topics in Culture and Society. (4) Seminar, three hours. Designed for graduate students. Current perspectives on sociological theory and research. \( \text{Consult Schedule of Classes for topics and instructors. May be repeated for credit. S/U or letter grading.} \)

M249. Culture, Brain, and Development. (4) (Same as Psychology M247.) Seminar, three hours. Introduction to interrelations of culture, brain, and development, including both social and cognitive devel-
opment. Special attention to effects of social change on culture and human development. S/U or letter grading.

250. Sociology of Health. (4) Seminar, three hours. Exploration of literature of human health as product of society. Macro focus and micro focus used to examine relevance of macro organizational features of national society (culture, economy, politics) while maintaining awareness that link these to personal experiences as influences to personal mind, body, emotion. Main focus on modern industrial societies and organized around many leading issues in sociology of health. S/U or letter grading.

251. Social Movements. (4) Seminar, three hours. In-depth exploration of current theoretical debates and empirical research on social movements, collective action, and contentious politics, examining case studies, comparative analyses, and large-N investigations, with focus on developing student expertise in understanding social movement research and conceptualizing research projects. S/U or letter grading.

252. Selected Topics in Sociology of Gender. (4) (Same as Gender Studies M252.) Lecture, two hours; discussion, two hours. Designed for graduate students. Seminar on selected topics in sociology of gender. May be repeated for credit. Letter grading.

253. Politics of Reproduction, Gender, and Family. (4) Seminar, three hours. Human reproduction and its regulation have long been focus of contentious politics around world and remain topical today. Reproduction refers here to all social reproduction, including interdependence shapes policies and practices pertaining to them. Government efforts to influence fertility behavior call attention to one important feature of modern states: political intervention into private life, intimacy, and sexuality. Politics of reproduction refers to intersection between politics and life cycle, or between public sphere and private lives. Expansion of state in codification of norms also blurs lines between public and private interests. Exploration of diverse aspects of politics of reproduction, their gendering, and their impact on changing family forms to encourage development think comparatively and historically about these issues in different contexts and cultures. Letter grading.

254. Human Capital, Social Capital, and Cultural Capital. (4) Lecture, three hours. Designed for graduate students. Historical sociology of these concepts, points of difference and similarity among these concepts, current exemplars of research that utilize these concepts, and critical reflection on research traditions. Letter grading.

255. Cross-Cultural Perspectives on Gender. (4) (Same as Gender Studies M255.) Seminar, three hours. How does gender manifest itself in lives of different women in U.S. and abroad? Are universal social systems or universal cultural models possible or is gender too different cross-culturally? S/U or letter grading.


258. Talk and Social Institutions. (4) Lecture, four hours; discussion, one hour. Practices of communication and social interaction in number of major institutional sites in contemporary society. Setting society but may include emergency services, police and courts, medicine, news interviews, and political oratory. Concurrently scheduled with course CM125S. S/U or letter grading.

259. Economy and Society. Discussion, two hours. (4) Discussion, two hours. Designed for graduate students. Review and critique of major analytical traditions in sociology of economy and specifically for themes traditionally studied in sociology of medicine. Topics include medicine, culture, and capital, professions and power, challenge of managed care, sick role and social control, interactionism and neglect, and social control. S/U or letter grading.

260. Sociology of Medicine. (4) Seminar, three hours. Review of major works that examine major issues in sociology of medicine. Topics include medicine, culture, and capital, professions and power, challenge of managed care, sick role and social control, interactionism and neglect, and social control. S/U or letter grading.

261. Communication in Medical Care. (4) Seminar, three hours. Review and development of empirical knowledge about doctor-patient relationship. Analysis of nature and dynamics of routine office visits, with focus on nature and role of norms in regulating doctor-patient conduct, role of expertise and power in doctor-patient relationship, and methodological questions concerning how doctor-patient relationship can be analyzed. S/U or letter grading.

262. Black Families and Relationships. (4) (Same as African American Studies M262.) Seminar, three hours. Evaluation of social, cultural, and historical forces that affect socialization, stability, and interaction in black intimate relationships, beginning with the historical framework from black feminism to analysis of economic and other expectations for partners in cohabiting and other types of unions. Examination of family life for black working-class and low-income populations. Exploration of notions of black sexuality, including images of hyper-masculinity and femininity within black body and critical interrogation of notions of blackness and authenticity in racial identification. Contribution to understanding of black intimate relationships in different contexts, including lesbian and gay identities, Caribbean and other ethnic identities, and interracial intimacies. S/U or letter grading.

263. Social Demography of Los Angeles. (4) (Same as Community Health Sciences M263.) Lecture, three hours. Designed for graduate students. Use of city of Los Angeles data to examine major social and demographic factors that characterize cities in the U.S. Examination of role of these factors in affecting health outcomes. Letter grading.


266. Selected Problems in Analysis of Conversation. (4) Lecture, three hours. Requisites: courses 244A, 244B. Variable topics/forms course. Consult instructor for topics and format to be offered in specific term. May be repeated for credit with topic change. S/U or letter grading.


269. Sociology of Latin America. (4) Lecture, one hour; discussion, two hours. Designed for graduate students. Selected topics in sociological study of Latin America, possible topics include political movements, race, ethnicity, stratification, and social development. Letter grading.

270. Trafficking, Gender, Health, and Human Rights. (4) (Same as Law M577.) Seminar, four hours. Review and critical assessment of diverse literature on international traffic of persons, with emphasis on significance of sociological, legal, and gender aspects of trafficking. Primary focus on trafficking for sex work and braned lines between discourse on commercial sex trade and trafficking. Additional issues include role of political and economic transition, militarization, health implications of trafficking, trafficking for non-sexual labor, and role of advocacy. S/U or letter grading.

271. Selected Problems in Mathematical Sociology. (4) Lecture, three hours. Exploration of some mathematical models of sociological processes. Possible topics include: network dynamics, social mobility, kinship relations, organizations, social interaction. S/U or letter grading.

272. Sociology of Human Rights. (4) Seminar, three hours. Discussion of major contemporary challenges and issues in sociology of medicine. Topics include medicine, culture, and capital, professions and power, challenge of managed care, sick role and social control, interactionism and neglect, and social control. S/U or letter grading.

273. Communication in Medical Care. (4) Seminar, three hours. Review and development of empirical knowledge about doctor-patient relationship. Analysis of nature and dynamics of routine office visits, with focus on nature and role of norms in regulating doctor-patient conduct, role of expertise and power in doctor-patient relationship, and methodological questions concerning how doctor-patient relationship can be analyzed. S/U or letter grading.


275A-275Z. Special Topics in Sociology. (4) (Each) Seminar, three hours. Designed for graduate students. Seminars on selected current topics of sociological interest. Consult Schedule of Classes for topics and instructors. May be repeated for credit. S/U or letter grading.

276. Topics in Chinese Society. (4) Seminar, three hours. Preparation: at least two upper-division courses on China in any social sciences discipline. Introduction to current research questions in Chinese sociology, as well as major themes in study of Chinese society, both historical and contemporary, including demographic, economic, political, and social change before and after 1949. S/U or letter grading.

277. Problems in Social Analysis. (2–4) Requisites: courses 244A, 244B. S/U or letter grading.

290A. Data Analysis. Laboratory, two hours, Practice in analysis of conversational data. May be repeated for credit. Letter grading.

290B. Problems in Social Analysis. (2–4) Requisites: courses 244A, 244B. S/U grading.

290A-290B. Practicum in Conversation Analysis. (2–4) Practice in analysis of conversational data. May be repeated for credit. S/U grading.

291N. Urban and Suburban Sociology. (5) Seminar, three hours. History and present condition of cities and suburbs in America, with stress on global cities such as New York and Los Angeles, and comparisons to London and Shanghai. Process of suburbanization as well in early and contemporary city. Analysis of city politics, house and architectural styles, crime, urban terror, public housing and ghettos, segregation and integration of neighborhoods, questions of gentrification, influences from community or national (especially art, museums, and movie and music industries) and environmentalism. Concurrently scheduled with course C191N. Letter grading.

292. Workshop in Culture and Society. (4) Seminar, two hours every other week. Interdisciplinary workshop for graduate students and faculty pursuing theory and research in topics related to interplay of culture and society, whether social, literary, or philosophical in nature. S/U grading.

293. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprentice to examine major issues in supervision and regulation of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U or letter grading.

294. Practicum in Evaluation of Health Services: Theory and Methodology. (4) (Same as Health Policy M422.) Lecture, four hours. Requisites: Health Policy 200A, 200B. Introduction to evaluation of health services programs and policies. Exposure to basic theoretical concepts and specific evaluation methodologies and designs. Letter grading.

295. Supervised Teaching of Sociology. (2) Seminar, two hours. Preparation: appointment as teaching assistant in Sociology. Design for teaching assistants designed to deal with problems and techniques of teaching introductory sociology. S/U grading.
SPANISH AND PORTUGUESE

College of Letters and Science

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Overview
The Department of Spanish and Portuguese is dedicated to the study and teaching of the languages, literatures, and cultures of the Hispanic heritage in all areas of the world, particularly on the continents of Europe and America. It maintains a strong commitment to the value of original research and professional instruction at all levels of its activities.

Whether studying for the Bachelor of Arts (BA), Master of Arts (MA), or Doctor of Philosophy (PhD) degree, students are given careful guidance in the choice of courses and in the preparation of a study program. The richness of Hispanic culture is amplified represented in the extensive range of courses in language, linguistics, and literature. Although the literatures of Spain, Portugal, Brazil, and Spanish America predominate, courses are also offered in Chicano literature. The breadth of courses offered by the department allows undergraduate students to pursue many possible interests and enables graduate students to concentrate in depth in several areas of specialization.

Department courses are primarily designed to serve the five BA programs: BA in Spanish, BA in Spanish and Community and Culture, BA in Spanish and Linguistics, BA in Spanish and Portuguese, and BA in Portuguese and Brazilian Studies; as well as to prepare students for its three graduate programs: MA in Spanish, MA in Portuguese, and PhD in Hispanic Languages and Literatures. The courses are also functionally supportive of such interdepartmental programs as the BA, MA, and PhD programs in Chicano and Chicano Studies, BA and MA programs in Latin American Studies, and MA and PhD programs in Comparative Literature.

Undergraduate Policies

Language Acquisition Courses
Beginning- and intermediate-level Spanish language courses are offered for Spanish second language learners and Spanish heritage learners. Beginning- and intermediate-level Portuguese language courses are offered for second language learners and learners proficient in another Romance language.

The approach is proficiency-oriented, communicative, and task-based. Students develop communicative competence in all four skill areas (listening, speaking, reading, and writing). Classes are conducted completely in Spanish or Portuguese.

Language courses are delivered in a blended format; students are required to attend face-to-face class meetings and also complete two hours per week of work assigned, online. The two hours of online work are included in the required contact hours for the course.

Students with one or more years of high school Spanish or Portuguese who plan to enroll in Spanish 1 through 27 should take the departmental placement examination. Consult the Schedule of Classes or the department office for more information.

No credit is allowed for completing a less advanced course after successful completion of a more advanced course in Spanish and Portuguese grammar and/or composition.

Undergraduate Majors

Spanish BA

Capstone Major
The Spanish major is a designated capstone major. Seniors complete a capstone seminar that provides unique opportunity to work closely with a faculty member on a focused topic of research. Through their capstone work students are expected to demonstrate mastery of the Spanish language, along with specific skills and expertise acquired in earlier coursework. Additionally, students acquire a working knowledge of scholarly discourse relative to a specialized topic, conceive and execute an associated project, and engage with a community of scholars, presenting their work to peers and helping to further peers’ work through discussion and critique.

Learning Outcomes
The Spanish major has the following learning outcomes:

• Demonstrated written and oral mastery of the Spanish language
• Demonstrated specific skills and expertise, including research, analysis, and writing
• Identification and analysis of appropriate primary sources
• Conception and execution of a project that identifies and engages with a specialized topic
• Working knowledge of scholarly discourse relative to a specialized topic
• Engagement with peers through presentation, discussion, and critique of student work

Entry to the Major
Transfer Students
Transfer applicants to the Spanish major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of Spanish, one Spanish civilization course, and one Spanish American civilization course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.
Requirements

Preparation for the Major
Required: Spanish 25 or 27, 42, 44.

The Major
Required: (1) Two core courses (Spanish 119 and 120), (2) eight upper-division Spanish elective courses in literature, culture, linguistics, media, service learning, or interdisciplinary studies, up to three of which may be from an outside department that deals with Spain or Spanish America and have been approved by the undergraduate adviser, and (3) one senior capstone seminar (Spanish 191C).

Honors Program
Portuguese 198A and Spanish 198A are 4-unit courses in which students research and prepare a draft of a thesis on a selected topic; Portuguese 198B and Spanish 198B are 2-unit courses in which students complete the final thesis draft of approximately 25 to 30 pages. Approval of the honors thesis by the faculty mentor is the final requirement for departmental honors. Portuguese 198A-198B and Spanish 198A-198B may not be applied toward the majors.

Policies

Preparation for the Major
Each course must be taken for a letter grade and passed with a grade of C or better prior to beginning upper-division work in the major.

The Major
Each course must be taken for a letter grade and passed with a grade of C or better prior to beginning upper-division work in the major.

Honors Program
Portuguese 198A and Spanish 198A are 4-unit courses in which students research and prepare a draft of a thesis on a selected topic; Portuguese 198B and Spanish 198B are 2-unit courses in which students complete the final thesis draft of approximately 25 to 30 pages. Approval of the honors thesis by the faculty mentor is the final requirement for departmental honors. Portuguese 198A-198B and Spanish 198A-198B may not be applied toward the majors.

Spanish and Portuguese / 829

Spanish and Community and Culture BA

Capstone Major
The Spanish and Community and Culture major is a designated capstone major. Students participate in community-based experiential learning courses coupled with elective and adjunct courses. Reflective journals, final projects, and in-class presentations are required. Through their capstone work, students should have mastery of the Spanish language, ability to conduct and interpret research to determine the needs of specific communities, critical understanding and ability to apply theories within a service context, sensitivity to diversity and cultural differences, and ability to perform scholarly presentations that tie current issues to research and theory.

Learning Outcomes
The Spanish and Community and Culture major has the following learning outcomes:

- Demonstrated written and conversational mastery of the Spanish language
- Conduct and interpret research to determine the needs of specific communities
- Demonstrated critical understanding of, and ability to apply, theories within a service context
- Demonstrated sensitivity to diversity and cultural differences
- Performance of scholarly presentations that tie current issues to research and theory
- Articulation of the value of civic engagement

Entry to the Major

Transfer Students
Transfer applicants to the Spanish and Community and Culture major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of Spanish, one Spanish civilization course, and one Spanish American civilization course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major
Required: Spanish 25 (or 27), M35 (or Portuguese M35), 42, 44.

The Major
Required: (1) Spanish 100A or 100B, 119; (2) three elective Spanish literature, culture, linguistics, or media studies courses selected from 130, 135, 140, 150, 155, 160, 170, 175, 180, 195; (3) two interdisciplinary studies courses selected from Chicana/o and Central American Studies 100XP, CM106, M119, 120, M121, M122, 131, M144, 149, 181, Sociology M155; (4) three capstone community-based and experiential learning courses (15 units) selected from Spanish M186XP (required course) and two Spanish M172XP (may be repeated with topic change).

Honors Program
Portuguese 198A and Spanish 198A are 4-unit courses in which students research and prepare a draft of a thesis on a selected topic; Portuguese 198B and Spanish 198B are 2-unit courses in which students complete the final thesis draft of approximately 25 to 30 pages. Approval of the honors thesis by the faculty mentor is the final requirement for departmental honors. Portuguese 198A-198B and Spanish 198A-198B may not be applied toward the majors.

Spanish and Linguistics BA

Learning Outcomes
The Spanish and Linguistics major has the following learning outcomes:

- Demonstrated technical mastery of the Spanish language, including pronunciation (phonetics and phonology), history (historical linguistics), and structure (syntax)
- Demonstration of how to do basic spoken language research in Spanish linguistics, emphasizing Latin American Spanish and Chicano Spanish or Los Angeles vernacular
- Identification and analysis of appropriate primary linguistic sources within the generative framework
- Working knowledge of scholarly discourse in a specialized Spanish linguistics topic (phonology, syntax, and historical linguistics)
- Conception and execution of a project that identifies and engages with a specialized Spanish linguistics topic as a result of the practical part of the courses on phonetics and phonology and on syntax

Entry to the Major

Transfer Students
Transfer applicants to the Spanish and Linguistics major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of Spanish, one introduction to linguistics course, and one Spanish or Spanish American civilization course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.
Learning Outcomes

The departmental honors program is open to majors who have completed a minimum of six upper-division major courses with a 3.7 grade-point average or better in those six courses. Each course must be taken for a letter grade and passed with a grade of C or better prior to admission to UCLA: two years of Spanish, one year of Portuguese, one Spanish civilization course or one Spanish American civilization course, and one Brazilian culture course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Portuguese 25 or 26 or 27 (27 recommended), M35 (or Spanish M35), 46. Spanish 25 or 27, 42 or 44.

The Major

Required: (1) One course from Spanish 100A or 100B and one course from Portuguese 100A or 100B, (2) Spanish 119, 120, Portuguese 130A or 130B, (3) six 4- or 5-unit upper-division elective courses, two of which must be in Spanish and three of which must be from the Portuguese offerings, including those taught in English. Only upper-division courses taught in the target language may be applied toward the major, except the Portuguese courses taught in English.

Honors Program

Portuguese 198A and Spanish 198A are 4-unit courses in which students research and prepare a draft of a thesis on a selected topic; Portuguese 198B and Spanish 198B are 2-unit courses in which students complete the final thesis draft of approximately 25 to 30 pages. Approval of the honors thesis by the faculty mentor is the final requirement for departmental honors. Portuguese 198A-198B and Spanish 198A-198B may not be applied toward the majors.

Policies

Preparation for the Major

Each course must be taken for a letter grade and passed with a grade of C or better prior to beginning upper-division work in the major, except Linguistics 20, which must be passed with a grade of B– or better.

The Major

Each course must be taken for a letter grade and passed with a grade of C or better.

Honors Program

The departmental honors program is open to majors who have completed a minimum of six upper-division major courses with a 3.7 grade-point average or better in those six courses. Eligibility is verified by the departmental counselor. On the basis of their coursework and special interests, students then consult with a faculty member in that field and formulate a research project that they pursue under the faculty member’s guidance through Portuguese 198A-198B or Spanish 198A-198B.

Spanish and Portuguese BA

Learning Outcomes

The Spanish and Portuguese major has the following learning outcomes:

- Demonstrated oral, aural, and written mastery of the Spanish and Portuguese languages
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Conception and execution of research projects that identify and engage with a specialized topic
- Identification and analysis of appropriate primary sources
- Working knowledge of scholarly discourse on a specialized topic
- Engagement with peers through presentation, discussion, and critique of student work

Entry to the Major

Transfer Students

Transfer applicants to the Spanish and Portuguese major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of Spanish, one year of Portuguese, one Spanish civilization course or one Spanish American civilization course, and one Brazilian culture course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Portuguese 25 or 26 or 27 (27 recommended), M35 (or Spanish M35), 46. Spanish 25 or 27, 42 or 44.

The Major

Required: Ten upper-division courses (45 units minimum), including Portuguese 100A or 100B, 130A or 130B, and seven elective courses selected from 100A through 199.

Honors Program

Portuguese 198A and Spanish 198A are 4-unit courses in which students research and prepare a draft of a thesis on a selected topic; Portuguese 198B and Spanish 198B are 2-unit courses in which students complete the final thesis draft of approximately 25 to 30 pages.

Portuguese and Brazilian Studies BA

Study Abroad

Students are encouraged to spend up to one year in a Portuguese-speaking country to study in a university or conduct research. Appropriate credit may be granted in accordance with the individual program, arranged in consultation with the undergraduate faculty adviser in Portuguese. Proposals must be submitted in advance in writing and must be approved by the department.

Learning Outcomes

The Portuguese and Brazilian Studies major has the following learning outcomes:

- Demonstrated oral, aural, and written mastery of the Portuguese language
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Conception and execution of research projects that identify and engage with a specialized topic
- Identification and analysis of appropriate primary sources
- Working knowledge of scholarly discourse relative to a specialized topic
- Engagement with peers through presentation, discussion, and critique of student work

Entry to the Major

Transfer Students

Transfer applicants to the Portuguese and Brazilian Studies major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of Portuguese, one nature of language course, one Portuguese civilization course or one Brazilian civilization course, and one Brazilian culture course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major

Required: Portuguese 25 or 26 or 27 (27 recommended), M35 (or Spanish M35), 46. Spanish 25 or 27, 42 or 44.

The Major

Required: One course from Spanish 100A or 100B and one course from Portuguese 100A or 100B, (2) Spanish 119, 120, Portuguese 130A or 130B, (3) six 4- or 5-unit upper-division elective courses, two of which must be in Spanish and three of which must be from the Portuguese offerings, including those taught in English. Only upper-division courses taught in the target language may be applied toward the major, except the Portuguese courses taught in English.

Honors Program

Portuguese 198A and Spanish 198A are 4-unit courses in which students research and prepare a draft of a thesis on a selected topic; Portuguese 198B and Spanish 198B are 2-unit courses in which students complete the final thesis draft of approximately 25 to 30 pages. Approval of the honors thesis by the faculty mentor is the final requirement for departmental honors. Portuguese 198A-198B and Spanish 198A-198B may not be applied toward the majors.

Policies

Preparation for the Major

Each course must be taken for a letter grade and passed with a grade of C or better.

The Major

Each course must be taken for a letter grade and passed with a grade of C or better prior to beginning upper-division work in the major.
Approval of the honors thesis by the faculty mentor is the final requirement for departmental honors. Portuguese 198A-198B and Spanish 198A-198B may not be applied toward the majors.

**Policies**

**Preparation for the Major**

Each course must be taken for a letter grade and passed with a grade of C or better prior to beginning upper-division work in the major.

**The Major**

Out of the seven elective courses, three courses from outside the department that focus on Brazil, Portugal, or Lusophone Africa may be applied toward the major with approval of the undergraduate adviser. A minimum of five out of the seven elective courses must be taken in Portuguese.

Each course must be taken for a letter grade and passed with a grade of C or better.

By petition, and after consultation with the undergraduate adviser, up to three 4-unit Portuguese 197 or 199 courses may be applied toward the major.

**Honors Program**

The departmental honors program is open to majors who have completed a minimum of six upper-division major courses with a 3.7 grade-point average or better in those six courses. Eligibility is verified by the departmental counselor. On the basis of their coursework and special interests, students then consult with a faculty member in that field and formulate a research project that they pursue under the faculty member’s guidance through Portuguese 198A-198B or Spanish 198A-198B.

**Double Majors**

Through judicious use of electives, students may find it possible to secure the BA degree with two complete majors (e.g., Portuguese/Spanish, Portuguese/History, Portuguese/Sociology, etc.). Interested students should consult with the undergraduate adviser in Portuguese as early as possible in their BA program.

**Undergraduate Minors**

**Mexican Studies Minor**

The Mexican Studies minor allows students with an interest in Mexico to augment their major programs with courses that expose them to the history, literature, and culture of Mexico. Given Southern California’s proximity to Mexico, the demographics of Los Angeles, and the shared history of Mexico and the Southwest, the minor is a natural complement to many majors.

**Admission**

To enter the minor, students must have an overall grade-point average of 2.0 or better and must complete or show proficiency equivalent to two years of college-level Spanish. A petition to declare the minor should be filed with the undergraduate counselor in 5314 Rolfe Hall.

**The Minor**

**Required Lower-Division Courses (8 to 9 units):**

- Spanish 25 or 27, and one course from History 8A, 8B, 8C, or Spanish 44.

**Required Upper-Division Courses (20 to 22 units):**

- Three Mexican culture and literature courses selected from Spanish 135 through 180 in consultation with the undergraduate adviser and two courses from Anthropology 114P, Chicana/o and Central American Studies M102, M108A, 120, M125, M132, 142, 172, 184, Ethnomusicology M109A, History 157B, 160B.

**Policies**

By petition and after consultation with the undergraduate adviser, one 4-unit 197 or 199 course may be applied toward the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade and passed with a grade of C or better. Students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

**Spanish and Portuguese Studies Minor**

**Admission**

To enter the Portuguese and Brazilian Studies minor, students must have an overall grade-point average of 2.0 or better and must complete Portuguese 27 or equivalent. A petition to declare the minor should be filed with the undergraduate counselor in 5314 Rolfe Hall.

**The Minor**

**Required Lower-Division Courses (9 units):**

- Portuguese 25 or 26 or 27 (27 recommended), and 46.

**Required Upper-Division Courses (20 units):**

- Three courses selected from Portuguese 100A through 199, and two upper-division courses on a Brazilian topic.

**Policies**

Courses may be taken in Portuguese or English but must be clearly related to an aspect of Brazilian studies.

Only one 4-unit Portuguese 197 or 199 course may be applied toward the minor.

By petition, up to two upper-division courses on Portugal or Brazil may be taken in other departments and applied toward the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade and passed with a grade of C or better.

Students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

**Spanish Linguistics Minor**

**Admission**

To enter the Spanish Linguistics minor, students must have an overall grade-point average of 2.0 or better and must complete or show proficiency equivalent to two years of college-level Spanish. A petition to declare the minor should be filed with the undergraduate counselor in 5314 Rolfe Hall.

**The Minor**

**Required Lower-Division Courses (9 units):**

- Spanish 25 or 27, M35 (or Portuguese M35).

**Required Upper-Division Courses (20 to 21 units):**

- Spanish 100A, 100B, and three upper-division Spanish electives, two of which must be from Spanish 160.

**Policies**

By petition and after consultation with the undergraduate adviser, one 4-unit 197 or 199 course may be applied toward the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.
Each minor course must be taken for a letter grade and passed with a grade of C or better. Students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Majors

Hispanic Languages and Literatures CPhil, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Portuguese MA

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Spanish MA

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Indigenous Languages of the Americas

Lower-Division Courses


2. Elementary Zapotec. (4) Lecture, five hours. For more information, course 1. Introduction to Zapotec language of Tlacolula Valley of Oaxaca. P/NP or letter grading.

3. Elementary Zapotec. (4) Lecture, five hours. For more information, course 2. Introduction to Zapotec language of Tlacolula Valley of Oaxaca. P/NP or letter grading.

5A-SB-SC. Elementary Nahuatl. (4-4-4) Formerly numbered MSA-MSB-MSC.) Lecture, five hours. Course 5A is required to 5B, which is required to 5C. Language of Nahuatl, grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

15A-15B-15C. Intermediate Nahuatl. (4-4-4) Formerly numbered M15A-M15B-M15C.) Lecture, four hours. Course 15A is required to 15B, which is required to 15C. Taught primarily in Nahuatl. Examination of Nahuatl (Aztec) language of central Mexico at intermediate level. Coverage of Nahuatl grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

17. Intensive Elementary Quechua. (12) Lecture, 15 hours; laboratory, five hours. Intensive course equivalent to courses 18A, 18B, 18C. Language of Incas and its present-day dialects, as spoken in Andean South America. Offered in summer only. Letter grading.

18A-18B-18C. Elementary Quechua. (4-4-4) Lecture, five hours. Course 18A is required to 18B, which is required to 18C. Language of Incas and present-day Quechua language, as spoken in Andean South America. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Enforced requisite to 89A. Dialectal and stylistic variation. Individual honors contract required. Honors content noted on transcript. P/NP or letter grading.

Upper-Division Courses

115A-115B-115C. Advanced Nahuatl. (4-4-4) Formerly numbered M115A-M115B-M115C.) Lecture, four hours. Requisite: course 115B, which is required to 115C. Taught primarily in Nahuatl. Examination of Nahuatl (Aztec) language of central Mexico at intermediate level. Coverage of Nahuatl grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

119A-119B-119C. Advanced Quechua. (4-4-4) Lecture, five hours. Requisite: course 119B, which is required to 119C. Taught primarily in Quechua. Dialectal and stylistic variation. Individual honors contract required. Honors content noted on transcript. P/NP or letter grading.

199HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course for individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units; Individual honors contract required. Honors content noted on transcript. P/NP or letter grading.

199. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (including this course), Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP or letter grading.

191. Variable Topics Research Seminars: Indigenous Languages. (2 or 4) Seminar, three hours. Research seminars on selected topics in various indigenous languages. Reading, discussion, and development of culminating project. May be repeated for credit with topic change. P/NP or letter grading.

Graduate Course

596. Directed Studies in Quechua. (1 to 8) Tutorial, to be arranged. Requisites: courses 119A, 119B, 119C. Directed individual study or research in Quechua. Four units may be applied toward MA course requirements. May be repeated for credit. S/U grading.

Portuguese

Lower-Division Courses

1. Elementary Portuguese. (4) Lecture, three hours; laboratory, two hours. Taught in Portuguese. Laboratory is online. Introductory Portuguese language and culture course that is proficiency-oriented, communicative, and task-based to help develop communicative competence in four skill areas (listening, speaking, reading, and writing), as well as cultural competence. P/NP or letter grading.

2. Elementary Portuguese. (4) Lecture, three hours; laboratory, two hours. Taught in Portuguese. Laboratory is online. Introductory Portuguese language and culture course that is proficiency-oriented, communicative, and task-based to help develop communicative competence in four skill areas (listening, speaking, reading, and writing), as well as cultural competence. P/NP or letter grading.

3. Intermediate Portuguese. (4) Lecture, three hours; laboratory, two hours. Taught in Portuguese. Laboratory is online. Intermediate Portuguese language and culture course that is proficiency-oriented, communicative, and task-based to help develop communicative competence in four skill areas (listening, speaking, reading, and writing), as well as cultural competence. P/NP or letter grading.

8A. Portuguese Conversation. (2) Lecture, three hours. Requisite: course 1, 11A, Portuguese Language Assessment Interview, or enrollment in any Portuguese course. Designed to help beginner and intermediate students of Portuguese language improve their conversational skills through discussions, presentations, participation in events, and other communicative situations. Among other elements of course, use of formal and informal speaking styles. Use of appropriate vocabulary to discuss issues relevant to students’ lives and to Luso-Brazilian culture. P/NP or letter grading.

8B. Portuguese Conversation. (2) Discussion, three hours. Enforced requisite: course 3 with grade of B or better. P/NP or letter grading.

11A-11B. Intensive Portuguese. (5-5) Lecture, four hours; laboratory, two hours. Taught in Portuguese. Laboratory is online. Accelerated course designed only for students with proficiency in another Romance language. P/NP or letter grading.

13. Intensive Introductory Portuguese Language and Culture. (12) Lecture, 20 hours; laboratory, three hours. Intensive introduction to Portuguese language and culture equivalent to courses 1, 2, and 3, and 11A and 11B. Proficiency-oriented, communicative and task-based approach intended to facilitate communicative competence in four language skills areas: listening, speaking, reading, and writing. Development of cultural awareness of heterogeneous Portuguese-speaking community in America, Europe, and Africa. Intensive accelerated course designed to help students increase their ability to communicate in Portuguese. Offered in summer only. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

25A. Advanced Portuguese: Summer Course. (4) Lecture, three hours. Enforced requisite: course 3 or 11B. Development of speaking, reading, and writing skills. Taught in thematic units, with songs, videos, and specific vocabulary emphasizing questions of Brazilian cultural identity. Field trips, and luncheons. Offered in summer only. P/NP or letter grading.

26. Language and Popular Culture. (4) Lecture, three hours. Enforced requisite: course 3 or 11B. Development of speaking, reading, and writing skills. Structured in thematic units, with songs, videos, and specific vocabulary emphasizing questions of Brazilian cultural identity. Includes cultural activities, field trips, and luncheons. Offered in summer only. P/NP or letter grading.

27. Writing Studies: Afro-Luso-Brazilian World. (4) Lecture, three hours. Requisite: course 3 or 11B. Further development of communicative skills, especially writing. Discussions and activities increase knowledge and ability to comprehend a variety of forms of cultural production in Portuguese language. Students continue to acquire cultural competence. Introduction to study of literature, with specific focus on themes and topics relevant to Lusophone world. P/NP or letter grading.

27A. Advanced Composition and Style: Summer Course. (4) Lecture, 20 hours. Enforced requisite: course 3 or 11B. Practice in writing Portuguese with appropriate vocabulary, syntactical structures, and stylistic patterns. Includes cultural activities, field trips, and luncheons. Offered in summer only. P/NP or letter grading.

M35. Spanish, Portuguese, and Nature of Language. (5) (Same as Spanish M35.) Lecture, three hours; discussion, one hour. Introduction to language study within context of Romance languages, focusing on Spanish and Portuguese. Nature of language: structure, diversity, evolution, social and cultural settings, literary uses. Study of language and its relation to other areas of human knowledge. P/NP or letter grading.


46. Brazil and Portuguese-Speaking World. (5) Lecture, four hours; discussion, one hour (when scheduled). Taught in English. Topical analysis of cultural history of Brazil in context of Portuguese-speaking world, with emphasis on comparative, trans-Atlantic relations, social development, and artistic manifestations. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HCL. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated for credit. P/NP grading.

Upper-Division Courses


102. Foundational Culture in Iberian, Latin American, and Luso-Brazilian Worlds. (4) (Same as Spanish M122.) Lecture, four hours. Requisite: course 25 or 26 or 27. Taught in English. Addresses specificities of visual culture in Spanish and Portuguese-speaking worlds. Through critical engagement with wide range of visual materials—from 16th-century maps of Americas to YouTube videos of street protests in Chile; from Modernist architectural designs for new national capitals to telenovelas and colonial photographs; and everything in between—instruction to practices, processes of study, and interdisciplinary networks of academic and visual culture studies. By examining manifestations of visual culture from Iberian, Latin American, and Luso-Brazilian contexts, students gain culturally specific foundations of visual literacy and skills of visual literacy. P/NP or letter grading.

130A-130B. Introduction to Literature in Portuguese. (4–5) Lecture, four hours. Requisite: course 25 or 26 or 27. Introduction to principal themes, currents, and authors from Brazil in context of Portuguese-speaking world. P/NP or letter grading.

141A. Literature and Film in Portuguese. (4) Lecture, four hours. Taught in English. Study of intertextuality and dialogism, interactions between literary and cinematic fields, question of fidelity, and equivalents between literary and cinematic expression in Portuguese-speaking world. May be repeated for credit with topic change. P/NP or letter grading.

141B. Film, Television, and Society in Brazil. (4) Lecture, four hours. Taught in English. Study of development, evolution, and impact of film and television in Brazil against backdrop of broader social, historical, and cultural contexts. May be repeated for credit: P/NP or letter grading.

141C. Documentary Film. (4) Lecture, four hours. Taught in English. Overview of documentary film production in Portuguese-speaking world, with special focus on period since 1985. May be repeated for credit with topic change. P/NP or letter grading.

142A. Brazil and Its Culture. (4) Lecture, four hours. Taught in English. Exploration of roots of contemporary Brazil through study of broad chronological period from Portuguese colonization to present and how they shaped idea of Brazilian exceptionalism, racial mixture as source of national identity, and lusotropicalism and its influence on Brazilian historiography. May be repeated for credit with topic change. P/NP or letter grading.

142B. Brazil and Portugal in Comparative Perspective. (4) Lecture, four hours. Taught in English. Study of social and cultural relations between Portugal and Brazil, with emphasis on issues of migration, dialogue, and contention in historical context. May be repeated for credit with topic change. P/NP or letter grading.

142C. Travel Narratives, Testimony, Autobiography. (4) (Formerly L512C.) Lecture, four hours. Taught in English. Exploration of travel, memory, and narrative in Portuguese-speaking world. Primary and secondary texts reflect Brazil, Brazil, and Portugal against background of globalization. May be repeated for credit with topic change. P/NP or letter grading.

143A. Colony, Intellectuals, and History. (4) Lecture, four hours. Taught in English. Exploration of way that Brazilian maritime expansion from 15th to early 19th century was represented and interpreted in writings from across empire. May be repeated for credit with topic change. P/NP or letter grading.

143B. Transatlantic Literature in Portuguese. (4) Lecture, four hours. Enforced requisite: course 25 or 26 or 27. Study of modern relations between Portugal and Portuguese-speaking world in literature and arts. May be repeated for credit with topic change. P/NP or letter grading.

143C. Modernism, Modernity, and Identity. (4) Lecture, four hours. Requisite: course 25 or 26 or 27. Examination of concepts and practice of modernism in Portuguese-speaking world, with primary focus on 1920s. Reading and discussion of works in sociohistorical context, relations with European avant-garde, modernist poetics and polemics, and avant-garde for national identity as expressed in period’s poetry and prose. May be repeated for credit with topic change. P/NP or letter grading.

143D. Contemporary Literature in Portuguese. (4) Lecture, four hours. Requisite: course 25 or 26 or 27. Exploration of connections between literatures of Angola, Brazil, and Portugal against background of globalization and Internet. May be repeated for credit with topic change. P/NP or letter grading.

175. Topics in Creative Writing and Literary Translation. (4) Seminar, three hours. Requisite: course 25 or 26 or 27. Exploration of art of translation or creative writing. Guest speakers or instructors include professional literary translators, novelists, playwrights, and filmmakers. Taught in English. May be repeated for credit with topic change. P/NP or letter grading.

180. Topics in Visual Culture. (4) Lecture, four hours; discussion, one hour (when scheduled). Requisite: Portuguese 25 or 26 or 27. Study of visual knowledge production in Latin America and Iberia as complex relation between visual subjects, practices, and representation in Latin American, Afro-Luso-Brazilian, and Iberian contexts. Objects of analysis may include architecture and urban design, digital media and other technologies, documentaries, fashion, fiction and experimental films, graphic novels and other media, maps and cartography, photography, plastic arts, and art history, theater and performance, video, among others. May be repeated four times for credit with topic change. P/NP or letter grading.

187FL. Special Studies: Readings in Portuguese. (2) Seminar, two hours. Enforced requisite: course 27. Students must be concurrently enrolled in affiliated main course. Additional work in Portuguese to augment work assigned in main course, including reading and written assignments. May be repeated for credit. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Topics in deeper or new areas of scholarly interest. May be repeated for maximum of 4 units. Individual honors contract required. Four hours of credit for course. Letter grading.

191. Undergraduate Variable Topics Seminars: Portuguese. (4) Seminar, three hours. Requisite: course 25 or 26 or 27. Research seminar on selected topics in Portuguese, Reading, and Genocide. Development of culminating project. Consult Schedule of Classes or department counselor for topic to be offered in specific term. May be repeated for credit. P/NP or letter grading.

195. Community Internships in Portuguese. (4) Tutorial, two hours; fieldwork, eight hours. Requisite: course 25 or 26 or 27. Limited to juniors/seniors. Community engaged learning is teaching and learning strategy that integrates meaningful community service.
with instruction and critical reflection to enrich the learning experience, teach civic responsibility, and strengthen communities. Students use cultural and linguistic immersion gained from studies in classes and research in real-world settings through 8-10 hours per week of volunteer work in on- or off-campus organization or unit serving Brazilian and Portuguese-speaking community. May be repeated for credit. Individual contract with supervising faculty member required. P/NP or letter grading.

197. Individual Studies in Portuguese. (2 to 4) Tutorial, to be arranged. Individual intensive study, with scheduled meetings, to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. Eight units of courses 197 and/or 199 may be applied toward major requirements. Individual contract required. Letter grading.

199A-199B. Senior Honors Research in Portuguese I, II. (4–2) Tutorial, to be arranged. Preparation: completion of minimum of six upper-division major core courses with 3.7 grade-point average. Course 199A is enforced requisite to 199B. Limited to juniors/seniors. Development and completion of honors thesis under direct supervision of faculty member. May be applied toward major requirements. Individual contract required. Letter grading.

199. Directed Research in Portuguese. (2 to 4) Tutorial, to be arranged. Directed research in Portuguese, to be arranged. Individual intensive study, with scheduled meetings, to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. Eight units of courses 197 and/or 199 may be applied toward major requirements. Individual contract required. Letter grading.

202. Synchronic Morphology and Phonology. (4) Lecture, three hours. Study of theoretical synchronic linguistics as applied to Portuguese.

204A-204B. Generative Grammar. (4–4) Lecture, three hours. Course 204A is requisite to 204B. Generative approach to the Portuguese language. May be repeated for credit with topic change. Interdisciplinary course with some consideration of bearing of syntax, sociolinguistics, and phonology on style, metaphor, and meter.

205A-M251B. Development of Portuguese and Spanish Languages. (4–4) (Same as Spanish M205A-M251B.) Lecture, three hours. Intensive study of historical development of Portuguese and Spanish languages from their origin in spoken Latin.


229. 20th-Century Portuguese Literature. (4) Lecture, three hours. Enforced requisite: course 27. Study of representative trends and authors. May be repeated for credit with topic change. S/U or letter grading.

231. Colonial Brazilian Literature and Culture. (4) Lecture, three hours. Enforced requisite: course 27. Study of most important authors to 1830. May be repeated for credit with topic change. S/U or letter grading.

232. 19th-Century Brazilian Literature and Culture. (4) Lecture, three hours. Study of representative trends and authors. May be repeated for credit with topic change. S/U or letter grading.


235. 20th-Century Brazilian Literature. (4) Lecture, three hours. Enforced requisite: course 27. Study of representative trends and authors. May be repeated for credit with topic change. S/U or letter grading.

236. 20th-Century Portuguese Literature. (4) Lecture, two hours. Study of representative trends and authors. May be repeated for credit with topic change. S/U or letter grading.

237. 23rd. Studies in Galegan-Portuguese and Old Spanish. (4–4) (Same as Spanish M251A-M251B.) Lecture, two hours. Study of problems related to historical development of Galegan-Portuguese and Old Spanish. Each course may be repeated once with topic change and consent of appropriate guidance committee.


255. Studies in Modern Brazilian Literature. (4) Discussion, two hours. S/U or letter grading.


290. Special Topics. (4) Discussion, two hours. Designed for graduate students. Consult Schedule of Classes or department counselor for topics to be offered in a specific term. S/U or letter grading.

296. Graduate Research Group. (2) Research group meeting, two hours. Limited to graduate students. Designed for senior to postgraduate students in seminar setting with one or more faculty members to discuss and critique individual research projects, especially dissertation research. S/U grading.

370. Teaching Portuguese in Secondary School. (4) Lecture, three hours; laboratory, two hours. Taught in Spanish. Laboratory is online. Designed for students who are from Spanish-speaking family background and have some knowledge of Spanish. Introductory course to further develop communicative abilities, both verbal and written, as well as cultural competence. S/U grading.


Spanish

Lower-Division Courses

1. Elementary Spanish. (4) Lecture, three hours; laboratory, two hours. Taught in Spanish. Laboratory is online. Introductory Spanish language and culture course that is proficiency-oriented, communicative, and task-based to help develop communicative competence in four skill areas (listening, speaking, reading, and writing), as well as cultural competence. P/NP or letter grading.

1G. Reading Course for Graduate Students. (4) Lecture, three hours. Knowledge of Spanish not required. May not be applied toward degree requirements. S/U grading.

2. Elementary Spanish. (4) Lecture, three hours; laboratory, two hours. Taught in Spanish. Laboratory is online. Introductory Spanish language and culture course that is proficiency-oriented, communicative, and task-based to help develop communicative competence in four skill areas (listening, speaking, reading, and writing), as well as cultural competence. P/NP or letter grading.

2A. Intensive Spanish. (4) Lecture, 20 hours; laboratory, five hours. Enforced requisite: course 1 or one year of high school Spanish. Intensive basic course in Spanish, with cultural activities, field trips, luncheons. Offered in summer only. P/NP or letter grading.

2G. Reading Course for Graduate Students. (4) Lecture, three hours. Enforced requisite: course 1G. May not be applied toward degree requirements. S/U grading.

3. Elementary Spanish. (4) Lecture, three hours; laboratory, two hours. Taught in Spanish. Laboratory is online. Introductory Spanish language and culture course that is proficiency-oriented, communicative, and task-based to help develop communicative competence in four skill areas (listening, speaking, reading, and writing), as well as cultural competence. P/NP or letter grading.

3A. Intensive Spanish. (4) Lecture, 20 hours; laboratory, five hours. Enforced requisite: course 1 or one year of high school Spanish. Course in Spanish, with cultural activities, field trips, luncheon. Offered in summer only. P/NP or letter grading.

4. Intermediate Spanish. (4) Lecture, three hours; laboratory, two hours. Taught in Spanish. Laboratory is online. Intermediate Spanish language and culture course designed to increase communicative ability. Acquisition of cultural competence and introduction to study of literature. Comprehension of conversations and stretches of connected discourse, reading of texts with minimum use of dictionary, writing with increased grammatical accuracy and control of sentence structure, coherence, and text organization, talking about past, present, and future events, and expression of preferences, feelings, beliefs, and opinions. P/NP or letter grading.

5. Intermediate Spanish. (4) Lecture, three hours; laboratory, two hours. Taught in Spanish. Laboratory is online. Intermediate Spanish language and culture course designed to increase communicative ability. Acquisition of cultural competence and introduction to study of literature. Comprehension of conversations and stretches of connected discourse, reading of texts with minimum use of dictionary, writing with increased grammatical accuracy and control of sentence structure, coherence, and text organization, talking about past, present, and future events, and expression of preferences, feelings, beliefs, and opinions. P/NP or letter grading.

7A. Introductory Spanish for Heritage Speakers. (4) Lecture, three hours; laboratory, two hours. Laboratory is online. Designed for students who are from Spanish-speaking family background and have some knowledge of Spanish. Introductory course to further develop communicative abilities, both verbal and written, as well as cultural competence. P/NP or letter grading.
written, and to increase knowledge of grammatical structures and achieve communicative competence. P/NP or letter grading.

7B. Intermediate Spanish for Heritage Speakers. (4) Lecture, two hours; laboratory, two hours; enforced requisite: course 3 or 7A or Spanish placement test. Laboratory is online. Designed for students who are from Spanish-speaking family background and have some knowledge of Spanish. Intermediate course to further develop communicative abilities, both verbal and written, and to increase knowledge of grammatical structures and achieve communicative competence. P/NP or letter grading.

8A-9B. Spanish Conversation. (2-2) Discussion, three hours. Course 8A is open to students with credit for course 4. Students who have completed course 3 with grade of B or better may be admitted. P/NP or letter grading.

9A-9B. Advanced Conversation. (2-2) Discussion, three hours. Enforced requisite: course 8B. P/NP or letter grading.

10. Intensive Elementary Spanish. (12) Lecture, 20 hours. Intensive elementary instruction in speaking, listening, reading, and writing equivalent to courses 1, 2, and 3, with emphasis on Spanish grammar and Hispanic culture. Offered in summer only. P/NP or letter grading.

11A. Catalan Language and Culture I. (4) Lecture, six hours. Part one of two-term accelerated language sequence equivalent to three terms of traditional instruction. Introduction to Catalan language and culture from with special interest in fields such as medicine, business, law, etc. P/NP or letter grading.

11B. Catalan Language and Culture II. (4) Lecture, six hours. Requisite: course 11A or equivalent. Part two of two-term accelerated language sequence equivalent to three terms of traditional instruction. Study of advanced concepts and structures that are not covered in lower-division courses. For students with special interest in fields such as medicine, business, law, etc. P/NP or letter grading.

12A-12B-12C. Basque Language and Culture I, II, III. (4–4–4) Lecture, five hours. Introduction to Basque language and culture from special interest in fields such as medicine, business, law, etc. P/NP or letter grading.

135. Topics in Early Modern Studies. (4) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 25 or 27, and 119. Exploration of medieval Iberian literatures: lyric poetry, prose, and history of the peninsula, with emphasis on its literary and linguistic diversity. Possible topics include Spanish colonization and indigenous responses, transatlantic literary and visual networks—from 16th-century maps of Americas to YouTube videos of street protests in Chile; from Modernist architectural designs for new national capitals to tele-novelas and colonial photographs; and everything in between—introduction to practices, processes, objects of study, and interdisciplinary critical frameworks of visual culture studies. By examining manifestations of visual culture from Iberian, Latin American, and Luso-Brazilian contexts, students gain culturally specific foundations of visual knowledge and skills of visual literacy. P/NP or letter grading.

140. Topics in Contemporary Studies. (4) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: courses 25 or 27, and 119. Exploration of major models for writing history—great narratives, cyclic, teleological, sacred, and profane conceptions. Traditional concepts of literary history and problems of mixed categories (historicizing concepts of style, national history, and world literature). P/NP or letter grading.

122. Foundations in Visual Culture in Iberian, Latin American, and Luso-Brazilian Contexts. (4) Same as Portuguese M122). Lecture, four hours. Requisite: course 25 or 27 or Portuguese 25 or 26 or 27. Taught in English. Addresses specificities of visual culture in Spanish- and Portuguese-speaking worlds; Through critical engagement with wide range of visual materials—from 16th-century maps of Americas to YouTube videos of street protests in Chile; from Modernist architectural designs for new national capitals to tele-novelas and colonial photographs; and everything in between—introduction to practices, processes, objects of study, and interdisciplinary critical frameworks of visual culture studies. By examining manifestations of visual culture from Iberian, Latin American, and Luso-Brazilian contexts, students gain culturally specific foundations of visual knowledge and skills of visual literacy. P/NP or letter grading.

123. Topics in Medieval Studies. (4) Lecture, four hours. Requisites: courses 25 or 27, and 119. Exploration of medieval Iberian literatures: lyric poetry, prose, and history of the peninsula, with emphasis on its literary and linguistic diversity. Possible topics include Spanish colonization and indigenous responses, transatlantic literary and visual networks—from 16th-century maps of Americas to YouTube videos of street protests in Chile; from Modernist architectural designs for new national capitals to tele-novelas and colonial photographs; and everything in between—introduction to practices, processes, objects of study, and interdisciplinary critical frameworks of visual culture studies. By examining manifestations of visual culture from Iberian, Latin American, and Luso-Brazilian contexts, students gain culturally specific foundations of visual knowledge and skills of visual literacy. P/NP or letter grading.

130. Topics in Modern Studies. (4) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: courses 25 or 27, and 119. Exploration of major models for writing history—great narratives, cyclic, teleological, sacred, and profane conceptions. Traditional concepts of literary history and problems of mixed categories (historicizing concepts of style, national history, and world literature). P/NP or letter grading.

107. Advanced Spanish Grammar for Heritage Speakers(4) Lecture, four hours. Requisite: course 27. Stresses acquisition of standard and formal registers and advanced grammar, morphology, orthography, and avoidance of vocabulary and sentence structure. Draws from existing linguistic background to perfect grammar and writing in Spanish. Comprehensive review of Spanish grammar with attention to advanced structures that are not covered in lower-level courses. Development of writing skills through application of grammar concepts. P/NP or letter grading.


182A-182B-182Z. Lower-Division Seminars. (4 each) Seminar, three hours. Knowledge of Spanish not essential. Variable topics courses designed to explore various themes and issues pertinent to Hispanic literature and culture.

189. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit under eligible students. Honors content noted on transcript. P/NP or letter grading.

99HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

97. Variable Topics in Spanish. (2) Lecture, two hours. Topics: Study of selected works in translation. Classroom discussion, papers, and examinations in English. 60A. Spanish Literature; 60B. Spanish-American Literature; 60C. Latin American Literature; 60D. Luso-Brazilian Literature; 60E. Comparative Literature. P/NP or letter grading.

100A-100B. Introduction to Study of Spanish Grammars. (4-4) Lecture, four hours. Requisite: course 25. Comprehensive review of Spanish grammar with attention given to advanced concepts and structures that are not covered in lower-level courses. Recommended skills through application of grammar concepts. P/NP or letter grading.

Upper-Division Courses

100A-100B. Introduction to Study of Spanish Grammars. (4-4) Lecture, four hours. Requisite: course 25. Comprehensive review of Spanish grammar with attention given to advanced concepts and structures that are not covered in lower-level courses. Recommended skills through application of grammar concepts. P/NP or letter grading.

104. Topics in Modern Studies. (4) Lecture, four hours. Requisites: courses 25 or 27, and 119. Exploration of major models for writing history—great narratives, cyclic, teleological, sacred, and profane conceptions. Traditional concepts of literary history and problems of mixed categories (historicizing concepts of style, national history, and world literature). P/NP or letter grading.

150. Topics in Contemporary Studies. (4) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 25 or 27, and 119. Exploration of main trends that characterize contemporary Latin American and Spanish literatures and cultures and main concepts used to address them. Possible topics
include transculturation and heterogeneity, race and ethnicity, gender, migration, and exile. Introduction to sociocultural and ethnohistorical themes. 187A-187B. Advanced Tutorial in Community and Culture, II, (1–2) Tutorial, one hour. Requisite: course 25 or 27. Designed as adjunct to upper-division course in community and culture. Exploration of topics in greater depth through supplemental readings, papers, community service, or other activities. Course 187A may be repeated once for credit. Spanish and Portuguese. 189. Advanced Honors Seminars, (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities, and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts, (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit with topic change. P/NP or letter grading.

191A. Variable Topics in Spanish: Studies in Hispanic Literature and Linguistics, (4) Seminar, three hours. Limited to 15 junior/senior Spanish majors. Variable topics course with readings, discussions, and development of culminating paper. Consult Schedule of Classes or department counselor for topic to be offered in specific term. May be repeated for credit with topic change. P/NP or letter grading.

191B. Variable Topics in Spanish: Studies in Hispanic Culture and Civilization, (4) Seminar, three hours. Advanced variable topics course that studies diverse aspects of Hispanic culture, civilization, and history. Classroom discussions, development of culminating paper, and examinations in Spanish. May be repeated for credit with topic change. P/NP or letter grading.

191C. Senior Capstone Seminar, (4) Seminar, three hours. Enforced requisites: courses 119, 120, and at least three upper-division elective courses required for majors. Limited to 15 junior/senior Spanish majors. Knowledge from previous coursework used to address current trends in discipline; students work with one faculty member on one focused research topic. Culminating paper required. Letter grading.

195. Community Internships in Spanish, (4) Tutorial, one hour; fieldwork, 10 hours. Requisite: course 25 or 27. Limited to juniors/seniors. Internship in supervised setting in community agency or business. Students meet on regular basis with instructor and provide journal of their experience. Final research paper required. May be repeated for credit. Individual contract with supervising faculty member required. P/NP or letter grading.

197. Individual Studies in Spanish, (2 to 4) Tutorial, to be arranged. Limited to juniors/seniors. Independent intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. Eight units of courses 197 and/or 199 may be applied toward major requirements. May be repeated for maximum of 16 units. Individual contract required. P/NP or letter grading.

198A-198B. Senior Honors Research in Spanish, II, (4–4) Tutorial, to be arranged. Preparation: completion of minimum of six upper-division major core courses with 3.7 GPA. Course 198A is enforced prerequisite to 198B. Limited to juniors/seniors. Development and completion of honors thesis under direct supervision of faculty member. May not be applied toward major requirements. Individual contract required. Letter grading.

199. Directed Research in Spanish, (2 to 4) Tutorial, to be arranged. Requisite: course 25. Limited to juniors/seniors. Supervised individual research under guidance of faculty mentor. Culminating paper required. Eight units of courses 197 and/or 199 may be applied toward major requirements. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

M200. Research Resources, (4) (Same as Portuguese M200). Lecture, three hours. Research on and use of research resources for graduate students.

M201A-M201B. Literary Theory and Criticism, (4–4) (Same as Portuguese M201A-M201B.) Lecture, three hours. Definition, discussion, and application of main currents of contemporary literary theory and criticism. Letter grading.

202A. Phonology, (4) Lecture, three hours. Study of the sound structure of Spanish and main phonological processes that map underlying representations into surface representations. Bearing of phonological theory on study of meter.

202B. Morphology, (4) Lecture, three hours. Study of derivational and inflectional word formation processes and their interaction with the morphological structure.


M205A-M205B. Development of Portuguese and Spanish Languages, (4–4) (Same as Portuguese M205A-M205B.) Lecture, three hours. Intensive study of historical development of Portuguese and Spanish languages from their origin in spoken Latin.

209. Dialectology, (4) Lecture, three hours. Major dialect areas of peninsular and American Spanish, with distinguishing features of each. Influence and contribution of cultural and historical features, including indigenous languages, to their formation.

212. Medieval Lyric Poetry, (4) Lecture, three hours. Readings of and lectures on Spanish lyric poetry from the beginning to 1500.

217. Medieval Epic and Narrative Poetry, (4) Lecture, three hours. Readings of and lectures on Spanish epic and narrative poetry from the beginning to 1500.


228. Prose of the Golden Age, (4) Lecture, three hours. Readings of and lectures on representative works of the period.

229. Poetry of the Golden Age, (4) Lecture, three hours. Readings of and lectures on Spanish poetry from 1500 to 1700.

232. Drama of the Golden Age, (4) Lecture, three hours. Readings of and lectures on works of Cervantes.

233. The Enlightenment, (4) Lecture, three hours. Readings of and lectures on representative works of the period.

239. Romanticism, (4) Lecture, three hours. Readings of and lectures on representative works of the period.

240. Realism and Naturalism, (4) Lecture, three hours. Readings of and lectures on representative works of the period.

243. Major Currents in Modern Spanish Literature, (4) Lecture, three hours. Introduction to major literary currents, including symbolism, Parnassianism, and the Generation of 1898.

244. Spanish Prose Literature from 1898 to the Civil War, (4) Lecture, three hours. Readings of and lectures on representative essays, novels, and short stories of the period.

245. Spanish Prose Literature from 1898 to the Civil War, (4) Lecture, three hours. Readings of and lectures on representative essays, novels, and short stories of the period.
233. Spanish Prose Literature after the Civil War. (4) Lecture, three hours. Readings of and lectures on representative essays, novels, and short stories of the period.

234. Spanish Drama and Poetry from 1898 to the Civil War. (4) Lecture, three hours. Readings of and lectures on representative plays and poems of the period.

237. Literature of the Spanish Conquest. (4) Lecture, three hours. Readings of and lectures on chronicles, poems, and indigenous accounts of the Spanish Conquest.


241A-241B. Contemporary Spanish-American Short Story. (4–4) Lecture, three hours. Study of important short story writers from modernism to the present.

243A-243B. Contemporary Spanish-American Poetry. (4–4) Lecture, three hours. Intensive study of important poets of Spanish America from modernism to the present.

244A-244B. Contemporary Spanish-American Novel. (4–4) Lecture, three hours. Study of important novelists from modernism to the present.


M251A-M251B. Studies in Galician-Portuguese and Old Spanish. (4–4) Same as Portuguese M251A-M251B.) Lecture, two hours. Study of problems related to the development of Galician-Portuguese and Old Spanish. Each course may be repeated once with topic change and consent of appropriate guidance committee.

M256A-M256B. Studies in Spanish Linguistics. (4–4) Lecture, two hours. Study of problems in analysis and description of the contemporary Spanish language. Each course may be repeated once with topic change and consent of appropriate guidance committee.

257. Studies in Dialectology. (4) Discussion, two hours. May be repeated once with topic change and consent of appropriate guidance committee.

262A-262B. Studies in Medieval Spanish Literature. (4–4) Discussion, two hours. Each course may be repeated once with topical change and consent of appropriate guidance committee.

264A-264B. Studies in Golden Age Spanish Literature. (4–4) Discussion, two hours. Each course may be repeated once with topical change and consent of appropriate guidance committee.

265. Cervantes. (4) Discussion, two hours. May be repeated once with topical change and consent of appropriate guidance committee.

270A-270B. Studies in 16th-Century Spanish Literature. (4–4) Discussion, two hours. Each course may be repeated once with topical change and consent of appropriate guidance committee.

271A-271B. Studies in 19th-Century Spanish Literature. (4–4) Discussion, two hours. Each course may be repeated once with topical change and consent of appropriate guidance committee.

272A-272B. Studies in 20th-Century Spanish Literature. (4–4) Discussion, two hours. Each course may be repeated once with topical change and consent of appropriate guidance committee.

277A-277B. Studies in Colonial Spanish-American Literature. (4–4) Discussion, two hours. Each course may be repeated once with topical change and consent of appropriate guidance committee.

278A-278B. Studies in 19th-Century Spanish-American Literature. (4–4) Discussion, two hours. Each course may be repeated once with topical change and consent of appropriate guidance committee.

280A. Studies in Contemporary Spanish-American Literature. (4) Discussion, two hours. May be repeated for credit. S/U or letter grading.

281. Studies in Chicano Literature. (4) Discussion, two hours. May be repeated once with topical change and consent of appropriate guidance committee.

290. Special Topics. (4) Lecture, two hours. Variable topics; consult Schedule of Classes or department counselor for topics to be offered in a specific term. May be repeated once with topical change and consent of appropriate guidance committee.

291A-291B. Colonial Studies Research Group. (2) Research group meeting, two hours. Limited to graduate students. Discussion and analysis of colonial manuscripts. Specific topics vary from year to year. Production of student papers for publication and/or presentation at conferences or symposia. 291A. S/U grading. 291B. Requisite: course 291A. May be repeated for credit. S/U or letter grading.

296. Graduate Research Group. (2) Research group meeting, two hours. Limited to graduate students. Designed to bring together graduate students in seminar setting with one or more faculty members to discuss and critique individual research projects, especially dissertation research. S/U grading.

M297A. Proseminar I. (2) Same as Portuguese M297A.) Proseminar, two hours. Limited to graduate students. Introduction to doctoral study and to professions. Designed to bring together first-year graduate students in seminar setting to discuss how to define their own work in relation to literary, linguistic, and/or cultural studies, broader humanities field, and our various communities. S/U grading.

310. Teaching Spanish in Elementary School. (4) Lecture, three hours.


375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

490. Using Technology in Foreign Language Classroom. (4) Discussion, two hours. Designed for graduate students. Theory and practice of using technology in foreign language classroom. Computer applications that facilitate instruction of grammar, discourse, culture, and composition, as well as evaluation and communication between students and instructor. S/U grading.


596. Directed Individual Study or Research. (4 or 8) Tutorial, to be arranged. Study or research in areas or subjects not offered as regular courses. No more than 4 units may be applied toward MA course requirements. S/U or letter grading.

597. Preparation for Graduate Examinations. (4 to 12) Tutorial, to be arranged. Preparation: official acceptance of candidacy by department. Individual preparation for MA comprehensive examination or PhD qualifying examinations. May be taken only once for each degree examination and only in term that comprehensive or qualifying examinations are to be taken. S/U grading.


Overview

The purpose of statistics and data science is to design, construct, and evaluate techniques for analyzing data. The data can be of any type—quantitative, qualitative, visual—and be collected through a variety of means through surveys, machines, self-reports, or random samples. The motivation can be scientific, commercial, legal, or policy.

The Department of Statistics and Data Science is devoted to furthering the science of data, and faculty research focuses on statistical and machine learning, computational statistics, computational biology, social statistics, and environmetrics. Both the undergraduate and graduate programs immerse students in theory, application, and computation—the foundations of data science.

Centers

Reflecting diverse research interests, the department is organized around several centers that collectively offer undergraduate and graduate students rich opportunities for specialized study. These include the Center for Environmental Statistics; Center for Social Statistics; Center for Statistical Research in Computational Biology; and Data Science Education Center.

Undergraduate Majors

Statistics and Data Science BS

The Statistics and Data Science major is designed to provide a general introduction to the practice of statistics for students who intend to pursue study at the graduate level or seek employment in industry or government. Courses are selected to provide sufficient theoretical background for future graduate-level research work, exposure to modern techniques and practices, and experience in fields of application.

It is strongly recommended that students, in conjunction with the BS degree, pursue a minor in a substantive discipline that applies statistics. Students must consult with the undergraduate faculty adviser to ensure that the minor selected is one in which statistics is applied.

Students interested in the major in Statistics and Data Science should meet with the student affairs officer early in their careers. Students who have completed Mathematics 33A, Statistics 20, and at least one course from Statistics 10 through 13 may declare a pre-major.

Capstone Major

The Statistics and Data Science major is a designated capstone major. Students are prepared for future academic studies, as well as for careers in which understanding, analyzing, communicating, and organizing data are of central importance. The capstone gives students an opportunity to put into practice concepts and ideas that otherwise might remain theoretical and/or abstract, and to synthesize the many topics they have studied. Students should demonstrate ability to restate investigative questions in terms of statistical models or algorithms, find appropriate research literature to support their work, relate theoretical concepts to real-world problems, and clearly communicate their results to nontechnical audiences.

Learning Outcomes

The Statistics and Data Science major has the following learning outcomes:

- Ability to restate an investigative question in terms of a statistical model or algorithm
- Verbally communicate statistical results clearly to a non-technical audience
- Successfully relate theoretical concepts to a real-world problem in a written report
- Demonstrated ability to find research literature appropriate to the investigative task
- Deliver reproducible statistical analyses using accepted practices of the research community
- Demonstrated ability to verbally and orally communicate statistical results to both technical and nontechnical audiences

Entry to the Major

Pre-major

Incoming first-year and transfer students may be admitted as Statistics and Data Science pre-majors on acceptance to UCLA. Pre-major students must apply for the major after completing Statistics 20, and one course from Statistics 10 through 15, with grades of C or better, and an overall grade-point average of 2.5. Any student who meets the pre-major requirements may declare the major with the undergraduate student services adviser through Message Center.

First-Year Students

Students who entered as first years must declare the major with the undergraduate adviser no later than the end of the fall quarter of their junior year.

Transfer Students

Transfer applicants to the Statistics and Data Science major with 90 or more units must complete as many of the following introductory courses as possible prior to admission: two years of calculus, one linear algebra course, and one statistics course. These courses must be completed with a minimum grade-point average of 2.5. Students must declare the major with the department undergraduate adviser no later than the end of the fall quarter of their junior year.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Requirements

Preparation for the Major


The Major

Required: Statistics 100A, 100B, 100C, 101A, 101B, 101C, 102A, 102B, 102C; two capstone statistical consulting courses (140XP, 141XP); and two upper-division elective courses selected from Mathematics 131A, 131B, 151A, 151B, 170B, 171, or Statistics 112 through 199 (except courses 147, M148, 184, 186).

Policies

Preparation for the Major

Each course must be completed with a grade of C or better, and a grade-point average of 2.5 or higher. Students who repeat more than two of the preparation courses or who repeat any preparation course more than once are automatically denied admission to the major.

The Major

Students are strongly encouraged to take electives in departments other than statistics, particularly in mathematics, computer science, and substantive disciplines that apply statistical methods. Elective courses from outside the department may be selected in consultation with the department director of undergraduate education.

The capstone consists of two courses (Statistics 140XP and 141XP) that must be completed sequentially in the final year. Students must first complete courses 100B and 101B before they can begin the capstone.

Students planning to continue their study of statistics at the graduate level are strongly advised to include in their schedule as many of the following courses as possible: Mathematics 115A, 115B, 131A, 131B, 151A, 151B, 170B, 171.

Only 4 units of Statistics 195 and 199 may be applied toward the major. Courses 189 and 189HC may not be applied toward any of the major requirements.
Each major course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

Data Theory BS

Capstone Major
The Data Theory major is a designated capstone major. Students work in small teams to solve a large, open-ended data science problem for community- or campus-based clients. Emphasis is placed on the development and theoretical support of a statistical model or algorithmic approach. Alternatively, students may undertake research on the foundations of data science, studying advanced topics and writing a senior thesis.

Learning Outcomes
The Data Theory major has the following learning outcomes:

- Understanding of mathematical and statistical bases of most common methods of data science
- Ability to explain in writing, with examples, how concepts of statistics and mathematics together solve real-world problems involving data
- Skillfully manage data
- Development, comparison, and testing of data-driven models to solve problems
- Understanding and explanation of variability when fitting and interpreting models of real-world systems
- Carrying out of reproducible data analysis using accepted practices of research community
- Written and verbal communication of findings of analyses
- Identification of areas of active research in data science
- Insightfully address problems concerning ethics of data use and storage, including data privacy and security
- Demonstrated mastery of concepts and skills of machine learning, modeling and supervised learning, dimension reduction and unsupervised learning, and deep learning
- Demonstrated familiarity with numerous software tools used in statistical and data science work and research
- Demonstrated knowledge of mathematical foundations, including pure and applied linear algebra, basic analysis, probability, and optimization theory
- Study and evaluation of proofs of mathematical and statistical results employed in data theory
- Work effectively in a team on a data science problem
- Demonstrated eligibility for graduate study in applied mathematical science or statistical science

Entry to the Major

Pre-major
Students entering UCLA directly from high school or first-term transfer students who want to declare the Data Theory pre-major at the time they apply for admission are automatically admitted to the pre-major. Students must visit the student services office of either the Mathematics Department or Statistics and Data Science Department in order to petition to enter the major. All students are identified as Data Theory pre-majors until they satisfy the following minimum requirements for the major.

First-Year Students
To enter the major, students must petition after they have completed the preparation for the major courses. Students who have an overall grade-point average (GPA) of at least 3.3 in the preparation for the major courses, and have completed all preparation for the major courses before the fall quarter of their third year at UCLA, will be admitted to the major.

Students whose overall GPA is between 2.7 and 3.3, or who fail to complete the preparation courses before the fall quarter of their third year, are admitted only if space is available. All students must petition before they have earned 160 units, or by the winter quarter of their junior year, whichever comes first. Only grades for courses that are taken at the University of California, including UC summer schools, are counted for this GPA computation.

Transfer Students
Transfer applicants to the Data Theory major are admitted to the pre-major. Applicants with 90 or more units must have completed the following by the end of the spring term prior to entering UCLA: two years of calculus for physical science and/or engineering majors, one linear algebra course, one C++ programming course, one statistics course. Transfer students must have completed all preparation for the major coursework, and must have passed Mathematics 42, 115A, and at least 4 units of upper-division coursework required for this major with at least a 3.3 GPA, in order to be eligible to petition to enter the major. Transfer students will be admitted to the major if they satisfy these requirements. Transfer students will be admitted to the major if they satisfy these requirements. Transfer students who fail to meet these criteria for automatic admission will be admitted only if resources allow. Transfer students must petition to enter the major no later than the spring quarter of their third year, whichever comes first. Only grades for courses that are taken at the University of California, including UC summer schools, are counted for this GPA computation.

To enter the major, students must petition after they have completed the preparation for the major courses. Students who have an overall grade-point average (GPA) of at least 2.7. All students must take Mathematics 42 at UCLA. The major is limited in size according to available resources.

Repetition of more than two mathematics or statistics sequenced courses or of any mathematics or statistics sequenced course more than once results in automatic dismissal from the major.

The Major
Only 4 units of course 199 may be applied toward the major. Courses 189 and 189HC may not be applied toward any of the major requirements.

Each major course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

Undergraduate Minors

Social Data Science Minor
The Social Data Science minor is designed to offer a solid background in data science for students majoring in social science disciplines. It is restricted to students who are declared majors within the Social Sciences Division.

Admission
To enter the minor, students (1) must have completed the required lower-division courses for letter grades with a minimum C or better grade in each course, and a grade-point average of 2.5 or better in lower-division courses; and (2) file a petition with the Statistics and Data Science Department undergraduate adviser.

The Minor

Required Lower-Division Courses (12 or 13 units): Mathematics 33A, Statistics 20, and one course from Economics 41, Geography 7, Political Science 6, Sociology 20, or Statistics 10 through 15.


Statistics and Data Science / 839
Graduate Majors

Master of Applied Statistics and Data Science

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Statistics MS, CPhil, PhD

Requirements

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Statistics Lower-Division Courses

10. Introduction to Statistical Reasoning. (5) Lecture, three hours; discussion, one hour. Enforced requisite: course 10, 11, 12, or 13. Introduction to statistical thinking and understanding, with emphasis on techniques used in geography and environmental science. Underlying logic behind statistical procedures, role of variation in statistical summaries, and fundamental inferential tools. Emphasis on application of statistical methods to problems using professional statistical analysis packages, including geographic information systems. P/NP grading.

11. Introduction to Probability with Applications to Computer Science. (5) Lecture, three hours; discussion, one hour. Preparation: three years of high school mathematics. Not open to students with credit for course 105, 188SA, 188SB, 188SC, 189, or score of 4 or higher on Advanced Placement Statistics Examination. Designed to prepare students for upper-division work in statistics. Introduction to use of R, including data management, simple programming, and statistical graphics in R. P/NP or letter grading.

12. Introduction to Statistical Programming with R. (5) Lecture, three hours; discussion, one hour. Enforced requisite: one course from 10, 12, 13, 14, Economics 41, or Psychology 100A, or score of 4 or higher on Advanced Placement Statistics Examination. Focus on programming with Python and selection of its libraries: NumPy, pandas, matplotlib, and scikit-learn, for purpose of data processing, data analysis, and machine learning. Other technologies covered include Jupyter notebook and Git. Intended for Data Theory majors as introduction to Python language and libraries most frequently used in data science. Letter grades.

13. Introduction to Probability with Applications to Poker. (4) Lecture, three hours; discussion, one hour. Exploration of some main topics in introductory probability theory, especially discrete probability problems, and analysis of applications that are useful in a wide variety of scientific applications. Topics include conditional probability and conditional expectation, combinatorics, laws of large numbers, central limit theorem, Bayes theorem, univariate distributions, Markov processes, and Brownian motion. Examination of computer simulation in depth and discussion of computational approximations of solutions to complex problems using R, with examples of situations and concepts that arise naturally when playing Texas Hold’em and other games. P/NP or letter grading.

14. Introduction to Data Science. (5) Lecture, three hours; discussion, one hour. Preparation: one course from 10, 11, 12, 13, or 14. Limited to 20 lower-division students. Readings and discussions designed to introduce students to current statistical consulting research and fieldwork. Culminating project may be required. P/NP or letter grading.

15. Introduction to Statistical Methods for Life and Health Sciences. (5) Lecture, three hours; discussion, one hour; laboratory, one hour. Preparation: three years of high school mathematics. Not open to students with credit for course 10, 12, 13, or former course 10H, 11, or 14. Introduction to data science, including data management, data modeling, data visualization, communication of findings, and reproducible work. P/NP or letter grading.

16. Introduction to Data Science. (5) Lecture, three hours; discussion, one hour; computer laboratory, one hour. Preparation: three years of high school mathematics. Not open to students with credit for course 10, 12, 13, or former course 10H, 11, or 14. Introduction to data science, including data management, data modeling, data visualization, communication of findings, and reproducible work. P/NP or letter grading.

17. Introduction to Data Science. (5) Lecture, three hours; discussion, one hour; computer laboratory, one hour. Preparation: three years of high school mathematics. Not open to students with credit for course 10, 12, 13, or former course 10H, 11, or 14. Introduction to data science, including data management, data modeling, data visualization, communication of findings, and reproducible work. P/NP or letter grading.

18. Introduction to Data Science. (5) Lecture, three hours; discussion, one hour; computer laboratory, one hour. Preparation: three years of high school mathematics. Not open to students with credit for course 10, 12, 13, or former course 10H, 11, or 14. Introduction to data science, including data management, data modeling, data visualization, communication of findings, and reproducible work. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise, examining many paths of discovery at UCLA. P/NP grading.

20. Introduction to Statistical Programming with R. (4) Lecture, three hours; discussion, one hour. Enforced requisite: one course from 10, 12, 13, 14, Economics 41, or Psychology 100A, or score of 4 or higher on Advanced Placement Statistics Examination. Designed to prepare students for upper-division work in statistics. Introduction to use of R, including data management, simple programming, and statistical graphics in R. P/NP or letter grading.

21. Python and Other Technologies for Data Science. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 20. Covers use of Python and other technologies for data analysis and data science. Focus on programming with Python and selection of its libraries: NumPy, pandas, matplotlib, and scikit-learn, for purpose of data processing, data analysis, and machine learning. Other technologies covered include Jupyter notebook and Git. Intended for Data Theory majors as introduction to Python language and libraries most frequently used in data science. Letter grades.

22. Introduction to Probability with Applications to Poker. (4) Lecture, three hours; discussion, one hour. Exploration of some main topics in introductory probability theory, especially discrete probability problems, and analysis of applications that are useful in a wide variety of scientific applications. Topics include conditional probability and conditional expectation, combinatorics, laws of large numbers, central limit theorem, Bayes theorem, univariate distributions, Markov processes, and Brownian motion. Examination of computer simulation in depth and discussion of computational approximations of solutions to complex problems using R, with examples of situations and concepts that arise naturally when playing Texas Hold’em and other games. P/NP or letter grading.

23. Sophomore Seminars: Statistics. (2) Seminar, two hours. Preparation: credit for course 10, 11, 12, 13, or 14. Limited to 20 lower-division students. Readings and discussions designed to introduce students to current statistical consulting research and fieldwork. Culminating project may be required. P/NP or letter grading.

24. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supervised independent readings, projects, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

25. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

26. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100A. Introduction to Probability. (4) Lecture, three hours; discussion, one hour. Preparation: Mathematics 32B, 33A. Not open to students with credit for Electrical Engineering 131A or Mathematics 170A; open to graduate students. Students may receive credit for only two of following: course 100A, former course 110A, Biostatistics 100A. Probability distributions, random variables, vectors, and expectation. P/NP or letter grading.

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Policies

Statistics 105, 188SA, 188SB, 188SC, 189, 189H-C, 195, and 199 may not be applied toward the minor. Elective courses from outside the department are selected in consultation with the Statistics and Data Science undergraduate faculty adviser. The variable topics courses Political Science 179 and 191E and Sociology 191V may only be applied toward the minor by special petition on the basis of their statistical content.

Economics 104 may be used as a substitute for Statistics 101A as a requisite for Statistics 101B. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Statistics and Data Science Minor

The Statistics and Data Science minor is designed to provide a solid background in statistics for students majoring in other disciplines.

Students interested in the minor in Statistics and Data Science should meet with the student affairs officer early in their careers. Students who have completed Mathematics 33A, Statistics 20, and at least one course from Statistics 10 through 15 may declare the minor.

Admission

To enter the minor, students (1) must have taken Mathematics 33A, Statistics 20, and one course from Statistics 10 through 15 for letter grades with a minimum C or better grade in each and a grade-point average of 2.5, and (2) file a petition with the department undergraduate adviser.

The Minor

Required Upper-Division Courses (24 units): Six upper-division courses selected from one of the following options: (1) Statistics 100A, 100B, and 100C, and Statistics 101A, 101B, and 101C, or Statistics 102A, 102B, and 102C, or (2) Statistics 100A, 100B, 101A, 101B, 102A, and 102B or 102C.

Policies

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.
100B. Introduction to Mathematical Statistics. (4) Lecture, three hours; discussion, one hour. Requisite: course 100A or Mathematics 170A or 170E. Survey sampling, residuals, principle component regression, and hypothesis testing, with emphasis on general linear model (e.g., multiple regression) and generalized linear model (e.g., logistic regression). Special attention to modern extensions of regression, including diagnostics, graphical procedures, and bootstrapping for statistical inference. P/NP or letter grading.

100C. Linear Models. (4) Lecture, three hours; discussion, one hour. Requisite: course from 10 12, 13, Economics 11, 41, or Psychology 100A, or score of 4 or higher on Advanced Placement Statistics Examination, and course 20. Recommended: course 102A. Applied regression analysis, with emphasis on general linear model, multiple regression and generalized linear model, logistic regression. Special attention to modern extensions of regression, including diagnostics, graphical procedures, and bootstrapping for statistical inference. P/NP or letter grading.

101A. Introduction to Data Analysis and Regression. (4) Lecture, three hours; discussion, one hour. Requisite: course from 10 12, 13, Economcis 11, 41, or Psychology 100A, or score of 4 or higher on Advanced Placement Statistics Examination, and course 20. Recommended: course 102A. Applied regression analysis, with emphasis on general linear model (e.g., multiple regression) and generalized linear model (e.g., logistic regression). Special attention to modern extensions of regression, including diagnostics, graphical procedures, and bootstrapping for statistical inference. P/NP or letter grading.

101B. Introduction to Design and Analysis of Experiment. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 101A. Designing for junior/senior projects. Applied regression analysis, with emphasis on general linear model (e.g., multiple regression) and generalized linear model (e.g., logistic regression). Special attention to modern extensions of regression, including diagnostics, graphical procedures, and bootstrapping for statistical inference. P/NP or letter grading.

102A. Introduction to Computation Statistics with R. (4) Lecture, three hours; discussion, one hour. Requisite: 100B or (Mathematics 170S). 102A, Mathematics 33A. Introduction to computational methods and optimization useful for statisticians. Use of computer programming to solve statistical problems. Topics include vector/matrix computation, random number generation, normal distribution, and computational intensive methods for statistical problems. Topics include statistical graphics, root finding, simulation, randomization testing, and bootstrapping. Emphasis on modern techniques for statistical inference. P/NP or letter grading.


105. Statistics for Engineers. (4) Lecture, three hours; discussion, one hour. Requisite: course 100A or Electrical Engineering 131A or Mathematics 170A. Foundation of basic concepts and techniques of statistics. Topics include sampling distributions, statistical estimation (including maximum likelihood estimation), statistical intervals, and hypothesis testing, with emphasis on the analysis of comparisons. Discussion of methods for checking whether assumptions required for mathematical foundations are appropriate for given set of data. P/NP or letter grading.


C116. Social Statistics. (4) Lecture, three hours. Preparation: some knowledge of basic calculus and linear algebra. Requisites: course 101A, and one from 10B, 10B, 101B, and 101C, or one course from 10, 11, 12, 13 and 101B division course using regression. Designed for social sciences graduate students and advanced undergraduate students seeking training in data issues and methods employed in social sciences. Concurrently scheduled with course C216. P/NP or letter grading.

130. Getting Up to Speed with SPSS, Stata, SAS, and R. (4) Lecture, three hours; discussion, one hour. Preparation: basic statistics, basic computer literacy. Study of four commonly employed solutions—SPSS (Statistical Package for Social Sciences), Stata, SAS (Statistical Analysis System), and R—for data analytic and statistical issues in health sciences, engineering, economics, and government. Emphasis on applied problem solving, measurement issues in data analysis, use of computer for analysis of large-scale data. P/NP or letter grading.

131. Python and Other Technologies for Data Analysis. (4) Lecture, three hours; discussion, one hour. Requisite: course 102A. Limited to junior/senior statistics majors and minors. Python for numerical computing with Numpy, Matplotlib, and sci-kit-learn—for purposes of data analysis, and machine learning. Other technologies covered include Jupyter notebook, Structured Query Language (SQL), and git. P/NP or letter grading.

140XP. Practice of Statistical Consulting. (4) Formerly numbered 140SL. Lecture, one hour; discussion, two hours. Enforced requisite: courses 100B, 101B. Limited to seniors. Opportunity to solve real data analysis problems for real community-based clients. Students work in small groups with faculty member and client to frame client’s question in statistical terms, create statistical model, analyze data, and report results. Weekly meetings in classroom setting to study basic consulting skills, share experiences, exchange ideas, and make reports. On-site visits as necessary. Courses 140XP and 141XP must be taken in sequence. P/NP or letter grading.

141XP. Practice of Statistical Consulting. (4) Formerly numbered 141SL. Seminar, one hour; discussion, one hour; research group meeting, two hours. Requisite: course 140XP. Limited to seniors. Opportunity to solve real data analysis problems for real community-based clients. Students work in small groups with faculty member and client to frame client’s question in statistical terms, create statistical model, analyze data, and report results. Weekly meetings in classroom setting to study basic consulting skills, share experiences, exchange ideas, and make reports. On-site visits as necessary. Courses 140XP and 141XP must be taken in sequence. P/NP or letter grading.
data protection, intellectual property and confidentiality, sample selection and algorithms, equality and anti-discrimination. Letter grading.

186. Careers in Statistics. (1) Seminar, one hour. Discussion of applications, including guest speakers. How statistics is applied to legal questions, economic decisions, arts, environment, and other fields, with some emphasis on career paths in statistics. P/N/P grading.

189SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topics, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/N/P or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for credit. Individual honors contract required. Honors content noted on transcript. Letter grading.

190. Community or Corporate Internships in Statistics. (4) Tutorial, four hours. Limited to juniors/senior in supervised setting in community agency or business. Students work in one-on-one basis with instructor and provide periodic reports of their experience. May be repeated for credit. Individual contract with supervising faculty member required. P/N/P or letter grading.

190C. Internship in supervised setting in community agency or business. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

200A. High Dimensional Statistics. (4) Lecture, three hours; discussion, one hour. Survey of modern techniques in analyzing high-dimensional and nonparametric estimation problems. Emphasis on non-asymptotic bounds, concentration inequalities, S/U or letter grading.

201A. Research Design, Sampling, and Analysis. (4) Lecture, three hours; discussion, one hour. Designed for graduate students. Basics of block designs, factorial designs, unequal probability sampling, regression estimation, stratified sampling, and cluster sampling. S/U or letter grading.

201B. Statistical Modeling and Learning. (4) Lecture, three hours; discussion, one hour. Designed for graduate students. Basics of block designs, factorial designs, unequal probability sampling, regression estimation, stratified sampling, and cluster sampling. S/U or letter grading.

202A. Statistics Programming. (4) Lecture, three hours; discussion, one hour. Topics in programming environments/languages such as UNIX, UNIX shell, Python, R, and Processing and data technologies/formats such as relational databases/SQL and XML, with emphasis on complex data types, including large collections of textual data, GPS traces, network logs, and various online sources. S/U or letter grading.

202B. Matrix Algebra and Optimization. (4) Lecture, two hours; discussion, one hour. Enforced corequisite: course 200B. Survey of computational methods that are especially useful for statistical analysis, with implementations in statistical package R. Topics include matrix analysis, multiple regression, principal component analysis, multivariate analysis, and deterministic optimization methods. S/U or letter grading.

202C. Monte Carlo Methods for Optimization. (4) Lecture, three hours; discussion, one hour. Designed for students in statistics and other disciplines who want to perform data analysis using linear and nonlinear regression and multilevel models. Introduction to and demonstration of wide variety of models to instruct students in how to fit these models using freely available software packages. Topics include regression, poststratification, matching, regression discontinuity, and instrumental variables, as well as multilevel logistic regression and missing-data imputation. Practical tips regarding building, fitting, and understanding models provided. S/U or letter grading.

207. Statistical Learning with Sparsity. (4) Lecture, three hours. Introduction to the analysis of statistical learning with sparsity. Topics include recent advances in model selection and estimation, theoretical properties of methods, and their applications in machine learning and other fields of research. Prerequisite: course 200A and linear algebra. S/U or letter grading.


211. Topics in Economics and Machine Learning. (4) Lecture, three hours. Requisites: courses 200B, 201A, and 210B. Introduction to modern developments in information technology leading to deeper engagement between technology and human that involve data, inferences, and decisions between multiple self-interested participants. Coverage of blending economics, information theory, and mathematical statistics began to emerge several decades ago with its roots in work of John von Neumann, Jerzy Neyman, Alan Turing, and David Blackwell. Problems in real-world problems solving in industry and science in recent years leads to new interest and progress in this area. Covers machine-learning, game-theoretic, and economic concepts and principles that are relevant across many applications. Methods and theory for structure learning of graphical models, condition independence and causality. Methods and theory for structure learning of graphical models, and techniques for observational and experimental data. S/U or letter grading.

212. Graphical Models. (4) Lecture, three hours. Recommended requisite: course 200A. Introduction to graphical models with applications in statistical modeling, machine learning, and causal inference. Covers topics such as underlying graphs, directed acyclic graphs, and ancestral graphs for modeling conditional independence and causality. Applications to genetic sequencing, social media, and climate science. S/U or letter grading.

213. Synthetic Data Generation. (4) Lecture, three hours; discussion, one hour. Requisite: course from 200B, 201B, 202A, 210B or 213A. Introduction to research on synthetic data generation, to build trustworthy artificial intelligence systems. In general, well-designed generation process should produce a synthetic data set that is statistically similar to the real data in a way that can be measured and used. Practical challenges include issues of data privacy, fairness, and ethics. S/U or letter grading.


231A. Pattern Recognition and Machine Learning. (4) Same as Computer Science M276A. Lecture, three hours; discussion, one hour. Recommended requisite: courses 208, 208A. Introduction to machine learning and pattern recognition and machine learning that are used in computer vision, image processing, speech recognition, data mining, statistics, and computational biology. Topics include Bayesian decision theory, parametric and nonparametric learning, clustering, complexity (VC-dimension, MDL, AIC), PCA/ICA/TCA, MDS, SVM, boosting. S/U or letter grading.


231C. Theories of Machine Learning. (4) Lecture, three hours. Requisites: courses 200A, 231B. Introduction to many useful nonparametric techniques such as nonparametric density estimation, nonparametric regression, and high-dimensional statistical modeling. Some semiparametric techniques and functional data analysis include Gaussian process regression, clustering, and classification. S/U or letter grading.


232B. Statistical Computing and Inference in Vision and Cognition. (4) Same as Computer Science M266B. Lecture, three hours. Preparation: basic statistics, linear algebra (matrix analysis), computer vision, computer vision and pattern recognition. Introduction to broad range of algorithms for statistical inference and learning that could be used in vision, pattern recognition, speech, bioinformatics, data mining. Topics include Markov chain Monte Carlo computing, sequential Monte Carlo methods, belief propagation, partial differential equations. S/U or letter grading.


235. Modern Environmental Statistics. (4) Same as Environmental M235L, Seminar, three hours. Limited to graduate students. Recommended requisite: calculus, linear algebra. Focus on practical understanding and application of statistical tools for environmental modeling. Includes tutorial on modern generative modeling (e.g., preserved data privacy), inject knowledge (e.g., existing expert opinions), and real-time modeling to build artificial intelligence by following principles of human intelligence revealed by cognitive science, including learning from small data, expressing causality on a semantic level, and inferring latent variables for intuitive social interactions. Drawn from statistical modeling, cognitive science, artificial intelligence, computer vision, and robotics. S/U or letter grading.

236. Introduction to Bayesian Statistics. (4) Lecture, three hours; discussion, one hour. Recommended requisite: course 200A or 200B. Designed for graduate students. Introduction to statistical inference based on use of Bayes theorem, covering foundational aspects, current applications, and computational issues. Topics include Stein paradox, nonparametric Bayes, and statistical learning. Applications vary according to interests of students. Concurrently scheduled with course C180. S/U or letter grading.


242. Multivariate Analysis with Latent Variables. (4) Same as Political Science M208D and Psychology M257F. Lecture, three hours. Introduction to models and methods for analysis of data hypothesized to be generated by unmeasured latent variables, including latent variable analogues of traditional methods in multivariate analysis. Causal modeling: theory testing via analysis of margins of observed measurement models such as confirmatory, higher-order, and structured-means factory analytic models. Structural equation models, including path and simultaneous equations, and structural models for analysis testing, and other statistical issues. Computer implementation. Applications. S/U or letter grading.

M244. Statistical Models and Latent Variables. (4) (Same as Education M231E.) Lecture, three hours. Requisites: Education 231A, M231B. Introduction to general latent variable modeling framework. Important special cases of this framework include confirmatory factor analysis, structural equation models, item response models, latent class models, and multilevel models, among others. Topics include discussions of general statistical model specification, computational, model formulation, identification, estimation, and testing. Letter grading.


246. Statistical Model Selection. (4) Lecture, three hours. Preparation: basic knowledge of calculus, linear algebra, and computer programming. Modern methods of evaluating statistical models, including non-Bayesian and Bayesian statistical modeling approaches. Discussion of theoretical parts and data analysis. Letter grading.

CM248. Applied Sampling. (4) (Same as Epidemiology M216.) Lecture, three hours; discussion, one hour. Preparation: course 100A or 200A or Biostatistics 202A. Design, execution, and analysis of surveys. Introduction to computer methods for the design and analysis of surveys. Students will learn the principles of survey design and analysis, and will apply these principles to the design and analysis of surveys. Letter grading.

M250. Statistical Methods for Epidemiology. (4) (Same as Epidemiology M211.) Lecture, four hours. Preparation: two terms of statistics (such as Biostatistics 102A and 102B) or equivalents: Epidemiology 200B, 200C. Concepts and methods tailored for analysis of epidemiologic data, with emphasis on tabular and graphical techniques. Expansion of topics introduced in course 200A and 200B and introduction of new topics, including principles of epidemiologic analysis, trend analysis, smoothing and sensitivity analysis. S/U or letter grading.

M254. Statistical Methods in Computational Biology. (4) (Same as Bioinformatics M223 and Biomathematics M271.) Lecture, three hours; discussion, one hour. Preparation: elementary probability concepts. Requisites: course 100A or 200A or Biostatistics M221. Introduction to statistical methods developed and widely applied in several branches of computational biology, such as gene expression, sequence alignment, comparative-genomics, and biological networks, with emphasis on understanding of standard statistical concepts and use of statistical inference to solve biological problems. Letter grading.

256. Causality. (4) Lecture, three hours; discussion, one hour. Preparation: proficiency in basic R coding, probability theory, linear algebra, multivariate calculus, and statistics through inference and regression. Tools to pursue both theoretical and applied research in causality. S/U or letter grading.


271. Probabilistic Models of Visual Cortex. (4) Seminar, three hours. Requisite: course 100B or Mathematics 33A. Recommended: Computer Science 180. Introduction to probabilistic and artificial neural models of mammalian visual cortex, with topics in low-, mid-, and high-level vision. Discussion of relevant evidence from anatomy, electrophysiology, imaging (e.g., fMRI), and psychophysics. Concentration on mathematical modeling and theory to account for recent progress in probabilistic models of computer vision and developments in machine learning. S/U or letter grading.

C273. Applied Geostatistics. (4) Lecture, three hours; discussion, one hour. Geostatistics can be applied to many problems in other disciplines such as hydrology, traffic, air and water pollution, epidemiology, economics, human settlement, forensics, government, terrorism, traffic, oceanography, meteorology, and agriculture and, in general, to every problem where data are observed at geographic locations. Acquisition of knowledge from different areas that can be used to analyze real spatial data problems and to connect geostatistics with geographic information systems (GIS). Concurrently scheduled with course C173. S/U or letter grading.


285. Seminar: Research Topics in Statistics. (2 to 4) Seminar, one to three hours. Topics in various statistical areas by means of lectures and informal conferences with staff members. May be repeated for credit. S/U grading.

M286. Seminar: Statistical Problem Solving for Population Biology. (2) (Same as Ecology and Evolutionary Biology M286.) Seminar, two hours. Designed for graduate students. Statistical solutions to complex data analysis and/or experimental design problems encountered by biology graduate students in their own research. S/U or letter grading.

287. Seminar: Gene Expression and Systems Biology. (2) Seminar, two hours. Designed for graduate students (open to undergraduate students with consent of instructor). With high-throughput technologies such as genomic sequencing, microarray gene expressions, ChIP-chip (chromatin-immuno-precipitation DNA chip - ChIP-chip), and mass spectrometry (MS/MS) proteomics, scientists are collecting genetic, genomic, and pathway data at rates far beyond imagination one decade ago. Much of this data produced cannot be analyzed and understood without highly sophisticated computational methods guided by mathematical and statistical principles. Cutting-edge genomics research from statistical data analytic point of view. S/U or letter grading.

290. Current Literature in Statistics. (2) Seminar, one hour. Topics in various statistical areas by means of lectures and informal conferences with staff members. S/U grading.

291XP. Service Learning for Graduate Statistical Consulting. (4) (Formerly numbered 291SL) Research group meeting, two hours; fieldwork, two hours. Exposure to realistic statistical and scientific problems that appear in typical interactions between statisticians and researchers, with lectures centered on case studies presented by faculty members and invited speakers from business, academic, and nonprofit organizations. Applied regression analysis and design of experiments, together with basic statistical programs. Presentations and written reports required. S/U or letter grading.

292. Graduate Student Statistical Packages Seminar. (1) Independent study, one hour. Introduction to various statistical packages. How to handle data in different packages (input, output, data management, treatment of missing data), general syntax of different programming languages, and tips and tricks for writing own statistical functions. S/U grading.

294. Scientific Writing. (2) Seminar, two hours. Development of oral and written presentations of statistical data. Objectives and techniques of scientific writing and practice with different forms of professional writing. Participation in oral presentations of student work. S/U or letter grading.


297SL. Service Learning and Community Learning for Statistics. (2 to 4) Seminar, three hours; fieldwork, 10 hours. To further knowledge by applying what students have learned in class to actual service work setting in local communities. Interaction with nonprofit organizations can be either on location or over the Internet. May be used for MS thesis; research paper/project required. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member re-setting for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

400. Introduction to Probability Modeling. (4) Lecture, three hours; discussion, one hour. Preparation: course 102A. Calculus, linear algebra, and probability. Recommended: course 102B of Applied Statistics students. Introduction to probability theory, probability models, and stochastic processes, with emphasis on concepts, intuitions, calculations, real applications, Letter grading.

401. Survey of Methods in Modern Statistics. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Statistics students. Overview of fundamental concepts of data analysis and statistical inference and how these are applied in wide variety of settings. Arc of statistical investigation, including data collection, data exploration, formal inference, and model checking. Letter grading.


403. Mathematical Statistics. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Statistics students. Basic concepts of mathematical statistics and their applications. Mathematics used to support various statistical analysis on real-world applications. Estimation and statistical inference. Random variables and their distributions; random vectors, their means, variances, variance-covariance matrix; and important theorems such as central limit theorem. Letter grading.


405. Data Management. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Statistics students. Basic principles of data management, including reading and writing various forms of data, working with databases, data cleaning, validation, transformation, exploratory data analysis, and intro-
ductory data visualization and data mining techniques. Exploration of related issues of data security, ethics, and scalability. Introduction to and use of variety of software and languages, such as Python, SQL, Stata, SAS, R, Letter grading.

4.11. Multivariate Statistical Analysis. (4) Lecture, three hours; discussion, one hour. Requisites: courses 10, 20, and 101A, or equivalent level of discipline. Limited to Master of Applied Statistics students. Or Junior, Senior, or equivalent level of discipline. Limited to Master of Applied Statistics students. Or students working knowledge of basic concepts underlying multivariate techniques, with overview of actual applications in various fields, and with experience in linear statistical techniques on problem of their own choosing. Addresses underlying mathematics and problems of applications. Reasonable level of competence in both statistics and mathematics is required. Letter grading.

4.12. Advanced Regression and Predictive Modeling. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Statistics students. Often we are interested in making inferences and predictions from data, either by (1) estimating particular meaningful parameters of models or (2) finding best fitting model that we can then manipulate to produce useful outputs such as predictions or counterfactual estimates. Focus on what is done when linear models are not sufficient. Linear models are not sufficiently appropriate and may produce misleading estimates. Generalized linear and model maximum likelihood methods as essential tools all statistics students should know. Differentiation of shift factors to explore regression and classification techniques that have been ubiquitous in machine learning literature in recent years, with special attention to regularization and kernel methods. Letter grading.


4.15. Introduction to Forecasting. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Statistics students. Designed for physical and social sciences students who are interested in using statistics and its applications for forecasting and data-driven decisions and for life sciences and medical school students who are interested in modeling of historical data to predict outcomes. Introduction to state-of-art statistical methods that rely on historical data collected in past to forecast future outcomes. Coverage of models used for forecasting only one measurement type and models used to forecast several types of measurements simultaneously. S/U or letter grading.

4.16. Applied Geostatistics. (4) Lecture, three hours; discussion, one hour. Requisites: courses 401, 402, 403. Limited to Master of Applied Statistics students. Introduction to analysis of types of spatial and spatiotemporal datasets frequently arising in geostatistical problems. Geostatistical data arise commonly in nearly every science, wherever spatial or temporal patterns in data are obtained. Examples include geology, hydrology, traffic, air and water pollution, epidemiology, economics, geography, waste management, forestry, oceanography, meteorology, and agriculture. Modern methods for analyzing both lattice and point process data using R, and student performances of their own analysis of geostatistical datasets involving variogram modeling, kriging, model fitting, and estimation using maximum likelihood and nonparametric methods. Letter grading.


4.19. Experimental Design. (4) Lecture, three hours; discussion, one hour. Requisites: courses 402, 403. Limited to Master of Applied Statistics students. Fundamentals of designing experiments to gain maximal information while minimizing costs. Topics include role of randomization and blocking, comparing two or more treatments, randomized blocks, factorial design, Latin square designs, fractional factorial designs, response surface designs, and experiment. Letter grading.


4.21. Advanced Statistical Communication. (4) Formerly numbered 421B. Lecture, three hours; discussion, one hour. Designed to improve verbal and written communication skills related to various ways in which statistics is used in workplace. Directed toward students who are fluent in English and are already proficient in verbal and written communication of scientific results. Letter grading.


4.23. Longitudinal Data Analysis. (4) Lecture, three hours; discussion, one hour. Requisites: courses 10, 20, 101A, or equivalent level of discipline. Limited to Master of Applied Statistics students. Fundamental methods in longitudinal data analysis, with examples of actual applications in various disciplines. Students gain experience in using such techniques on problems of choice. Reasonable level of competence in both statistics and mathematics required. Letter grading.

4.24. Teamwork and Leadership in Data Science. (4) Lecture, three hours; discussion, one hour. Requisites: courses 10, 20, 101A, or equivalent level of discipline. Limited to Master of Applied Statistics students. Students learn how to lead, manage, negotiate, and participate in teams of data scientists. Students present statistical results for audiences ranging from business leaders to media outlets to academic statisticians. Letter grading.


4.26. MS Thesis Research. (2 to 12) Tutorial, to be arranged. Supervised individual reading and study on project approved by a faculty member. May be repeated for credit. Letter grading.

4.27. AS Thesis Research. (2 to 8) Tutorial, to be arranged. Supervised individual reading and study on project approved by a faculty member. May be repeated for credit. Letter grading.

4.28. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. Preparation: advancement to PhD candidacy. Study and research for PhD dissertation. May be repeated for credit. S/U grading.

4.29. PhD Dissertation Research. (2 to 12) Tutorial, to be prepared. Supervised individual reading and study on project approved by a faculty member. May be repeated for credit. S/U grading.

Surgery

495A. Teaching College Statistics. (2) Seminar, two hours; intensive training at beginning of Fall Quarter. Required of all potential departmental teaching assistants and new PhD students. Practical and theoretical issues in teaching of statistics. S/U grading.

495B. Teaching College Statistics. (2) Seminar, two hours. Weekly discussion and intensive training for all first-year teaching assistants that addresses practical and theoretical issues in using technology to teach statistics, including use of statistical software as education tool. S/U grading.

496. Statistics Internship. (2 to 4) Tutorial, four hours; field work, two hours. Under faculty supervision, production of substantial paper relating to or arising from internship. S/U or letter grading.

497. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. Supervised individual reading and study on project approved by a faculty member. May be repeated for credit. Letter grading.

Research on thesis project for MAS students. Project should be original analysis of data that solves pressing problem and is done typically in conjunction with an industry partner. May be repeated for credit. S/U grading.

498. MS Thesis Research. (2 to 12) Tutorial, to be arranged. Supervised individual reading and study on project approved by a faculty member. May be repeated for credit. Letter grading.


Surgery

David Geffen School of Medicine
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Surgery

O. Joe Hines, MD, Chair
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Gerald S. Lipshutz, MD, Vice Chair, Research
Jessica B. O’Connell, MD, Vice Chair, VA Greater Los Angeles Healthcare System
Areti Tillou, MD, Vice Chair, Education
Eley Washington, MD, Vice Chair, Charles R. Drew University of Medicine and Science
Overview
The Department of Surgery instructs medical students during all four years of medical school. Students are expected to obtain broad knowledge of diseases treated by surgical means and to understand the pathophysiology of these conditions, the therapy that may be applied, and the anticipated results of treatment. They are also encouraged to learn about the effects of surgical illness on the patient and the patient's family and environment.

Second-year students participate in one eight-week core clerkship in clinical surgery and are assigned to rotations at a combination of Reagon UCLA, Cedars-Sinai Medical Center, Harbor-UCLA, West Los Angeles VA, Olive View-UCLA, Kaiser Permanente, and UCLA Santa Monica medical centers. Each faculty has a special orientation depending on the patient population and the individual staff. During the fourth year students may elect to take additional clinical rotations with increasing responsibilities. Additional in-depth elective courses are offered in collaboration with other departments.

For more details on the Department of Surgery and courses offered, see the department website. Surgery faculty information is available from the department.

Lower-Division Courses
19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.
99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses
188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.
188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.
188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.
199. Directed Research in Surgery. (2 to 6) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

THEATER
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Department e-mail
J. Ed Araiza, BA, Chair

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Myung Hee A. Cho, MFA
Lap Chi Chu, MFA
Chrisi Karvounides-Dushenko, MFA
Suk-Young Kim, PhD
Brian E. Kite, MFA
Deborah Nadoolman Landis, PhD (David C. Copley Professor of Costume Design)
Sean A. Metzger, PhD
Dominic A. Taylor, MFA
Edit E. Villarreal, MFA

Professors Emeriti
Alden M. Armstrong, MFA
Sue-Elleen Case, PhD
Hanay L. Geiogamah, BFA
Michael J. Hackett, PhD
Patricia M. Harter, PhD
Robert H. Hethmon, PhD
Anna Krajewska-Wieczorek, PhD
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Associate Professors
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Thomas K. O’Connor, MFA
Sylvan M. Oswald, MFA
Marinke A. Splint, MFA

Assistant Professor
Felipe Cervera, PhD

Senior Lecturer SOE
Thomas J. Orth, Emeritus

Lecturers
Cheryl Baxter-Ratliff
Sara R. Clement, MFA
Perry M. Daniel, MFA
David M. Gorshein, PhD
Leanora Martino, MA
Angela R. Scott, MFA
Jonathan Snipes

Natsuo Tomita
Jonathan Wang, BS, MSOM

Adjoint Professors
Dan T. Belzer, MFA
F. Nicholas Gunn, Retired
Linda Kerns, Retired
Jeremy L. Mann
Ed J. Monaghan, MFA
Judith E. Moreland, MFA
Paul M. Wagars

Adjunct Associate Professor
Marilyn E. Fox

Academic Administrator
Jonathan Burke, MFA

Overview
The Department of Theater offers comprehensive training for the profession, including study of theater’s long history and in the skills of theater, while students engage in theatrical performance in a variety of settings and organizations where creative and critical thought combine in the exploration of the artistic and intellectual challenges inherent in theater making.

For current or specific information about the programs and faculty members, see the department website.

Undergraduate Study
At the undergraduate level, students receive education in acting, design and production, directing, formal and textual analysis, musical theater, performance studies, and playwriting, all within the rigorous liberal arts framework of the Bachelor of Arts (BA) degree. The department also offers a Theater minor.

Graduate Study
At the graduate level, students in the Master of Fine Arts (MFA) program develop as artists and professionals, engaging in an intensive and in-depth study of theater and performance. Students engage in theatrical performance in a community where creativity and critical thought combine in the exploration of the artistic and intellectual challenges inherent in theater making.

At the undergraduate level, students receive education in acting, design and production, directing, formal and textual analysis, musical theater, performance studies, and playwriting, all within the rigorous liberal arts framework of the Bachelor of Arts (BA) degree. The department also offers a Theater minor.

Undergraduate Major
Theater BA
The Theater BA provides students with a liberal arts education by combining critical study of theater and performance with experiential
practice in one or more of its component parts. Students explore acting, design, directing, formal and textual analysis, playwriting, and production to build a foundation for future creative work. Specialized and advanced training is available to prepare students for a variety of careers, further training, or graduate study. At the upper-division level, students may choose from an array of advanced elective courses including those in acting, design and production, directing, musical theater, playwriting, theater history, and dramatic literature. Internships in areas such as producing and casting are also available.

Capstone Major
The Theater major is a designated capstone major. Theater capstone courses represent independent student scholarship and/or a high degree of artistic achievement in each of the undergraduate areas. Capstone courses are intended to be the culmination of all the broad educational courses and core foundational courses that a student has taken. Group participation in the creation and production of student projects is core to the curriculum. Capstone courses vary by area and require individual projects or performances, a major artistic contribution to a theater production, or an individual course of study resulting in a research paper. Through their capstone work, students demonstrate general knowledge and specialized skills, successfully relate their experience in a studio, production, or fieldwork setting, communicate effectively orally and in writing, and engage with a community of artists and scholars presenting theatrical work.

Learning Outcomes
The Theater major has the following learning outcomes:
- Demonstrated broad knowledge of fundamentals acquired through coursework, including general knowledge of the art form and skills in a specialized area of study
- Successful relation of experience in a studio, production, or fieldwork setting
- Engagement with a community of artists and scholars presenting theatrical work
- Effective oral and written communication

Entry to the Major
Admission
All applicants must meet the admission standards of UCLA and the departmental screening process. Applications are accepted only in November for admission to the following fall quarter. There are no mid-year admissions. Students must submit required supplemental materials directly to the Theater Department. If requested by the department, applicants must also sign up for an audition and/or interview online. There is a $90 fee for all interviews/auditions.

Applicants interested in one of the emphases in acting, design and production, integrated studies (including critical studies, directing, and playwriting) or musical theater may submit materials for consideration in that area.

Requirements
Preparation for the Major
Required: Theater 11, 12, 13, 14A, 14B, 14C, 50 (must be taken for 4 units total).

The Major
The major consists of Theater 101A, 101B, one course from 102A through 113, 131C or 163C or 180 (capstone seminar), one course (4 units) from 150, 173A, 173B, 174B, or 174C, and 34 upper-division theater elective units.

Policies
The Major
Up to 8 units of upper-division credit in the Department of Film, Television, and Digital Media may be included in the 34-unit theater elective requirement.

 Majors wishing to pursue one of the emphases in the areas of acting, design and production, directing, musical theater, or playwriting are expected to complete a number of regularly offered elective courses.

 Students who do not select and emphasize or who wish to pursue an individualized plan are expected to meet with the undergraduate vice chair at the beginning of each year to plan their course of study.

Undergraduate Minor
Theater Minor
The Theater minor is designed for students who wish to augment their major program of study with a series of courses that promote the study of theater as a global phenomenon for reflecting the human experience. The minor consists of a selection of lower-division courses that expose students to the fundamentals of theatrical production, as well as acting, writing, and directing. Upper-division courses offer more focused study of those areas, as well as theater design, history, education, and theater of non-Western cultures.

Admission
To enter the minor students must be in good academic standing (minimum 2.0 grade-point average), have completed at least one approved UCLA theater minor course with a grade of C or better, and file a petition at the Student Services Office, 103 East Melnitz Building, 310-206-8441. All degree requirements, including the specific requirements for this minor, must be fulfilled within the unit maximum set forth by each student’s school or College.

Required Lower-Division Courses (6 to 10 units): Theater 10 and one course from 15, 20, 28A, 28B, 28C, 30.

Required Upper-Division Courses (22 to 27 units): Theater 150, one course from 102A through 113, and four courses selected from 117, 118A, 118B, 118D, 120A, 120B, 120C, 121, 123, 128A, 130, 136, 138, 139, C146A, C146B, 149, 195.

Policies
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor, and at least 16 units applied toward the minor must be taken in residence at UCLA. Transfer credit for any of the above is subject to department approval.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Majors
Theater MFA
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Theater and Performance Studies CPhil, PhD
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Theater
Lower-Division Courses
1A-1B-1C. Introduction to Dance for Music Theater. (1–1–1) Studio, four hours. Designed for Theater majors. Introduction to basic music theater dance technique. Each course may be repeated once for credit. Letter grading.

2A. Tai Chi. (1) Studio, two to four hours. Emphasizes proper form, etiquette as coextensive with training, and other values that sustain practice over lifetime. Actors increase focus, enhance discipline, cultivate inner energy, and relax mind and body. Demonstration of how each tai chi movement works in self-defense situation. Letter grading.

2B. Tai Chi II. (1) Studio, two to four hours. Requisite: course 2A. Designed for Theater majors. Reviews, refines, and advances work of course 2A, introducing new forms, and delving more deeply into practice of Yang-style tai chi. Courses in performance practice continue to emphasize proper form, etiquette, and other values that sustain practice over lifetime. May be repeated once for credit. Letter grading.

3. Aikido. (1) Studio, two to four hours. Designed for Theater majors. Introduction to basic stance, falls, throws, and pins of 20th-century martial art, Aikido.
Courses in performance practice continue emphasizing proper form and etiquette. May be repeated twice for credit. Letter grading.

10. Introduction to Theater. (5) Lecture, three hours; discussion, one hour. Exploration of theater in production, with emphasis on collaborative role of theater artists and active role of audience. Understanding of and access to live theatrical event and enhanced appreciation of value of theater to society; development of critical thinking skills. Each course may be repeated for credit. Letter grading.

11. Approaches to Interpretation of Theater and Performance: Global Perspective. (5) Seminar, four hours. Introduction to basic methods of interpretation in theater and performance throughout world. Topics illustrated by faculty members and guest speakers. Visits to off-campus theaters, and reading from contemporary plays. Letter grading.

12. Introduction to Performance. (4) Lecture, two hours; studio, four hours. Investigation of phenomena of performance and role of performer in theatrical events, including interpretation of drama through performance. Examination of various forms of theatrical performance and styles of expression, and development of acting, voice, and movement skills. Letter grading.

13. Play Reading and Analysis. (5) Lecture, three hours. Provides basic understanding of how those who are trained to read and analyze plays can help bring a dramatic work to life in the theater. Letter grading.

14A-14B-14C. Introduction to Design. (5-5-5) Lecture, three hours; studio, six hours. Exploration of visual interpretation of drama. Study of styles and techniques of design, collaborative role of designer, principles of design for scenery, lighting, costumes, and sound. Both technical and aesthetic groundwork for further study. Letter grading.

15. Introduction to Directing. (4) Lecture, two hours; studio, four hours. Investigation of role of director in theatrical production and theories of play direction, with emphasis on analysis and interpretation of dramatic work and its realization in production. Letter grading.

16. Fiat Lux Freshman Seminars. (5) Seminar, one hour. Discussion of critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating the major keys. Letter grading.

17. Acting for Camera. (2 to 4) Studio, three to six hours. Laboratory experience in various aspects of film acting. Includes strategies of movement initiation and development of character, and to build overall confidence/ease in comic performance skills. P/NP or letter grading.


19. Fiat Lux Freshman Seminars. (5) Lecture, three hours; discussion, one hour. Introduction to history of theater from early theatre to present, with emphasis on different cultural and economic contexts. Letter grading.

20. Introduction to Production Practice in Theater. (5) Lecture, three hours. Laboratory experience in various aspects of production in the theater industry, including theater, film, television, and digital media. May be applied toward honors credit for eligible students. Letter grading.


23A. Introduction to Musical Literacy for Singing Actors. (2) Formerly numbered 23M. Studio, three hours. Reading and translating musical notation in treble clef; defining common musical terminology; basic rhythm-reading and diatonic sight-singing in all major keys. Letter grading.

23B. Advanced Musical Literacy for Singing Actors. (1) Studio, three hours. Requisites: course 23A. More advanced sight-singing, incorporating minor keys, chromatic scales, interval key changes, and bass clef; exploration of contrapuntal and harmonic/contrapuntal singing. Letter grading.

24A. Actor’s Voice. (2) Studio, three to four hours. Study of basic vocal technique for actor, with emphasis on exploration of vocal apparatus and physiological foundation for subsequent training. Letter grading.

24B. Voice in Performance. (2) Studio, three to four hours. Requisites: course 24A. Continuation of course 24A, with greater emphasis on group and/or solo performance projects that present targeted vocal and text-related challenges. Letter grading.

24C. Voice and Speech I. (1) Studio, three to four hours. Development of voice and speech techniques for stage. Letter grading.

25. Articulation and Body. (2) Studio, three to four hours. Study of basic physiological principles of body in performance. Includes strategies of movement initiation and organization, as well as performance of movement scores to support actor’s craft. Letter grading.

26. Alexander Techniques. (2) Studio, three hours. Study and practice in Alexander techniques as method of developing balance, poise, and coordination of body and mind. Exploration of use of rhythm to expand movement potential of actors and relevant use of visual arts and animal studies to character development and to expansion of movement potential. P/NP or letter grading.

27. From Vaudeville to Standup Comedy. (4) Studio, three to four hours. Exploration of many aspects of comedy using American vaudeville traditions, acts, and performers as historical base to experience importance of rhythm, pace, timing, delivery, sound. Both technical and aesthetic groundwork for further study. Letter grading.

28A-28B. Acting, Voice, and Movement Workshops I. (2 each) Studio, three to six hours (28A-28B) and six hours (28B-F). Study of beginning acting technique, scene study, and development of voice and movement skills. Each course may be repeated for maximum of 12 units. Letter grading.

30. Dramatic Writing. (4) Studio, three hours. Intended for theater minors and other nonmajors. Exploration and development of creative writing skills for one or more of various forms of entertainment media. Letter grading.

34A-34B-34C. Ballet II. (1–1–1) Studio, five hours. Development of dance and movement techniques for musical theater. Letter grading.


35M. Group Singing Techniques. (5) Lecture, two hours; discussion, one hour. Introduction to global aesthetic theories and historiographical research methods. Letter grading.

101A. Global Histories of Theater and Performance I. (5) Lecture, three hours; discussion, one hour. Introduction to histories of the theater from across world, with emphasis on ancient world through 18th century. Introduction to global aesthetic theories and historiographical research methods. Letter grading.

101B. Global Histories of Theater and Performance II. (5) Lecture, three hours; discussion, one hour. Introduction to histories and historiographies of theater and performance from across world, with emphasis from 18th century through 21st century. Introduction to representational modalities from melodrama to performance art and theatrical approaches from Marxism to poststructuralism. Letter grading.

102A. Theater of Japan. (5) Lecture, three hours. Overview of Japanese theater and performance from early theatrical activity to present, with emphasis on enduring forms and genres, patterns of reception, and transnational influences. Letter grading.

102B. K-Pop: Race, Gender, and Sexuality in Globalizing Asian Media. (5) Lecture, two hours; discussion, two hours. Exploration of K-pop through critical lens of gender queerness, racial plagiarism and cultural appropriation, body image, technology, transmedia, and globality. Letter grading.

102C. Cross-Cultural Currents in Theater. (5) Lecture, three hours. Exploration of interculturalism in theater, with focus on 20th-century alternatives to nativism. Analysis of historical materials and dramatic texts to investigate cultural, aesthetic, ethical, and social implications of borrowing from other cultures. Letter grading.

M103A. African American Theater History: Slavery to Mid-1800s. (4) Same as African American Studies M103A. Lecture, three hours. Designed for juniors/seniors. Exploration of extant materials on history and literature of African American artists in America from slavery to mid-1800s. Letter grading.


M103C. Origins and Evolution of Chicano Theater. (5) Same as Chicano/a and Central American Studies M103C. Lecture, three hours. Designed for juniors/seniors. Exploration of development of Chicano theater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Grades not applied toward honors credit. Letter grading.

95. Introduction to Community or Corporate Internships in Theater, Film, and Television. (2 to 4) Tutorial, six to 12 hours. Limited to freshmen/sophomores. Internship at various theater, film, and entertainment organizations accentuating creative contributions, organization, and work of professionals in various specialties. Students meet on regular basis with faculty member and provide periodic letter grading. May be taken for maximum of 4 units. Individual contract with supervising faculty member required. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research) 10 to 30 hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division courses

101A. Global Histories of Theater and Performance I. (5) Lecture, three hours; discussion, one hour. Introduction to histories of the theater from across world, with emphasis on ancient world through 18th century. Introduction to global aesthetic theories and historiographical research methods. Letter grading.

101B. Global Histories of Theater and Performance II. (5) Lecture, three hours; discussion, one hour. Introduction to histories and historiographies of theater and performance from across world, with emphasis from 18th century through 21st century. Introduction to representational modalities from melodrama to performance art and theatrical approaches from Marxism to poststructuralism. Letter grading.

102A. Theater of Japan. (5) Lecture, three hours. Overview of Japanese theater and performance from early theatrical activity to present, with emphasis on enduring forms and genres, patterns of reception, and transnational influences. Letter grading.

102B. K-Pop: Race, Gender, and Sexuality in Globalizing Asian Media. (5) Lecture, two hours; discussion, two hours. Exploration of K-pop through critical lens of gender queerness, racial plagiarism and cultural appropriation, body image, technology, transmedia, and globality. Letter grading.

102C. Cross-Cultural Currents in Theater. (5) Lecture, three hours. Exploration of interculturalism in theater, with focus on 20th-century alternatives to nativism. Analysis of historical materials and dramatic texts to investigate cultural, aesthetic, ethical, and social implications of borrowing from other cultures. Letter grading.

M103A. African American Theater History: Slavery to Mid-1800s. (4) Same as African American Studies M103A. Lecture, three hours. Designed for juniors/seniors. Exploration of extant materials on history and literature of African American artists in America from slavery to mid-1800s. Letter grading.


M103C. Origins and Evolution of Chicano Theater. (5) Same as Chicano/a and Central American Studies M103C. Lecture, three hours. Designed for juniors/seniors. Exploration of development of Chicano theater
from its beginning in legends and rituals of ancient Mexico to work of Luis Valdez (late 1960s). P/NP or letter grading.

M103D. Contemporary Chicano Theater: Beginning of Chicana/o and Central American Studies M103D. Lecture, three hours. Analysis and discussion of historical and political events from 1965 to 1980, as well as theatrical productions that led to emergence of Chicano theater. Letter grading.

M103E. Contemporary Chicano Theater: Chicano Renaissance to Black Arts Movement. (4) Same as Chicana/o and Central American Studies M103E. Lecture, three hours. Examination of sociohistorical context out of which plays were created and critical essays that illustrate development of American African-American playwrights and their significant involvement in creation of diversified American theatrical tradition. Letter grading.

M103F. Native American Theater. (5) Lecture, three hours. Study of American Indian theater as evolving art form. P/NP or letter grading.


M103H. Israel and Palestine: Communities, Conflicts, Cultures, and Arts in Middle East. (4) Lecture, three hours. No background on or prior interest in history or region or arts required. Land variously known by names of Zion, Holy Land, Palestine, and Israel is not just one place. It is a realm of imagination, envisioned and re-envisioned throughout history. It is at once real and surreal, sturdy and fragile, all-enduring and ephemeral. Examination of selected works of literature, performance, visual arts, film, and media by Israeli and Palestinian artists, as well as Western artists with interest in region. Looking beyond headlines and facile cultural clichés for deeper insights art can offer into cultural conflict and community at large, to emerge with surprising conclusions. Letter grading.


104D. New Playwrights, New Playwriting. (5) Seminar, three hours. Required for students in playwriting sequence. How to approach diverse range of new plays and their aesthetic and philosophical landscape of theater. Contemporary look at plays written in last 15 years and how they reflect society. Reading of plays to build skills of manuscript analysis; development of working vocabulary of dramaturgical concepts; exploration of different styles of acting, directing, and design that playwrights of today draw from. Letter grading.

C104E. History of Design Décor Part I: Architecture and Décor—Antiquity to Early Neoclassical. (4) Lecture, four hours. Survey of courses 14A, 14B, 14C. Study of pre-Renaissance architectural and interior décor as manifestation of cultural, social, economic, and political influences to provide historical framework for design of scenery, costumes, and lighting for theater, film, and television. May be repeated once for credit. Concurrently scheduled with course C404E. Letter grading.

C104F. History of Design Décor Part II: Architecture and Décor—Industrial Revolution to 21st Century. (4) Lecture, four hours. Requisites: courses 14A, 14B, 14C. Study of post-Renaissance architectural and interior décor as manifestation of cultural, social, economic, and political influences to provide historical framework for design of scenery, costumes, and lighting for theater, film, and television. May be repeated once for credit. Concurrently scheduled with course C404F. Letter grading.

C104G. History of Design for Performance Production Part I: Historic Costume from Prehistoric to Neo-Classical. (4) Lecture, four hours. Requisites: courses 14A, 14B, 14C. Study of historic costume as manifestation of cultural, social, economic, and political influences to provide historical framework for design of costumes for theater, film, and television. Survey of history of Western costume and civilian attire. May be repeated once for credit. Concurrently scheduled with course C404G. Letter grading.

C104H. History of Design for Performance Production Part II: Historic Costume from Neo-Classical to 21st Century. (4) Lecture, four hours. Requisites: courses 14A, 14B, 14C. Study of historic costume as manifestation of cultural, social, economic, and political influences to provide historical framework for design of costume for theater, film, and television. Survey of history of Western costume and civilian attire with global emphasis. May be repeated once for credit. Concurrently scheduled with course C404H. Letter grading.

C104J. History of Design for Performance Production: Selected Topics of Décor and Costume Design History. (4) Lecture, four hours; discussion, one hour (when scheduled). Critical examination of leading theories of theater from 1887 to present. Study and discussion of modern modes of production. P/NP or letter grading.


107. Drama of Diversity. (5) Lecture, three hours; discussion, one hour (when scheduled). Investigation of diversity in American society as manifested in dramatic works and theatrical presentations. P/NP or Letter grading.

108. Undergraduate Seminar: History and Criticism. (5) Seminar, four hours. Limited to 15 students. Selected topics in history and criticism of theater and performance. Study of how experimental theaters originate, how they imagine their form of performance, their audience, and their goals. Concentration on theaters that regarded themselves, in some way, as experimental. Examples primarily from theaters within U.S. from 1950s to present, and other countries, specifically Poland, also considered. Letter grading.

M109. Art and Performance: Interdisciplinary Approaches to Contemporary Art. (4) Seminar Honors Collegium M109. Lecture, four hours; discussion, one hour. Drawing from objects in five major collections at Getty Museum, focus on five parallel historical periods in which political, social, and aesthetic philosophy of age is examined in musical and dramatic performance. Letter grading.

110. History of American Musical Theater. (5) Lecture, three hours; discussion, one hour. Survey of history of major musical composers, writers, and performers from musicals’ emergence in immigrant cultures to Broadway and Off-Broadway. With its roots in British music halls and comic opera, Viennese operetta and American musical theater emerged as vivid and popular art form with its own culture and identity. P/NP or letter grading.

111. Creating Theatrical Season. (5) Seminar, three hours. Limited to sophomore/junior/senior Theater majors. Preparation of annual production calendar. Introduction to process of selecting topics for annual production calendar. May be repeated once for credit. Concurrently scheduled with course C411. Letter grading.

112. Emerging Technologies and Their Uses in Live Performance. (4) (Formerly numbered C137.) Seminar, four hours. Survey of major emerging and contemporary technologies and their potential uses in and on the stage, in the classroom, or in design and analysis of contemporary issues facing theater and entertainment industries, and then address them through research and proposing Theater Department’s next annual production calendar. May be repeated for credit with topic or instructor change. P/NP or letter grading.

113. Special Topics in Theater and Performance Studies. (5) Lecture, three or four hours. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit. P/NP or letter grading.

M114. Variable Topics in Performance and Disability Studies. (4) (Same as Disability Studies M114.) Seminar, four hours. Analysis and critique of depictions of disability in theater. Topics may include introduction to disability studies; race, gender, and disability; representation of disability in theater; and more. May be repeated for credit with topic or instructor change. P/NP or letter grading.


117. Topics in Physical Performance. (2) Studio, three to four hours. Exploration of specific physical performance techniques, dramatic and comedic practices. Topics may include specific types of partnering, combat, martial arts, vintage dance, etc. May be repeated twice for credit. Letter grading.

118A. Creative Dramatics. (4) Lecture/laboratory, four hours. Studies of principles and procedures of improvisational approach to drama as done with children from nursery school to junior high. P/NP or letter grading.

118B. Advanced Creative Dramatics. (2 to 4) Lecture, four hours; other, to be arranged. Practical application of creative drama process. Exploration of interrelationships of arts to traditional disciplines of learning. May be repeated once for credit. P/NP or letter grading.

119. Interactive Theater. (4) Seminar, four hours. Active, problem-solving process of theater exercises and games designed to examine racial stereotypes, sexual harassment, gender discrimination, and other issues that divide members of campus community, as well as issues that divide campus from Los Angeles community. Selected to increase social and political awareness of problems and ideas fundamental to theatrical, musical, and dance practices. Topics may include specific types of partnering, combat, martial arts, vintage dance, etc. May be repeated twice for credit. Letter grading.

119A. Creative Dramatics. (4) Lecture/laboratory, four hours. Studies of principles and procedures of improvisational approach to drama as done with children from nursery school to junior high. P/NP or letter grading.

119B. Advanced Creative Dramatics. (2 to 4) Lecture, four hours; other, to be arranged. Practical application of creative drama process. Exploration of interrelationships of arts to traditional disciplines of learning. May be repeated once for credit. P/NP or letter grading.
room teacher to identify core subject to be taught. Language arts, science, history, mathematics, and social sciences are possible curricular areas. Development of educational content is based on measures of incorporating theater materials into curriculum. Weekly meetings to discuss teaching strategies and prepare written lesson plans that incorporate California Teaching Content Standards, objectives, motivation, detailed implementation of lesson plan, and ideas for assessment. Classroom work culminates in thoroughly documented final project evaluated by Arts-Bridge student, classroom teacher, and UCLA faculty members. P/NP or letter grading.

120A-120B. Acting and Performance in Film. (5–5)
Lecture, six hours. Exploration of acting and performance in film. Through screenings of performance-driven films, along with acting exercises, examination of methods, styles, and performances of some of world’s most highly regarded actors and their work. P/NP or letter grading.

120C. Acting and Performance in Film. (6) Lecture, six hours. Exploration of acting and performance in film. Through screenings of performance-driven films, class discussion, and acting exercises, examination of methods, styles, and performances of some of world’s most highly regarded actors and their work. P/NP or letter grading.

121. Acting Workshop. (2) Studio, to be arranged. Requisite: course 20. Courses 160, 163A, 163B, and 163C may not be taken concurrently. Workshop that provides students with opportunity to rehearse, perform, and critique scenes. May be repeated once for credit. P/NP or letter grading.

122. Character Development through Makeup and Hair Design. (2) Studio, four hours. Examination of importance of makeup and hair design in film. History and overview of hair and makeup in fashion and motion pictures. Collaboration of makeup artists and hair-stylists with costume design, actors, production designer, and director to conceptualize people in script. Exploration of makeup artist and hairstylist roles in current film, television, and theater productions and skills needed to design makeup and hair for film and television productions. Concurrently scheduled with course C222. Letter grading.


124A. Intermediate Voice and Speech I: Vocal Ener-
gy in Classical Texts. (3) Studio, three to four hours. Requisites: courses 2A and 24B, or 2A and 28A. Creation of warm-up and building of vocal energy through understanding ideas, thoughts, and beats. Examination of diaphragmatic connection and breath control to work on vocal and physical text and verse, including Shakespearean sonnet. Letter grading.

124B. Intermediate Voice and Speech II: Creating Complete Warm-Up for Theatrical Productions. (2) Studio, three to four hours. Requisites: courses 2A, 24A, and 124A, or 28A, 28B, and 124A. Working with contemporary texts to learn all simple vowels (lip, tongue, open, neutral) and to communicate sound consistently with phonation, vocal instrument, and body. Creation of complete warm-up for theatrical production using these methods. Letter grading.


125B. Physical Awareness and Combat for Theater, Film, and Television. (2) Studio, three to four hours. Requisite: course 125B. Study of character, film, and television. Concentration on warm-up, relaxation, control, stunts, gymnastics, martial arts, and use of weapons. Letter grading.

125D-125E-125F. Movement and Combat III. (2–1–2) Studio, three to four hours. Physical awareness for actors, concentrating on warming up body, relaxation, control, stunts, gymnastics, martial arts, and use of weapons. Letter grading.


126B. Acting Classical Texts. (4) Studio, six hours. Requisite: course 126A. Advanced study of characteriza-
tion, approach to verse, scansion, use of embodiment in classic texts. Personalization within heightened reality. Letter grading.


127. Performance for Virtual Environments. (4) Lecture, two hours; discussion, one hour; laboratory, two hours. Exploration of performance in virtual environments through hands-on experimentation and scene work using two or more voices/speakers, supported by history of each technology and its use in arts, key technological concepts, and basic production processes. Consideration of uses in large scale professional production as well as low-budget and do-it-yourself approaches. Platforms studied are selected for their importance to field, timeliness, and relationship to departmental season. Students engage with platforms as actors, director, sound, and self, and selected scenes. Students explore character development, different relationships to audience and camera, and engagement/synchronization with virtual setting. Students incorporate their platform into collaborative in-concert with study of experiences of other actors, directors, and other creators with platforms. Letter grading.

128A. Acting, Voice, and Movement Workshops II. (2) Studio, four to six hours. Study of advanced acting technique, scene study, and development of voice and movement skills. May be repeated for maximum of 12 units. Letter grading.

129. Contemporary Topics in Theater, Film, and Television. (2) Same as Film and Television CM129.) Lecture, two hours; screenings, two hours. Limited to junior/senior and graduate theater/film and television students. Examination of creative process in theater, film, and television; techniques of writing, direction, production, and performance. Overview of individual contributions in collaborative effort; examination of distinctiveness and interrelations among these arts. Individual units include participation of leading members of theater, film, and television professions. May be repeated twice for credit. Concurrently sched-
uled with course CM229. P/NP or letter grading.


133A. Script Development Workshops. (4 to 8) Lecture, three hours; studio, four to 24 hours. Guided process of script development, with emphasis on communication, artistic growth, and professional process. May be taken for maximum of 8 units. Concurrently scheduled with course C433A. Letter grading.


134G. Dance for Musical Theater: Ballet. (1) Studio, three to four hours. Designed for Theater majors. Intermediate level course. Development of skills and furthering of concepts of ballet technique. Emphasis on development of proper placement, building strength and flexibility, higher level of techniques, and awareness of musicality and artistic expression. May be repeated five times for credit. Letter grading.

135. Musical Theater Vocal Styles: Gospel. (2) Studio, three hours. Designed for Theater majors. Part of five-course series of musical theater performance techniques in which students explore and master vocal techniques. Emphasis is necessary to be competitive in field of professional musical theater. Exploration of strategies and techniques for singing gospel and rhythm and blues music, with solo and group improvisation as foundation. Letter grading.


135C. Musical Theater Vocal Styles: Legitimate/Opera. (2) Studio, three hours. Designed for Theater majors. Part of five-course series of musical theater performance techniques in which students explore and master variety of vocal styles and/or acting approaches necessary to be competitive in field of professional musical theater. Exploration of strategies and techniques for singing legitimate/opera music, with specific vocal and body strengthening exercises and solo song coaching. Letter grading.

135D. Musical Theater Vocal Styles: Rock (2) Studio, three hours. Designed for Theater majors. Part of five-course series of musical theater performance techniques in which students explore and master variety of vocal styles and/or acting approaches necessary to be competitive in field of professional musical theater. Exploration of strategies and techniques for singing rock music, with emphasis on vocal and body strengthening exercises and solo song coaching. Letter grading.

135E. Musical Theater: Creating and Playing Char-
acters from Musical Text. (3) Studio, two to three hours. Designed for Theater majors. Exploration of text and lyrics of musical theater piece, song cycle, or specific composer’s work from actors’ point of view. Students develop skills in collaborative observation, and improvisation. Emphasis on creating and sustaining character through singing. Letter grading.

135F. Singing: Individual Instruction. (1) Studio, one hour. Requisite: course 35B. Designed to advance participants’ vocal technique, to develop control, vowel shape, range expression, and overall mastery of vocal instrument. May be repeated four times for credit. Letter grading.
136. Advanced Acting for Stage. (4) Studio, four hours. Requisite: course 123. Study and practice of art of acting through progression to more advanced acting problems. Students will rehearse a scene twice for credit. Concurrent enrollment with same instructor not permitted. Total units for courses 136, 137A, 137B, and 137C may not exceed 12 units. Letter grading.

137. Acting for the Camera. (4) Lecture/studio, four to six hours. Requisite: course 116B. Designed to aid the actor in the transition from stage to film work. Examination of film production and its physical characteristics and the acting style needed for work in film and television. Students may perform in simulated studio setting on camera. May be repeated once for credit with instructor change. Letter grading.


139. Play Reading and Analysis. (5) Lecture, three hours. Investigation of dramatic texts, with focus on play structure, plot, character, dialog, ideas, and various other elements essential to effective theatrical interpretation and realization. Letter grading.

C146A-C146B. Art and Process of Entertainment Design. (4–4) Lecture. Conceptualization, design, and prototyping of entertainment environments. Concurrently scheduled with courses C446A-C446B. Letter grading. C146A. Exploration of original forms of media-rich entertainment experience through lectures, presentations, and participation. Students form collaborative teams to conceive and propose interactive entertainment events. C146B. Prototype development; two to five proposals to be more completely defined and developed. Students form collaborative teams for further conceptual development of their project proposals. May be repeated once for credit.

147A. Drafting. (4) Studio, four hours. Development of visual and technical skills through drafting. Exploration of drafting for scenic and lighting designs. May be repeated once for credit. Letter grading.

148. Special Courses in Design and Technical Theater. (4) Lecture, three hours. Group study of selected subjects in design and technical theater. May be repeated twice for credit. P/NP or letter grading.

149. Introduction to Design. (5) Lecture, three hours. Exploration of interpretation of drama through design, including scenic, costume, and lighting. Study of design techniques of design collaborative role of designer, principles of design for scenery, lighting, costumes, and sound. Both technical and aesthetic groundwork for further study. Investigation of process for realization of designs in production. Letter grading.

150. Theater Production and Performance. (1 to 2) Laboratory, three to six hours. Laboratory experience in various aspects of theater production, including performance in project or production, stage management, member of crew, or assignment as designer or assistant on production. May be repeated for maximum of 8 units. Letter grading.

C151A. Scenic Design. (4) Lecture/studio, four hours. Requisites: courses 14A, 14B, 14C. Imaginative design, role of designer for design, text analysis, metaphor, and conceptualization. Investigation of design research process, composition, and style leading to visual presentation of design. May be repeated twice for credit. Concurrently scheduled with course C452A. Letter grading.


C152D. Lighting Design for Performances and Special Events. (4) Lecture, four hours. Requisites: courses C152A, C152B, C152C. Advanced topics in lighting design, including live performances for concerts, exhibitions, and live events. Concurrently scheduled with course C452D. Letter grading.

C152E. Lighting Design for Dance. (4) Lecture, four hours. Requisite: course C152A, C152B, or C152C. Advanced topics in lighting design, concentrating on live dance performance in all styles. Concurrently scheduled with course C452E. Letter grading.


C153D. Projects in Costume Design Management. (4) Lecture/production, four hours. Theory and practice of production; design of concept, design analysis, and practical and theoretical aspects of design. Collaboration of professional costume designer, director, other designer or team. Concurrently scheduled with course C453D. Letter grading.

C153E. History of Costume Design in Movies. (4) Lecture, three hours; screenings, two to six hours. History of costume design within context of 20th-century movie history, role and evolution of role of costume designer since early days of film industry. Role of costume designer and contribution of costume design to cinematic storytelling. Concurrently scheduled with course C453E. Letter grading.


C154A. Sound Design. (4) Lecture/studio, four hours. Requisites: courses 14A, 14B, 14C. Introduction to sound and audio in acoustic, audio, and digital domains. Study and practice of techniques for recording, editing, and creating soundscapes. May be repeated once for credit. Concurrently scheduled with course C454A. Letter grading.

C154B. Sound Design for Musicals. (4) Lecture/studio, four hours. Requisites: courses 14A, 14B, 14C. Exploration of sound design for theater and technologies for mixing, reinforcement, and signal processing. Topics include use of delay, equalization, and microphone placement for theater sound reinforcement with focus on mixing professionals. Covers paper work needed to complete show. Tuning space, equalizing mics, and sound created by programing and mixing on various consoles. May be repeated once for credit. Concurrently scheduled with course C454B. Letter grading.

C154C. Sound for Film and Television. (4) Lecture/studio, four hours. Study of current professional sound recording, re-recording, mixing, and synchronization practices for film and television. Concurrently scheduled with course C454C. Letter grading.

C154D. Script Analysis for Sound Design. (4) Formerly numbered C446C.) Lecture/studio, four hours. Requisites: courses C154A, C154B. Advanced study and practice in preparation of theater sound design with emphasis on analysis of script and score, concept development of physical and audio elements to re-envision of design. Concurrently scheduled with course C454D. Letter grading.

C154F. Field Recording and Content Creation for Sound Designers. (4) Lecture, four hours. Requisites: courses C154A, C154B. Advanced techniques for creating content, focused on field recording and capturing sounds and their application for performance. Concurrently scheduled with course C454F. Letter grading.


C155A. Graphic Representation of Design: Perspective Drawing. (2) Studio, four hours. Requisite: course 147A or 147B. Introduction to use of pen and pencil to communicate scenic designs, including one- and two- point perspective, form light, shade, and textures. Concurrently scheduled with course C455A. Letter grading.

C155B. Graphic Representation of Design: Multimedia Rendering. (2) Studio, four hours. Study and practice of multimedia rendering techniques as they relate to interpretation of scenic, lighting, and costume renderings, with focus on human form in space. Weekly demonstrations of wide variety of art media, including watercolors, markers, pastels, and collage rendering. May be repeated twice for credit. Concurrently scheduled with course C455B. Letter grading.

C155C. Graphic Representation of Design: Digital Rendering. (2) Studio, four hours. Study and practice of multimedia rendering techniques with combination of hand and digital rendering techniques. Coverage of rendering from life, enhancing final rendering with variety of computer-assisted for- mats to create polished computer-generated presentations for theater, film, and television productions. May be repeated twice for credit. Concurrently scheduled with course C455C. Letter grading.

C155D. Graphic Representation of Design: Model Making. (2) Studio, four hours. Requisite: course 147A or 147B. Study of model for representation of scenic designs from initial working prototypes to fin- ished color models. Use of wide variety of materials and techniques for execution of model. Concurrently scheduled with course C455D. Letter grading.

C155E. Graphic Representation of Design: Life Drawing. (2) Studio, four hours. Requisite: course 147A or 147B. Study of form, proportions, and spatial composition of human form. May be repeated twice for credit. Concurrently scheduled with course C455E. Letter grading.
C155F. Graphic Representation of Design: Costume Rendering. (2) Studio, four hours. Requisite: course 147A or 147B. Study of techniques for rendering the theatrical costume in two and three dimensional form using AutoCAD, and fabrics. May be repeated twice for credit. Concurrently scheduled with course C455F. Letter grading.

C155G. Graphic Representation of Design: Scene Painting Techniques. (2) Studio, four hours. Requisite: course 147A or 147B. Study of scenic painting techniques and materials and their realization of color design and elevations. May be repeated one for credit. Concurrently scheduled with course C455G. Letter grading.

C155H. Selected Topics in Graphic Representation of Design. (2) Studio, six hours. Group study of selected subjects in techniques for interpretation of design for theater. May be repeated once for credit. Concurrently scheduled with course C455H. Letter grading.

C156A. Introduction to Computer-Assisted Drafting. (4) Studio, four hours. Requisite: course 147A. Investigation of drawing and editing techniques, drawing floor plan sections, and elevation drawings using AutoCAD. Concurrently scheduled with course C456A. Letter grading.


C156G. Virtual Reality Rendering for Film. (2) Studio, four hours. Requisites: courses C155C, C155H, C156A, C156B, C156C. Preparation: basic 3D modeling and rendering skills. Students learn how to translate 3D models developed in Maya into Unreal virtual engine environment, and utilize this platform as a powerful tool for development, presentation, and staging of film and theater set design. Students primarily use Autodesk Maya and Unreal gaming engine, but are also introduced to Zbrush, Blender, Quixel, and other ancillary resources. Concurrently scheduled with course C456G. Letter grading.


C160. Fundamentals of Play Direction. (5) Lecture, two hours; laboratory, four hours. Requisite: course 15 with instructor’s consent; may be taken concurrently. Basic theories of play direction and their application through preparation of scenes under rehearsal conditions. Letter grading.

C163A. Directing for Stage. (4) Lecture/studio, four hours. Requisite: course 15. Intensive development of primary directing skills and process, including text analysis and exploration of craft fundamentals as basic for director/actor communication and effective staging. Students direct scenes from plays under laboratory conditions. Letter grading.


C163D. Directing Project for Stage. (5) Discussion, three hours; laboratory, four to eight hours. Requisites: courses 163A, 163B. Emphasis on stage directing techniques in production of short play or project. Students direct one-act play or project. May be repeated once for credit. Concurrently scheduled with course C463D. Letter grading.

C167A. Career Preparation for Actor. (2) Lecture/ studio, three to four hours. Requisite: course 116B. Preparation for professional career as actor in film, television, theater, and commercials. Topics include audition preparation, head shots, resumes, agents, managers, casting directors, producers, unions, survival skills, professional development. Letter grading.

C167B. Audition Preparation for Singing Actor. (2) Lecture/studio, three hours. Requisite: one course from 134A through 135F. Audition preparation for singing actor, providing various techniques to prepare for and successfully execute professional musical theater auditions. Letter grading.

C170. Design and Production Project. (4) Laboratory, eight hours. Requisites: courses 14A, 14B, 14C. Experience as stage manager or designer, including participation in preparation and realization of scenic, lighting, costume, or sound designs, or stage management for production. May be repeated once for credit. Letter grading.

C171A. Advanced Theater Laboratory. (1 to 4) Labora- tory, to be arranged. Creative participation as actor or stage manager in production and postproduction de- mentsial productions. May be taken for maximum of 4 units. P/NP or letter grading.

C171B. Advanced Theater Laboratory. (1 to 4) Labo- tory, to be arranged. Creative participation in realiza- tion of production elements related to public presenta- tion of departmental productions. May be taken for maximum of 4 units. P/NP or letter grading.

C172. Production Practice in Theater, Film, Video, and Digital Media. (1 to 8) Studio, three to eight hours. Explo- ration and laboratory experience in one or more aspects of production and postproduction practice for entertainment media, including theater, film, video, and digital media. May be repeated for maximum of 24 units. Letter grading.

C173A. Design Assignment: Assistant Designer. (2) Studio, six hours. Requisites: courses 14A, 14B, 14C. Laboratory experience as assistant designer, including participation in preparation and realization of scenic, lighting, costume, or sound designs. May be repeated twice. Letter grading.

C173B. Production Design Assignment: Designer. (2) Studio, six hours. Requisites: courses 14A, 14B, 14C. Laboratory experience as designer, including prepara- tion and realization of scenic, lighting, costume, or sound designs. May be repeated twice. Letter grading.


C174B. Project in Stage Management. (3) Studio, nine hours. Requisites: course C174A. Laboratory experience in professional duties of assistant stage manager, in- cluding participation as assistant stage manager in preproduction, rehearsal, and performance phases of productions. May be repeated once for credit. Letter grading.

C174C. Project in Stage Management. (4) Studio, 12 hours. Requisite: course 174A. Laboratory experience in professional duties of stage manager, including par- ticipation as stage manager, preparation, preproduction, rehearsal, and performance phases of productions. Problems of unions, audits, organization, scheduling, and responsibilities of lengthy run. May be re- peated three times for credit. Letter grading.

C174D. Advanced Stage Management Techniques. (2) Lecture, two hours; studio, two hours. Requisites: courses 14A, 147A. Professional duties of stage management. Practical training in director’s tech- niques, dry techniques, cue 2 cue, preshow setup, performance reports, and quick change rehearsals. Letter grading.

C174A-1756-175D. Summer Theater Workshops. (4 each) Lecture/Laboratory, 12 units total. Participation in various aspects of theater production and perfor- mance. Offered in summer only. Letter grading.

C175B. Summer Theater Workshop. (1 to 4) Labora- tory, three hours. Participation in various aspects of theater production and performance. Offered in summer only. Letter grading.

C176A-C176B-C176C. Production Practice in Theater with Emerging Technologies I, II, III. (4-4-4) Studio/laboratory, four to six hours. Collaborative cre- ative and technical development of all aspects of the- atrical production incorporating emerging and/or ad- vanced technologies, culminating in rehearsal and orchestration. Offered as series of up to three courses in cases where multiple quarters are needed to prepare production. Concurrently scheduled with course C476A-C476B-C476C. Letter grading.


C178. Film and Television Acting Workshop. (2) Lecture and Laboratory, four hours. Workshop providing opportunities for students to rehearse, perform, and evaluate scenes. Three dif- ferent production styles to which performers may respond. Two hours of lab are required: (1) regular production rehearsal, (2) single-camera experience, and (3) mul- tiple-camera experience. May be repeated twice for credit. Letter grading.
180. Senior Project. (4) Lecture or studio, three hours. Requisites: courses 101A, 101B. Preparation of conceptual or creative project to provide culminating experience in production of creative or research work. May be repeated twice for credit. Letter grading.

181. Career Development for Actors. (2) Lecture, three hours; fieldwork, three hours. Limited to seniors. Study of business practices, career entry, and development of personal and professional skills. Letter grading.

C15A. Role of Producer in Professional Theater. (2) Lecture, three hours. Study of structure governing economic and artistic decision-making processes in professional theater of America. Concurrently scheduled with course C15P. P/NP or letter grading.

C15B. Role of Management in Educational and Community Theater. (2) Lecture, three hours. Study of artistic, social, and economic criteria in administration of educational and community theater. Concurrently scheduled with course C25B. P/NP or letter grading.

M187. Art Alive: Art and Improvisation in Museums. (4) [Same as Honors Collegium M116.] Seminar, four hours. Offered in collaboration with Los Angeles County Museum of Art (LACMA). Interpretation of art in collection through acting, dialogues, movement, and music. Research into history and art history and production of creative performance piece required. P/NP or letter grading.

188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

195. Community or Corporate Internships in Theater, Film, and Television. (2, 4, or 8) Tutorial, eight, 16, or 24 hours. Limited to juniors/seniors. Internship at various theaters, studios, or entertainment organizations accentuating creative contributions, organizations, and work of professionals in their various specialties. Students meet on regular basis with instructor and participate in the daily activities of their employer. May be taken for maximum of 8 units. Individual contract with supervising faculty member required. Letter grading.

199. Directed Research or Senior Project in Theater. (4 to 8) Tutorial, to be arranged. Limited to juniors/seniors. Research under guidance of faculty mentor. Supervised individual research or investigation. Culminating research project required. May be repeated twice for credit. Individual contract required. P/NP or letter grading.

Graduate Courses


206. Themes in World Theater and Drama. (5) Seminar, four hours. Designed for graduate students. Selected topics in world theater history, drama, production, and/or architecture organized on thematic basis. May be repeated four times for credit. S/U or letter grading.

208C. Practicum in Dramaturgy. (2 to 12) Laboratory, to be arranged. Requisites: courses 208A, 208B. Demonstration of competence in practice of dramaturgy through completion of approved dramaturgical assignment. May be taken for maximum of 12 units. Letter grading.

210. Topics in World Theater and Drama. (5) Seminar, three hours. Designed for graduate students. Investigation of selected topics in world theater, drama, production, and architecture. May be repeated four times for credit. S/U or letter grading.

212. Emerging Technologies and Their Uses in Live Performance. (4) Formerly numbered C437. Seminar, four hours. Survey of major emerging and contemporary technologies and their potential uses and impact on live performance, from augmented and virtual reality to electronic textiles, Internet of Things, and Modern artificial intelligence. Offers solid basis for engaging in future collaborations with technologists, for self-study of new technologies, and, for those already more familiar with digital technologies, theoretical framework for engaging with social context of these technologies. Concurrently scheduled with course C112. S/U or letter grading.

216A. Approaches to Representation. (5) Lecture, three hours; laboratory, one hour. Overview of strategies of representation from classical aesthetic theories to postmodern deconstructions of them. May be repeated once for credit. Letter grading.

216B. Approaches to History. (5) Lecture, three hours; laboratory, one hour. Overview of key methodologies, theories, and methodologies of the field of theater. Examination of performance linked to plays and performances appropriate to approach. Letter grading.

216C. Approaches to Identification. (5) Lecture, three hours; laboratory, one hour. Overview of key theories, methods, debates, and performance texts of identifying structure between audience member or scholar and theatrical or performance object. Letter grading.

220. Graduate Forum. (1 to 4) Seminar, one to four hours. Designed for graduate students. Presentation and discussion of issues informing and affecting contemporary theater. May be repeated four times for credit. S/U grading.

221. Introduction to Performance Studies. (5) Seminar, three hours. Introduction to the field of performance as sustained practice in traditional disciplines such as the theater, music, and dance and as lens to focus thinking about human experience in fields such as philosophy, anthropology, linguistics, education, and law. Emphasis on establishing interdisciplinary dialogue across many fields. Letter grading.

C222. Character Development through Makeup and Hair Design. (2) Studio, four hours. Examination of importance of makeup and hair design in film, history and overview of hair and makeup in fashion and motion pictures. Collaboration of makeup artists and hairstylists with actors, production designers, and director to conceptualize people in script. Exploration of makeup artist and hairstylist roles in current film, television, and theater productions and skills needed to design makeup and hair for film and television productions. Concurrently scheduled with course C122. Letter grading.

CM229. Contemporary Topics in Theater, Film, and Television. (2) [Same as Film and Television CM229.] Lecture, two hours. Designed for junior/senior and graduate theater/film and television students. Examination of creative process in theater, film, and television, with consideration of writing, direction, production, and/or production. Overview of individual contributions in collaborative effort; examination of distinctiveness and interrelations among these arts. Individual units include participation of leading members of theater, film, and television professions. May be repeated twice for credit. Concurrently scheduled with course CM129. S/U or letter grading.


230A. One-Act Play. Analysis of strategy and dramatic structure of selected contemporary short plays leading to guided completion and publication of student-written one-act plays. 230B. Full-Length Play. Analysis of strategy and dramatic structure of selected contemporary full-length plays leading to guided completion and critique of student work. 230C. Performance and Text. Exploration of structural strategies, political implications, and technical demands of selected contemporary American plays leading to guided completion and critique of student work.

231. Special Topics in Playwriting. (4) Lecture, three hours. Analysis and practice of various aspects of playwriting. Variable content selected from topics such as comedy writing, docudrama, experimental theater, writing for alternative audiences, or children’s theater. May be repeated twice for credit. Letter grading.

232. Manuscript Analysis. (4) Lecture, three hours. Design for graduate students. Critical and constructive study of dramatic techniques as employed by playwrights and screenwriters in selected examples of contemporary work. May be repeated once for credit. S/U or letter grading.

242. Introduction to Design in Production. (4) Lecture or studio, four hours. Introduction to process of design for entertainment, collaborative role of designer, and realization of designs in production. May be repeated once for credit. Letter grading.

243A-243B-243C. Scenic Design. (4–4–4) Studio, four hours. Advanced study and practice in scenic design for theater. Imagination as impetus for design, text analysis, metaphor, and conceptualization. Investigation of design research process, composition, and style leading to visual presentation of design. May be repeated once for credit. S/U or letter grading.

244A. Advanced Theater Production. (2 to 8) Studio, 12 to 24 hours. Designed for graduate students. Creative participation in preparation and presentation of theatrical production. May be taken for maximum of 8 units. Letter grading.

244B-244C-244D. History of Costume. (4–4–4) Lecture/studio, four hours. Designed for graduate students. Study of history of costume as manifestation of cultural, social, economic, and political influences to provide historical framework for understanding costumes for theater, film, and television. Historical survey and in-depth exploration of selected periods, with study of influences of diverse cultures. Letter grading.

246D. History of Costume Design. (4) Lecture, four hours. Study of history of costume as manifestation of cultural, social, economic, and political influences to provide historical framework for design of costumes for theater, film, and television. Historical survey and in-depth exploration of selected periods, with study of influences of diverse cultures. Letter grading.

260. Directing I. (4) Lecture, four hours; studio, 24 hours. Designed for graduate students. Development of directorial skills of analysis, planning, staging, and content through medium of written preparations and directing of scenes. Letter grading.

261. Directing Post-Realist Drama. (4) Lecture, four hours; studio, 30 hours. Designed for graduate students. Critical evaluation of processes of post-realist playwork through interpretation and laboratory scene work. Letter grading.

262. Directing II. (4) Studio, six hours. Practical exploration for generating original performances and concerns with directors IO-, design, and theatrical aspects of the process of working with key contemporary artists across globe. Letter grading.

263. Production Project in Direction for Stage. (2 to 8) Discussion, one hour; studio, 12 to 30 hours. Designed for graduate students. Direction of dramatic work, preparation and discussion in progress. May be repeated for maximum of 20 units. Letter grading.
C263D. Directing Project for Stage. (5) Discussion, three hours; laboratory, four to eight hours. Requisites: courses 163A, 163B, 163C. Application of stage directing technique in planning, casting, and supervision of productions in project. Students direct one-act play or project. May be repeated once for credit. Concurrently scheduled with course C163D. Letter grading.

264. Directing Classical and Historical Drama. (4) Lecture, three hours; studio, three to eight hours. Experiments in different theatrical techniques and problems in project. Students direct one-act play or project. May be repeated once for credit. Concurrently scheduled with course C163D. Letter grading.

285. Modern Theories of Production. (4) Lecture, four hours. Examination of modern theories of production from emergence of director in 19th century to present. Investigation of different responses to problems of creating vital theatrical event in context of ongoing evolution of theater as art form. Examination of contribution of significant directors and movements; relation between theater and other forms of representation. Letter grading.

266. Theatrical Conceptualization. (4) Lecture, four hours. Examination of process of conceptualization in dramatic production; centrality of theatrical conceptualization in interpretation of dramatic text; exploration of range of possibilities in different theatrical spaces and options in design components. Consideration of visual arts and music as sources of stimulus for theatrical conceptualization with focus on collaborative aspect of theatrical production. Letter grading.

272. Production Practice in Theater, Film, Video, and Digital Media. (1 to 8) Studio, three to eight hours. Experiments in different theatrical spaces and options in design components. Consideration of visual arts and music as sources of stimulus for theatrical conceptualization with focus on collaborative aspect of theatrical production. Letter grading.

C285A. Role of Producer in Professional Theater. (2) Lecture, three hours. Designed for graduate students. Study of structure governing economic and artistic decision-making processes in professional theaters of America. Concurrently scheduled with course C185A. S/U or letter grading.

C285B. Role of Management in Educational and Community Theater. (2) Lecture, three hours. Designed for graduate students. Study of artistic, social, and economic criteria in administration of educational and community theater. Concurrently scheduled with course C185B. S/U or letter grading.

C298A-298B. Special Studies in Theater Arts. (2 or 4 each) Lecture/discussion, two or four hours. Designed for graduate students. Seminar study of specific aspect of theater arts, organized on topical basis. Each course may be repeated once for credit. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

C404E. History of Design Décor Part I: Architecture and Décor—Antiquity to Early Neoclassical. (4) Lecture, four hours. Requisites: courses 14A, 14B, 14C. Study of pre-Renaissance architectural and interior décor as manifestation of cultural, social, economic, and political influences to provide historical framework for design of scenery, costumes, and lighting for theater, film, and television. May be repeated once for credit. Concurrently scheduled with course C104E. Letter grading.

C404F. History of Design Décor Part II: Architecture and Décor—Industrial Revolution to 21st Century. (4) Lecture, four hours. Requisites: courses 14A, 14B, 14C. Study of post-Renaissance architectural and interior décor as manifestation of cultural, social, economic, and political influences to provide historical framework for design of scenery, costumes, and lighting for theater, film, and television. May be repeated once for credit. Concurrently scheduled with course C104F. Letter grading.

C404G. History of Design for Performance Production Part I: Historic Costume from Prehistoric to Neoclassical. (4) Lecture, four hours. Requisites: courses 14A, 14B, 14C. Study of historical costume as manifestation of cultural, social, economic, and political influences to provide historical framework for design of costumes for theater, film, and television. Survey of history of Western costume and civilian attire with global emphasis. Concurrently scheduled with course C104G. Letter grading.

C404H. History of Design for Performance Production Part II: Historic Costume from Neoclassical to 21st Century. (4) Lecture, four hours. Requisites: courses 14A, 14B, 14C. Study of historic costume as manifestation of cultural, social, economic, and political influences to provide historical framework for design of costumes for theater, film, and television. Survey of history of Western costume and civilian attire with global emphasis. Concurrently scheduled with course C104H. Letter grading.

C404J. History of Design for Performance Production: Selected Topics of Décor and Costume Design History. (4) Lecture, four hours. Requisites: courses 14A, 14B, 14C. Historic survey and in-depth exploration of selected periods and subcategories of décor and costume. Visits to collections with emphasis on influences on global diverse cultures. May be repeated three times for credit. Concurrently scheduled with course C104J. Letter grading.

402A. Advanced Acting I. (4) Studio, five to 13 hours. Advanced training for actors challenging body’s core, and energy and concentration needed for performance. Deepening awareness of personal, physical idioms, acting tendencies, and body and breath control. Letter grading.

402B. Advanced Acting I (4) Studio, six to 18 hours. Scene work, usually from 20 to 30 minutes in length. Continuation of work on off-stage preparation, with further development of how actor goes about doing research and fieldwork on character being played. Letter grading.

402C. Advanced Acting for Camera. (4) Studio, six to eight hours. Practice in performance techniques for film and television production. Exploration of language used by actors and directors in film and television production, and subtle differences between acting for stage and camera. Letter grading.

421A. Advanced Acting: Shakespeare. (4 to 8) Studio/laboratory, six to 18 hours. Extending fieldwork on character being played. Developing character’s voice, delivery, and interpretations of text. Letter grading.

421B. Advanced Acting: Classical and Historical Drama. (4) Studio/laboratory, six to eight hours. Concepts related to Greek choruses and historical plays. Development of group communication, choral breathing, awareness of kinetic relationship of performer’s body in space, and relationship of emotion to movement, and voice. Letter grading.

421C. Advanced Acting and Craft for Actor. (4) Studio/laboratory, six hours. Advanced acting with focus on craft, inclusive of physicality of thought, detailed realism, tempo, shared rhythm and relating movement to text, and audition technique. Letter grading.

422. Advanced Acting for Theater, Film, and Television. (8 to 12) Studio/laboratory, eight to 12 hours. Intensive performance experience. May be repeated for maximum of 24 units. Letter grading.

423. Advanced Acting for Virtual Environments. (4) Studio, six to eight hours. Synthesizing gesture, action, and characterization into scene work for virtual reality, motion capture, and other emerging performance contexts. Letter grading.

424A. Advanced Voice and Text. (2) Studio, three to six hours. Development of voice for stage, including exercises for relaxation, breathing, bodily alignment, diaphonous breath, head and chromosome and warm-up. Application of vocal techniques on contemporary and classical texts, including U.S. dialects and scansion of verse in Shakespeare. Letter grading.

424B. Vowels and Voice Placement. (1) Studio, three hours. Requisite: course 424A. Builds on course 424A. Introduction of vowel diphthongs and triphthongs; development of forward sound, including consistent thought energy. Exercises to develop, and text to implement forward sound, including consistent thought energy. Text and warm-up exercises also covered. Letter grading.

424C. Articulation, Pitch, and Vocal Choices. (1) Studio, three hours. Requisites: courses 424A, 424B, 424C. Corequisite: course 424D. Focus on articulation: work consonants, nasal continuants, plosives, fricatives, continuants, laterals, and glides, as well as pitch and safest expanding vocal range and pitch. Exploration also of warm-ups, actions with vocal choices, and exercises with monologues. Letter grading.


424F. Advanced Vocal Range and Flexibility. (1) Studio, three hours. Dynamic use of vocal range, including tempo, volume, pitch, resonance, actions, and physical presence. Text work focuses on developing vocal and physical flexibility and techniques designed to keep one’s instrument safe while effectively communicating character. Letter grading.

424G. Advanced Vocal Dynamics. (1) Studio, three hours. Extended range, resonance, and vocal power in support of clear, forward speech. Further fluency with vocal resonance in relation to acoustical properties of performance spaces. Using vivid vocal engagement to support dynamic expression of demanding texts, with attention to varieties of tempo, volume, pitch, resonance, range, etc. Letter grading.


424I. Phonetics, Dialects, and Accents. (1) Studio, three hours. Use of phonetics to enhance actor’s ability to create character using dialect and accents. Culminating dialect presentation project required. Letter grading.

424J. Acting for Microphone. (2) Studio, four to six hours. Techniques including textual analysis and character work in art and craft of acting for microphone. Letter grading.

425A. Advanced Movement I. (2 or 4) Studio/laboratory, three to six hours. Discovery of body’s unique language through exercises designed to explore and free total instrument. Development of flexible actor with range, expression, and confidence physically. May be repeated for maximum of 12 units. Letter grading.

425B-425C. Advanced Movement I. (2 or 4 each) Studio/laboratory, three to six hours. Discovery of body’s unique language through exercises designed to explore and free total instrument. Development of flexible actor with range, expression, and confidence physically. May be repeated for maximum of 12 units. Letter grading.

425D. Advanced Training Intensive. (2) Studio, 12 to 15 hours per week for four weeks. Advanced training class, challenging body’s core, energy, and concentration needed for performance. Deepening awareness of movement, physical idioms, acting tendencies, body and breath control. May be repeated once for credit. Letter grading.
425E. Advanced Conditioning and Combat for The-ater, Film, and Television. (2) Studio, six hours. Body conditioning, basic striking skills, tumbling, breakfalls, redirection of energy, strength training, gymnastics, martial arts, use of weapons, and integration of skills in perform-ance contexts. Letter grading.

425F. Advanced Movement II. (2 or 4) Studio/labora-tory, three to six hours. Presentation of more complete picture of movement related to character development, lighting, music, and dance. Advancement of physical training of individual actors to their maximum poten-tial. Experience in techniques and discovery of origins of variety of acrobatic and dance disciplines, including ballet, ballroom, period dance, and circus techniques. Letter grading.

425G-425H-425I. Advanced Movement III. (2 or 4 each) Studio, three to six hours. Advanced physical training to individual student. Study of production dance, combat discipline: capoeira, martial arts, ballet, ball-room, period dance, circus techniques. Letter grading.

426A-426B-426C. Alexander Techniques. (2 or 4 each) Studio, three to six hours. Study and practice in Alexander techniques as method of developing bal-ance, poise, and coordination of body and mind. Explo-ra-tion of use of rhythm to expand movement po-tential of actors and relevant use of visual arts and an-imal studies to character development and to exploration of use of rhythm to expand movement po-tential. Letter grading.

430A-430B-430C. Advanced Studies in Playwriting. 411D. Scenic Projection and Media Techniques. (4) Lecture/laboratory, four hours. Designed for graduate students. Advanced study and practice in scenic projection and media. Exploration of scenic design, and design and execution of theatrical projection and photographic technique for stage. May be repeated once for credit. S/U or letter grading.

424A-424B-424C. Costume Design. (4–4) Lecture/ studio, four hours. Advanced study and practice in costume design for theater. Imaginatipon as impetus for design, text analysis, metaphor, and conceptualization. Investigation of design research process, composition, and style leading to visual presentation of design. May be repeated once for credit. Concurrently scheduled with course C151A. Letter grading.

425A. Script Development Workshop. (4 to 8) Lecture, three hours. Limited to MFA playwriting program. Guided completion of full-length scripts for stage. S/U or letter grading.

431. Special Topics in Playwriting. (4) Discussion. Three hours. Designed for MFA playwriting program students. Analysis and practice of varied aspects of playwright’s art. Variable content selected from topics such as comedy writing, docudrama, writing for alter-native audiences, adaptation from stage to screen, children’s theater, or improvisational techniques. May be repeated to a maximum of 8 units. Concurrently scheduled with course C431B. Letter grading.


C433A. Script Development Workshops. (4 to 8) Lecture, three hours; studio, four to 24 hours. De-sign and practice in script development, with emphasis on communica-tion, artistic growth, and professional process. May be taken for maximum of 8 units. Concurrently scheduled with course C433B. Letter grading.

433B. Script Development Workshop. (4 to 8) Lecture, three hours; studio, four to 24 hours. Designed for graduate students. Guided practice of script develop-ment, with emphasis on communication, artistic growth, and professional process. May be taken for maximum of 8 units. Letter grading.


441C. Lighting Design. (4) Lecture/studio, four hours. Investigation of lighting design in production, musical theater, and concert lighting. Examination of the development of script and score for lighting designer. May be repeated once for credit. Letter grading.
while adhering to logistical obstacles and tasks. Concurrently scheduled with course C153D. Letter grading.

**C453E. History of Costume Design in Movies.** (4) Lecture, three hours; screenings, two to six hours. History of costume design within context of 20th-century fashion and film history, including evolution of role of costume designer since early days of film industry. Role of costume designer and contribution of costume design to cinematic storytelling. Concurrently scheduled with course C153E. Letter grading.

**C453F. Practice of Costume Design for Film Productions.** (4) Lecture, three hours. Introduction to costume design as an art form, emphasis on interaction of costume design and filmmaking process and what it takes to bring characters to life. Skills needed to effectively costume short narrative films, including script breakdown, collaboration with directors and actors, and how to manage production challenges. Concurrently scheduled with course C153F. Letter grading.

**C454A. Sound Design.** (4) Lecture/studio, four hours. Introduction to sound and audio in acoustic, audio, and digital domain. Study and practice of techniques for recording, editing, and creating soundscapes. May be repeated once for credit. Concurrently scheduled with course C154A. Letter grading.

**C454B. Sound Design for Musicals.** (4) Lecture/studio, four hours. Explanation of sound design for theater and techniques for mixing, reinforcement, and signal processing. Use of volume, equalization, and microphone placement for theater sound reinforcement with focus on mixing musicals. Covers paperwork needed to complete show. Tuning space, equalization, and some advanced projects involving programming and mixing on various consoles. May be repeated once for credit. Concurrently scheduled with course C154B. Letter grading.

**C454C. Sound for Film and Television.** (4) Lecture/studio, four hours. Introduction to professional sound recording, recording, mixing, and synchronization practices for film and television. Concurrently scheduled with course C154C. Graduate students expected to produce designs demonstrating higher level of proficiency and skill. Letter grading.

**C454D. Script Analysis for Sound Design.** (4) (Formerly numbered C444C.) Lecture/studio, four hours. Requisites: courses C454A, C454B. Advanced study and practice in preparation of theater sound design with emphasis on analysis of script and score, conceptual development of design, and techniques to realize designs. Concurrently scheduled with course C154D. Letter grading.

**C454F. Field Recording and Content Creation for Sound Designers.** (4) Lecture/studio, four hours. Requisites: courses C454A, C454B. Advanced techniques for creating soundscapes on field recording and capturing sounds and their application for performance. Concurrently scheduled with course C154F. Letter grading.

**C454G. Music Technology for Sound Design.** (4) Lecture/studio, four hours. Requisites: courses C454A, C454B. Overview of music, musical genres, and their structure with goal of understanding music composition. Students use software to create musical ideas and sound components. Concurrently scheduled with course C154G. Letter grading.

**C455A. Graphic Representation of Design: Perspective Drawing.** (2) Studio, four hours. Requisite: course 147A or 147B. Introduction to use of pencil and pen to communicate scenic designs, including one- and two-point perspective, form light, shade, and textures. Graduate students expected to produce drawings demonstrating higher level of proficiency and skill. Concurrently scheduled with course C155A. Letter grading.

**C455B. Graphic Representation of Design: Multimedia Rendering.** (2) Studio, four hours. Study and practice of multimedia rendering as they apply to interpretation of scenic, lighting, and costume renderings, with focus on human form in space. Weekly demonstrations of wide variety of art media, including watercolor, markers, pastel, and collage rendering. May be repeated twice for credit. Concurrently scheduled with course C155B. Letter grading.

**C455C. Graphic Representation of Design: Digital Rendering.** (4) Studio, four hours. Requisite: course 147A or 147B. Study of digital techniques in rendering costumes, lighting, and scenic elements with combination of hand and digital rendering techniques. Coverage of rendering from life, enhancing final image using variety of computer-aided formats to create polished sophisticated presentations for theater, film, and television productions. May be repeated twice for credit. Concurrently scheduled with course C155C. Letter grading.

**C455D. Graphic Representation of Design: Model Making.** (2) Studio, four hours. Requisite: course 147A or 147B. Studio of model for representation of scenic designs from initial working prototypes to finished color models. Use of wide variety of materials and techniques for execution of model. Graduate students expected to produce models demonstrating higher level of proficiency and skill. Concurrently scheduled with course C155D. Letter grading.

**C455E. Graphic Representation of Design: Life Drawing.** (2) Studio, four hours. Requisite: course 147A or 147B. Study and practice in drawing of human form. May be repeated twice for credit. Concurrently scheduled with course C155E. Letter grading.

**C455F. Graphic Representation of Design: Costume Rendering.** (2) Studio, four hours. Requisite: course 147A or 147B. Study of techniques of rendering theatrical costumes, with emphasis on figure, clothing, and fabrics. May be repeated twice for credit. Concurrently scheduled with course C155F. Letter grading.

**C455G. Graphic Representation of Design: Scene Painting Techniques.** (2) Studio, four hours. Requisite: course 147A or 147B. Study of scene painting techniques and materials and their realization of color design and elevations. May be repeated once for credit. Concurrently scheduled with course C155G. Letter grading.

**C455A. Selected Topics in Graphic Representation of Design.** (2) Studio, six hours. Group study of selected subjects in techniques for interpretation of design for theater. May be repeated once for credit. Concurrently scheduled with course C155H. Letter grading.

**C455A. Introduction to Computer-Assisted Drafting.** (4) Studio, four hours. Requisite: course 147A. Investigation of drafting techniques and drafting floor plan sections, and elevation drawings using AutoCAD. Concurrently scheduled with course C155A. Letter grading.

**C455B. Advanced Computer-Assisted Drafting.** (4) Studio, four hours. Requisite: course 147A. Investigation of drafting techniques for scenic and lighting designs using AutoCAD. Concurrently scheduled with course C155B. Letter grading.

**C456C. Computer-Assisted Rendering.** (4) Studio, four hours. Investigation of three-dimensional lighting and scenic design previsualization: wire-frame perspective drawing and photo-realistic computer rendering techniques using three-dimensional studio. Concurrently scheduled with course C156C. Letter grading.

**C456D. Introduction to Computer-Assisted Drafting.** (4) Studio, four hours. Requisite: course 147A. Investigation of drafting techniques, drafting floor plan sections, and elevation drawings using Vectorworks. Concurrently scheduled with course C156D. Letter grading.


**C456F. Introduction to Computer-Assisted Rendering.** (4) Studio, four hours. Investigation of three-dimensional lighting and scenic design previsualization: wire-frame perspective drawing and photo-realistic computer rendering techniques using Vectorworks. Concurrently scheduled with course C156F. Letter grading.

**C456G. Virtual Reality Rendering for Film.** (2) Studio, four hours. Requisites: courses C455C, C455H, C456A, C456B, C456C. Preparation: basic 3D modeling and rendering skills. Students learn how to translate 3D models developed in Maya into Unreal virtual game environment, and utilize this platform as a powerful tool for development, presentation, and staging of film and theater set design. Students primarily use Autodesk Maya and Unreal gaming engine, but are also introduced to Zbrush, Blender, Quixel, and other ancillary resources. Concurrently scheduled with course C156G. Letter grading.

**C457A-C457B-C457C. Costume Construction Techniques.** (2–2–2) Studio, four hours. Study of theory and application of drafting, pattern making, fitting, and construction techniques for period costumes and undergarments. May be repeated once for credit. Concurrently scheduled with courses C157A-C157B-C157C. S/U or letter grading.

**C457A. Introduction to costume drafting, construction of period costumes and undergarments.** Concurrently scheduled with course C157A. Letter grading.

**C457B. Final Costume Construction.** (2) Studio, four hours. Investigation of materials, systems, and techniques for the realization of scenic designs for theater, film, and television. Study of advanced techniques and materials for construction, finishing, and rigging of scenery and properties. Concurrently scheduled with course C157A. Letter grading.

**C457B. Lighting Design Technology.** (4) Lecture/studio, four hours. Requisites: courses C454A, C454B, C454C. Investigation of materials, systems, and techniques for realization of lighting designs for theater, film, and television. Study of design, operation, and performance of lighting instruments, dimming equipment, and control systems, including automated fixtures, projection equipment, and control systems for lighting. Concurrently scheduled with course C157B. Letter grading.


**C458B. Lighting Design Technology.** (4) Lecture/studio, four hours. Requisites: courses C454A, C454B, C454C. Investigation of materials, systems, and techniques for realization of lighting designs for theater, film, and television. Study of design, operation, and performance of lighting instruments, dimming equipment, and control systems, including automated fixtures, projection equipment, and control systems for lighting. Concurrently scheduled with course C158B. Letter grading.

**459A-459B. Directing for Theater, Film, and Television.** (4–4) Lecture, three hours. Limited to graduate students. Analyzes with specific scenes, of differences and many similarities in directorial approach to same literary material in three media. S/U or letter grading.

**460A–460W–460A. Contemporary Issues in Direction.** (1–1–1) Discussion, three hours. Designed for graduate students. Discussion of role of director in contemporary professional practice. Review discussion and critique of directing projects. Each course may be repeated for maximum of 4 units. Letter grading.

**462. Advanced Directing.** (8 or 12) Studio, 12 or 30 hours. Designed for graduate students. Advanced problems in directing for theater, film, and television. May be repeated for maximum of 24 units. Letter grading.

**463. Production Project in Direction for Stage (8 or 12 units).** Studio, 24 hours. Designed for graduate students. Creative participation as director in concep-tualization and preparation of dramatic work. Letter grading.

**472. Production Practice in Theater, Film, Video, and Digital Media.** (1 to 8 studio, three to eight hours. Ex-ploration and laboratory work in understanding various aspects of production and postproduction practice for entertainment media, including theater, film, video, and digital media. May be repeated for maximum of 24 units. Letter grading.
474. Advanced Projects in Design and Production. (4) Lecture/studio, four hours. Study and practice in preparation and execution of designs for theater, film, video, and entertainment forms. As contributing artistic member of design team, creative responsibilities include designer, technical supervisor, or production manager. May be repeated for maximum of 16 units. Letter grading.

475A. Graduate Design Portfolio Project: Scenic Design. (2) Lecture, four hours; studio, four to eight hours. Preparation: at least six master scenic design courses. Preparation of complete designs and drawings for theatrical, film, operatic, and theoretical productions and assembling of design portfolio and résumé. Information about industry demands and protocol for portfolio presentation and review, with projects prepared under guidance of respective design faculty adviser. Letter grading.

475B. Graduate Design Portfolio Project: Lighting Design. (2) Lecture, four hours; studio, four to eight hours. Preparation: at least six master lighting design courses. Preparation of complete designs and drawings for theatrical, film, operatic, and theoretical productions and assembling of design portfolio and résumé. Information about industry demands and protocol for portfolio presentation and review, with projects prepared under guidance of respective design faculty adviser. Letter grading.

475C. Graduate Design Portfolio Project: Costume Design. (2) Lecture, four hours; studio, four to eight hours. Preparation: at least six master costume design courses. Preparation of complete designs and drawings for theatrical, film, operatic, and theoretical productions and assembling of design portfolio and résumé. Information about industry demands and protocol for portfolio presentation and review, with projects prepared under guidance of respective design faculty adviser. Letter grading.

476A-C476B-C476C. Production Practice in Theater with Emerging Technologies I, II, III. (4–4–4) Studio/laboratory, four to six hours. Collaborative creative and technical development of all aspects of theatrical production incorporating emerging and/or advanced technologies, culminating in rehearsal and public presentation. Offered as series of up to three courses in cases where multiple quarters are needed to prepare production. Concurrently scheduled with course C176A-C176B-C176C. Letter grading.

495A-495B-495C. Practicum and Practice in Teaching Theater. (2–2–2) Seminar, to be arranged; discussion, two hours. Study and practice of teaching theater at university level. Orientation and preparation of graduate (PhD) students who have responsibility to assist in teaching undergraduate courses in department. Discussion of problems common to teaching experience. S/U or letter grading.

498. Professional Internship in Theater, Film, and Television. (4, 8, or 12) Tutorial, to be arranged. Full- or part-time at studio or on professional project. Internship with various film, television, or theater facilities accentuating creative contribution, organization, and work of professionals in their various specialties. Given only when projects can be scheduled. S/U or letter grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate adviser and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.

596A. Directed Individual Studies: Research. (2 to 12) Tutorial, to be arranged. Designed for graduate students. May be repeated with consent of instructor. S/U or letter grading.

596B. Directed Individual Studies: Writing. (2 to 12) Tutorial, to be arranged. Designed for graduate students. May be repeated with consent of instructor. S/U or letter grading.

596C. Directed Individual Studies: Directing. (2 to 12) Tutorial, to be arranged. Designed for graduate students. May be repeated with consent of instructor. S/U or letter grading.

596D. Directed Individual Studies: Design. (2 to 12) Tutorial, to be arranged. Designed for graduate students. May be repeated with consent of instructor. S/U or letter grading.

596E. Directed Individual Studies: Acting. (2 to 12) Tutorial, to be arranged. Designed for graduate students. May be repeated with consent of instructor. S/U or letter grading.

596F. Directed Individual Studies: Production. (2 to 12) Tutorial, to be arranged. Designed for graduate students. May be repeated with consent of instructor. S/U or letter grading.

597. Preparation for PhD Qualifying Examinations in Theater Arts. (2 to 12) Tutorial, to be arranged. Writing of prospectus and three reading lists. May be repeated for credit. S/U grading.


Learning Outcomes

The Individual Field major has the following learning outcomes:

- Development of individualized course of study
- Demonstrated competency in discourse of disparate disciplines on which the major draws
- Completion of capstone project or thesis that synthesizes coursework into a culminating project
- Demonstrated competency in the literature and/or artistic traditions pertinent to chosen course of study

UNIVERSITY STUDIES

College of Letters and Science
A316 Murphy Hall
Box 951430
Los Angeles, CA 90095-1430

University Studies
310-206-1697

Muriel C. McClendon, PhD, Chair

Faculty Committee
Frank A. Laski, PhD (Molecular, Cell, and Developmental Biology)
David W. MacFadyen, PhD (Comparative Literature, Musicology)
Elizabeth A. Marchant, MA (Comparative Literature, Gender Studies)
Muriel C. McClendon, PhD (History)
William I. Newman, PhD (Earth, Planetary, and Space Sciences; Mathematics; Physics and Astronomy)

Overview

Available to all undergraduate students, the University Studies curriculum seeks to promote academic success and meaningful engagement. Courses are tailored to specific undergraduate populations and are designed to introduce students to the research university and academic culture of UCLA. Beyond addressing themes of academic success, the courses also introduce students to the unique opportunities and experiences available at a large research university. For more information, contact Marian Gabra.

University Studies

Lower-Division Courses

10A. ACE UCLA | Critical Strategies to Achieve Undergraduate Excellence (First- and Second-Year Students). (2) Seminar, two hours. Not open for credit to students with credit for course 10B, 10C, 10D, 10E, 10F, or former course 10. Imparts students with critical strategies to achieve undergraduate excellence at top-tier research institution. Study of research university’s mission, rigor, and expectations of students, as well as its pedagogical implications. Cultivation of formal space on campus where UCLA students learn to engage collaboratively with their diverse community of scholars; to comprehend and apply effective learning strategies and theoretical foundations of college stu-
dent development; to navigate complex structure of UCLA; to practice resilience and growth mindset; and to think critically about diversity and their identity; and to be fully aware of their value to intellectual fabric of institution as contributors to innovative research and scholarship. P/NP grading.

10B. ACE UCLA | Critical Strategies to Achieve Undergraduate Excellence for International Students. (2) Seminar, two hours. Not open to students who have completed University Studies 10A, 10B, 10C, 10D, 10E, or former course 10. Designed for first-year students. Study of research university’s history, mission, rigor, expectations of students, and pedagogical implications. Cultivation of formal space on campus where UCLA students learn to explore major in humanities and identify transferable skills; to engage collaboratively with their diverse community of scholars; to comprehend and apply effective learning strategies and theoretical foundations of college student development; to navigate complex structure of UCLA; to practice resilience and growth mindset; to think critically about diversity and their identity; and to be fully aware of their value to intellectual fabric of institution as contributors to innovative research and scholarship. P/NP grading.

10C. ACE UCLA | Critical Strategies to Achieve Undergraduate Excellence for Incoming Transfer Students. (2) Seminar, two hours. Not open for credit to students with credit for course 10A, 10B, 10C, 10D, 10E, or former course 10. Designed for transfer students. Imparts students with critical strategies to achieve undergraduate excellence at top-tier research institution. Study of research university’s mission, rigor, and expectations of students, as well as its pedagogical implications. Cultivation of formal space on campus where UCLA students learn to engage collaboratively with their diverse community of scholars; to comprehend and apply effective learning strategies and theoretical foundations of college student development; to navigate complex structure of UCLA; to practice resilience and growth mindset; to think critically about diversity and their identity; and to be fully aware of their value to intellectual fabric of institution as contributors to innovative research and scholarship. P/NP grading.

10D. ACE UCLA | Critical Strategies to Achieve Undergraduate Excellence for First-Generation Students. (2) Seminar, two hours. Not open for credit to students with credit for course 10A, 10B, 10C, 10D, 10E, or former course 10. Designed for first-generation college students. Imparts students with critical strategies to achieve undergraduate excellence at top-tier research institution. Study of research university’s mission, rigor, and expectations of students, as well as its pedagogical implications. Cultivation of formal space on campus where UCLA students learn to engage collaboratively with their diverse community of scholars; to comprehend and apply effective learning strategies and theoretical foundations of college student development; to navigate complex structure of UCLA; to practice resilience and growth mindset; to think critically about diversity and their identity; and to be fully aware of their value to intellectual fabric of institution as contributors to innovative research and scholarship. P/NP grading.

10F. ACE UCLA | Critical Strategies to Achieve Undergraduate Excellence for First-Year Students. (2) Seminar, two hours. Not open to students who have completed University Studies 10A, 10B, 10C, 10D, 10E, or former course 10. Designed for first-year students. Study of research university’s history, mission, rigor, expectations of students, and pedagogical implications. Cultivation of formal space on campus where UCLA students learn to explore major in humanities and identify transferable skills; to engage collaboratively with their diverse community of scholars; to comprehend and apply effective learning strategies and theoretical foundations of college student development; to navigate complex structure of UCLA; to practice resilience and growth mindset; to think critically about diversity and their identity; and to be fully aware of their value to intellectual fabric of institution as contributors to innovative research and scholarship. P/NP grading.

15A. Collaborative Learning Workshops for Humanities and Social Sciences Majors. (2) Seminar, two hours. Designed for students in First Year Scholars Program (FYSP). Part I of three-part series of collaborative learning and community-building work sessions. Collaborative work spaces and participatory learning environments are integral component of student development. Creates specific and unique space for FYSP scholars to cultivate community and support, as well as develop critical strategies to achieve undergraduate excellence at top-tier institution. Engages students collaboratively with diverse community of scholars; supports their understanding and application of interactive learning strategies; guides students in practice growth mindset, navigation of complex structure of UCLA, thinking critically about diversity and their identity, and being fully aware of their value to intellectual fabric of institution as contributors to innovative research scholarship. P/NP grading.

15B. Collaborative Learning Workshops for Humanities and Social Sciences Majors. (2) Seminar, two hours. Requisite: course 15A. Designed for students in First Year Scholars Program (FYSP). Part II of three-part series of collaborative learning and community-building work sessions. Collaborative work spaces and participatory learning environments are integral component of student development. Creates specific and unique space for FYSP scholars to cultivate community and support, as well as develop critical strategies to achieve undergraduate excellence at top-tier institution. Engages students collaboratively with diverse community of scholars; supports their understanding and application of interactive learning strategies; guides students in practice growth mindset, navigation of complex structure of UCLA, thinking critically about diversity and their identity, and being fully aware of their value to intellectual fabric of institution as contributors to innovative research scholarship. P/NP grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.
Adjunct Professor
Gregory S. Pierce, PhD

Overview
The professional urban planner works on the creation and management of the urban environment, including its physical, economic, and social elements. Housing, transportation, air and water quality, the preservation of historic communities, and the development of community-level economic and employment programs are some of the tasks undertaken by recent graduates of the Department of Urban Planning.

The department takes pride in its collegiate atmosphere. It features a lively mix of students from diverse academic backgrounds, drawn from many foreign countries and from every avenue of American life. It includes many members of racial and ethnic minority groups, and more than half the students are women. Student organizations provide an interesting program of extracurricular activities.

Career Prospects
Graduates have taken positions in local, state, and national governments, and increasingly with nonprofit and private companies whose products and services affect the urban environment. While most UCLA graduates find positions in the U.S., the program offers the opportunity to specialize in development planning abroad, including rural development, and many graduates have found positions in Latin America, Africa, and Asia.

Undergraduate Minor

Urban and Regional Studies Minor
The scale, diversity, balkanized governance, and natural environment of Southern California all contribute to making it an extraordinary natural laboratory for learning about urban and regional issues, whether the focus is on immigration, employment, the built environment, transportation, poverty, natural resources, or a host of other challenges. The Urban and Regional Studies minor offers undergraduate students a means to address some of these issues from an interdisciplinary perspective, giving a balanced mixture of theory, practice, and service learning courses.

Admission
To enter the minor, students must be in good academic standing with an overall grade-point average of 2.0 or better, have completed 90 or more units, and complete either Urban Planning M120 (or Public Affairs M109) or 121 with a grade of C or better. An introductory course in sociology is recommended. For more information, contact the undergraduate advising office.

The Minor
Required Courses (28 units): (1) Urban Planning M120 (or Public Affairs M109) or 121 with a grade of C or better; (2) five elective courses selected from Public Affairs 110, 120, 121, 140, M142, 148, 149, M153, 154, M157, M159, M160, M161, Urban Planning M120 (unless taken under item 1), 121 (unless taken under item 1), CM151, M161, M167, M168 (electives may be added as additional undergraduate courses are offered; any urban planning course from 100-199 is permitted); (3) capstone course selected from Public Affairs 195, 195CE, 199, Urban Planning 185XP, 195, or 199, or an additional upper-division elective course (minimum 4 units) selected from the list above.

Policies
By petition, courses outside the Luskin School of Public Affairs may be applied as an elective for the minor. No more than two courses from outside the Luskin School of Public Affairs may be applied toward the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Majors

Master of Urban and Regional Planning
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Concurrent Degree Programs
Concurrent degree programs allow students to reduce the number of courses required for two degrees, since some courses may apply to both degrees.

- Master of Urban and Regional Planning/Community Health Sciences Master of Public Health
- Master of Urban and Regional Planning/Environmental Health Sciences Master of Public Health
- Master of Urban and Regional Planning/Juris Doctor
- Master of Urban and Regional Planning/Latin American Studies MA
- Master of Urban and Regional Planning/Master of Architecture
- Master of Urban and Regional Planning/Master of Business Administration

Master of Urban and Regional Planning–Institut d’Études de Paris
In this dual degree program, students receive a Master in Governing the Large Metropolis from the Urban School of Sciences Po in Paris and a Master of Urban and Regional Planning from the Urban Planning Department at UCLA.

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Urban Planning PhD
Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Lower-Division Courses

18. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

88. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Options include topics such as: Understanding and analyzing poverty and inequality in the United States, urban social theory, current growth trends, and the role of government in the economy. By petition, courses outside the Luskin School of Public Affairs may be used as a seminar, one hour. Survey of urban history and evolution in the U.S., urban social theory, current growth trends, and the role of government in the economy. By petition, courses outside the Luskin School of Public Affairs may be used as a seminar, one hour.

99. Student Research Program. (1 to 2) Tutorial (supervised research or scholarly work); three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. May be repeated. P/NP or letter grading.

Environmental Health Sciences Master of Public Health

Lower-Division Courses

M110. Inequality and Democracy: Analysis and Praxis of Public Problems. (4) Same as Social Welfare M110.) Lecture, three hours; discussion, one hour. Analysis and praxis of public problems. This course covers the role of government in the economy, social policy, and inequality. The problems are political, economic, and social, and the emphasis is on understanding the role of the government in the economy. P/NP or letter grading.

M120. Introduction to Cities and Planning. (4) Same as Public Affairs M109.) Lecture, three hours; discussion, one hour. Survey of urban history and evolution in the U.S., urban social theory, current growth trends, and the role of government in the economy. P/NP or letter grading.
121. Urban Policy and Planning. (4) Lecture, three hours. Examination of current urban planning and policy issues and debates, such as normative theories of good urban form, metropolitan organization and governance, economic development and growth management, edge cities, spatial mismatch hypothesis, urban poverty, racial/ethnic inequality, gender and urban structure, sustainability, and future of cities. P/NP or letter grading.

M122. Policy, Planning, and Community. (4) Same as Asian American Studies M108. Lecture, three hours; field laboratory. Project-oriented methods course on conducting needs assessment in Asian American communities. Geographic information systems to be used to define problems and needs. Letter grading.

129. Special Topics in Urban Policy and Research. (4) Lecture, three hours. Examination of particular composition, and review (e.g. conflicting portrayals of environmental planning, housing and community development, international planning and development, land use, or urban design) in some depth. Specific topic area rotate depending on instructor. May be repeated for credit with topic change. P/NP or letter grading.

130. Fundamentals of Urban and Regional Economies. (4) Lecture, three hours. Preparation. Exploration of introduction to microeconomics course. Most U.S. population lives and works in urbanized areas, and world’s population is becoming more urbanized with each passing decade. National, state, and local governments are engaged in managing, planning, policy-making, and governing in urban context. Ultimate efficacy of these public activities can be enhanced by understanding basic historical forces acting on urban areas. Basic concepts related to location choice, agglomeration effects, economies of scale, and specialization by cities and transportation. P/NP or letter grading.

CM137. Southern California Regional Economy. (4) Same as Labor Studies M180.) Lecture, three hours. Introduction to regional economy, with emphasis on Los Angeles. Key economic sectors, labor market development, and local labor marketography. Cities constitute crucibles of most pressing social and environmental challenges and are also potential centers of innovation for addressing these challenges. Examination of theory and practice from geography and related fields to understand many articulations of social vulnerability and how it might be achieved. Letter grading.

CM140. Issues in Latina/Latino Poverty: Mexican and Central American Voices from Los Angeles. (4) Same as Chicana/o and Central American Studies M121 and Labor Studies M121.) Lecture, four hours. Examination of key factors of poverty, housing, and neighborhood) in urban poverty, with particular focus on Mexican and Central American immigrant populations in Los Angeles. Exploration of major theoretical models that explain urban poverty and application of them in comparative context while looking at differences between Mexican and Central American immigrants. Social conditions and forces that help us understand and are conductions to history and physical form of Los Angeles. Field of planning offers distinct perspectives and opportunities for improving vulnerable communities. Topics range from discussion of intersection between race and income, critical race theory, community development, residential segregation, spatial mismatch, and environmental justice to social justice. P/NP or letter grading.

141. Planning with Minority Communities. (4) Lecture, three hours. Overview of planning history, theory, and contemporary issues that affect low-income communities, minority groups, and underserved neighborhoods, particularly in Los Angeles area. Field of planning offers distinct perspectives and opportunities for improving vulnerable communities. Topics range from discussion of intersection between race and income, critical race theory, community development, residential segregation, spatial mismatch, and environmental justice to social justice. P/NP or letter grading.

M150. Transportation Geography. (4) Same as Geography M153.) Lecture, three hours. Designed for juniors/seniors. Study of geographical aspects of transportation, with focus on characteristics and functions of various modes and on complexities of intra-urban transport. P/NP or letter grading.

CM151. Parking and City. (4) Same as Public Affairs M153.) Lecture, three hours. Examination of Parking 11 or Public Affairs 40. Parking is misunderstood link between transportation and land use. Transportation engineers typically assume that free parking simplifies urban planning. Some urban planners treat parking as transportation issue that engineers must study. No profession is intellectually responsible for parking, and everyone seems to assume that engineering solutions. Examination of new ways to improve parking, transportation, and land use. Concurrently scheduled with course C251. Letter grading.

CM157. Built Environment and Health. (4) Same as Public Affairs M157.) Lecture, three hours. Exploration of important linkages between urban-built environment and public health outcomes using ecological urban planning, and community-based lenses through theory and series of case studies. Knowledge of these linkages is used to propose ecological solutions to issues and problems of our public and built environment. May be concurrently scheduled with course C285. Letter grading.

CM160. Environmental Politics and Governance. (4) Same as Environment M164.) Lecture, three hours. Examination of current political-economic forces acting on urban areas. Basic concepts related to location choice, agglomeration effects, economies of scale, and specialization by cities and transportation. P/NP or letter grading.

CM161. Urban Sustainability. (4) Same as Public Affairs M163.) Lecture, three hours. In 21st century, majority of Earth’s population now lives in urban areas and virtually no part of globe remains untouched by human influence. Cities constitute crucibles of most pressing social and environmental challenges and are also potential centers of innovation for addressing these challenges. Examination of theory and practice from geography and related fields to understand many articulations of social vulnerability and how it might be achieved. Letter grading.

CM164A. Documentary Production for Social Change: Mobility in Los Angeles. (4) Same as Analysis M164A.) Seminar, three hours; fieldwork, three hours. Exploration of documentary filmmaking as catalyst for social change, using daily commute in Los Angeles as case study. Introduction to issues of race, ethnicity, gender, disability, and class on experiences of commuting, access to public transportation, and car-based versus alternative (bike and pedestrian) forms of commuting. Exposure to observational, interview-based, and participatory documentary shooting and editing techniques, as well as social marketing strategies that are vital to documentary production and distribution. Letter grading.

CM165. Environmentalism: Past, Present, and Future. (4) Same as Environmental Studies M125.) Lecture, three hours; discussion, one hour. Exploration of history and origin of major environmental ideas, movements or countermovements that spawned, or continue to shape, and/extend or challenge environmental thought. Introduction to early ideas of environmentalism, how rise of modern sciences reshaped environmental thought, and how this was later transformed into environmental movements. Review of politics of American environmental thought and contemporary environmental questions as they relate to broader set of questions about natural resources, sustainability, and equity in environmental debate. Exploration of issues in broad context, including global climate change, rise of pandemics, deforestation, and environmental justice impacts of war. Letter grading.


M167. Environmental Justice through Multiple Lenses. (4) Same as Environ M167 and Public Affairs M167.) Lecture, three hours. Examination of intersection between race, economic class, and environment in U.S., with focus on issues related to social justice. Because environmental inequality is highly uneven, complex phenomenon, multidisciplinary and multi-population approach taken, using alternative ways of understanding, interpreting, and taking action. P/NP or letter grading.


M171. Planning Issues in Latin/Latino Communities: Preserving and Strengthening Community Assets in Mexican and Salvadoran Los Angeles. (4) Same as Chicana/o and Central American Studies M122 and Labor Studies M122.) Lecture, four hours. How community and economic development interact, role of assets in community development, and unique strategies for promoting sustainable communities from developing to their potential. How to strengthen and how to preserve community resources in Pico-Union neighborhood in Los Angeles. Research skills include theoretical analysis, electoral asset mapping, web-based data processing and analysis, oral and written reports, and cyber-based research. Letter grading.


M175. Women and Cities. (4) Same as Gender M175.) Lecture, three hours. Limited to juniors/seniors. Examination of relationship between women and cities: (1) how cities have affected women’s opportunities for economic and social equality, (2) women’s contributions to development of U.S. cities, and (3) contemporary strategies and efforts to create urban environments that reflect women’s needs and interests. P/NP or letter grading.

C184. Looking at Los Angeles. (4) Lecture, three hours. Exploration of history and origins of Los Angeles, how rise of modern sciences reshaped environmental thought. Introduction to issues of race, ethnicity, gender, disability, and class on experiences of commuting, access to public transportation, and car-based versus alternative (bike and pedestrian) forms of commuting. Exposure to observational, interview-based, and participatory documentary shooting and editing techniques, as well as social marketing strategies that are vital to documentary production and distribution. Letter grading.

185XP. Community-Based Research in Planning. (4) Formerly numbered 185SSL.) Seminar, one hour; fieldwork, three hours. Preparation: at least four Urban and Regional Studies minor courses, of which at least one should be related to subject area of service learning setting. Limited to junior/senior minor students. De- signed to serve as complement to service learning re- search experiences that may be required for minor. Students are matched to public, private, or nonprofit agency through Center for Community Learning and must complete minimum of 100 hours of service learning. May be set be students and sponsoring organizations. Readings to be determined in consultation with instructor. P/NP grading.
M187. Latino Metropolis: Architecture and Urbanism in America. (4) (Same as Chicanas/o and Central American Studies M187 and History M151E.) Lecture, four hours. Exploration of history of architecture and urbanism in Americas, from fabled cities of Aztec empire to barrios of 21st-century Los Angeles and Miami. Emphasis on role of cities in Latinx/Latino experience and uses of architecture and city planning to forge new social, political, and environmental landscapes rooted in historical experiences of conquest, immigration, nationalization, and revolution. P/NP or letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced prerequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced prerequisite: course 188SB. Enforced corequisite: Honors Collegium 101E. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors and departmental honors programs. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

195. Community in Urban Planning. (4) Tutorial, 12 hours. Limited to junior/senior Urban and Regional Studies minors. Internship in supervised setting in community agency or urban planning setting. Students are assigned regularly with instructors to provide periodic reports of their experience. May be repeated for credit. Individual contract with supervising faculty member required. P/NP or letter grading.

196. Directed Research in Urban Planning. (2 to 6) Tutorial, three hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culling paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

M201. Theories of Architecture. (4) Same as Architecture and Urban Design M201.) Lecture, three hours. Exploration of conceptual and historical structures that shape current issues in architectural theory. Readings in primary texts serve as framework for understanding, discussion, and development of prescriptive inquiry in archives of cultural context. Letter grading.

M202A-202B. Land Use. (202A: 3 or 4/202B: 1 or 2) Lecture, three hours. Course 202A is enforced prerequisite to 202B. Exploration of 21st-century land-use public controls, private practice, and litigation in California from basic planning, zoning, subdivision controls, and official mapping to regional growth management, environmental, and land conservation. Concurrently scheduled with Law 286. In Progress (202A) and S/U or letter (202B) grading.

M203S. Housing Segregation, Housing Discrimination, and Evolution of Public Policy. (1 to 8) (Same as Law M256.) Seminar, three hours; two field trips. Consideration of selected aspects of housing law and policy, including current federal and state housing subsidies; remedies of housing consumers; impacts of market discrimination against children, racial minorities, and women; and local governmental laws influencing housing. Preparation for examination; participation in group and small group discussions; paper or examination as determined by instructor. Letter or S/U grading.

M203A-203B. Seminar: Housing Segregation, Housing Discrimination, and Evolution of Public Policy. (1 to 8) (Same as Law M256.) Seminar, three hours; two field trips. Course M203A is enforced prerequisite to 203B. Examination of housing law and policy, including current federal and state housing subsidies; remedies of housing consumers; impacts of market discrimination against children, racial minorities, and women; and local governmental laws influencing housing supply and demand. Participation in group and small group discussions; examination; preparation for examination. Letter or S/U grading.

M204. Research Design and Methods for Social Policy. (4) (Same as Public Policy M218.) Lecture, three hours; outside study, nine hours. Limited to graduate students. Emphasis on sophisticated and consumer-driven methods and producers of quantitative and qualitative policy research. In first half of course, formal principles of research design; in second half, various data collection methods, survey and interview design, and survey design. Letter grading.

M205A-205B. MURP Comprehensive Examination: Applied Planning Research Project I, II. (4–4) Required of all second-year students completing applied planning research project. MURP comprehensive examination capstone option. Letter grading. 205A. Seminar, three hours. Guides students through identifying topics, developing scope, writing of final examination paper, and oral defense. Letter grading. 205B. Seminar, three hours; discussion, one hour. Guides students through completion of data collection, analysis, findings, conclusions, and recommendations of applied planning research project. Preparation of executive summary and poster synthesizing their work.

206. Introduction to Geographic Information Systems. (4) Lecture, one hour; laboratory, two hours. Practice-oriented study using Esri/ArcGIS. Survey and overview of spatial databases and overview of data collection, management, and visualization. Students are guided through series of exercises and assignments to build higher levels of spatial understanding and experience. Use of laboratory exercises, book exercises, and project to help illuminate principles and teach useful skills. Discussion of three major themes: spatial analysis, data management, design and visualization. Letter grading.

207. Applied Microeconomics for Urban Planning. (4) Lecture, three hours; laboratory, 90 minutes. Preparation: passing score on microeconomics examination given first day of class. Practical use of economics in analysis of problems in urban planning. Topics include analysis of personal and business consumer issues. Letter grading.


208D. Introduction to Qualitative Research. (4) (Same as Social Welfare M249B.) Lecture, three hours; outside study, nine hours. Preparation: course M208A. Required in first or second year of PhD program. Introduction to philosophy, theories, logic, design, and practice of qualitative research by studying its varied methodologies. Letter grading.

209. Special Topics in Planning Theory. (4) Lecture, three hours. Topics in planning theory selected by faculty members. May be repeated for credit. S/U or letter grading.

M201A. Special Topics in Public Affairs. (4) (Same as Public Policy M291C and Social Welfare M290X.) Seminar, three hours; outside study, nine hours. Advanced seminar on emerging issues across public policy, social welfare, and urban planning. May be repeated for credit. S/U or letter grading.

M210B. Comparative Perspective on States, Markets, and Civil Society. (4) (Same as Public Policy M247B and Social Welfare M290X.) Lecture, two and one half hours. Governments and managing societal problems, such as climate change, poverty, migration, security, mobility, pollution, or trade relations. Contemporary governance is complex set of laws, rules, and regulations involving rights and responsibilities of three institutional complexes of modern societies (state, market, and civil society), interests that guide them, and legitimacy and resources they command. Actors often cross across systemic, jurisdictional, and national boundaries; their relationships can be cooperative, neutral, or fraught with conflict, and governance outcomes can vary significantly. These dynamics involve changing and, consequently, require significant governance readiness. Lectures, debates, in-class exercises, and student presentations. Exploration of several issues in multiple settings, e.g., the United States, China, the European Union, and subnational comparisons to get at core phenomena. Letter grading.

211. Law and Quality of Urban Life. (4) Lecture, three hours. Introduction to law as urban system, directed primarily toward those interested in intersection of law and policy: broad array of urban issues examined, as is law’s role as part of cause and cure of urban problems. Examination of law as changing process rather than collection of principles, so that students develop facility to interact with law and lawyers in positive and fruitful manner. S/U or pass/fail grading.

212. International/Comparative Planning Workshop. (2 or 4) Seminar, three hours; field trips, five to 10 days. Topics of planning and policy in various international or domestic sites. Topics may include urban design, economic development, land use, environmental issues, transportation, infrastructure planning, housing development, community development, and/or physical planning. May be repeated for credit. S/U or letter grading.

213. Urban Data Science. (4) Lecture, three hours. Preparation: basic Python programming experience or introductory Python course. New data sources are potential goldmine for urban planners and policy makers. Big Data involves they are 202B) Seminar, three hours. Required of all second-year students completing Applied Planning Research Project I, II. Examination of dissertation components, framing specific research questions/hypotheses, and selecting methodology and plan for testing hypotheses. May be repeated for credit. S/U or letter grading.
guage processing, geospatial analysis, and machine learning. Use of examples from transit, housing, and equity planning, and building of competence in open-source tools such as Python and SQL. Consideration also of limits to data science, and biases and pitfalls that big data can entail. Letter grading.

114. Neighborhood Analysis. (4) Lecture; two hours; laboratory, one hour; practicum, one hour. The social, human, and economic forces that have contributed to the formation of neighborhoods and the evolution of neighborhood structure and social processes. Letter grading.

228. Visual Communication Skills. (2) Five-week course. Lecture, two hours; laboratory, one hour. Greater emphasis on graphic presentation and visual communication to educate stakeholders, advocate for change, and encourage participation in planning processes in recent years, both in public and private sector. Visual communication requires artistic skills and strategic thinking, strong foundation in design theory, and technical skills in computer programs. Introduction to Adobe InDesign and Illustrator and foundation in design theory and communication. How to use graphic design to present planning projects in an attractive and powerful planning materials and reports, design principles to communicate ideas in clear, succinct, and engaging manner, and when and how to use graphic materials to support verbal presentations or written reports. Letter grading.

229. Special Topics in Planning Methods. (4) Lecture, three hours. Topics in planning methodology selected by faculty members. May be repeated for credit. S/U or letter grading.

M230. Introduction to Regional Planning. (4) (Same as Public Policy M241.) Lecture, three hours. Critical and historical survey of evolution of regional planning theory and practice, with particular emphasis on relationships between regional planning processes and issues within Western social and political philosophy. Major concepts include regions and regionalism, territorial community, and social production of space. Letter grading.

M231. Global Public Affairs: Governing in an Interconnected World. (4) (Same as Public Policy M228B and Social Welfare M215.) Lecture, three hours; outside work, nine hours. Conceptually, focuses on interplay between three major institutions (state, market, and civil society) and the globalizing societies and organizations that operate within them: state, market, and civil society. Study moves between abstract theory and concrete examples, offers sense of where these institutions and organizations have come from, and helps chart their present trajectories. From perspective of governance, economic, social, environmental, and institutional and organizations to address today’s challenges. S/U or letter grading.

232. Disaster Management and Response. (4) Lecture, three hours. Through readings and presentations, examination of disaster management and response in both U.S. and developing countries. Exploration of how disaster impacts and risk reduction both relate to economic, vulnerability, and political factors, in addition to the complex interplay of roles and configurations of institutions and organizations to focus on distinct disaster contexts and themes as set out in reading and weekly sessions. Letter grading.

233. Political Economy of Development. (4) (Formerly numbered C233.) Lecture, three hours. Introduction to new approaches and new urban studies, basic concepts and analytical approaches of urban political economy, with major emphasis on American urban problems and restructuring of modern metropolises. Topics include historical geography of urbanization, development and transformation of urban spatial structure, suburbanization and metropolitan political fragmentation, urban fiscal crisis, and role of urban social movements. Letter grading.


M234B. Ecological Issues in Planning. (4) (Same as Geography M229B.) Lecture, three hours. Recommended preparation: course M265. Science and policies of modern environments, in light of transformations inherent in global change, including how to address these questions in ways that go beyond green consumerism and bifurcation of wild, ecological, and human environments. American environ-
mentalist has become dominant model for many conservation practices. Informed by Marxist model of idea of untrammeled nature with people-less set-
ments; this approach used in environmental policy and as key idea in conservation and fragment biology. At opposite end is environmental planning directed to in-
frastucture in human-urban habitats (cities), Explora-
tion of these urban and rural landscapes and many ac-
sceptable of both in 21st century. Letter grading.

M234C. Resource-Based Development. (4) (Same as Geography M229C.) Lecture, three hours. Recom-
mended preparation: course M234A. Some major is-
ues associated with development of specific natural resources. Topics include nature of particular resource (or region associated with it), its previous manage-
ment, development of state, corporations, and local groups, and environmental and social impact of its de-
velopment. Letter grading.

235A. Urbanization in Developing World. (4) Lec-
ture, three hours. Course 235A is not requisite to 235B. Questions of urbanization and planning in low-
and middle-income countries. Case studies from Latin America, Africa, and Asia. Lectures, student presen-
tations, and policy debates. Letter grading.

235B. Civil Society, Nongovernmental Organizations, and International Business. (4) Lecture, three hours. Questions of civil society, nongovernmental organizations (NGOs), and social movements in low- and middle-income countries. Case studies from Latin America, Africa, and Asia. Lectures, student presentations, and policy debates. Letter grading.

M236A. Theories of Regional Economic Develop-
ment I. (Same as Geography M230A and Public Policy M240L.) Lecture, three hours; discussion; one hour. Introduction to theories of location of economic activity, trade, and other forms of contact between re-
gions, with examples from Los Angeles region. Re-
sourcing for different levels of economic development, re-
lations between more and less developed regions. Letter grading.

M236B. Globalization and Regional Development. (4) (Same as Geography M230B.) Lecture, three hours. Requisite: course M236A. Application of theo-
ries of regional economic development, location, and trade learned in course M236A to contemporary pro-
cess known as globalization. Examination of nature and effects of globalization on development, employ-
ment, and social structure, along with implications for policy. Letter grade.

236C. Advanced Workshop on Regions in World Economy. (4) Lecture, three hours. Requisite: course M236B. Advanced workshop on regional development examining changes in organization of production sys-
tems, their geographies, and processes that affect re-
gional performance in globalized environment. Letter grading.

237A. Sectoral Analysis. (4) Lecture, three hours; lab-
oratory, one hour. Introduction to methods and proce-
dures of sectoral investigation as applied to regions, industries, companies, and their labor forces. Current theorems and conceptions of industrial structure and industrial change. Investigation of characteristics and trends of industries within urban areas revealing in industry profile that can serve as aid to planning and shaping economic development. Letter grading.

237B. Urban and Regional Economic Development Applications. (4) Lecture, three hours. Survey and analysis of economic development strategies in U.S. Because economic development strategies seek to modify or shape existing conditions, focus on how policies attempt to harness dynamics associated with new forms of industrial restructuring, intersectoral com-
petition, and interrelationships among capital, labor, and state. Letter grading.

237C. Southern California Regional Economy. (4) Lecture, three hours. Introduction to the economy, with emphasis on Los Angeles. Key eco-
nomic sectors, labor market composition, and review of conflicting portrayals depicting dynamics of region. Two all-day bus tours of key economic regions and guest lectures by regional experts included. Concur-
rently scheduled with course CM137. Letter grading.

238. Global Labor Markets. (4) Lecture, three hours. Consideration of labor-related programs, policy, and strategy in international and comparative context. Re-
view of major approaches to improving quality, quan-
tity, and access to jobs, including training, regulation, migration policy, organizing strategies, and social safety net. Global in scope, with particular reference to countries of global south. Letter grading.

239. Special Topics: Globalization and International Development. (4) Seminar, three hours. Topics in urban and regional development selected by faculty members. May be repeated for credit. S/U or letter grading.

240. Local Government. (2 to 6) (Same as Law M285.) Lecture, three hours. Analysis of structure and function of local, regional, and state government in historical and institu-
tional context: organization, finance, intergovernment-
relational roles, justice, public services, lawmakers, citizen participation through initiatives and referenda, and government tort liability. Letter grading.

240A-240B. Local Government. (4-2) Lecture, three hours. Analysis of structure and function of local and re-
gional, and state government in historical and institu-
tional context: organization, finance, intergovern-
mental relations, role of judiciary, public services, law-

241. Policing through Bureaucracy: Encounters with City and State. (4) Lecture, three hours. Every day, people encounter state power through their contact with bureaucracies. Bureaucracies administer and regulate matters including educ-

dation, housing, social benefits, and mobility. Ex-
anima of role of bureaucracies in emergence of, per-
sistence of, and experience of social inequality. Ex-
ploration of dilemmas that bureaucrats face when they do their jobs, and experiences of people who interact with bureaucrats either voluntarily or involuntarily. Consideration of how peoples’ experiences of bureaucr-
acies influence social class and re-
lection on how experiences with bureaucracies convey messages about race, citizenship, and be-
longing. Letter grading.

242. Poverty and Inequality. (4) Lecture, three hours. Examination of relationship between urbanization and spatial inequality in U.S.—spatial dynamics of urban growth, levels and causes of spatial inequality, and im-
PLICATIONS OF SPATIAL INEQUALITY FOR LOW-INCOME COMMUNITIES. Topics include poverty, residential segregation, immigrant neighborhoods, spatial dispar-
disparities in access to opportunities, housing mobility, neighborhood health and safety, urban infrastructure, and political economy. Examination of role of policies in promoting and/or reducing spatial inequalities. Letter grading.

243. Urban Futures: Space, Ecology, Society. (4) Lecture, three hours. Urban social and ecological change are intertwined and coproduced. Inquiry into how we can better understand and intervene in this critical relationship, in global context of technological promise, extensive urbanization, ecological crises, and increasing ecological and splintered societies. Examination of big problems, and big ideas and big plans that may be necessary to address them as well as what enables large-scale urban environmental proj-

ects to be conceived and implemented. Letter grading.

244. Urban Poverty and Planning. (4) Lecture, three hours. Examination of determinants of urban poverty, with emphasis on poverty in U.S. and on geographical dimensions of poverty and planning interventions that contribute to poverty reduction. Topics include rela-
tionship between poverty and human and social cap-
ital, demographic change, low-wage labor market, spatial concentration of poor, residential segregation, and social policy. Letter grading.

245. Urban Public Finance. (4) Lecture, three hours. Requisites: courses 207, 220A. Theory and practice of urban public finance, with emphasis on methods used to fund public infrastructure. Topics include fiscal im-
impact analysis of real estate development, effects of taxes on land-use decisions, benefits assessment to

M245. Planning for Multiple Publics. (4) Lecture, three hours. Exploration of planning needs of various social groups in urban settings, using existing literature and research studies to develop mecha-


249. Special Topics in Transportation Policy and Planning. (4) Lecture, three hours. Topics in transpor-
policy and planning selected by faculty mem-
ners. May be repeated for credit. S/U or letter grading.

M250. Transportation, Land Use, and Urban Form. (4) (Same as Public Policy M220.) Lecture, three hours. Historical evolution of urban form and transpor-
tation systems, intraregional, and interregional theo-

topics in transportation policy and planning selected by faculty mem-
ters. May be repeated for credit. S/U or letter grading.

251. Parking and City. (4) Lecture, three hours. Re-
quiser: course 207. Parking is misunderstood link be-
tween transportation and land use. Transportation en-
gineers typically assume that free parking simply is not there at end of most trips, while urban planners treat parking as transportation issue that engineers must study. No profession is intellectually responsible for parking and everyone is bound to come to some point. Letter grading.

252. Transportation and Land Use: Transportation and Urban Design Studio. (4) Studio, three hours. Students of different backgrounds and interests col-
laborate with city planners, and individuals propose solutions for actual transportation planning and urban design problem. Course simulates real-world profes-
sional planning proposal of type that students might be asked to perform if working for public or private agencies. Students acquire ability to collect and syn-
thesize evidence typically marshalled by transportation planning and urban design professionals, urban and site analysis capabilities, design and physical planning skills, and data analysis and design presentation and re-
presentation abilities. Letter grading.

M253. Travel Behavior Analysis. (4) (Same as Civil Engineering M287 and Public Policy M212.) Lecture, three hours. Requisites: courses 207 and 220B, or Public Policy 201 or M201A, and 203. Descriptions of travel patterns in metropolitan areas, recent trends and changes influence of regional travel fore-
casting methods, trip generation, trip distribution, mode split traffic assignment, critique of traditional travel forecasting methods and new approaches to travel behavior analysis. Letter grading.

254. Bicycle and Pedestrian Planning. (4) Lecture, three hours. Walking and bicycling are essential com-
ponents of sustainable transportation systems. In re-

sponse to growing concerns about access, safety, and increasing numbers of bicycles, and bicycle theo-
sists, development of bicycle and pedestrian facilities and their appropriate contexts. Examination of bicycle
and pedestrian planning in context of overall street design. Essential components of bicycle and pedestrian planning, including policies, programs, funding, and advocacy, are reviewed. Out-of-class planning projects. Letter grading.

M255. Transportation Economics, Finance, and Policy. (4) (Same as Public Policy M222.) Lecture, three hours. Overview of transportation finance and economics: cost, capacity, and equity in transportation finance; historical evolution of highway and transit finance; current issues in highway finance; private participation in road finance, toll roads, road costs and congestion charges, congestion pricing; current issues in transit finance; transit fare and subsidy policies, contracting and privatization of transit services. Letter grading.

257. Transportation and Local Economies. (4) Lecture, three hours. Examination of equity issues related to urban transportation, with focus on complex relationships among urban spatial structure, transportation (transit and automobile) policies, and economic outcomes. Role of transportation in improving economic outcomes for low-income and minority households and communities. Letter grading.

M258. Transportation and Climate Change. (4) (Same as Energy M253.) Lecture, three hours. How to reduce greenhouse gas emissions from transportation. Critical analysis of policies to improve fuel efficiency, promote electric vehicles, and reduce vehicle travel by integrating the transportation system with environmental regulation. Analytical methods to quantify carbon emissions and estimate emission reductions. Focus on climate change, but consideration of other environmental consequences of transportation. Air pollution to stormwater runoff. Letter grading.

260. Environmental Politics and Governance. (4) Lecture, three hours. Environmental planning is more than simply finding problems and fixing them. Each policy must be created and implemented within complex systems of governance. Institutions and politics matter deeply. Overview of how environmental governance works in practice and how it might be improved. Letter grading.


260B. Green Urban Studio: Designing Living Neighborhoods. (4) Studio, three hours. Students gain detailed knowledge of established and emerging performance-based methods for addressing issues of energy, water, waste, food, transportation, habitat, biomics, and local economies at district or neighborhood scale. Letter grading.

261. Land-Use Planning: Processes, Critiques, and Innovations. (4) Lecture, three hours. Understanding of techniques, processes, strategies, and dilemmas of land-use planning. Despite strong criticisms and demonstrated shortcomings, land-use control remains integral part of planning practice. How does land-use control work? How has it evolved? What are problems with traditional land-use control mechanisms? How well do innovations in land-use planning address criticisms? What is role of land-use planning in good society? S/U or letter grading.

262. Urban Environmental Problems: Water Resources. (4) Lecture, three hours. Water access affects quality of life and livelihoods both in California and across low and middle income countries. Examination of similarities and distinctions between relevant water access issues in both contexts. To date, water resources planning has been devoted almost exclusively to ensuring high-quality service delivery systems. Focus here on social, political, and economic drivers of access, inequality of access, and related conflicts. Water resource governance issues primarily center at subnational, city, and household scales. S/U or letter grading.

264. Environmental Law. (4 or 6) Lecture, three hours or four hours. Examination of field of environmental law through analysis of various legal issues and public policy. Legal consequences of public decision-making and strategies and allocation of primary responsibility for various environmental decisions. Focus on air pollution and Clean Air Act as means of illustrating policy issues underlying field. Concurrently scheduled with Law 290. S/U or letter grading.

264A-264B. Environmental Law, (264A: 3 or 4/264B: 1 or 2) Lecture, three hours. Course 264A is enforced requisite to 264B. Examination of field of environmental law through analysis of various legal issues and public policy: legal consequences of public decision-making and strategies and allocation of primary responsibility for various environmental decisions. Focus on air pollution and Clean Air Act as means of illustrating policy issues underlying field. Concurrently scheduled with Law 290. In Progress (264A) and S/U or letter (264B) grading.


M271A. Community Economic Development. (4) Lecture, three hours. Introduction to fundamentals of community economic development and neighborhood development strategies. Overview of basic approaches, important concepts, resources and language of field, and major strategies for revitalization of low-income neighborhoods. Letter grading.

M271B. Labor and Economic Development. (4) Lecture, three hours. Exploration of economic development and labor unions directly and indirectly influence and shape economic development. Wide range of roles that labor plays, and could play, in promoting and supporting economic development throughout. Letter grading.

272B. Advanced Real Estate Studio. (4) Studio, three hours. Requires: course M272. Study combines disciplines of planning, urban design, construction, real estate finance and investment, and property operations and management. Students learn about behind-the-scenes negotiation and decisions, and gain better ability to determine real estate project feasibility, deeper understanding about financing methods and tools, and ability to judge and develop development programs for success. Letter grading.

273. Site Planning. (4) Lecture, 90 minutes; laboratory, 90 minutes. Requires: course 274. Introduction to principles of site planning for urban areas. S/U or letter grading.

274. Introduction to Physical Planning. (4) Lecture/ workshop, 90 minutes; discussion, 90 minutes. Designed for students with no prior physical planning background and for first-year MA students in community development and built environment area development programs for success. Letter grading.

M277. Urban Housing. (1 to 8 each) Lecture, three hours; discussion, 90 minutes; one field trip. Review of current status of homelessness: who homelesseces; how homelessness is managed. Opportunities for creative, existing, and proposed programs—appropriate architecture, management, and sources of funding. Outside speakers include providers of services to homeless. Letter grading.

278. Special Topics in Environmental Analysis and Policy. (4) Lecture, three hours. Topics in environmental analysis and policy selected by faculty members. May be repeated for credit. S/U or letter grading.

M287. Urban Homelessness: History and Policy. (4) Lecture, three hours. Requirements: CM250 or equivalent. Examination of similarities and distinctions between relevant water access issues in both contexts. To date, water resources planning has been devoted almost exclusively to ensuring high-quality service delivery systems. Focus here on social, political, and economic drivers of access, inequality of access, and related conflicts. Water resource governance issues primarily center at subnational, city, and household scales. S/U or letter grading.

M276A-276B. Urban Housing. (1 to 8 each) (Same as Law M277.) Lecture, three hours. Course M276A is enforced requisite to M278B. Examination of past 40 years of federal and state programs to stem urban decline and improve housing in U.S.; comparison and
contrast of legal and policy initiatives in areas of public housing, housing segregation, mortgage subsidies, and immigration reform. Examination of power and inclusion within these processes. Letter grading.

279. Seminar: Public Space. (4) Seminar, three hours. Focus on key propositions that are shaping present urban and architectural debate and concrete case studies where policy options for making them work better and range from urban design to sustainable design of buildings and planning of communities. Letter grading.

281. Introduction to History of Built Environment in U.S. (4) Lecture, two hours; discussion, one hour. Open to advanced undergraduates with consent of instructor. Introduction to history of physical forms of urbanization in America; survey of economic, political, and aesthetic forces behind creation of built environments. S/U or letter grading.

282. Urban Form, Paradigms, Applications. (4) Lecture, three hours. Discussion and evaluation of philosophical bases, ideologies, and paradigms of urban design in last century; examination of how these reflect on built environment of cities. Letter grading.

283. Community Development, Organizing, and Engagement. (4) Lecture, three hours. Examination of theory and practice of community development, organizing, and engagement. Understanding of multiple dimensions of community development (physical, economic, political, social) and how they interact, as well as major debates about community development strategies and issues, especially in a context of empowerment strategy in disadvantaged and marginalized communities, and relationship of community and worker organizing to broader movements for social change. Consideration of various approaches to community participation and engagement, and struggles over power and inclusion within these processes. Examination of relations between community development, organizing, and engagement. Particular attention to race, gender, and class dimensions of these processes, issues of power, and how planner’s role connects with processes. Letter grading.

284. Looking at Los Angeles. (4) Lecture, three hours. Introduction to history and physical form of Los Angeles, with emphasis on understanding social, economic, and political issues in development of Los Angeles. Concurrently scheduled with course C284. Letter grading.

C285. Built Environment and Health. (4) (Formerly numbered 285S.) Lecture, three hours. Exploration of important linkages between urban-built environment and health. Examination of policies and programs related to housing production and community-based health initiatives. Letter grading.

M287. Politics, Power, and Philanthropy. (4) Same as Public Policy M227 and Social Welfare M229S. Lecture, three hours; outside study, nine hours. Use of political economy perspective to analyze forces that have shaped rise and characteristics of nonprofit sector and its constituent elements. Examination of social history of nonprofit sector in U.S. Exploration of legal and policy environments and distinct organizational forms. Comparative perspective between U.S. and other countries. S/U or letter grading.

M288. Nonprofit Organizations and Philanthropy: Management and Policy. (4) Same as Public Policy M228 and Social Welfare M241E. Lecture, three hours; outside study, nine hours. Increased importance of nonprofit organizations—as service provider, catalyst, or social change advocate, social entrepreneurs, innovators, and as stimulus of government reform—have moved this set of institutions closer to center of social welfare, urban planning agendas. Introduction of conceptual background, examination of theories and aspects of organizational behavior, and management models and policy frameworks. Lectures, seminars, critiques, research, presentations, and guest presentations. Letter grading.

289. Sprawl and Smart Growth. (4) Lecture, three hours. Suburbs are not new, but metropolitan areas in U.S. and overseas have grown rapidly at their edges in ways that many consider problematic. Discussion of causes and impacts of sprawl as it relates to smart growth. Letter grading.

M291. Introduction to Sustainable Architecture and Community Planning. (4) Same as Architecture and Urban Design CM247A. Lecture, three hours. Relations of built environment to natural environment through whole systems approach, with focus on sustainable design of buildings and planning of communities. Emphasis on energy efficiency, renewable energy, and appropriate use of resources, including materials, water, and land. Letter grading.


M293. Politics, Ideology, and Design. (4) Same as Architecture and Urban Design M293. Lecture, three hours. Exploration of cultural and political context of architecture and planning work. Examination of theory and practice from variety of perspectives applied to set of varied physical environments and to set of current spatialized concepts. Consideration of theoretical propositions that are shaping present urban and architectural debate and concrete case studies where political and ideology shape design process. Letter grading.

294. Housing in Developing Countries: Policy Objectives and Options. (4) Lecture, three hours. Examination of relevance of public policies and their intended and unintended effects on housing demand and supply in developing countries. How definition of housing problems, and scope of solutions, has changed over time. Critical assessment of some key solutions that have been tried in past, their advantages, shortcomings, and resultant trade-offs, and likely directions for future housing policy. Letter grading.

M295. Introduction to Urban Humanities. (4) Lecture, three hours. Core introduction to urban humanities. Analytical and descriptive methods of humanities paired with speculative and projective methods of architectural and urban design to better understand contemporary state of human environment. Focus on Los Angeles, with concepts seminar, methods laboratory, projects studio, and site visit components. Offered in summer only. S/U or letter grading.

M296. Housing Policy and Planning. (4) Same as Public Policy M243B. Lecture, three hours. Study of housing policy and planning in the U.S., with special focus on California given rapid changes occurring in state, with consideration of experiences from other states and countries and to what extent they are relevant here. Special emphasis likely includes evaluation of housing, rent control, and housing finance, issues of household formation, housing supply, housing sub-markets, and gentrification, as well as planning concepts and relationships to historical and furthered Fair Housing. Letter grading.

297. Current Issues in Urban Planning. (1 to 4) Seminar, three hours. Current issues in urban planning selected by students in conjunction with faculty members. May be repeated for credit. S/U grading.

M297B. Current Issues in Public Affairs. (2) Same as Public Policy M297C and Social Welfare M297B. Lecture, one to two hours. Introduction to wide range of current issues in public affairs. Lecturer will emphasize major material from diverse fields. Assigned readings are distributed in advance of each meeting. S/U grading.

M297F. Career Planning and Management. (2) Same as Public Policy M297F. Tutorial, six hours. Designed to meet professional development needs of first-year Public Policy, Social Welfare, and Urban Planning students. Development of career management skills while balancing busy life of graduate student. More than just deciding on career path, career planning and management involves taking concrete steps to become career ready. Students gain fundamental career management skills to be competitive on job market, including creating competitive résumé and practicing interviewing articulately. Offers opportunity to learn professional development skills to assist with career planning strategies. S/U grading.

298. Special Topics in Emerging Planning Issues. (2 or 4) Seminar, three hours. Topics in newly emerging planning issues such as role of cutting-edge technology, innovative policies, and experimental programs. May be repeated for credit. Letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

M404. Joint Planning/Architecture Studio. (4) Same as Architecture and Urban Design M404.) Lecture, one hour; discussion, one hour; studio, four hours. Opportunity to work on joint planning/architecture project for client. Outside speakers; field trips. Examples of past projects include Third Street Housing, Santa Monica; New American House for nontraditional households; Pico-Allso Housing, Boyle Heights; working with resident leaders at Los Angeles City public housing developments. S/U or letter grading.

M470. Improving Worker Health: Social Movements, Policy Debates, and Public Health. (4) Same as Community Health Sciences CM470 and Environmental Health Sciences CM471.) Lecture, three hours; fieldwork, two hours. Examination of intersection between work, health, and environment, analysis of social causes of health disparities, investigation of historical, class and political factors and social reproduction of current policy debates, and development of innovative interventions. S/U or letter grading.

496. Field Projects. (4) Tutorial, four hours. May not be repeated for credit. Letter grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate advisor and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.
Mark S. Litwin, MD, MPH, FACS

The fundamental goal of the Department of Urology encompasses a wide scope of human illness, including conditions that are congenital and acquired, pediatric and adult, male and female, malignant and benign. The department functions to acquaint students with the skills necessary to manage these conditions in the initial stages and over the long term. Instruction spans all four years of the undergraduate medical school curriculum but is concentrated during the clinical rotations. Students spend two weeks on the urology service during the third year and may return for an additional three-week elective rotation during the fourth year. The clinical experience includes time spent in the faculty and resident clinics, on ward rounds, and in didactic conferences that cover general urology, urological subspecialties, uro-pathology, and uroradiology. Urology teaching settings include the Reagan UCLA, Harbor-UCLA, Olive View-UCLA, UCLA Santa Monica, and West Los Angeles VA medical centers.

For more details on the Department of Urology and courses offered, see the department website.

Urology

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one and one-half to three hours. May be repeated once for credit for maximum of 8 units. S/U grading.

597. Preparation for MA Comprehensive Examination or PhD Qualifying Examinations. (4 to 12) Tutorial, four hours. May be repeated for credit by PhD students. S/U grading.

598. Preparation for MA Thesis in Urban Planning. (4) Tutorial, four hours. May be repeated but may be applied toward degree only once. S/U grading.

599. PhD Dissertation Research in Planning. (2 to 12) Tutorial, to be arranged. May be repeated for credit. S/U grading.

Upper-Division Course

199. Directed Research in Urology. (2 to 10) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP grading.

Visual and Performing Arts Education

Interdisciplinary Minor
School of the Arts and Architecture
2101 Broad Art Center
Box 951620
Los Angeles, CA 90095-1620

Overview

The Visual and Performing Arts Education Minor is intended to supplement the education of undergraduate students enrolled in the Architectural Studies, Art, Art History, Design, Media Arts, Ethnomusicology, Music, Theater, and World Arts and Cultures majors.

Admission

To apply to the minor, students must have completed at least 50 percent of the lower-division requirements of their specific majors and Arts Education M102 with a grade of B or better, be in good academic standing with an overall grade-point average of at least 2.7, and submit a minor application, which includes a concentration proposal to be developed in consultation with the Visual and Performing Arts Education director.

The Minor

Required Courses (28 to 32 units with a minimum of 24 upper-division units): (1) Core and capstone sequence requirement: Arts Education M101, 102, 192, M192XP (Arts Education M192 and M192XP include a guided teaching experience), (2) arts education requirement: two courses selected from Arts Education 20, 101, 103, 105, 195 (minimum 4 units), 197 (minimum 4 units), (3) one upper-division elective course (list of recommended courses available from the Arts Education program office or the school Office of Student Services), and (4) one upper-division elective course (minimum 4 units) selected from arts education or, by petition, an arts education related course (list of recommended courses available from the Arts Education program office or the school Office of Student Services).

Policies

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade. Successful completion of the minor is indicated on the transcript and diploma.
19. Flat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20. Introduction to Community Engagement through Arts. (5) Lecture, three hours; discussion, one hour; outside study, nine hours. Introduction to fields of community engagement and arts education informed by philosophies of progressive education and social justice movements. By looking at community engagement as issue of equity and social justice, examination of basic theories of creativity, artistic development, and community partnership, and history, philosophies, politics, and sociocultural trends of community engagement in American society. Attendance at UCLA arts presentations and introduction to creative process. Readings and discussions to understand community engagement and arts education as crucial elements of comprehensive education, with emphasis on writing process, including regular writing assignments that require students to read, analyze, critique, and evaluate community arts practices and arts education scholarship. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week. Independent research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required. Consult Undergraduate Research Center. May be repeated. P/NP grading.

101. Selected Topics in Arts Education. (4) Lecture, three hours; outside study, nine hours. Selected topics in arts education explored through variety of approaches that may include community projects, guided teaching experiences, studio and/or fieldwork, readings, discussion, research papers, oral presentations, and relevant guest speakers. P/NP or letter grading.

105. Arts Programs in Correctional Institutions: History, Theory, and Practice. (4) Lecture, three hours; outside study, nine hours. Examination of attitudes of prison and correctional arts programming for incarcerated artists working in prisons, political figures, and community while critically engaging with consequences of correctional environment without outside influence of arts as role model for inspiration and discipline. Selected topics and approaches in correctional institutions explored through variety of approaches that may include readings, visual and audio documentation, discussion, research papers, oral presentations, and relevant guest speakers. P/NP or letter grading.

107. Visual Arts Methods for Teaching Artist. (4) Lecture, three hours; discussion, one hour. Recommended requisite: experience in specific art form. Enrollment by consent of instructor. Methodological approach to teaching visual arts specifically in K-12 setting. Emphasis on strategies for teaching in hybrid settings, inclusive of management strategies, evaluation, and repertoire development. Exploration through variety of approaches may include community projects, visual art, guided teaching experiences, studio and/or fieldwork, readings, discussion, and oral presentations. P/NP or letter grading.

108. Performing Arts Methods for Teaching Artist. (4) Lecture, three hours; discussion, one hour. Recommended preparation: experience in specific art form. Enrollment by consent of instructor. Methodological approach to teaching design media arts specifically in K-12 setting. Emphasis on strategies for teaching in hybrid settings, inclusive of management strategies, evaluation, and repertoire development. Exploration through variety of approaches may include community projects, performance, guided teaching experiences, studio and/or fieldwork, readings, discussion, and oral presentations. P/NP or letter grading.

109. Design/Arts Programs in Correctional Institutions: History, Theory, and Practice. (4) Lecture, three hours; discussion, one hour. Recommended preparation: experience in specific art form. Enrollment by consent of instructor. Methodological approach to teaching visual arts specifically in K-12 setting. Emphasis on strategies for teaching in hybrid settings, inclusive of management strategies, evaluation, and repertoire development. Exploration through variety of approaches may include community projects, digital artwork, guided teaching experiences, studio and/or fieldwork, readings, discussion, and oral presentations. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

M102. Introduction to Arts Education for Multiple Publics: Theory and Practice. (4) (Same as Education M142.) Seminar, three hours; outside study, nine hours. Introductory course with focus on arts education for multiple publics in inner-city settings. Study of core issues in arts education, creativity, and social justice as students develop, implement, and assess original syllabi, lesson plans, and community learning projects for multiple publics in inner-city schools and arts organizations. Collaboration with partner schools in planning, teaching, and evaluation of arts education programs in dance, music, theater, and visual arts. P/NP or letter grading.

M103. Socially Engaged Pedagogy in Arts. (4) Lecture, three hours; outside study, nine hours. Students are in contact and conversation with active community-based artists and youth workers regularly utilizing socially engaged practices, principles, and practices. Based on readings and investigations, students research and write one case study on a particular arts site that is utilizing socially engaged pedagogy and art-making strategies. Theoretical and experiential components provided for students from all arts disciplines to explore tactics and strategy of socially engaged pedagogy and arts practice through variety of approaches that may include readings, visual and audio documentation, discussion, research papers, oral presentations, and relevant guest speakers. P/NP or letter grading.

197. Individual Studies in Arts Education. (2 to 4) Tutorial, to be arranged. Preparation: 3.0 grade-point average in major. Limited to juniors/seniors in Visual and Performing Arts Education minor and/or arts education teaching sequence. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. Letter grading.

195. Community Internships in Arts Education. (2 to 4) Tutorial, one hour; fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship in supervised setting in K-12 schools or community arts organizations. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for maximum of 8 units. Individual contract with supervising faculty member required. P/NP or letter grading.
Overview

Defined by a dynamic blend of theory and practice, the Department of World Arts and Cultures/Dance (WAC/D) is led by a renowned faculty of scholars, activists, curators, filmmakers, and choreographers dedicated to critical cross-cultural analysis and art-making. The department is the place to make dances, explore digital media, curate exhibitions, become an arts activist, and develop scholarly expertise in culture and the arts. Multiple disciplines and artistic approaches are used to encourage students to position their work within broad social contexts.

In the World Arts and Cultures BA arts activism, visual cultures, and critical ethnographies are emphasized. The Dance BA integrates composition, training, and improvisation, while challenging students to locate dance politically, culturally, and historically. The MFA in Choreographic Inquiry promotes adventurous choreographic inquiry and engages with global discourses around the body and performance. The MA/PhD programs in culture and performance address theories of corporeality, performance, visuality, and culture, and offer interdisciplinary training that fosters independent research. The Art and Global Health Center enables undergraduate and graduate students to explore art as a life-saving activity.

The path-breaking programs of the department are committed to academic excellence, diversity, freedom of expression, activism, and social transformation through the arts.

Undergraduate Study

The undergraduate program offers majors in Dance and in World Arts and Cultures.

The BA in Dance thoroughly integrates learning to dance, learning to make dances, and critical interrogation of dance as a cultural practice. Students study a variety of dance throughout their studies. They enroll in a four-term sequence in dance composition, with additional opportunities to participate in the creation of their own dances, as well as working as dancers in the creation of new works by faculty members and visiting artists. Further, they engage in a core of four courses in the study of scholarly discourse around the body and dance, launching a critical inquiry into their own study of bodily practices, internalization of the embodied experience, and how bodily ideas and embodied experiences are interpreted and communicated outwardly and interpersonally, both locally and globally.

The BA in World Arts and Cultures highlights culture and representation as key perspectives for understanding creativity in local and global arenas. Three streams of cross-cultural and interdisciplinary study are available: arts activism, critical ethnographies, and visual cultures. These streams define the department commitment to a range of practices, including ethnography, activism, visual and related expressive arts, documentary and short films, museum and curatorial studies, performance, and other creative perspectives and methods. Courses combine theory and practice and are grounded in culturally diverse artistic expressions.

All students are encouraged to complement the required set of core and elective departmental courses with others offered across campus, such as courses from ethnic and area studies programs, and may organize their course of study in relation to particular interests or professional goals (e.g., international comparative studies, intercultural studies, education, area specializations such as Africa, Asia, or Latin America, minority discourse, gender studies).

Graduate Study

The graduate program offers Master of Arts (MA) and Doctor of Philosophy (PhD) degrees in Culture and Performance and a Master of Fine Arts (MFA) in Choreographic Inquiry. Culture and performance students research communities, cultures, and transnational movements through heritage and globalization studies, multivocal ethnographies, dance and theories of corporeality and embodiment, visual and material culture, critical museum and curatorial studies, documentary practice and Internet interventions, as well as arts activism and interdisciplinary art making. The MFA in Choreographic Inquiry offers opportunities to engage multiple movement practices as students work on pioneering research in the form of new choreography. Students may focus on media, dance studies theory, and theories of the body as supplements to their work as choreographers. The Art and Global Health Center within the department presents further opportunity for learning and practice.

While operating with considerable independence, the two graduate degree areas are unified by the department’s common concern for aesthetic production, corporeality and performance, the dynamics of tradition, and culture-building in contemporary societies. Connections are forged between critical theory and artistic practices, and attention is given to the changing social roles and responsibilities of artists, practitioners, and scholars of the arts in the U.S. and worldwide.

Undergraduates and graduates have excelled in fields including technology and the arts, videography, documentary work, public service, education, theatrical/events production, performing arts, urban planning, law, environmental activism, public health, and medicine. They have made careers in community nonprofits and activist groups, government arts agencies, museums, and arts foundations. Potential careers for MA, PhD, and MFA graduates also include positions in research universities and colleges, and MFA graduates are active as choreographers/performers in their own companies or with other professional organizations.

Undergraduate Majors

Dance BA

All students take a set of courses as preparation for the Dance major that focuses on the integration of dance and critical analysis. For students who transfer into the major, depending on the year of entry and prior coursework, lower-division preparatory coursework may be waived or substituted. When students enter the major, they continue their studies of dance technique, composition, and analysis, and they also enroll in a primary and secondary research area.

The three research areas are (1) creative inquiry as research, (2) critical dance studies, and (3) dance and civic engagement. The creative inquiry as research area is grounded in contemporary choreography with a focus on dance-making and performing in a wide range of genres from throughout the world. Opportunities are provided for students to present their own choreography, to participate in performances by others, and to study performance production and videography. The critical dance studies area focuses on study of scholarship examining the body and dance, in their cultural and historical contexts. Courses in dance history, dance and culture, and dance as an identificatory practice are offered that enable students to analyze the rhetorical and ideological significance of dance. The dance and civic engagement area is grounded in the investigation and activist-oriented work of artists and the role of dance in the public sphere, and offers a wide range of courses in the nature of activism as well as opportunities for fieldwork, education internships, and other forms of community involvement.

Students select one area as their primary area and another as their secondary area. Elective options provide further deepening of student knowledge and skills in any or all of the areas. Students may also consider courses from programs outside the department and may organize their course of study in relation to their particular interests.

Students who wish to confer with the departmental student affairs officer regarding program planning and major requirements should contact the undergraduate counselor.

Learning Outcomes

The Dance major has the following learning outcomes:

- Choreography of dances in various settings, cultural contexts, and media, with emphasis on progressive approaches.
- Creative problem-solving of issues tied to arts and activism, dance-making, and producing...
in multiple formats, in an intercultural and interdisciplinary context
• Think critically about the relationship between aesthetics and politics through choreography, written analysis, and multiple research methods
• Demonstrated advanced proficiency in at least two movement disciplines
• Analysis of vocabulary, location, and syntax of dance works
• Analysis of political, cultural, and historical implications of dance works
• Demonstrated ability to understand and implement collaboration in an art-making practice
• Written and oral recognition and synthesis of key concepts in critical dance studies

Entry to the Major

Admission

New students are admitted to the Dance major for fall quarter only. All applicants are reviewed individually, based on submission of a written research paper, transcripts, two letters of recommendation, and one personal essay. These supplementary materials are requested from students in mid-December, after the general UC application is received and processed, and are due back in the department in January. For first-year applicants, college placement test scores are also considered. Students must participate in a late January/early February audition. Specifics about the audition are included in the e-mail requesting the above-mentioned supplementary materials.

Change of major applications are considered once a year. Current UCLA students who petition to change their major are required to meet with the student affairs officer prior to application, but no later than the eighth week of fall quarter in order to participate in the departmental supplemental application process during fall/winter quarters for admission into the program the following spring or fall quarter. They are required to take selected departmental courses before and during the term in which they apply to the program (contact the student affairs officer for a list of selected courses). They must have a minimum 2.0 overall grade-point average, a minimum 2.0 GPA in all departmental courses taken, and no more than 90 quarter units at the time of application. All students are required to audition in early winter quarter and may be interviewed as part of the application process.

Requirements

Preparation for the Major

Required: Dance 1, 16, 44, 45, 67A, 67B, 70.

The Major

The Dance major consists of 76 units of coursework.

Required: (1) Dance 101, 117A, 117B and (2) 10 units in the primary area and 5 units in the secondary area selected from the following: (a) creative inquiry as research—Dance 114, 116, 117C, C122, 170, C171, 174A, C174B, C180, or other upper-division courses with faculty approval, (b) critical dance studies—Dance C145XP, C152, M157, 158, 160, CM168, C171, 182, World Arts and Cultures 199, or other upper-division courses with faculty approval, (c) dance and civic engagement—Dance 114, C184, World Arts and Cultures 100A, 100B, 103, 144, 160, 177XP, 195, or other upper-division courses with faculty approval (no more than 8 units of courses 114 and/or 195 may be applied toward this area). Students also have the option to propose a senior honors project through Dance 186A and 186B.

Movement Arts/Dance Practices—Required: A total of 48 units of practice courses. A minimum of two technique courses per term until completion is strongly recommended. Thirty of the total 48 units must be selected from Dance 6, 9, 13, 15, 56, 63, 65, C106A, C113A, C115, 116. Of these 30 units, a minimum of 6 units of a first style and 4 units of a second style must be at the advanced level. Eighteen of the total 48 units may be selected from Dance 5, 10, 11, 12, 16, 52, 60, C112A, 116, 160, World Arts and Cultures 55, 78, 80, 178. No more than 8 units of World Arts and Cultures 78 or 178 may be applied toward this requirement.

Senior Honors Project

Students may participate in a senior honors project consisting of 10 additional units. The project provides students with opportunity to demonstrate mastery and integration of knowledge and learned abilities from the major. The project may take various forms—from choreographic performance projects or an academic research paper to field/internship work in an identified area of research focus. With faculty advising, students must declare their intent to participate by spring quarter of their junior year. They identify a faculty mentor and work closely with that person on the development of the project, submitting a senior project proposal for faculty approval by the beginning of the senior year. In their senior year they enroll in a two-term course sequence (Dance 186A, 186B) to coordinate and present their research findings.

World Arts and Cultures BA

The World Arts and Culture major emphasizes a cross-cultural and interdisciplinary approach to the study of art making, community engagement, and multimedia analysis. The five required preparation for the major classes introduce students to the intersectionality evidenced in the collective work of the faculty. A lower-division, practice-based course enables students to connect the practice and study of art-making across a variety of genres and forms. In three lower-division seminars, students are prepared for the major by studying theoretical concepts of culture, the tensions between local and global art perception, and the diverse ways that colonialism has been understood and resisted around the globe.

Building upon the foundational preparation courses, the required core courses of the major expand interpretive lenses to include ethics of representation, methods of research, an opportunity to build upon one’s practice-based experience, and a one-credit course that connects students with faculty advisers to increase awareness of field-specific scholarship, disciplinary methods, and various genres and forms for intellectual output, particularly as these might be articulated with post-graduate aspiration.

Students in the major have the option to pursue a senior praxis project. Working with faculty advisers, students will be able to develop a performance, film, event, multimedia production, and other possible forms of evidence of their education in the department.

Students who wish to confer with the departmental student affairs officer regarding program planning and major requirements should contact the undergraduate counselor.

Learning Outcomes

The World Arts and Cultures major has the following learning outcomes:

• Demonstrated critical analyses of a variety of approaches to visual and performance-based art making and activism in cross-cultural contexts
• Interpretation of and, in some cases, conduct of field-based research within specific communities
• Demonstrated ability to conceptualize, plan, and exercise art, curatorial, and/or ethno-graphic projects that reflect a dynamic dialog between theory and practice
• Demonstrated sensitivity to diversity and cultural differences, particularly as articulated within various forms of governance, national and international policy, transnational art and curatorial practices, and museum and heritage sites
• Development of informed interpretations, not only of the way that art functions within communities but also how the links between art and community are created and represented
• Articulation of the value of civic engagement within a variety of arts-oriented social contexts

Entry to the Major

Admission

New students are admitted to the major for fall quarter only. All applicants are reviewed individually, based on submission of a written research paper, transcripts, two letters of recommendation, and one personal essay. These supplementary materials are requested from students in mid-December, after the general UC application is received and processed, and are due back in the department in January. For first-year applicants, college placement test scores are due back in the department in January. For UC application is received and processed, and are due back in the department in January. For first-year applicants, college placement test scores are also considered.

Change of major applications are considered once a year. Current UCLA students who petition to change their major are required to meet with the student affairs officer prior to application, but no later than the eighth week of fall quarter in order to participate in the departmental supplemental application process during fall/winter quarters for admission into the program the following spring or fall quarter. They are required to take selected departmental courses before and during the term in which they apply to the program (contact the student affairs officer for a list of selected courses). They must have a minimum 2.0 overall grade-point average, a minimum 2.0 GPA in all departmental courses taken, and no more than 90 quarter units at the time of application. All students are required to audition in early winter quarter and may be interviewed as part of the application process.
partamental courses taken, and no more than 90 quarter units at the time of application. Students may be interviewed as part of the application process.

Requirements

Preparation for the Major
Required: World Arts and Cultures 1, 2, 20, 24, 33.

The Major
The World Arts and Cultures major consists of 46 units of coursework.

Required: (1) World Arts and Cultures 100A or 100B, 102, 104, 124, 185; (2) 25 units from any World Arts and Cultures elective courses, or other upper-division courses with faculty approval.

Senior Praxis Project
Students may choose to complete a senior praxis project by completing 15 units of elective coursework and the following two courses, or 10 units of equivalent coursework with faculty approval. World Arts and Cultures 2 and 102 provide the foundational training in making practice-based techniques. Students begin to identify a project in the required World Arts and Cultures 185 Junior-Year Proposal course during their junior year. With the support of their instructor, students can be approved to choose the senior praxis project during their final three quarters of enrollment. Projects may include written theses, visual ethnographies, documentaries, curatorial projects, installations, short films, internships, community service, field-based research, as well as other formats. Projects are crafted in close consultation with faculty advisers to provide capstone experiences that draw together ideas and abilities from their WAC/D curriculum while positioning students for postgraduate opportunities.

Graduate Majors

Choreographic Inquiry MFA

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Culture and Performance

MA, PhD
The master’s degree may be earned only in the process of completing PhD requirements.

Requirements
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Education website. In many cases, more detailed guidelines may be outlined in announce-ments, other publications, and websites of the schools, departments, and programs.

Dance

Lower-Division Courses

1. Global Perspectives on Dance. (5) Lecture, three hours; discussion, one hour. Examination of practices of choreography, improvisation, and technique in different cultural settings and historical eras. Introduction to field of dance studies through analysis of broad spectrum of philosophies and practices within global contexts. Focus on creative act of dance-making, thinking and understanding act of improvising, and diverse ways of training one's body. By framing process of analysis within array of historical periods and cultural settings, development of capacity to engage with dance as lived social and artistic practice while refining critical seeing, thinking, and writing skills. P/NP or letter grading.

5. Moving Voice. (2) Studio, three hours. Experiential Investigation of voice as it relates to resonant, physical body. Working with primal qualities of voice and how it interfaces with breath, physical anatomy, and space around us. Physical approach to singing, with singing being defined in its broadest sense as all possible sounds emitted by human voice. May be repeated for credit without limitation. P/NP or letter grading.

6. Beginning West African Dance. (2) Studio, three hours. Beginning-level study of dances originating from Mandingo culture in sub-Saharan Africa. May be repeated for credit without limitation. P/NP or letter grading.


10. Beginning Martial Arts. (2) Studio, three hours. Beginning-level study of Tai Chi Chuan and other martial arts forms. May be repeated for credit without limitation. P/NP or letter grading.

11. Yoga. (2) Studio, three hours. Beginning-level study of yoga. May be repeated for credit without limitation. P/NP or letter grading.

12. Beginning Special Topics. (2) Studio, three hours. Beginning-level study of variable movement practices. May be repeated for credit without limitation. P/NP or letter grading.


15. Beginning Modern/Postmodern Dance. (2) Laboratory, four hours. Study of modern and/or postmodern movement practice. May be repeated for credit without limitation. P/NP or letter grading.

16. Beginning Improvisation in Dance. (2) Laboratory, four hours. Introduction to creative exploration in movement through improvisational and compositional exercises that access and develop imagination, find relationship between imagination and dance making, and enrich movement vocabulary. May be repeated for credit without limitation. P/NP or letter grading.

19. Flat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

44. World Dance Histories. (5) Lecture, three hours; discussion, two hours. Comparative framework for looking at dance practices through time as they have developed around world, questioning relation of dance to culture and politics and providing students with tools for investigating histories of any given dance form. P/NP or letter grading.

45. Introduction to Dance Studies. (4) Lecture, three hours. Forced-choice cultural contexts. Introduction to discipline of dance studies, with focus on study of corporeality as key contemporary perspective on body. Multidisciplinary approach to dancing bodies conceptualized as social constructs, including attention to gender, race, class, and national identity. P/NP or letter grading.

52. Intermediate Special Topics. (2) Studio, three hours. Intermediate-level study of variable movement practices. May be repeated for credit without limitation. P/NP or letter grading.

56. Intermediate West African Dance. (2) Studio, three hours. Intermediate-level study of dances originating from Mandingo culture in sub-Saharan Africa. May be repeated for credit without limitation. P/NP or letter grading.


60. Intermediate Martial Arts. (2) Studio, three hours. Intermediate-level study of Tai Chi Chuan and other martial arts forms. May be repeated for credit without limitation. P/NP or letter grading.

63. Intermediate Ballet. (2) Studio, three hours. Intermediate-level study of ballet as movement practice. May be repeated for credit without limitation. P/NP or letter grading.

65. Intermediate Modern/Postmodern Dance. (2) Studio, four hours. Intermediate-level work in modern and/or postmodern movement practices. Technical training with emphasis on increasing skill. May be repeated for credit without limitation. P/NP or letter grading.

67A. Theories and Methods in Dance Composition I: Languages. (4) Seminar, two hours; studio, two hours; outside study, eight hours. Enforced requisite: course 1B. Examination of diverse movement sources from which dances are made. How do different choreographers envision vocabularies of movement they use? How do they select or create movement out of which they create dance? Answers to these questions in relation to broad range of artistic approaches, acknowledging that dance-making occurs distinctively in different cultural contexts and different moments. Readings about and viewing of videos of selected artists’ work and their different strategies for creating languages of their dances for comparison. Use of these analyses to assist in creative process for making new dances. P/NP or letter grading.

67B. Theories and Methods in Dance Composition II: Processes. (4) Seminar, two hours; studio, two hours; outside study, eight hours. Enforced requisite: course 67A. Examination of diverse movement processes through which creation of dance can take place. How do different choreographers conceptualize creative process of dance-making? What kinds of strategies do they use for sequencing their materials? Answers to these questions in relation to broad range of artistic approaches, acknowledging that dance-making occurs distinctively in different cultural contexts and different historical moments. Readings about and viewing of videos of selected artists’ work and their different strategies for their processes of creating dances for comparison. Use of these analyses to assist in creative process for making new dances. P/NP or letter grading.

70. Production Practicum. (2) Lecture, 90 minutes; activity, three and one half hours. Introduction to practical perspectives on producing events in world arts and culture, including but not limited to theatrical support and planning and executing lecture series. Introduction to professional stage production principles and hands-on experience in technical theater. May be repeated once for credit. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-divi- sion lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu- dents. Honors content noted on transcript. P/NP or letter grading.

98. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-divi- sion students under guidance of faculty mentor. Students must be in good academic standing and en-
Upper-Division Courses

117B. Theories and Methods in Dance Composition IV: Impacts. (4) Seminar, two hours; studio, two hours; outside study, eight hours. Enforced requisites: courses 16A, 67A, 67B. Exploration of function of dance to its audience. Synthesis of analyses undertaken in previous courses to determine how dances move their viewers. How do dances appeal to or address their audiences? How do dance vocabulary, sequence, style, and dynamics convey meaning? What are the effects? Answers to these questions in relation to broad range of artistic approaches, acknowledging that dance-making occurs distinctively in different cultural contexts and different historical moments. Different approaches to dance result in highly distinctive kinds of responses from audiences. Focus on creation of three in-depth studies, each of which endeavors to construct distinct kind of response from viewers. P/NP or letter grading.

117C. Advanced Topics in Choreography. (4) Lecture, four hours; studio, two hours; outside study, six hours. Designed for dance students who have prior coursework/experience in dance and composition. Thematic topics include contemporary issues and concerns such as image, essence, and abstraction; home, history, and memory; interculturalism; constructing identities. May be repeated for credit without limitation. P/NP or letter grading.

121. Music and Dance Collaborations. (4) Study, four hours. Requisites: courses 67A, 67B. Designed for dance students who have prior coursework/experience in music composition. Opportunity for directors, choreographers, and composers to work together creating and performing music for dance students who have prior coursework/experience in music composition. Concurrently scheduled with course C222. P/NP or letter grading.

145. Selected Topics in Dance Studies. (4) (Formerly numbered 145.) Lecture, four hours; studio, six hours; outside study, eight hours. Enforced requisites: courses 16A, 67A, 67B. Explores in depth a specific topic. Likely topics: dance and visual media; dance film, choreo-cinema; and impact of MTV. May be repeated for credit with topic change. Concurrently scheduled with course C245XP. P/NP or letter grading.

151. History and Theory of Modern/Postmodern Dance. (4) Lecture, four hours; studio, two hours; outside study, six hours. Introduction to key figures in creation of modern/Postmodern dance, their theories and philosophies and tracing of radical shift to postmodern dance that occurred in mid-20th century. Contemporary developments, both historical and theoretical. Students will conduct research, create a final project, and prepare a written paper. May be repeated for credit with topic change. Concurrently scheduled with course C152. P/NP or letter grading.

152. History and Theory of Modern/Postmodern Dance. (4) Study, four hours; studio, two hours; outside study, six hours. Enforced requisites: courses 16A, 67A, 67B. Further development and application of experience of it? What are factors that need to be considered when locating dance in one particular place? Answers to these questions in relation to broad range of artistic approaches, acknowledging that dance-making occurs distinctively in different cultural contexts and different historical moments. Examination of range of locations for dances, including proscenium stages, theaters in round, parks, sidewalks, temples, amphitheaters, village squares, and other site-specific locations. Development of dance with specific significance and how various artists have worked with place in construction of new dances. Use of these analyses to assist in creative process for making new works. P/NP or letter grading.

153. Choreographing Gender. (4) Lecture, three hours; laboratory, two hours; outside study, three hours. Focus on understanding of how gender and movement dancing impacts its meaning. How does occasion of dance, concert, festival, ritual, or celebration influence experience of it? What are factors that need to be considered when locating dance in one particular place? Answers to these questions in relation to broad range of artistic approaches, acknowledging that dance-making occurs distinctively in different cultural contexts and different historical moments. Examination of range of locations for dances, including proscenium stages, theaters in round, parks, sidewalks, temples, amphitheaters, village squares, and other site-specific locations. Development of dance with specific significance and how various artists have worked with place in construction of new dances. Use of these analyses to assist in creative process for making new works. P/NP or letter grading.

157. Rechoreographing Disability. (Same as Disability Studies M157.) Seminar, four hours. Through study of range of performance by, featuring, or about people who identify as disabled, reading and discussion of range of writing about experiences of disability and process of making work about disability by key artists and thinkers, the concept of choreography as political/cultural idea is broadly defined as scored movement and organization and behavior of bodies, as well as choreography as poetic form for expression of ideas, creative tool, or product. View, discuss, and discuss work, and embody ideas through movement and dance-making. P/NP or letter grading.

158. Choreographic Techniques. (4) Lecture, three hours; laboratory, two hours; outside study, three hours. Analysis of aesthetic codes and theatrical choreographic approaches as they intersect with conceptions of gender in U.S., with close attention to race, class, and sexuality. May be repeated for credit with topic change. P/NP or letter grading.

160. Topics in Body Mechanics. (4) Lecture, three hours; studio, one hour. Enforced requisites: courses 16A, 67A, 67B. Further development and application of experience of it? What are factors that need to be considered when locating dance in one particular place? Answers to these questions in relation to broad range of artistic approaches, acknowledging that dance-making occurs distinctively in different cultural contexts and different historical moments. Examination of range of locations for dances, including proscenium stages, theaters in round, parks, sidewalks, temples, amphitheaters, village squares, and other site-specific locations. Development of dance with specific significance and how various artists have worked with place in construction of new dances. Use of these analyses to assist in creative process for making new works. P/NP or letter grading.

166. Beyond Academia: Making Art in Real World. (Same as World Arts and Cultures CM168.) Lecture, four hours; outside study, eight hours. Enforced requisites: courses 16, 67A, 67B. Designed for juniors/seniors. Focus on understanding bureaucratic structures and regional histories conditioning production of art, examining such practical issues as publicity and grant-writing. Concurrently scheduled with course CM268. P/NP or letter grading.

170. Advanced Production. (1 to 2) Laboratory, three hours. Enforced requisites: courses 16, 67A, 67B. Designed for dance students who have had prior coursework/experience in dance. Concurrently scheduled with course C245. P/NP or letter grading.

174A. Projects in Dance. (2) Laboratory, four hours. Individualized major projects in choreography, performance, cultural studies, production, and media. May be repeated for credit without limitation. P/NP or letter grading.

174B. Projects in Dance. (Formerly numbered 174B) Laboratory, six hours. Individualized final showing, video viewing and comparison paper in choreography, performance, cultural studies, production, and media. May be repeated for credit without limitation. Concurrently scheduled with course C274B. P/NP or letter grading.

182. Dance and Visual Media. (4) Lecture, four hours. Examination of aesthetic differences between dance, film, and video and exploration of new aesthetic when they are combined. Analysis of record and documentary dance film, choreo-cinema, and impact of MTV, as well as integration of media with performance. Letter grade.

180. Dance for Camera. (4) Lecture, two hours; laboratory, two hours. Introduction to making dance for camera. Students acquire and apply basic video production skills for creating and post-production projects. With rudimentary tools—to film, frame, set up shots, storyboard, design shot lists, and set-up lists, log and capture, edit, and export footage—students may create their own dance for camera video projects. Students gain deeper understanding of conceptualization, practice, theory, history, and current state of dance for camera. Concurrently scheduled with course C280. Letter grade.

184. Production Arts Seminar. (4) Seminar, four hours. Theory and practice of production administration, including hands-on case studies for producing public events in arts and academia. Topics include, but are not limited to, history and theories of producing, mission statements, budgeting, marketing, public relations, fund-raising, legalities, and archiving. Concurrently scheduled with course C243. P/NP or letter grade.

186A-186B. Senior Projects in Dance. (5–5) Lecture, four hours; outside study, 11 hours. Course 186A is required to 186B. Limited to senior Dance majors. Theory and practice of production administration, including hands-on case studies for producing public events in arts and academia. Topics include, but are not limited to, history and theories of producing, mission statements, budgeting, marketing, public relations, fund-raising, legalities, and archiving. Letter grade.
188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individually scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SA. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 883 course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth, including reading, paper writing, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

Graduate Courses

211A-211E. Advanced Choreography. (4 each) Lecture, two hours; studio, two hours. Theoretical aspects of advanced choreography for students who have reached level of self-initiation of substantial creative works. Refinement and realistic self-evaluation; critical counsel by acknowledged choreographers. S/U or letter grading.

C222. Music and Dance Collaborations. (4) Studio, four hours. Requisites: courses 67A, 67B. Designed for dance and music students who have had prior coursework/experience in music composition. Opportunity for directors, choreographers, and composers to work together creating and developing material in their respective disciplines. Exploration of different forms and ways of approaching creative process of making dance and music, presenting musical units, audience participation, and developing skills for discussion, critique, and review. Concurrently scheduled with course C122. S/U or letter grading.

C243. Production Arts Seminar. (4) Seminar, four hours. Theory and practice of production administration, including hands-on case studies for producing public events in arts and academia. Topics include, but are not limited to, history and theories of producing, mission statements, budgeting, marketing, public relations, fund-raising, legalities, and archiving. Concurrently scheduled with course C184. S/U or letter grading.

C245XP. Selected Topics in Dance Studies. (4) Formerly numbered C245L. Lecture, four hours, outside study, eight days. Designed for graduate students. Selected topics in study of dance and corporeality. Consult Schedule of Classes for topics to be offered in specific terms. May be repeated for credit with topic change. Concurrently scheduled with course C145XP. S/U or letter grading.

C252. History and Theory of Modern/Postmodern Dance. (4) Lecture; four hours; studio; two hours; outside study, eight days. Designed for graduate students. Theories and practices of modern and postmodern dance and their historical and cultural contexts. Cross-listed for students who have had prior coursework in one or both historical periods. Literature, philosophical, theoretical and pedagogical issues. May be repeated for credit with topic change. Concurrently scheduled with course C152. S/U or letter grading.

C268. Beyond Academia: Making Art in Real World. (4) Same as World Arts and Cultures CM268. Lecture, four hours; outside study, eight hours. Designed for graduate students. Focus on understanding bureaucratic structures and regional histories conditioning creation of art in real world, including such practical issues as publicity and grant-writing. Concurrently scheduled with course CM168. S/U or letter grading.

C271. Dance Production: Variable Topics. (4) Lecture, four hours; laboratory, two hours. Foundational experience in range of dance production practices, including location design, set design, costume design, and stage management. Practical training in area covered, combined with theoretical inquiry into practice and opportunities for students to reflect on their own work and that of others. Completion of production project required. May be repeated for maximum of 12 units. Concurrently scheduled with course C171. S/U or letter grading.

C274B. Projects in Dance. (4) Laboratory, six hours. Individualized study, design, and production of dance project. S/U grading.

C280. Dance for Camera. (4) Lecture, two hours; laboratory, two hours. Introduction to making dance for camera. Students acquire and apply basic video production skills for creation of movement-based projects, including shooting setup, storyboard, shot lists, and set-up lists. Photo, video, and film footage—students design own dance for camera ideas. Projects achieve coherence and give viewers a chance to see dance in a different medium. May be repeated for credit without limitation. Concurrently scheduled with course C174B. S/U or letter grading.

C290A. Advanced West African Dance. (2) Studio, three hours. Advanced-level study of dances originating from Mandingo culture in sub-Saharan Africa. May be repeated for credit without limitation. May be repeated for credit without limitation. Concurrently scheduled with course C106A. S/U or letter grading.

C409A. Advanced Hip-Hop Dance. (2) Studio, three hours. Advanced-level study of hip-hop movement practices. May be repeated for credit without limitation. Concurrently scheduled with course C109A. S/U or letter grading.

C412A. Advanced Special Topics. (2) Studio, three hours. Advanced-level study of variable movement practices. May be repeated for credit without limitation. Concurrently scheduled with course C112A. S/U or letter grading.

C413A. Advanced Ballet. (2) Studio, three hours. Advanced-level study of ballet as movement practice. May be repeated for credit without limitation. Concurrently scheduled with course C113A. S/U or letter grading.

C415. Advanced Modern/Postmodern Dance. (2) Studio, six hours. Advanced-level work in modern and/or postmodern dance, with emphasis on increased understanding of movement principles and ability to apply these to performance. May be repeated for credit without limitation. Concurrently scheduled with course C115. S/U or letter grading.

441. Dance Production Practicum. (2 to 4) Laboratory, four to eight hours (one or two hours may be individualized consultation). Skills and understanding of production components. Concurrently scheduled with course C113A. S/U or letter grading.

452. Directed Field Study in Dance Education. (2 to 8) Seminar, one hour; field study, two hours minimum. Directed field study to provide teaching experience in community school or other approved site. No more than 4 units may be applied toward MA degree requirements. S/U grading.

490. Projects in Choreography and Performance. (2 to 8) Tutorial, one three-hour rehearsal per unit per week minimum. Creation, casting, and rehearsing of culminating concert. Students individually develop unique choreographic projects and perform at culminating concert by each student leading to fully realized and polished showcase reflecting professional achievement. May be repeated for maximum of 16 units. S/U or letter grading.

488. Professional Internship in Dance. (4, 8, or 12) Seminar, to be arranged. Full- or part-time supervised fieldwork. Limited to MFA students. Internship in dance, theater, film, or television organization. Participation in creative, administrative, technical work of professionals in their specialties. S/U or letter grading.

World Arts and Cultures

Lower-Division Courses

1. Introduction to World Arts and Cultures. (5) Lecture, three hours; discussion, one hour. Survey of con- cepts and theories involved in intercultural, interdisciplinary study of art, aesthetics, and performance. Ex- amination of interactions among various modes of human activity, role of style in daily life, performative representation of cultural identity and difference, and interaction of diverse artistic traditions. Letter grading.

2. Lower-Division Seminar. (5) Seminar, four hours; outside study, 11 hours. Variable topics seminar with focus on scholarly and practice-based research in arts. In-depth investigations of topics ranging from body in cultural context, interdisciplinary art-making, performance and pedagogy, critical examination of culture and performance, including individual and cul- tural identity through arts, creation of dance/theatrical performance, the theories and methodologies that shape practices and artistic performance, and other topics pertaining to broad fields of culture, performance, and dance. Research inquiry methods may include readings, as- signed written analysis, individual and collaborative assignments, and/or practice-oriented processes. Substantial culminating project integrating theoretical and practical components of selected seminar topic required. May be repeated for credit. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise, illuminating many paths of discovery at UCLA. P/NP grading.

20. Culture: Introduction. (5) Lecture, four hours. In- troduction to key concepts and major theoretical and methodological debates that characterize field of cul- tural studies, including discussion of notions of cul- ture, popular culture, subculture, youth culture, hegemony, gender, race, class, and national identity. Letter grading.

Introduction to American Folklore Studies. (5) Lecture, four hours; discussion, one hour; outside study, 10 hours. Cultural/historical survey of role of folklore in development of American civilization and of influence of American experience in shaping folklore in society; attention to current anthropological, creative, and arts-related areas of inquiry and analytical procedures. P/NP or letter grading.

M23. Introduction to American Indian Studies. (5) (Same as American Indian Studies M10.) Lecture, three hours; discussion, one hour; activity, one hour. Survey of selected Native North American cultures from pre-Western contact to contemporary period, with particular emphasis on early cultural diversity and diverse patterns of political, linguistic, social, legal, and cultural change in postcontact period. P/NP or letter grading.

24. World Arts, Local Lives. (8) Lecture, three hours; discussion, one hour. Use of Fowler Museum’s long- term exhibition entitled “Intersections: World Arts/ Local Lives” as object of study to examine many in- sights that arts can offer into social, political, and reli- gious experiences. Drawing heavily on cultures of Af- rica, Asia, Pacific, and indigenous Americas, both an- cient and contemporary, consideration of degree to which notions of aesthetics and efficacy are inter- related and independent in art forms made to inter- oduce in people’s lives in active, instrumental ways. Use of specific case studies to illustrate and interrogate theoretical paradigms. P/NP or letter grading.

33. Colonialisms and Resistance. (8) Lecture, three hours; discussion, one hour; activity, one hour. Study of indigenous worldviews as they are expressed through
Lecture, four hours; 100A. Art as Social Action. (5) - art, mythology, ritual, health practices, and languages, and logical differences between people. Examination of critical perspectives on social development, historical progress, and intellectual assimilation. P/NP or letter grading.


55. Intermediate World Arts Practices in Global and Transcultural Forms. (2) Studio, three hours; outside study, three hours. Intermediate-level study of world arts practices crossing national and cultural boundaries. Variable topics, such as body music, cross-cultural textile creation, or mural painting, in cultural and historical context. May be repeated for credit without limit. P/NP or letter grading.

78. Private Instruction in World Arts and Cultures, (2 to 10) Six hours. Designed for freshmen/sophomores. Private or semiprivate instruction in one world arts practice with distinguished community-based or theatrical work. May be repeated for maximum of 24 units. P/NP grading.

M79. Food Politics: Cultural Solutions to Political Problems. (5) - Same as Food Studies M79. Lecture, four hours; discussion, one hour. Examination of issues of environmental and public health effects of intensive and extensive agriculture, influence of corporations on government, animal ethics, food deserts and urban food insecurity, focus on representation of such issues in documentaries, public lectures, memoirs, novels, and visual art, as well as on initiatives to address such problems through policy and activism. P/NP or letter grading.

80. Video Tools and Techniques. (2) Laboratory, four hours. Introduction to video tools and practices to train students in key techniques of video production. Basic skills spanned to develop short videos for circulation via DVD and/or Internet. Practical exercises based on materials and instruction provided in class, spanning production and postproduction processes of video making. Evaluation of students on these exercises and culminating project. P/NP or letter grading.

85. Student Research Program. (1 to 10) Seminar, 90 minutes. Planning and execution of proposal for junior year of study, with attention to exploring resources of department and University as whole. P/NP grading.

90. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit regardless of independent study students. Honors content noted on transcript. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual research consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100A. Art as Social Action. (5) - Lecture, four hours; discussion, one hour. Designed for juniors/seniors. Discussion of what constitutes artist's social responsibility and how art work may be qualified to engage in direct political action. Study of tension between powers of this world and powers of art. P/NP or letter grading.

100B. Art as Moral Action. (5) - Lecture, four hours; discussion, one hour. Designed for juniors/seniors. One's ability to distinguish between right and wrong actions without violating values and norms. Study of cultural strategies of moral engagement, persuasion, and inquiry in personal and public life, including acts of conscience and civil disobedience. P/NP or letter grading.

101. Theories of Performance. (5) - Lecture, four hours; studio, two hours. Performance commonly refers to activities on proscenium stage. Exploration of that narrow notion of performance by delving into scholarly study of performance in and outside of institutions. May be repeated for credit with change in topics. P/NP or letter grading.

102. Upper-Division Seminar. (5) - Seminar, three hours. Variable topics seminar with focus on advanced practice-based research arts. In-depth investigations of topics addressing variable array of art genres including drawing, musical composition, painting, performance poetry, photography, sculpture, stand-up comedy, and visual histories and theories. Exploration of techniques of image and borders of area through making projects. P/NP grading.

103. Arts in Community. (5) - Lecture, four hours. Introduction to theoretical and practical understanding of field of community arts by and for multiple publics. Review of relevant issues in field and exploration of roles of arts and organizations in struggles for social change, representation, and community building. Through national and international examples, exploration of art works that emphasize participation of citizenry in cultural and political concerns. Performance, art, and exhibition. Examination of processes of creative thinking, community involvement, collaborative enterprise, research, and education in community arts. P/NP grading.

104. Representations in Theories and Practices. (5) - Lecture, three hours. Enforced requisite: course 20. Limited to juniors/seniors. Advanced survey into performance, postcolonial, and gender theories to critically analyze theories, specifically interrogating creation of art works supported by readings, assigned written analysis, supervised fieldwork, individual and collaborative assignments, and/or practice-oriented laboratory. Lecture and major project integrating theoretical and practical components of selected seminar topic required. May be repeated once for credit. Letter grading.

105. Legislative Theater for Race and Gender Justice. (5) - Same as African American Studies CM113B. Lecture, three hours; discussion, one hour (when scheduled). Exploration and application of range of interactive methods and arts-based strategies with participants from UCLA and broader Los Angeles community in order to research and influence public policy and legislative change. Students and campus partners create and perform legislative theater addressing issues of race, gender, and criminal justice system. Critical texts, collaborative work, and creative methods are used to engage perspectives on justice. Analysis of diverse and growing body of work on systems of research, writing, workshops, performances, and critiques of own original writings and performances developed in response to visiting scholars and community partners. Concurrently scheduled with course CM113B. P/NP or letter grading.

M113D. Spoken Word Workshop: Creative Writing and Performance Practicum. (4) - Same as African American Studies CM113D. Enrollment by consent of instructor. Shaped by, and consistently inspiring, broader movements for social and political change, practice of spoken word today provides creative opportunities for performers worldwide by resisting and remixing elements of traditional verse, participatory theater, and popular culture. To develop writing and performance skills, and to deeply understand selection of poets and performing artists who have shaped spoken word as known today, investigation of aesthetics and political movements of their time through critical essays and poetry from range of influential movements. P/NP or letter grading.

114. Performance Practicum. (1 to 4) Studio, three to 12 hours. Rehearsal and performance in selected community-based or theatrical work. May be repeated for credit without limitation. P/NP grading.

120. Selected Topics in Cultural Studies. (4) - Lecture, three hours. Designed for juniors. Selected topics in interdisciplinary study of arts and performance in cultural and historical context. Consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit with topic change. P/NP or letter grading.

121. Ethnography and Performance. (4) - Lecture, four hours; outside study, eight hours. Survey of some ways that ethnography and performance intersect, as development of some preliminary approaches to effectively document performance events. Reading of ethnographies of performances, as well as consideration of how performances can work effectively, P/NP or letter grading.

122. Healing across Cultures. (5) - Lecture, two and one half hours; discussion, one hour. Examination of multiple traditions of healing as recorded across cultures, ranging from unquestioned faith and vitality and comparisons to allopathic medicine. Study driven by theory (why people heal differently) and praxis (how things are done differently when body or health conditions differently). Broadly about body, health, curing, and performances of healing (as acts and spectacles). Students draw from and contribute to Archive of Healing as database and practical project. Consideration of questions about how cultural assumptions affect individual's options for seeking healing; what is dynamic between individual and community health; how changes in conceptions of body affect meaning of healing practices, such as culture of healing and approach to health varies across culture; how healing has been studied previously and new lines of inquiry; if methods of healing are available to everyone regardless of cultural histories of community protocols. Letter grading.

124. Introduction to Field-Based Research Methods. (5) - Lecture, three hours. Introduction to methods, techniques, and issues in conducting field-based research, including nature, variations, and limitations of major data-gathering procedures, ethical concerns, sampling, checks and controls, teamwork, interventions, and results as not only tangible and impersonal output of inquiry but also intangible. Through readings, discussion, and hands-on exercises, students learn how to plan fieldwork projects and write proposals, prepare consent forms and deal with ethical issues, conduct questionnaires, interview, use audiovisual documentation, and manage and present data. P/NP or letter grading.

M125A. Beyond Mexican Mural: Beginning Muralism and Community Diversity. (5) - Same as Art M186A and Chicana/o and Central American Studies M186A. Studio/lecture, four hours. Corequisite: course M125AL, Investigation of muralism as method of community education, development, and empowerment. Exploration of development of large-scale collaborative digitized created image and/or painting for placement in community. Students research design, and work with community participants. P/NP or letter grading.

M125AL-M125BL-M125CL. Beyond Mexican Mural: Muralism and Community Laboratory. (4–2–2) - Same as Art M186AL-M186BL-M186CL and Chicana/o and Central American Studies M186AL-M186BL-M186CL. Course M125AL is requisite to M125BL, which is requisite to M125CL. Mural and Digital Laboratory is art studio housed at Social and Public Art Resource Center in Venice, CA, where students work in community-based setting. Open to students during scheduled hours with laboratory tech support, it offers instruction as students independently in collaboration with design, research, and produce large-scale painted and digitally generated murals to be placed in community setting. P/NP or letter grading. M125AL, Beginning, Laboratory, four hours. Corequisite: course M125A, M125BL, Interme-
M125B. Beyond Mexican Mural: Advanced Muralsim and Community Development. (4) (Same as Art M186B and Chicana/o and Central American Studies M186B.) Studio/lecture, four hours. Requisite: courses M125B, M125AL. Corequisite: course M125BL. Continuation of investigation of muralism as method of community education, development, and empowerment. Exploration of issues through development of large-scale collaborative digitally created image and/or painting for placement in community. Students research, design, and work with community participants. Continuation of project through states of production, full-scale and community approval. P/NP or letter grading.

M125C. Beyond Mexican Mural: Advanced Muralism and Community Development. (4) (Same as Art M186C and Chicana/o and Central American Studies M186C.) Studio/lecture, four hours. Requisite: courses M125A, M125AL, M125BL. Corequisite: course M125CL. Continuation of investigation of muralism as method of community education, development, and empowerment. Exploration of issues through development of large-scale collaborative digitally created image and/or painting for placement in community. Students research, design, and work with community participants. Continuation of project through stages of production, full-scale and community approval. P/NP or letter grading.

M126. Whose Monument Where: Course on Public Art. (4) (Same as Art M18S and Chicana/o and Central American Studies M18S.) Lecture, four hours. Recommended corequisite: course M125A, M125B, or M125C. Examination of public monuments in U.S. as basis for cultural insight and critique of American values from perspective of artist. Use of urban Los Angeles as textbook in urban space issues such as who is public, whose monument at end of 20th century what defines neighborhoods, and do different ethnic populations use public space differently. P/NP or letter grading.

M128. Chicana Art and Artists. (4) (Same as Art M184 and Chicana/o and Central American Studies M175.) Lecture, four hours. Introduction to Chicana art and artists. Examination of Chicana aesthetic. Chicanas have developed unique experience and identity as Chicana artists. Letter grading.

C129. Food Customs and Symbolism. (4) Lecture, three hours. Designed for juniors/seniors. Introduction to foodways, with particular attention to customs and symbolism in America. Topics include sensory realm, child rearing, cooking, food and identity, food and its emotional significance, aversions and taboos, advertising, changing food habits, and American diet. Concurrently scheduled with course C229. P/NP or letter grading.

C130. Space and Place. (4) (Same as Architecture and Urban Design CM130.) Lecture, three hours. Survey of array of spaces and places from cross-cultural or comparative perspective and with performance emphasis. Focus on mutual interaction of human beings and their created environments. Emphasis on common, ordinary, anonymous, or vernacular nonbuilt environments, which are used and user of small-scale, traditional, and transitional communities around world. Concurrently scheduled with course CM230. P/NP or letter grading.

C132. Narrative and Oral Performance. (4) Lecture, four hours. Survey of concepts of story as text versus narrative as oral performance, studies of individual narrators, how stories are composed in performance, interaction of narrator and audience, how place and experience become embedded in narratives, modes of representing oral narrative, and politics of stories and oral performance. P/NP or letter grading.

C133. Textiles of World. (4) Lecture, four hours; discussion, one hour; laboratory, one hour. How cloth and clothing were and are made by hand-woven indigeneous societies. Use of textiles from Fowler Mu-
178. Advanced Private Instruction in World Arts and Cultures. (2 to 8) Studio, three to 12 hours. Designed for juniors/seniors. Private or semiprivate instruction in one world art practice with distinguished community-based artist to be arranged by students and approved by instructor. May be repeated for maximum of 24 units. P/NP grading.

M179. Food Activism in Los Angeles: Narrating Past, Imaging Futures. (4) Same as Food Studies M179.) Lecture, two hours; discussion, two hours. Introduction to study of diverse food cultures, representations, with focus on selected ethnographic, documentary, visual art, and performance practices. Focus on relationships between food access, food op- pression, food politics, and food ethics; and social histories of race, class, urban planning, and housing discrimination. Letter grading.

C180. Variable Topics in Video Production/Practice. (4) Lecture, two hours; laboratory, two hours. Enforced requisite: course 80. Training in low-budget and independent video and documentary practice as research tool. Visual ethnography combined with experimental film. Introduction to history, ethics, and aesthetics of documenting subjects such as culture, performance, and dance through video and documentary forms for both expression and experience. Film and documentary theory, ethnography, and phenomenology used to create innovative and critical forms of visual documentation. Skills include shooting, sound recording, editing, and final editing. May be repeated once for credit. Concurrently scheduled with course C280. Letter grading.

181. Ethnographic Film. (4) Lecture, four hours. Survey of ethnographic film and video, with focus on studies of expressive culture. Emphasis on critical and comparative approaches to visual study of culture, community, and arts. P/NP or letter grading.

C182. Film and Feminism. (B) Lecture, three hours. Designed for juniors/seniors. Introduction to feminist film theory to develop skills for feminist interpretations and analysis of films from the Hollywood cinema, European art film, and Asian cinema. Examination of psychoanalytical feminist, postfeminist film, and postcolonial theories. Concurrently scheduled with course C282. P/NP or letter grading.


185. Junior-Year Proposal. (1) Lecture, 90 minutes; outside study, 90 minutes. Limited to World Arts and Cultures majors. Planning and presentation of proposal (either senior focus or honors project) for sen- ior-year study, with attention to exploring resources of department and University as whole. May be repeated for credit. P/NP grading.

186A-186B. Senior Honors Projects in World Arts and Cultures. (5-8) Lecture, four hours; outside study, 11 hours. Course 186A is requisite to 186B. Limited to senior World Arts and Cultures majors. Application of concepts and content from interdisciplinary major and minor projects. Methodologies may include critical, comparative, ethnographic, and performance approaches. Lecture/semiformal with World Arts and Cultures faculty during first term; faculty-directed pre- sentations of individual projects during second term. Letter grading.

M187. Indigenous Film. (B) Same as American Indian Studies M187.) Seminar, one hour. Introduction to study of Indigenous filmic images and representations, with focus on selected ethnographic, documentary, animated, and feature films ranging from 1920 to present. P/NP or letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: course C188SA. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 885 course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu- dents. Honors content noted on transcript. P/NP or letter grading.

195. Community or Corporate Internships in World Arts and Cultures. (2 to 4) Tutorial, six hours. Intern- ship in supervised setting in community agency or business. Students meet on regular basis with in- structor and provide periodic reports of their experi- ence. May be repeated for maximum of 8 units. Indi- vidual contract with supervising faculty member required. P/NP or letter grading.

199. Directed Research in X. (4) Lecture, three hours; discussion, one hour. Preparation: 3.0 grade- point average in major. Limited to juniors/seniors. Su- pervised individual research or investigation under guidance of faculty member. Paper or project required. May be repeated for maximum of 10 units. Individual contract required. P/NP or letter grading.

Graduate Courses

200. Theories of Culture. (4) Seminar, three hours; outside study, nine hours. Introduction to history of culture concept in arts, humanities, and social sci- ences. Analysis of contemporary debates concerning ownership and use of world culture, and critical eluci- dation of study of culture. S/U or letter grading.

201. Theories of Performance. (4) Seminar, three hours; outside study, nine hours. Close reading and analysis of classic and contemporary studies of performance and related aesthetic practices. Familiariza- tion with ways in which performance is defined and deployed by scholars working in disciplines of anthro- pology, dance, folklore, linguistics, literature, musi- cology, performance studies, philosophy, sociology, and theater. S/U or letter grading.

202. Research Methodologies. (4) Seminar, three hours; outside study, nine hours. Hands-on course designed to help students develop understanding of many de- veloped qualitative research methods and designs they encounter in their work. Identification and cre- ation of research problems, development of designs, actual data collection, and analysis procedures to ad- dress those problems. S/U or letter grading.

203. Proseminar: Dance Studies. (4) Seminar, three hours; outside study, nine hours. Survey of theoretical issues and problems in study of dance and body movement in cultural, social, and historical context. S/U or letter grading.

204. Theories of Corporeality. (4) Seminar, three hours; outside study, nine hours. Cross-cultural and interdiscipli- nary perspectives on human body. Topics include re-presentations of body, embodiment of identity (including gender, race, ethnicity, and class identities), and analysis of dance and other so- matic modes of performance. S/U or letter grading.

207. Ethnography of Performance. (4) Seminar, three hours; outside study, nine hours. Survey of methods and methodological issues in ethnographic study of performance in cultural context. Field documentation, participant observation, oral history and interview techniques, performative dimensions of ethnographic research, ethics, and politics of ethnographic repre- sentation. S/U or letter grading.

210. Ethnography of and as Colonialism. (4) Seminar, three hours. Beginning with 1560 debates over Indian humanity and ranging to contemporary scholar- ship about and by indigenous peoples, focus on inter- sections of writing, colonialism, violence, and histo- riography in America. Exploration of relationship be- tween modernity and post-19th-century, Western, and academic practices of writing history. Development of critical stance on utility of colonial theories as such perspectives bear on anthropological and historical studies of indigenous religiosity. Regions include southwest Columbia, Ori- noco Delta in Venezuela, Valley of Mexico, and several others throughout the Latin American plains, and northeast. S/U or letter grading.

CM213B. Legislative Theater for Race and Gender Justice. (5) Same as African American Studies CM213B.) Lecture, three hours; discussion, one hour (when scheduled). Exploration of range of interactive methods and arts-based strate- gies with participants from UCLA and broader Los An- geles community in order to research and influence public policy and legislation. Students and campus partners create and perform legislative thea- ter addressing issues of race, gender, and criminal justice system. Critical texts, collaborative work, and creative methods are used to engage perspectives on justice. Analysis of diverse and growing body of work on systems of justice through research, writing, work- shops, performances, and critiques of own original works in performance. Response to visiting scholars and community partners. Concur- rently scheduled with course CM113B. S/U or letter grading.

216. Analyzing Narrative and Oral Performance. (5) Seminar, four hours. Designed for graduate students. Exploration of ways of documenting individual narra- tors and interpreting their styles and repertoires; how narrators conceptualize and perform narrative discourse, impact of audience and situated event on both narrating and story, how experiences and values are communicated through narrating, modes of repre- senting oral narrating, and politics of narrative and oral performance. S/U or letter grading.

220. Seminar: Culture and Performance. (4) Seminar, three hours; outside study, nine hours. Designed for graduate students. Variable topics in interdiscipli- nary study of expressive culture and performance in social and historical context. May be re- peated for credit with topic change. S/U or letter grading.

C229. Food Customs and Symbolism. (4) Lecture, three hours; outside study, nine hours. Introduction to foodways, with particular attention to cus- tom and symbolism in America. Topics include sen- sory realm, childhood experiences, food and identity, food and its emotional significance, aver- sions and taboos, advertising, changing food habits, and American diet. Concurrently scheduled with course C129. S/U or letter grading.

CM230. Space and Place. (4) Same as Architecture and Urban Design CM230.) Lecture, five hours. Survey of array of spaces and places from cross-cul- tural or comparative perspective and with perfor- mance emphasis, with focus on mutual interaction of
human beings and their created environments. Emphasis on common, ordinary, anonymous, or vernacular non-built and built environments, which are both and used to shape and be shaped by transitional communities around world. Concurrently scheduled with course CM130. S/U or letter grading.


C240XP. Healing, Ritual, and Transformation. (4) Formerly numbered CM240X. Lecture, four hours; outside study, eight hours. Designed for graduate students. Examination of how various contexts of health and wellness, not only individually but collectively. Exploration of structural inequalities within health care and medical sciences. Students are required to contribute weekly to service learning component, working with individuals and organizations in fields of health and wellness including healers, non-profits, and organizations working for social justice. May be concurrently scheduled with CM140XP. Letter grading.

C242. Myth and Ritual. (4) Lecture, four hours; outside study, eight hours. Designed for graduate students. Examination of the role of myths and rituals in the construction of identity and power. Focus on the construction of identity and power in the context of the arts. Concurrently scheduled with course C142. S/U or letter grading.

C245. Curating Cultures. (4) Lecture, three hours. Exploration of poetics and politics of exhibiting non-Western arts and cultures. Series of provocative case studies which aim to challenge readers' assumptions about the aesthetic, historical, and social contexts of non-Western art. Concurrently scheduled with course C145. S/U or letter grading.

C246. Politics of Performance. (4) Seminar, four hours; outside study, eight hours. Designed for graduate students. Focus on the role of performance in the politics of identity and power. Concurrently scheduled with course C146. S/U or letter grading.

C250. Critical Ethnographies. (5) Lecture, three hours. Enforced requisite: course 20 or 30. Survey of major tropes and rhetorical strategies to explicitly locate ethnographic method as key component of cross-cultural understanding. Examination of categorical notions of insider and outsider while also developing various perspectives on performed acts of identity formation. Concurrently scheduled with course C150. S/U or letter grading.

C251. Ethnography of Religions. (4) Lecture, three hours. Religions are cultural systems helping people to cope with misfortune, deal with death, and find fulfillment in life. Case studies reveal commonalities across cultures as cosmologies define moral being in world, divination determines causes of difficulty, spirit mediumizations provide intervention, and sacred arts render deeds tangible. Nonjudgmental comparative investigation stressing conversation. Concurrently scheduled with course C151. S/U or letter grading.

C252. Visual Cultures. (4) Lecture, three hours. How are ways of seeing constructed through culture, gender, religion, class, and nation? Theories and case studies are woven into understanding of how social processes such as gaze is determined and image economies are negotiated. Topics include scopic regimes, aesthetics of streamlined design, and visuality and liberty. Concurrently scheduled with course CM102. S/U or letter grading.

C258. Theorizing Arts Activism. (4) Seminar, three hours. Historizing and theorizing of arts activism to provide context for concerted analysis, creation, and promotion of social change. Concurrently scheduled with course CM102. S/U or letter grading.

C259. Art and Global Health. (4) Seminar, three hours. Exploration of interface of arts- and health-based methodologies in pursuit of improved health outcomes, using examples from international projects created and supported by UCLA Art and Global Health Center. Readings include texts by artists and arts organizers, health professionals, and medical literature. Seminar members propose their own arts-based health promotion interventions. Concurrently scheduled with course C159. S/U or letter grading.

C268. Art in Real World. (4) Same as Dance CM268. Lecture, four hours; outside study, eight hours. Designed for graduate students. Focus on understanding bureaucratic structures and regional histories conditioning creation of art in real world, including such practical issues as publicity and grant-writing. Concurrently scheduled with course CM168. S/U or letter grading.

C273. Sound Resources for Performance. (4) Lecture, three hours; studio, one hour; outside study, eight hours. Designed for graduate students. Exploration of music, in search of interesting, new, and unusual. Investigation of musical possibilities via record store, Internet, and music library; environmental sounds and patterns; body (clapping, stepping, and singing); and hardware store (found sound). Participants collaborate with fellow students in creative efforts and in presentations of research results. Concurrently scheduled with course C173. S/U or letter grading.

C280. Variable Topics in Video Production/Practice. (4) Lecture, two hours; laboratory, two hours. Enforced requisite: course 200. Enrolled students must present their own coursework and independent video and documentary practice as research tool. Visual ethnography combined with experimental film. Introduction to history, ethics, and aesthetics of documentary subgenres, performance, and dance among range of forms for bodily expression and experience. Film and documentary theory, ethnography, and phenomenology used to create innovative and critical forms of visual documentation. Skills include cinematography, sound recording, interview, and digital editing. May be repeated once for credit. Concurrently scheduled with course C180. Letter grading.


C295. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

400. Directed Professional Activities. (2 to 8) Lecture, to be arranged. Directed projects in professional editing, bibliography, filmography, videography, conference and festival direction, and other professional activities. May not be applied toward MA degree requirements. May be repeated. S/U grading.

451. Teaching Assistant Seminar. (2) Seminar, one hour; laboratory, three hours. Required of all World Arts and Cultures Department teaching assistants. Lectures, discussion, readings, and practice teaching. May be repeated once for credit. S/U grading.

478. Advanced Private Instruction in World Arts and Cultures. (2 to 8) Studio, three to 12 hours; outside study, three to 12 hours. Private or semiprivate instruction with distinguished community-based artist to be arranged by students and approved by instructor. May be repeated for maximum of 24 units. S/U grading.

480. Seminar: Research Topics. (2 to 4) Seminar, two hours. Outside study, eight hours. Concurrently scheduled with course CM142. S/U grading.

495. Teaching Assistant Seminar. (2) Seminar, one hour; laboratory, three hours. Required of all World Arts and Cultures Department teaching assistants. Lectures, discussion, readings, and practice teaching. May be repeated once for credit. S/U grading.

496. Teacher Preparation in World Arts and Cultures. (2) Seminar, two hours. Directed work in preparation of course syllabi and discussion of topics relevant to developing teaching skills. Fundamental principles and methods with which to design course syllabi and gather resources for courses. Topics include development of teaching philosophy, evaluating/ selecting course content, teaching methodologies, assessment/evaluation/grading practices, and consideration of practical, administrative, and ethical issues. Students meet with instructor to review specific needs as they progress in development and elaboration of course plans. Microteaching sessions provide context for applying concepts and principles discussed. S/U grading.

596A. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. S/U or letter grading.

596R. Directed Study or Research in Hospital or Clinic. (2 to 8) Tutorial, to be arranged. S/U grading.

597. Preparation for Master’s Comprehensive Examination or MFA Qualifying Examination. (2 to 8) Tutorial, to be arranged. Preparation for MA or MFA comprehensive examination or PhD qualifying examination. S/U grading.


Writing Programs
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Overview
Writing Programs is committed to inclusive pedagogy and student success, serving undergraduates through a curriculum in composition and English as a second language (ESL), as well as through the Undergraduate Writing Center (UWC). Writing Programs serves as the chief resource for writing and English language instruction through entry-level writing, first-year composition, writing-in-the-disciplines, and professional writing courses. Its courses play a vital role in preparing undergraduates from diverse linguistic and academic-skill backgrounds to succeed as writers/communicators in their UCLA studies as well as in future professional contexts. Writing Programs’ courses facilitate discovery, understanding, analysis, inspiration, community building, and global citizenship.

In addition, Writing Programs serves international graduate students as writers and communicators through graduate-level academic writing courses that satisfy the UCLA ESL requirement, elective writing workshops, and oral communication courses for international students who plan to serve as TAs and need to satisfy the Test of Oral Proficiency (TOP) requirement.

During the summer, matriculated UCLA students can complete some of their undergraduate writing requirements. Writing Programs also offers international summer visitors a suite of second language writing and communication courses.

Writing Programs works closely with the Office of Equity, Diversity, and Inclusion to help all students experience academic belonging, and bring together members of the UCLA and Los Angeles communities through service learning courses, summer bridge programs for high school students, the UCLA prison education program, and public events. Writing Programs educational initiatives promote the impact of writing, writ large, around issues of self expression, public discourse, diversity, and experiential learning.

Undergraduate Study
The undergraduate curriculum develops writing skills in linguistic, visual, and digital forms, and encourages students to see the classroom as a place to be challenged by new ideas, to investigate, problem-solve, reflect, imagine, think and rethink, and ultimately, to learn. Writing Program’s undergraduate teaching mission is extended by the UWC, which aids thousands of students annually from all disciplines and all divisions at UCLA to communicate effectively in their coursework.

Entry-Level Writing
Every student who does not satisfy the Entry-Level Writing requirement by presenting transfer credit or acceptable test scores is required to take, as early as possible during the first year in residence, English Composition 1, 1A, 1B, 2, or 2I as determined by performance on the Analytical Writing Placement Examination (AWPE). Students who have not otherwise satisfied the Entry-Level Writing requirement and who have not taken the AWPE before entering UCLA must take it in their first term. For more information, see Entry-Level Writing in Undergraduate Study.

English as a Second Language Requirement
All entering undergraduate students whose native language is not English and who have not otherwise satisfied the English as a Second Language (ESL) requirement may be required to take one or more English composition courses designed for multilingual students (1A, 1B, 2). First-year undergraduate students are placed in the courses based on the AWPE. Transfer students are placed in the courses based on the UCLA English as a Second Language Placement Examination (ESLPE). Transfer students who are required to take the ESLPE include those who have not yet satisfied the Intersegmental General Education Transfer Curriculum (IGETC), and those held at the discretion of Undergraduate Admission. The ESLPE may be taken once only.

Graduate Study
A curriculum in writing pedagogy for graduate students is also offered. Graduate writing instructors from across campus benefit from intensive writing pedagogy training as preparation for teaching freshman composition (satisfies Writing I requirement) and writing in the disciplines (satisfies Writing II requirement). Writing Programs also provides writing pedagogy training for teaching assistants (TAs) in the Samuels School of Engineering, and the general education freshman cluster program, the Freshman Summer Program and the Freshman Summer Program in partnership with the Academic Advancement Program. Teaching assistants interested in expanding their professional teaching profile as writing specialists can pursue a graduate certificate in Writing Pedagogy, and participate in the certificate annual teaching symposium.

English as a Second Language Requirement
All entering graduate students whose native language is not English and who have not otherwise satisfied the English as a Second Language (ESL) requirement may be required to take one or more ESL courses. Students are placed in the courses based on the UCLA English as a Second Language Placement Examination (ESLPE) and may be held for up to two ESL courses (300, 301).

The following students are exempt from the ESL requirement: students who hold a bachelor’s or higher degree from a university located in the U.S. or in another country (e.g., Australia, Barbados, Canada, Ireland, Jamaica, New Zealand, United Kingdom) in which English is both the primary spoken language of daily life and the medium of instruction, or who have completed at least two years of full-time study at such an institution; and students with a score of 100 or better on the Test of English as a Foreign Language Internet-Based Test (TOEFL iBT), or at least a 7.5 overall band score on the International English Language Testing System (IELTS) examination. See International Applicants in Graduate Study.
Graduate Certificate
Writing Programs offers a graduate certificate in Writing Pedagogy.

English as a Second Language

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20. Conversation and Fluency. (4) Lecture, four hours. Emphasis on speaking fluently in English by examining rules of conversation, participating actively in class discussions, making group presentations, and completing out-of-class assignments designed to promote interaction with native speakers and familiarize international students with UCLA campus and local community. Offered in summer only. P/NP or letter grading.

21. Pronunciation. (4) Lecture, four hours. Designed to improve clarity, accuracy, and understanding of spoken English through study and practice of pronunciation features as they occur in real speech, using models from television, movies, and online talks. Emphasis on individualized feedback through audorecording and videorecording technology. Offered in summer only. P/NP or letter grading.

22. Public Speaking. (4) Lecture, four hours. Emphasis on making presentations, interacting with audience members, and leading group discussions. Videorecording of student performances to allow students to improve through self and peer evaluation, as well as through individualized instructor feedback. Offered in summer only. P/NP or letter grading.

23. American Culture through Film. (4) Lecture, four hours. Development of critical thinking skills through study and viewing of American films. Emphasis on understanding and using idiomatic language, expanding vocabulary, recognizing dialect differences, and reflecting on cultural similarities and differences. Offered in summer only. P/NP or letter grading.

24. Preparation for American Universities. (4) Lecture, four hours. Designed for international students planning to study at American universities. Students research suitable undergraduate or graduate programs, interview advisers at local universities, and learn to write effective personal statements. Additional focus on expanding vocabulary, reading comprehension, and discussion skills by viewing and analyzing variety of American films. Emphasis on understanding and using idiomatic language, expanding vocabulary, recognizing dialect differences, and reflecting on cultural similarities and differences. Offered in summer only. P/NP or letter grading.

25. Academic Reading and Writing. (4) Lecture, four hours. Designed to improve reading speed, comprehension, and knowledge of academic writing conventions. Emphasis on synthesizing information from sources, providing proper citations, and avoiding plagiarism. Focus on development of ability to revise and edit one’s own writing. Offered in summer only. P/NP or letter grading.

26. Business Communication: Speaking. (4) Lecture, four hours. Emphasis on giving business and marketing-focused presentations (both individual and group), handling audience questions, and running effective meetings. Videorecording of student performances to allow students to improve through self and peer evaluation, as well as through individualized instructor feedback. Offered in summer only. P/NP or letter grading.

27. Business Communication: Writing. (4) Lecture, four hours. Emphasis on writing persuasive texts for diverse business audiences. Topics include writing effective summaries, preparing reports, research papers, and developing professional online profile. Offered in summer only. P/NP or letter grading.

28. English through Language, Culture, and Society. (4) Lecture, four hours. Survey of selective language structures through their occurrence within contemporary cultural and societal topics within thematic, content-based English language learning environment. Focus on understanding and applying these structures to improve fluency while enhancing critical thinking skills. Meets in conjunction with salient written/spoken assignments that situate language within authentic contexts. Topics may include gender, sexuality, politics, humor, intercultural communication, media, technology, commercial issues, and local/regional issues. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

97A. Variable Topics in English as a Second Language. (4) Lecture, four hours. Specialized topics in English as second language or English for academic purposes. Emphasis on improving topics covered in/on/audience to whom course is directed. May be repeated for credit with topic change. Offered in summer only. P/NP (undergraduates), S/U (graduates), or letter grading.

97EL. Variable Topics in English as a Second Language. (2) Lecture, two hours. Enforced requisite: course 33B or proficiency demonstrated on English as a Second Language Placement Examination. Specialized focus in English as second language or English for academic purposes. Emphasis varies according to topics covered and/or audience to whom course is directed. May be repeated for credit with topic change. P/NP (undergraduates), S/U (graduates), or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

103. Pronunciation for Multilingual Students. (4) Lecture, four hours. Emphasis on accurate articulation of sounds, word stress, rhythm, linking between syllables, intonation, and other features of fluent spoken English, using variety of videorecorded models and online pronunciation resources. Individualized feedback provided through frequent recording assignments. P/NP or letter grading.


105. Advanced Grammar and Style for Multilingual Students. (4) Lecture, five hours. Requisite: sat...
English Composition

Lower-Division Courses

1. Introduction to University Discourse. (4) Lecture, four hours. Requisite: proficiency demonstrated on Analytical Writing Placement Examination. Introduction to university-level critical reading and academic writing. Engagement in substantial and regular writing and revision assignments through practicing and building on reading, writing, and rhetorical skills. Emphasis on revision, developing syntactic variety and academic vocabulary, and editing for grammar and style. Completion of course with grade of C or better is requisite to course 2. Letter grading.

1A. Intermediate Composition for Multilingual Students. (4) Lecture, five hours. Enforced requisite: proficiency demonstrated on Analytical Writing Placement Examination (first-year students) or English as a Second Language Writing Placement Examination (transfer students). Development of academic writing skills with focus on reading comprehension, vocabulary development, and fundamental composition techniques, with additional work on grammar and editing. Letter grading.

1B. High-Intermediate Composition for Multilingual Students. (4) Lecture, five hours. Requisite: proficiency demonstrated on Analytical Writing Placement Examination (first-year students) or English pass on Second Language Placement Examination (transfer students) or course 1A (C or better). Development of academic writing skills with focus on synthesis, sources, argumentation, critical thinking, academic reading, and vocabulary, with additional work on grammar and editing. Letter grading.

1C. Advanced Composition for Multilingual Transfer Students. (5) Lecture, four hours. Requisite: proficiency demonstrated on English as a Second Language Placement Examination (enforced) or course 1A (C or better). Development of academic writing skills with focus on writing process, grammatical structures key to clear and effective style, and practice with major forms of academic writing, with additional work on writing, article, and communication with grade of C or better satisfies English as a Second Language requirement. Letter grading.

2. Approaches to University Writing. (5) Lecture, four hours. Requisite: proficiency demonstrated on Analytical Writing Placement Examination (enforced) or course A (C or better). Second course in university-level discourse, with analysis and critique of university-level texts. Transcripts of actual teaching assistants. Communication patterns include building rapport, giving instructions, handling questions, and interacting in office hours. Microteaching performances video-recorded for self, peer, and instructor evaluation. S/U grading.

2A. Approaches to University Writing for Multilingual Students. (6) Lecture, six hours. Requisite: demonstrated proficiency on Analytical Writing Placement Examination (enforced) or course 1B (C or better). Second course in university-level discourse, with analysis and critique of university-level texts. Transcripts of actual teaching assistants. Communication patterns include building rapport, giving instructions, handling questions, encouraging participation, and organizing lessons. Microteaching performances video-recorded for self, peer, and instructor evaluation. S/U grading.

2B. Presentation and Discussion-Leading Skills for International Teaching Assistants. (4) Lecture, five hours. Satisfies Test of Oral Proficiency (TOP) requirement for international graduate students who received marginal pass on TOP. Focus on stress, rhythm, and intonation of fluent spoken English using videos and transcripts of actual teaching assistants. Communication patterns include building rapport, giving instructions, handling questions, encouraging participation, and organizing lessons. Microteaching performances video-recorded for self, peer, and instructor evaluation. S/U grading.


311. Classroom Communication for International Teaching Assistants. (5) Lecture, five hours. Satisfies Test of Oral Proficiency (TOP) requirement for international graduate students who received marginal pass on TOP. Focus on stress, rhythm, and intonation of fluent spoken English using videos and transcripts of actual teaching assistants. Communication patterns include building rapport, giving instructions, handling questions, and interacting in office hours. Microteaching performances video-recorded for self, peer, and instructor evaluation. S/U grading.

312. Classroom Communication for International Teaching Assistants II. (4) Lecture, five hours. Satisfies Test of Oral Proficiency (TOP) requirement for international graduate students who received marginal pass on TOP. Course 311 is not requisite to 312. Focus on stress, rhythm, and intonation of fluent spoken English using videos and transcripts of actual teaching assistants. Communication patterns include building rapport, giving instructions, handling questions, encouraging participation, and organizing lessons. Microteaching performances video-recorded for self, peer, and instructor evaluation. S/U grading.

3. English Composition, Rhetoric, and Language. (5) Lecture, three hours. Requisite: demonstrated proficiency on Analytical Writing Placement Examination or course 1 or 21 (C or better). Second course in university-level discourse, with analysis and critique of university-level texts. Transcripts of actual teaching assistants. Communication patterns include building rapport, giving instructions, handling questions, encouraging participation, and organizing lessons. Microteaching performances video-recorded for self, peer, and instructor evaluation. S/U grading.


5. English Composition, Rhetoric, and Language (Service Learning). (5) Formerly numbered 3DS. Lecture, three hours; fieldwork, two hours. Enforced requisite: satisfaction of Entry-Level Writing requirement or course 2 or 2I (C or better). Investigation of difference and diversity through writing and rhetoric. Critical examination of structures and institutions that promote asymmetrical power relations as well as responses of diverse groups to these inequalities. Original argumentation that engages with difference and responds to complexities of diverse societies. Service learning adds to understanding of diversity by offering firsthand interactions with diverse communities students are learning about. Completion of 20 hours of on-site service learning and development of critical thinking skills about diversity through classroom discussions, focused readings, and service-learning experiences, as well as through reflective and analytical writing and research. Completion of course with grade of C or better satisfies Writing I requirement. Letter grading.


12. Second Language Placement Examination (transfer students). (5) Lecture, four hours. Requisite: proficiency demonstrated on Analytical Writing Placement Examination or course 1 or 2 (C or better). Multilingual communication patterns include building rapport, giving instructions, handling questions, encouraging participation, and organizing lessons. Microteaching performances video-recorded for self, peer, and instructor evaluation. S/U grading.

5W. Literature, Culture, and Critical Inquiry. (5) Lecture, four hours. Enforced requisite: course 3. Use of analysis of literary works within cultural context to engage students in critical thinking and writing about issues important to academic inquiry and responsible citizenship. Minimum of 20 pages of revised text required in addition to regular informal writing exercises. Satisfies Writing II requirement. Letter grading.

6W. Language, Culture, and Discourse. (5) Lecture, four hours. Enforced requisite: course 3. Course examines social structure and cultural values. Readings in linguistic analysis, language acquisition, sociolinguistics, and pragmatics provide foundation as students analyze authentic language as it is used in private and public contexts. Minimum of 15 to 20 pages of revised writing required. Satisfies Writing II requirement. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP or letter grading.

50. Writing Workshop. (2) Lecture, five hours. Open only. P/NP or letter grading.

51. Writing Workshop. (2) Lecture, two hours. Limited to students admitted to one UC campus who have not completed their first year of college coursework. Introduction to demands of university writing and often untaught conventions that govern it. Writing techniques developed to address specific writing tasks such as timed examination, application essay, effective e-mail, and college paper. Offered in summer only. P/NP or letter grading.

52. Writing and Critical Thinking for Pre-College Scholars. (4) Lecture, 10 hours. Limited to students admitted to VIP Scholars Program at UCLA. Introduction to demands of university writing, including research writing, with special focus on helping students think critically about world around them and their place in it within social justice framework. Offered in summer only. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to upper division students. Enforced requisite: demonstrated proficiency on Analytical Writing Placement Examination or informed self-placement administered through Writing Programs. Corequisite: course 1 or 2. May be applied toward graduation; repeatable for credit. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to upper division students. Enforced requisite: demonstrated proficiency on Analytical Writing Placement Examination or informed self-placement administered through Writing Programs. Corequisite: course 1 or 2. May be applied toward graduation; repeatable for credit. Honors content noted on transcript. P/NP or letter grading.

Writing Programs / 879
Upper-Division Courses

100W. Interdisciplinary Academic Writing. (5) Lecture, four hours. Requisites: course 3 or 3H or English as a Second Language 36. Designed for sophomores/juniors/seniors. Course in academic writing suitable for both lower- and upper-division students that helps them develop academic papers with range of complexity and length. Focus on conventions of academic prose and genres across disciplines. Written assignments include common forms of academic writing such as argument, research paper, and/or critical essay. Satisfies Writing II requirement. Letter grading.

100WD. Academic Writing Workshop. (5) Lecture, four hours. Requisites: course 3, 3D, 3DS, or 3E. Course in academic writing suitable for both lower- and upper-division students that helps them develop academic papers with range of complexity and length. Focus on conventions of academic prose and genres across disciplines. Written assignments include common forms of academic writing such as argument, research paper, and/or critical essay. Investigation of difference and diversity through writing and rhetoric. Critical examination of structures and institutions that promote asymmetrical power relations, and responses of diverse social inequalities. Original argumentation that engages with difference and response to complexities of diverse societies. Satisfies Writing II requirement. Letter grading.

110. Writing Adjunct. (4) Lecture, four hours. Requisites: satisfaction of Entry-Level Writing requirement, course 3 or 3H. Students must be concurrently enrolled in course 110 (consult Schedule of Classes for courses so designated). Writing assignments use materials from adjacent course and reflect and develop analytic writing skills needed in that course. May be repeated for credit with consent of instructor. P/NP or letter grading.

120A. Language Study for Teachers: Elementary School. (4) Lecture, four hours. Requisite: satisfaction of Entry-Level Writing and English Composition requirements. Survey of topics in English linguistics of special interest to school teachers, including English language acquisition and development; language attitudes; regional and social dialects of American English; bilingual schooling; contribution of English language study to teaching of reading, writing, spelling, and literature. P/NP or letter grading.


123. Information Literacy and Research Skills. (1) Lecture, one hour. Preparation: satisfaction of Writing I requirement. Designed to help students become information literate, so they know how to identify, locate, critically evaluate, and use print and electronic information effectively and ethically. Closely interwoven with Writing Programs courses that have information/research-related assignments. P/NP or letter grading.

129A-129D. Academic Writing in Disciplines. (4 each) Lecture, four hours. Requisites: seniors/novices. Advanced study of writing conventions in specific disciplinary areas, with focus on analysis and development of writing expertise in common discursive forms, stylistic patterns, and research practices in given discipline. Each course may be taken independently for credit. P/NP or letter grading. 129A. Literature. 129B. Social Sciences. Lecture; three hours; discussion, one hour; 129C. Physical and Life Sciences; 129D. Fine Arts.

130A. Professional Writing: Digital Writing and Web Literacy. (5) Lecture, four hours. Requisites: satisfaction of Entry-Level Writing requirement, course 3. Emphasis on writing for digital environments such as websites, blogs, newsletters, and social media. Common professional settings for these skills include journalism, political campaigns, Internet marketing, and corporate communication. P/NP or letter grading.

130B. Professional Writing: Business and Entrepreneurship. (5) Lecture, four hours. Requisites: satisfaction of Entry-Level Writing requirement, course 3. Emphasis on developing written, oral, and visual communication skills for entrepreneurial settings. Common tasks including pitching idea, seeking funding for startup, or promoting product or service. P/NP or letter grading.


130D. Professional Writing: Nonprofits and Public Engagement. (5) Lecture, four hours. Requisites: satisfaction of Entry-Level Writing requirement, course 3. Development of ability to write persuasively and effectively in both nonprofit and public sectors. Writing genres include mission and vision statements, grant proposals, public service announcements, and outreach campaigns. P/NP or letter grading.

130E. Professional Writing: Arts and Entertainment. (5) Lecture, four hours. Requisites: satisfaction of Entry-Level Writing requirement, course 3. Emphasis on the economy of writing and effective use of material and performances in areas such as film, television, theater, music, art/design, podcasts, and video games. Writing genres include critical reviews, recaps, promotional materials, treatments, and profiles. P/NP or letter grading.

131A-131C-131D. Specialized Writing. (4–4–4) Lecture, four hours. Requisite: satisfaction of Entry-Level Writing and English Composition requirements. Designed for seniors/juniors. Advanced writing course designed to help students develop stylistic, formal, and argumentative sophistication in various rhetorical contexts, including different sections that emphasize rhetorical values of major professions and research areas. Each course may be taken independently for credit. P/NP or letter grading. 131A. Law and Politics; 131C. Medicine and Public Health; 131D. Media and Communications.

131B. Specialized Writing: Business and Social Policy. (5) Lecture, four hours. Requisite: satisfaction of Entry-Level Writing and English Composition requirements. Designed for juniors/seniors. Advanced writing course designed to help students develop stylistic, formal, and argumentative sophistication in various rhetorical contexts, including different sections that emphasize rhetorical values of major professions and research areas. Each course may be taken independently for credit. P/NP or letter grading.

132. Variable Topics in Rhetoric and Writing. (5) Lecture, four hours. Requisites: satisfaction of Entry-Level Writing and English Composition requirements. Designed for juniors/seniors. Advanced writing course designed to help students develop stylistic, formal, and argumentative sophistication in various rhetorical contexts, including different sections that emphasize rhetorical values of major professions and research areas. May be taken independently for credit. P/NP or letter grading.

133. Topics in Writing for Multimedia Environments. (5) Lecture, four hours. Requisites: satisfaction of Entry-Level Writing requirement, course 3. Special topics in professional writing exploring current developments, issues, or debates within art, entertainment, science, or video game industries. May be repeated for maximum of 10 units. P/NP or letter grading.

134. Topics in Science Writing. (5) Lecture, four hours. Requisites: satisfaction of Entry-Level Writing requirement, course 3. Special topics in professional writing exploring current developments, issues, or debates within specific field of science or technology. May be repeated for maximum of 10 units. P/NP or letter grading.

135. Professional Writing: Writing for Audio. (5) Formerly numbered 130F. Lecture, four hours. Requisites: satisfaction of Entry-Level Writing requirement, course 3. Focus on writing for listening audiences such as podcasts and radio, building brand awareness to reach them, and engineering clean audio. Common professional settings for these skills include audio journalism, political campaigns, Internet marketing, and corporate communication. P/NP or letter grading.

136. Practical Writing and Editing. (5) Lecture, four hours. Requisites: satisfaction of Entry-Level Writing requirement, course 3. Focus on writing for listening audiences such as podcasts and radio, building brand awareness to reach them, and engineering clean audio. Common professional settings for these skills include audio journalism, political campaigns, Internet marketing, and corporate communication. P/NP or letter grading.

137. Writing for Public Speaking. (5) Lecture, four hours. Requisites: satisfaction of Entry-Level Writing requirement, course 3. Emphasis on careful preparation, rehearsal, and delivery of professional presentations including design of effective visuals, choice of multimodal forms. Student performances videorecorded for extensive self, peer, and instructor feedback. P/NP or letter grading.

M138. Topics in Creative Writing. (5) Same as English M138. Seminar, three hours. Requisite: course 3 or 3D or 3DS or 3SL. Introductory workshop in genre(s) of instructor choice, that may include mixed genres, playwriting, screenwriting, literary nonfiction, creative nonfiction. May be repeated for maximum of 10 units. P/NP value term not permitted. May be repeated for maximum of 15 units. May not be used to satisfy workshop requirements for English creative writing concentration. P/NP or letter grading.

M141. Current Methods of Language Teaching. (5) Same as Linguistics M141. Lecture, four hours; discussion, one hour. Enforced requisite: Linguistics 20. Special topics of the theory and practice of teaching second languages, including (1) past and present methods used to teach second languages, (2) current theory and practice underlying skills-based instruction and integrated approaches, and (3) factors that affect second language acquisition and learning. Development of knowledge base in and rational base for design, development, implementation, and evaluation of second language instruction programs. P/NP or letter grading.

142. Teaching Grammar and Style. (4) Lecture, four hours. Requisite: Linguistics 20. Survey of English language structures and conventions to better understand relationships among forms/structure, meaning, and stylistic effects. Design of language instructors’ ability to explain structures and to articulate nuances of meaning. Exploration of grammar and style in terms of activity design and lesson building. P/NP or letter grading.

175. Apprenticeship in Composition Tutoring. (2) Seminar, two hours. Enforced requisite: satisfaction of Writing II requirement. Composition Peer Learning Facilitators (PLFs) who work in Undergraduate Writing Center provided with ongoing mentoring in composition and peer learning methodologies. Overview of language, writing, and literacy needs of diverse college-age writers, including developing writers, multilingual writers, and nonnative English-speaking (NNS) writers. Provides opportunity to reflect critically on
M185. Professional Writing Capstone. (4) Same as English M185. Seminar, four hours. Limited to junior/senior Professional Writing minors. Topical writing workshop on rhetorical strategies useful in written and multimodal genres. Intended to provide students with opportunity for serious engagement with writing project in their minor specialization under close faculty supervision. Preparation of an extensive composition with feedback from peer review, and develop research projects in consultation with colleagues, instructor, and faculty and librarians. Culminates with completion of literature review, senior thesis, or thesis chapter. P/NP or letter grading.

M192. Undergraduate Practicum in English: Journals. (2) Same as English M192.) Seminar, two hours. Limited to students in College Honors Program. Designed as adjunct to upper-division literature course. Exploration of topics of greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

M192H. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division literature course. Individual study with lecture course instructor to explore topics of greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

180. Research Practice. (5) Formerly numbered M180.) Lecture, four hours. Advanced workshop designed for juniors and seniors engaged in large-scale research projects or social/public service. Students hone research, critical reading, and writing skills through class sessions, digital research notebook, and writing workshops. Students practice giving, receiving, and incorporating feedback through peer review, and develop research projects in consultation with colleagues, instructor, and faculty and librarians. Culminates with completion of literature review, senior thesis, or thesis chapter. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate education course. Exploration of topics of greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division literature course. Individual study with lecture course instructor to explore topics of greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Graduate Courses

300. Teaching English. (4) Lecture, four hours. Required of candidates for single subject credential in English. Study of theories of rhetoric, composition, reading, and literature as they apply to secondary school English classes. P/NP or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel to be appointed by department head or fellow. Teaching apprenticeship under active guidance of faculty mentor. May be repeated for credit with consent of instructor. P/NP or letter grading.
texts. Practical concerns of creating assignments, responding to and grading essays, and conducting peer reviews and conferences. May be repeated for credit. S/U grading.

495P. Teaching Preparation Seminar: Empowering Culturally Diverse Student Writers. (2) Seminar, two hours. Limited to graduate students. Recommended for all teaching assistants planning to teach English composition as part of AAP’s summer bridge programs. Focus on pedagogy that serves heterogeneous classrooms, with emphasis on diversity of race, socioeconomic status, citizenship status, and academic preparedness. Practical concerns include lesson planning and professionalization for composition instructors. S/U grading.

495S. Supervised Summer Teaching of Language and Composition. (2) Seminar, 90 minutes. Prerequisite: course 495A or 495C. Recommended for all teaching assistants teaching English as a second language, English composition, and Writing II courses during summer. Focus determined on individual basis according to class appointed and may include oral skills pedagogy, composition pedagogy, course design, assessment of student performance, and specialized problems that may occur in intensive summer language and/or composition courses. Supervision during appointment and mentor meetings and reflection on teaching experience following summer appointment. S/U grading.

496. Special Projects in Language and Writing Pedagogy. (1 to 4) Tutorial, three hours. Limited to Writing Pedagogy graduate certificate students. Reflective teaching experience, practicum experience, specialized curriculum development project, or independent research project under guidance of faculty mentor. Individual contract required. S/U grading.

499. Academic Professionalization Colloquium. (2) Colloquium/workshop, three hours every other week. Limited to graduate students. Rotating speakers on topics such as designing digital teaching portfolio, drafting academic/teaching curriculum vitae (CV), writing application letters for academic jobs, and pursuing alternative academic careers. Speaker sessions and panels to be followed by workshops. Revision of application letter, CV, teaching portfolio, or other relevant document to be determined in consultation with colloquium organizer. S/U grading.
Appendixes

Appendix A: University Administrative Officers

University of California (UC) administrative officers include the systemwide Board of Regents, Office of the university president, and chancellors of the ten state campuses. UCLA officers include administrative and academic executives, and deans of the College and schools.

UC Board of Regents

Terms of Regents appointed by the Governor expire March 1 of the year in parentheses. The student Regent and alumni Regents serve a one-year term beginning July 1 and ending June 30 of the year shown.

Regents Ex Officio

Michael V. Drake, President of the University
Keith Ellis (2024), Vice President, Alumni Associations of UC
Eleni T. Kounalakis, Lieutenant Governor of California
Gavin C. Newsom, Governor of California
Joel Raznick (2024), President, Alumni Associations of UC
Anthony Rendon, State Assembly Speaker
Tony K. Thurmond, State Superintendent of Public Instruction

Appointed Regents

Maria Anguiano (2028)
Elaine E. Batchlor (2033)
Carmen Chu (2030)
Michael Cohen (2030)
Gareth Elliott (2025)
Howard Peter Guber (2029)
Jose M. Hernandez (2033)
Richard Leib (2026)
Hadi Makarechian (2032)
Ana Matosantos (2034)
Lark Park (2029)
John A. Pérez (2024)
Janet Reilly (2028)
Mark Robinson (2034)
Richard Sherman (2026)
Jonathan Jay Sures (2032)
Merhawi Tesfai (2024), Student Regent

Faculty Representatives

Steven Cheung (2024), Senate Vice Chair
James Steintrager (2024), Senate Chair

Staff Adviser

Jo Mackness (2024), Berkeley

Officers of the Regents

Alexander Bustamante, Executive Vice President; Chief Compliance and Audit Officer

Gareth Elliott, Vice Chair
Richard Leib, Chair
Tricia Lyall, Secretary and Chief of Staff
Gavin C. Newsom, President
Charles F. Robinson, Senior Vice President; General Counsel
Jagdeep Singh Bachher, Vice President, Investments; Chief Investment Officer

UC Office of the President

Michael V. Drake, University President
Nathan Brostrom, Executive Vice President; Chief Financial Officer
Alexander Bustamante, Executive Vice President; Chief Compliance and Audit Officer
Carrie Byington, Executive Vice President; UC Health
Rachael Nava, Executive Vice President; Chief Operating Officer
Katherine S. Newman, Executive Vice President, Academic Affairs; Provost
Michael Reese, Senior Vice President, External Relations and Communication (Interim)
Charles F. Robinson, Senior Vice President; General Counsel
Jagdeep Singh Bachher, Vice President, Investments; Chief Investment Officer
Pamela Brown, Vice President, Institutional Research and Academic Planning
Yvette Gullatt, Vice President, Graduate, Undergraduate, and Equity Affairs; Vice Provost; Chief Diversity Officer
Glenda Humiston, Vice President, Agriculture and Natural Resources
Craig Leasure, Vice President, National Laboratories
Cheryl Lloyd, Vice President, Human Resources
Theresa A. Maldonado, Vice President, Research and Innovation
Van Williams, Vice President, Information Technology Services; Chief Information Officer
Kathleen Fullerton, Associate Vice President, State Government Relations
Christopher Harrington, Associate Vice President, Federal Government Relations

UC Campus Chancellors

Gene D. Block, Los Angeles
Carol T. Christ, Berkeley
Howard Gillman, Irvine
Sam Hawgood, San Francisco
Pradeep K. Khosla, San Diego
Cynthia K. Larive, Santa Cruz
Gary S. May, Davis
Juan Sánchez Muñoz, Merced
Kim A. Wilcox, Riverside
Henry T. Yang, Santa Barbara

UCLA Administrative Officers

Gene D. Block, Chancellor
Darnell M. Hunt, Executive Vice Chancellor and Provost
Michael J. Beck, Administrative Vice Chancellor
Allison Baird-James, Vice Chancellor; Chief Financial Officer (Interim)
Ina Bryant, Vice Chancellor, Legal Affairs (Interim)
Mitchell J. Chang, Vice Chancellor, Equity, Diversity, and Inclusion (Interim)
Monroe Gorden, Jr., Vice Chancellor, Student Affairs
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Michael S. Levine, Vice Chancellor, Academic Personnel
John C. Mazziotta, Vice Chancellor, Health Sciences
Mary Osako, Vice Chancellor, Strategic Communications
Rhea Tureltaub, Vice Chancellor, External Affairs
Roger M. Wakimoto, Vice Chancellor, Research and Creative Activities
Gary A. Clark Jr., Vice Provost, Enrollment Management (Interim)
C. Cindy Fan, Vice Provost, International Studies and Global Engagement
Erin Sanders O’Leary, Vice Provost, Teaching and Learning
David K. Yoo, Vice Provost, Institute of American Cultures
Kate Jakway-Kelly, University Registrar (Interim)

Deans of the UCLA College and Schools

College of Letters and Science
  Adriana Galván, Undergraduate Education Division
  Miguel A. García-Garibay, Senior Dean, Physical Sciences Division
  Tracy L. Johnson, Life Sciences Division
  Alexandra Minna Stern, Humanities Division
  Abel Valenzuela, Jr., Social Sciences Division (Interim)
Paul H. Krebsbach, School of Dentistry
Christina A. Christie, School of Education and Information Studies
Ah-Hyung Alissa Park, Henry Samueli School of Engineering and Applied Science
Susan L. Ettner, Graduate Education Division
Michael E. Waterstone, School of Law
Antonio E. Bernardo, John E. Anderson Graduate School of Management
Steven M. Dubinett, David Geffen School of Medicine
Eileen L. Strempel, Herb Alpert School of Music
Lin Zhan, School of Nursing
Anastasia Loukaitou-Sideris, Meyer and Renee Luskin School of Public Affairs (Interim)
Ronald S. Brookmeyer, Jonathan and Karin Fielding School of Public Health
Brian E. Kite, School of Theater, Film, and Television (Interim)
Eric A. Bullard, University Extension–Continuing Education

Appendix B: Endowed Chairs

Although UCLA is a public institution, private gifts are increasingly important in maintaining the quality of the three missions of education, research, and community service. Among the principal forms of private support are endowed professorships, or chairs, which support the educational and research activities of distinguished faculty members.

As of publication, UCLA has 531 endowed chairs that have been approved by the UC Office of the President.

School of the Arts and Architecture
  Alma M. Hawkins Memorial Chair
  S. Charles Lee Chair in Architecture and Urban Design
  Harvey S. Perloff Chair
  Lynda and Stewart Resnick Endowed Chair in Art
  UCLA Art Council Professorship in Art

School of Dentistry
  Alumni and Friends Oral and Maxillofacial Surgery Endowed Chair
  Alumni and Friends Presidential Endowed Chair
  Thomas R. Bales Chair in Orthodontics
  Thomas K. Barber Endowed Chair in Pediatric Dentistry
  Naomi and Jim Ellison Endowed Chair
  Lee Family Endowed Chair
  Momentum Endowed Chair in Special Patient Care
  Nobel Biocare Endowed Chair in Surgical Implant Dentistry
  Dr. No-Hee Park Chair in Dentistry
  Tarson Family Endowed Chair in Periodontics
  Jack A. Weichman Chair in Endodontics
  Bob and Marion Wilson Endowed Chair
  Felix and Mildred Yip Endowed Professorship in Dentistry

School of Education and Information Studies
  Martin and Bernard Breslauer Professorship in Bibliography
  Allan Murray Carter Chair in Higher Education
  Dr. Rosalyn Shostak Heyman and Dr. Max L. Heyman, Jr., Endowed Chair
  George F. Kneller Chair in Education and Anthropology
  George F. Kneller Chair in Education and Philosophy
  Presidential Chair in Education and Diversity
  Pritzker Family Endowed Chair in Education to Strengthen Families
  Wasserman Endowed Deanship of Education and Information Studies

Henry Samueli School of Engineering and Applied Science
  L.M.K. Boelteir Chair in Engineering
  Collins Aerospace Term Chair for Excellence
  Collins Aerospace Term Chair for Innovation
  Vijay K. Dhir Chair in Engineering
  Traugott and Dorothea Frederking Endowed Chair
  Norman E. Friedmann Chair in Knowledge Sciences
  Armando and Elena Hairestian Chair in Engineering and Medicine
  Tatsuo Itok Endowed Chair in Electrical and Computer Engineering
  Leonard Kleinrock Term Chair in Computer Science
  Evalyn Knight Chair in Engineering
  Levi James Knight, Jr., Chair for Innovation
  Levi James Knight, Jr., Term Chair for Excellence
  J.M. Maguire Term Chair in Engineering
  Richard G. Newman AECOM Endowed Chair in Civil Engineering
  Nippon Sheet Glass Company Chair in Materials Science
  Northrop Grumman Chair in Electrical Engineering
  Northrop Grumman Chair in Electrical Engineering/Electromagnetics
  Northrop Grumman Opto-Electronic Chair in Electrical Engineering
  Mukund Padmanabhan Term Chair
  Mukund Padmanabhan Term Chair Electrical Engineering
  Ralph M. Parsons Foundation Chair in Chemical Engineering
  Jonathan B. Postel Chair in Computer Systems
  Jonathan B. Postel Chair in Networking
  Presidential Endowed Chair in Structural Engineering
  Pritzker Chair in Sustainability
  Raytheon Company Chair in Electrical Engineering
  Raytheon Company Chair in Mechanical Engineering
  Charles P. Reames Endowed Chair in Electrical Engineering
  Ben Rich Lockheed Martin Chair in Aeronautics
  Sabol-Scott Term Chair in Civil and Environmental Engineering
John P. and Claudia H. Schauerman Endowed Chair in Engineering
William Frederick Seyer Chair in Materials Electrochemistry
Ronald and Valerie Sugar Dean of Henry Samueli School of Engineering and Applied Science
Ronald and Valerie Sugar Endowed Chair in Engineering
Symantec Term Chair in Computer Science
Carol and Lawrence E. Tannas, Jr., Endowed Chair in Engineering
Carol and Lawrence E. Tannas, Jr., Endowed Term Chair in Engineering
William D. Van Vorst Chair in Chemical Engineering Education
Volgenau Chair for Engineering Excellence
Volgenau Chair for Engineering Innovation
Volgenau Endowed Chair in Engineering
Wintek Endowed Chair in Electrical Engineering
Neria and Manizheh Yomtoubian Endowed Chair in Cancer and Risk Sciences

School of Law
Norman Abrams Endowed Chair in Law
Omar and Azmeralda Alfi Chair in Islamic Law
Harry Graham Balter Chair in Law
Barrall Family Endowed Chair in Tax Law and Policy
David A. Binder Endowed Chair in Clinical Law
Connell Professorship of Law
Jesse Dukeminier Professorship in Law
Dan and Rae Emmett Endowed Chair in Environmental Law
Rosalinde and Arthur Gilbert Foundation Endowed Chair in Civil Rights and Civil Liberties
Carole Goldberg Endowed Chair in Native American Law
Paul Hastings Endowed Chair in Business Law
Robert Henigson Endowed Chair in Legal Ethics
Pete Kameron Endowed Chair in Law
Pete Kameron Chair in Law and Social Justice
Michael J. Klein Chair in Law
Richard C. Maxwell Chair in Law
McDonald/Wright Chair in Law
Lowell Milken Chair in Law
Arjay and Frances Fearing Miller Chair in Law
Alicia Minana Chair in Law
Rachel F. Moran Endowed Chair in Law
Susan Westerberg Prager Endowed Chair in Law
Honorable Harry Pregerson Endowed Chair in Law
David G. and Dallas P. Price Chair in Law
Promise Institute Chair in Comparative and International Law
Promise Institute Chair in Human Rights
David Sanders Professorship in Law and Medicine
Greg Sarris Endowed Chair in Native American Law
Michael H. Schill Endowed Chair in Law
Gary T. Schwartz Endowed Chair in Law
Security Pacific Bank Chair
Ralph and Shirley Shapiro Chair in Law
Shirley and Ralph Shapiro Endowed Chair in Environmental Law
Jonathan D. Varat Endowed Chair in Law
William D. Warren Chair in Law
Frank G. Wells Endowed Chair in Environmental Law
Stephen Yeazell Endowed Chair in Law
Eric M. Zolt Chair in Tax Law and Policy

College of Letters and Science
Armen A. Alchian Chair in Economic Theory
Maurice Amado Chair in Sephardic Studies
Jahangir and Eleanor Amuzegar Chair in Iranian Studies
Aris Anagnostos Family Chair in Hellenic Studies
Joyce Oldham Appleby Endowed Chair of America in the World
Thomas M. Asher Endowed Chair in Microbiology
George and Nouhad Ayoub Chair in Life Sciences Innovation
Marilyn Beaudry-Corbett Endowed Chair in Mesoamerican Archaeology
Bedari Kindness Institute Endowed Chair
Mani L. Bhaumik Presidential Endowed Chair in Theoretical Physics
Theresa McShane Biggs and Henry P. Biggs Centennial Term Chair in Linguistics
Paul D. Boyer Professorship in Molecular Biology and Biochemistry
Henry J. Bruman Chair in German History
Dr. E. Bradford Burns Chair in Latin American Studies
Robert N. Burr Endowed History Department Chair
Chair of California and the American West
Edward W. Carter Chair in European Art
James and Carol Collins Chair in College of Letters and Science
Brian P. Copenhaver Chair
Lloyd E. Cotsen Chair in Archaeology
D.J. and J.M. Cram Chair in Organic Chemistry
Lore and Gerald Cunard Chair in UCLA/Getty Conservation Program
Charles E. Davidson Endowed Chair in Economics
Charles E. Davidson Endowed Term Chair in Economics
De Logi Chair in Biological Sciences
Donald R. Dickey Chair in Vertebrate Biology
A. Richard Diebold, Jr., Endowed Chair
Distinguished Chair in Environment and Sustainability
Navin and Pratima Doshi Chair in Indian Studies
Dubchansky Endowed Chair in Economics
Dunn Family Endowed Chair in Data Theory
Mr. and Mrs. C.N. Flint Professorship in Philosophy
Christopher S. Foote Term Chair
Evan Frankel Endowed Chair
Andrea M. Ghez Centennial Term Chair in Astronomy and Astrophysics
Benjamin Graham Centennial Endowed Chair in Value Investing
Gloria and Paul Griffin Chair in Philosophy
Haruhisa Handa Professorship in Shinto Studies
John Charles Hillis Chair in Literature
Marvin Hoffenberg Chair in American Politics and Public Policy
Dr. Myung Ki Hong Endowed Chair in Materials Innovation
Dr. Myung Ki Hong Endowed Chair in Polymer Science
Walter Hopps Chair in Modern and Contemporary Art
Richard Hovannisian Chair in Modern Armenian History
Marcia H. Howard Term Chair in Literary Studies
June and Alex Jaffee Chair in Women and Politics
Michael and Alice Jung Endowed Chair in Medicinal Chemistry and Drug Discovery
Sady and Ludwig Kahn Chair in Jewish History
Penny Kanner Endowed Chair in Women’s Studies
Renée and David Kaplan Presidential Endowed Chair in Philosophy
Fred Kavli Chair in Nanosystems Sciences
Kershaw Chair in Ancient Eastern Mediterranean Studies
Ibn Khaldun Endowed Chair in World History
Leon and Joanne V.C. Knopff Chair in Physics and Geophysics
Alexander and Renee Kolin Endowed Professorship in Molecular Biology and Biophysics
George P. Kolovos Family Centennial Term Chair in Hellenic Studies
Venu and Ana Kotamraju Endowed Chair in Economics
Lauren B. Leichtman and Arthur E. Levine Astrophysics Endowed Chair
Madeleine L. Letessier Chair in French and Francophone Studies
Thomas E. Lifka Chair in History
Kevin Love Fund Centennial Chair
Vladimir and Lydia Markov Chair in Russian Literature
John McCague Career Development Chair
Dorothy L. Meier Social Equities Chair
Anne K. Mellor Presidential Chair in Women’s Writing
Ronald J. Mellor Chair in Ancient History
Sherie and Donald Morrison Chair in Immunology
Sherie L. Morrison Chair in Microbiology, Immunology, and Molecular Genetics
Morrison Family Endowed Chair
Franklin D. Murphy Chair in Italian Renaissance Studies
Narekatsi Chair in Armenian Studies
Gary B. Nash Endowed Chair in United States History
Waldo W. Neikirk Term Chair
John E. Anderson Graduate  
School of Management  

Allstate Chair in Insurance and Finance  
Andersen Worldwide Chair in Management  
John E. Anderson Chair in Management  
Marion Anderson Chair in Management  
Arden Realty Chair  
Donnalis ’86 and Bill Barnum Endowed Term Chair in Management  
Robert D. Beyer ’83 Chair in Management  
California Chair in Real Estate and Land Economics  
Edward W. Carter Chair in Business Administration  
William M. Cockrum Chair in Entrepreneurship  
William M. Cockrum Professorship in Entrepreneurial Finance  
James A. Collins Chair in Management  
Warren C. Cordon Chair in Money and Financial Markets  
Ernst and Young Chair in Accounting  
Laurence D. and Lori W. Fink Endowed Chair in Finance  
Ford II Chair in International Management  
Joel Fried Chair in Applied Finance  
Lee and Seymour Graff Endowed Professorship  
Goldyne and Irwin Hersh Chair in Money and Banking  
Hans Hufschmid Chair in Management  
IBM Chair in Management  
Joseph Jacobs Chair in Entrepreneurial Studies  
Neil Jacoby Chair in Management  
Japan Alumni Chair in International Finance  
Bud Knapp Marketing Professorship  
Harry and Elsa Kunin Chair in Business and Society  
J. Clayburn La Force Chair in Management  
William E. Leonhard Chair in Management  
Los Angeles Times Professor of Management and Policy  
Justice Elwood Lui Endowed Term Chair in Management  
Chauncey J. Medberry Chair in Management  
Peter W. Mullin Chair in Management  
Howard Noble Chair in Management  
Paine Chair in Management  
George Robbins Chair in Management  
Sanford and Betty Sigoloff Chair in Corporate Renewal  
Term Chair in Teaching Excellence  
Term Chair in Management  
UCLA Anderson Board of Visitors Term Chair in Management  
UCLA Anderson Dean’s Term Chair in Management  
UCLA Anderson Faculty Term Chair in Management  
J. Fred Weston Chair in Finance  
Harold Williams Chair in Management  
Susan Wojcicki Chair in Data Science and Innovation  
Ho-Su Wu Chair in Management  
Bing (‘86) and Alice Liu Yang Endowed Term Chair in Management  
Bing (‘86) and Alice Liu Yang Endowed Term Chair in Management and Innovation  
Bing (‘86) and Alice Liu Yang Endowed Term Chair in Teaching Excellence  

David Geffen School of Medicine  

William S. Adams, MD, Chair in Medicine  
Ahmanson Chair in Ophthalmology  
Mary D. Allen Chair in Vision Research  
Lori Altshuler Endowed Chair in Mood Disorders  
Harlan C. Amstutz, MD, Endowed Chair in Anthropology  
Wallis Annenberg Endowed Chair in Integrative East-West Medicine  
Leonard Apt Endowed Chair in Pediatric Ophthalmology  
Archstone Foundation Endowed Chair in Geriatrics  
Stephen J. Ryan—Arnold and Mabel Beckman Foundation Chair  
Casey Lee Ball Endowed Chair in Pediatric Nephrology  
Wiley F. Barker Chair in Vascular Surgery  

LeRoy Neiman Term Chair  
Nickoll Family Endowed Chair in History  
1939 Society Samuel Goetz Chair in Holocaust Studies  
Joan Palevsky Chair in Classics  
Pourdavoud Endowed Director’s Chair  
Presidential Chair in Chemistry  
Presidential Chair in Institute of the Environment  
Presidential Chair in Modern European History, Art, and Culture  
Presidential Chair in Molecular Cell Biology  
President’s Chair in Developmental Immunology  
Howard and Astrid Preston Term Chair in Astrophysics  
Pritzker Chair in Environment and Sustainability I  
Pritzker Chair in Environment and Sustainability II  
Ramanujan Visiting Professorship  
Hans Reichenbach Chair in Scientific Philosophy  
Peter Reill Chair in European History (1450 to Modern)  
Howard Reiss Career Development Chair  
John D. and Edith M. Roberts Term Chair in Organic Chemistry  
Maria Rowena Ross Term Chair in Biological Sciences  
Michael and Irene Ross Endowed Chair in Yiddish Studies  
Marcie H. Rothman Presidential Chair in Food Studies  
Musa Sabi Chair in Iranian Studies  
Edward W. Said Professorship in Comparative Literature  
David Saxson Presidential Term Chair in Mathematics  
David Saxson Presidential Term Chair in Physics  
David S. Saxson Presidential Chair in Physics  
Randy Schekman and Sabeeha Merchant Centennial Term Chair  
David O. Sears Presidential Endowed Chair in Division of Social Sciences  
Johanna F. and Joseph H. Shaper Family Chair in Microbiology  
Shapiro Family Endowed Chair in Modern Political Theory  
Joan Silsbee Chair in African Cultural Archaeology  
Louis B. Slichter Chair in Geophysics and Planetary Physics  
Louis B. and Martha B. Slichter Endowed Chair in Geosciences  
Kenneth L. Sokoloff Chair in Economic History  
Charles Speroni Chair in Italian Literature and Culture  
Staglin Family Chair in Psychology  
Steinmetz Chair in Classical Archaeology and Material Culture  
Irving and Jean Stone Endowed Chair I  
Irving and Jean Stone Endowed Chair II  
Irving and Jean Stone Endowed Chair III  
Jean Stone Chair  
Keith and Cecilia Terasaki Endowed Chair in Physical Sciences  
Keith and Cecilia Terasaki Presidential Endowed Chair in Division of Life Sciences  
Kenneth N. Trueblood Endowed Chair in Chemistry and Biochemistry  
Richard P. and Linda S. Turco Term Chair  
UCLA Foundation Chair  
Viterbi Family Endowed Chair in Mediterranean Jewish Studies  
Alexander von Humboldt Endowed Chair in Geography  
Walter and Shirley Wang Endowed Chair in Medicinal Drug Discovery  
Scott Waugh Endowed Chair in Division of Social Sciences  
Eugen Weber Chair in Modern European History  
Robert and Dorothy Wellman Chair in Medieval History  
Bernice Wenzel and Wendell Jeffrey Term Endowed Chair in Behavioral Neuroscience  
Bernice Wenzel and Wendell Jeffrey Term Endowed Chair in Cognitive Neuroscience  
Bernice Wenzel and Wendell Jeffrey Term Endowed Chair in Developmental Neuroscience  
Dean M. Willard Chair in Chemistry  
Saul Winston Chair in Organic Chemistry  
Linda and Fred Wudl Term Chair  
Tadashi Yanai Endowed Chair in Japanese Literature  
Kyoko Yuki and Masamichi Takesaki Endowed Chair in Operator Algebras  
Stanley M. Zimmerman Endowed Chair in Economics and Finance  
Jeffrey and Helen Zink Endowed Professional Development Term Chair in Chemistry  

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Kamal A. Batniji, MD, Endowed Chair for Humanitarian Care and Innovation in Laryngology and Head and Neck Surgery
Dena Bat-Yacov Endowed Chair in Psychiatry
Ulrich Batzdorf, MD, Chair in Spinal Neurosurgery
Louis D. Beaumont Chair in Surgery
Donald P. Becker, MD, Term Chair in Neurosurgery
Donald and Vivienne Bellissario Chair
Jerome L. Belzer Chair in Medical Research
Lillian and Alvin L. Bergman Chair in Vascular Research
Bing Professorship in Urologic Research
Anna and Harry Borun Chair in Geriatrics/Gerontology
Bowyer Professorship in Medical Oncology
Saul Brandman Endowed Chair in Pulmonary Arterial Hypertension
Judson Braun Chair in Biological Psychiatry
Geri and Richard Brawerman Chair in Pediatric Neurosurgery
Gary L. Brinderson Family Chair in Neuropsychiatric Care
Eli and Eddyte L. Broad Foundation Chair in Inflammatory Bowel Disease Research
Rubin Brown Chair in Pediatric Neurology
Burnett Family Chair
Ronald W. Busuttil, MD, PhD and Sidney Kimmel Endowed Chair in Transplantation Surgery
Thomas C. Calcaterra, MD, Chair in Head and Neck Surgery
Joseph Campbell Chair of Child Psychiatry
Iris Cantor Chair in Breast Imaging
Iris Cantor Endowed Chair in Women’s Health
Edward W. Carter Chair in Internal Medicine
Castera Chair in Cardiology
Vincent and Stella Coates Chair in Molecular Neurobiology
Tony Coelho Chair in Neurology
Ronald and Susan Cohen Term Chair in Childhood Development and Cerebral Palsy
Carol and James Collins Chair
Carol and James Collins Chair in Geriatric Medicine
William E. Connolly Chair in Cardiothoracic Transplantation
Elliot Corday Chair in Cardiovascular Medicine and Science
Norman Cousins Chair in Psychoneuroimmunology
Crump Chair in Medical Engineering
Karen and Frank Dabby Endowed Chair in Ophthalmology
Dr. Alfonso A. Davies Endowed Chair in Honor of Paul Crandall, MD, for Epilepsy Research
M. Philip Davis Chair in Microbiology and Immunology
Robert and Kelly Day Chair in Cardiothoracic Surgery
Robert and Kelly Day Chair in General Surgery
Robert and Kelly Day Chair in Surgical Outcomes
Robert and Kelly Day Chair in Transplantation
Jean B. deKernion, MD, Endowed Chair in Urology
Wini and William J. Dignam, MD, Endowed Chair in Obstetrics and Gynecology
Joshua S. and Beth C. Friedman Chair for Women’s Genetic Research
Diller–von Furstenberg Family Endowed Chair in Human Genetics
Diller–von Furstenberg Family Endowed Chair in Precision Clinical Genomics
John Bartley Dillon, MD, Endowed Chair in Anesthesiology
Roy and Carol Doumani Chair
Roy and Carol Doumani Chair in Urologic Oncology
Robert and Patricia Draine Endowed Chair in Geriatric Medicine
Dumont–UCLA Chair in Transplantation Surgery
Jeffrey J. Eckardt, MD, Term Chair in Orthopaedic Surgery
Max Factor Family Foundation Chair in Nephrology
Charles Kenneth Feldman Chair in Ophthalmology
Marjorie Fine, MD, Endowed Chair in Clinical General Surgery
Elgie and Isaac Fogelman Endowed Chair in Pediatric Neurology
Eric W. Fonkalsrud, MD Endowed Chair in Pediatric Surgery
Dr. Daniel X. Freedman Administrative Chair in Academic Psychiatry
John Douglas French Alzheimer’s Foundation Endowed Chair
Friends of Semel Endowed Term Chair
Joaquin M. Fuster Chair in Cognitive Neuroscience
David Geffen Chair in Informatics
David Geffen Chair in Medical Research
David Geffen School of Medicine Chair in Neuroscience
Laraine and David Gerber Chair in Ophthalmology
Maggie C. Gilbert Endowed Chair in Bipolar Disorders
Rosalinde and Arthur Gilbert Foundation Endowed Chair in Health-Care Delivery
Dr. Allen and Charlotte Ginsburg Endowed Chair in Precision Genomic Medicine
Dr. Allen and Charlotte Ginsburg Endowed Chair in Translational Genomics
Nancy and Jonathan Glazer Family Endowed Chair for Pediatric Sarcomas
Joan S. and Ralph N. Goldwyn Endowed Chair in Immunobiology and Transplantation Research
Victor Goodhill, MD, Chair in Head and Neck Surgery
Laurie and Steven C. Gordon Chair in Neurosciences
Laurie and Steven C. Gordon Chair in Neurosurgery
Steven C. Gordon Family Chair in Parkinson’s Disease Research
Dolly Green Chair in Clinical Research
Dolly Green Chair in Ophthalmology
Dolly Green Chair in Vision Science
Thomas N. Grove Chair in Anesthesiology
Maud Cady Guthman Chair in Cardiology
Muriel Harris Chair in Geriatric Psychiatry
Shirley M. Hatos Chair
Stefan Hatos Endowed Chair in Psychiatry and Biobehavioral Sciences
Gavin S. Herbert Endowed Chair for Macular Degeneration
Ernest G. Herman Chair in Ophthalmology
Christian Herrmann, Jr., MD Endowed Chair in Neuromuscular Disease
Holt and Jo Hickman Endowed Chair in Advanced Lung Disease and Lung Transplantation
Ronald S. Hirshberg Chair in Translational Pancreatic Cancer Research
Stanley Iezman and Nancy Stark Endowed Chair in Thoracic Radiation Oncology Research
A. Ray Irving, Jr., MD, Chair in Clinical Ophthalmology
John Jergens Chair in Kidney Transplantation
Kaiser Permanente Chair in Community Medicine
Margaret Holden Jones Kanaar, MD, Chair in Cerebral Palsy
Solomon A. and Marie M. Kaplan Chair of Pediatric Endocrinology
Maddie Katz Endowed Chair in Palliative Care Research and Education
Ronald L. Katz, MD, Endowed Chair in Anesthesiology
Chizuko and Nobuyuki Kawata Chair in Cardiology
Dorothy and Robert Keyser Endowed Chair
Karl Kirchhoff Foundation Chair in Vision Science
Arnold W. Klein, MD, Chair in Dermatology
George F. Kneller Chair in Family Medicine
Kolokotrones Chair in Ophthalmology
John J. Kuiper Chair in Nephrology and Renal Transplantation
Grace and Walter Lantz Endowed Chair in Ophthalmology
Lya and Harrison Latta Chair in Pathology
Lauren B. Leichtman and Arthur E. Levine Endowed Chair in Women’s Health Research
Eleanor Leslie Chair in Innovative Brain Research
Eleanor Leslie Chair in Pioneering Brain Research
Eleanor I. Leslie Chair of Neuroscience
Barbara Gerald Levey Endowed Chair
Gerald S. Levey, MD, Endowed Chair
Shirley LeVine Chair in Pediatric Education
Bert O. Levy Endowed Chair in Orbital and Ophthalmic Plastic Surgery
Hilel Lewis Chair in Ophthalmology
Walton Li Chair in Cornea and Uveitis
Lincy Foundation Chair in Clinical Gastroenterology
Mark S. Litwin, MD, Endowed Chair in Mentorship
William P. Longmire, Jr., Chair in Surgery
Oliver and Anga Lundgren Endowed Chair
Meyer and Renee Luskin Chair in Migraine and Headache Studies
Gordon and Virginia MacDonald Distinguished Chair in Human Genetics
Charles H. Markham Chair in Neurology
Nancy Marks Endowed Chair in Women’s Health Research
Della Martin Chair in Psychiatry
Mattel Executive Endowed Chair in Pediatrics
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Herb Alpert School of Music

Kenny Burrell Chair in Jazz Studies
Susan G. Covel and Mitchel D. Covel, MD, Chair in Music
Mickey Katz Endowed Chair in Jewish Music
Leo M. and Elaine Krown Klein Chair in Performance Studies
Mohindar Brar Sambhi Endowed Chair in Indian Music
Shapiro Family Chair in Piano Performance

Simms/Mann Family Foundation Chair in Integrative Oncology
Jennifer Jones Simon Chair in Radiation Oncology
Norton Simon Chair in Biophysics
Jonathan Sinay Chair in Epilepsy
Henry E. Singleton Chair in Urology
Jack H. Skirball Chair in Multiple Sclerosis Research
Jack H. Skirball Chair in Ocular Inflammatory Diseases
Jack H. Skirball Chair in Pediatrics
P. Gene and Elaine Smith Endowed Chair in Alzheimer’s Disease Research
Rebecca Smith Chair in Molecular and Cellular Pathology
Rory Smith, MD, Endowed Chair
Smotrich Family Optometric Clinician-Scientist Chair
Jerome and Joan Snyder Chair in Ophthalmology
Joan and Jerome Snyder Chair in Cornea Diseases
Joan and Jerome Snyder Chair in Vision Science
George F. Solomon Professorship in Psychobiology
Spiegelberg Family Chair in Urologic Oncology
Norman F. Sprague Chair in Molecular Oncology
Frances Stark Chair in Neurology
Fran and Ray Stark Foundation Chair in Digestive Diseases
Fran and Ray Stark Foundation Chair in Ophthalmology
Fran and Ray Stark Foundation Chair in Urology
Peter Starrett Term Chair in Medical Education
Rupert and Gertrude Steiger Vision Research Chair
Jules Stein Chair in Ophthalmology
Michael and Sue Steinberg Endowed Chair in Global AIDS Prevention and Policy Research
W. Eugene Stern Chair in Neurosurgery
E. Richard Stiehm Endowed Chair in Pediatric Allergy, Immunology, and Rheumatology
Ruth and Raymond H. Stotter Chair in Neurosurgery
Bradley R. Straatsma, MD, Endowed Chair in Ophthalmology
Dorothy and Leonard Strauss Endowed Chair in Gastroenterology in Memory of Gussie Borun
Streisand Chair in Cardiology
Dr. Allen J. Swartz and Roslyn Holt Swartz Women’s Lung Health Endowed Chair
Kelly Lee Tarantino Endowed Term Chair in Integrative Liver Transplantation
Dr. George Tarjan Chair in Intellectual and Developmental Disabilities Research
Michael E. Tennenbaum Family Endowed Chair in Creativity Research
Paul I. Terasaki Chair in Surgery
Flora L. Thornton Chair in Vision Research
Leon J. Tiber, MD, and David S. Alpert, MD, Chair in Medicine
Vernon O. Underwood Family Chair in Ophthalmology
Phil Woodrow Van Wagoner Professorship in Ophthalmology
Variety Club—D. Barry Reardon Endowed Chair in Pediatric Hematology/Oncology
Richard D. and Ruth P. Walter Chair in Neurology
Richard D. and Ruth P. Walter Chair in Psychiatry
Charles Stewart Warren and Hildegard Warren Endowed Research Chair
Wasserman Professor of Ophthalmology
Wasserman Term Chair for Innovation in Ophthalmology
David Weil Chair in Psychiatry and Biobehavioral Sciences
Dr. Louis Jolyon West Chair for Innovation in Psychiatry
Dr. Louis Jolyon West Chair for Excellence in Psychiatry
Wildier Chair in Psychiatry and Neuroscience
Susan and David Wilstein Endowed Chair in Medicine
Susan and David Wilstein Endowed Chair in Rehabilitation Medicine
Judith and Robert Winston Chair in Pediatric Urology

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Appendix C: Faculty Honors

Distinguished Teaching Awards

Academic Senate Recipients

Each year the UCLA Alumni Association presents Distinguished Teaching Awards to Academic Senate faculty members. The highly prized awards are presented at the annual Andrea L. Rich Night to Honor Teaching, and selection of recipients is based on recommendations of the Academic Senate Committee on Teaching. Nominations are solicited from academic departments during fall quarter.

The Luckman Distinguished Teaching Awards Program was established in late 1991 after receipt of a generous gift from Harriet and Charles Luckman. Awards given for 1992 through 1997 were named the Luckman Distinguished Teaching Awards.

1961
John F. Barron (Economics)
Hector E. Hall (Physiology)
Kenneth N. Trueblood (Chemistry and Biochemistry)

1962
Charles W. Hoffman (Germanic Languages)
Thomas P. Jenkin (Political Science)
Ken Nobe (Chemical Engineering)

1963
Carl W. Hagge (Germanic Languages)
Wendell P. Jones (Education)
Robert H. Sorgenfrey (Mathematics)
Saul Weinstein (Chemistry and Biochemistry)

1964
Mostafa A. El-Sayed (Chemistry and Biochemistry)
Leon Howard (English)
Moshe F. Rubinstein (Civil and Environmental Engineering)

1965
E.A. Carlson (Biology)
W.R. Hitchcock (History)
Allen Parducci (Psychology)
William R. Romig (Microbiology and Molecular Genetics)

1966
George A. Bartholomew (Biology)
William P. Gerberding (Political Science)
Hans Meyerhoff (Philosophy)
Joseph E. Spencer (Geography)

1967
Basil Gordon (Mathematics)
J.A.C. Grant (Political Science)
William Matthews (English)
David S. Saxon (Physics and Astronomy)
E.K.L. Upton (Physics and Astronomy)

1968
Edward W. Graham (Chemistry and Biochemistry)
W. James Popham (Education)
Sydney C. Rittenberg (Microbiology and Molecular Genetics)
Robert P. Stockwell (Linguistics)
Fred N. White (Physiology)

1969
Robert J. Finkelstein (Physics and Astronomy)
Douglas S. Hobbs (Political Science)
J.E. Phillips (English)
Raymond M. Redheffer (Mathematics)
Margret I. Sellers (Microbiology and Immunology)

1970
Ehrhard Bahr (Germanic Languages)
Joseph Cascarano (Biology)
B. Lamar Johnson (Education)
Daniel Kivelson (Chemistry and Biochemistry)
Richard D. Lehan (English)

1971
Vernon E. Denny (Chemical Engineering)
Peter N. Ladefoged (Linguistics)
Arthur D. Schwabe (Medicine)
Duane E. Smith (Political Science)
Andreas Tietze (Near Eastern Languages and Cultures)

1972
Barbara K. Keogh (Education)
James N. Miller (Microbiology and Immunology)
David S. Rodes (English)
Ned A. Shearer (Speech)
Charles A. West (Chemistry and Biochemistry)

1973
Kirby A. Baker (Mathematics)
David Evans (Chemistry and Biochemistry)
Albert Hoxie (History)
Nhan Levan (Electrical Engineering)
Judith L. Smith (Physiological Science)

1974
Robert B. Edgerton (Anthropology, Psychiatry and Biobehavioral Sciences)
David S. Eisenberg (Chemistry and Biochemistry)
Victoria A. Fromkin (Linguistics)
Robert C. Neerhout (Pediatrics)
Andrea L. Rich (Speech)

1975
Alma M. Hawkins (World Arts and Cultures)
Morris Holland (Psychology)
Paul M. Schachter (Linguistics)
Stanley A. Wolpert (History)
Richard W. Young (Neurobiology)

1976
Marianne Celce-Murcia (Teaching English as a Second Language, Applied Linguistics)
Jesse J. Dukeminier (Law)
George R. Guffey (English)
Marilyn L. Kourilsky (Education)
Chand R. Viswanathan (Electrical Engineering)

1977
Michael J.B. Allen (English)
Henry M. Cherrick (Dentistry)
Richard C. Maxwell (Law)
J. William Schopf (Earth and Space Sciences)
Verne N. Schumaker (Chemistry and Biochemistry)

1978
William R. Allen (Economics)
Michael E. Jung (Chemistry and Biochemistry)
J. Fred Weston (Management)
Thomas D. Wickens (Psychology)
Johannes Wilbert (Anthropology)

1979
Steven Krantz (Mathematics)
Paul I. Rosenthal (Communication Studies)
Christopher Salter (Geography)
James H. White (Mathematics)
Stephen C. Yeazell (Law)

1980
A.R. Braunmuller (English)
Fredi Chiappelli (Italian)
Kenneth L. Karst (Law)
Richard F. Logan (Geography)
Ronald F. Zernicke (Physiological Science)

1981
Arnold J. Band (Near Eastern Languages and Cultures)
Charles L. Batten, Jr. (English)
Lucien B. Guze (Medicine)
Gerald Lopez (Law)
Andy Wong (Dentistry)

1982
Dean Bok (Neurobiology)
Robin S. Liggett (Architecture and Urban Design, Urban Planning)
William Melnitz (Theater)
Joseph K. Perloff (Medicine)
Karen E. Rowe (English)

1983
Claude Bernard (Physics and Astronomy)
Bryan C. Ellickson (Economics)
Robert S. Elliott (Electrical Engineering)
Albert D. Hutter (English)
Charles M. Knobler (Chemistry and Biochemistry)

1984
Robert Dallek (History)
Hooshang Kangerloo (Radiological Sciences)
Jeffrey Prager (Sociology)
Stanley Siegel (Law)
Sandra A. Thompson (Linguistics)

1985
Patricia M. Greenfield (Psychology)
David F. Martin (Computer Science)
Mark W. Plant (Economics)
Ross P. Shideler (Comparative Literature, Scandinavian Section)
William D. Warren (Law)

1986
Roger A. Gorski (Neurobiology)
Patricia A. Keating (Linguistics)
Leonard Kleinrock (Computer Science)
Martin Wachs (Urban Planning)
Scott L. Waugh (History)

1987
Lawrence W. Bassett (Radiological Sciences)
E. Bradford Burns (History)
Kenneth W. Graham, Jr. (Law)
Howard Suber (Film and Television)
Richard A. Yarborough (English)

1988
Alison G. Anderson (Law)
Ann L.T. Bergren (Classics)
Charles A. Berst (English)
Michael J. Goldstein (Psychology)
Richard L. Sklar (Political Science)

1989
John B. Garnett (Mathematics)
Kathleen L. Komar (Comparative Literature, Germanic Languages)
William G. Roy (Sociology)
Stephen Yenser (English)
Eric M. Zolt (Law)

1990
Peter M. Narins (Physiological Science)
Gary B. Nash (History)
John S. Wiley (Law)
Merlin C. Wittrock (Education)
Ruth Yeazell (English)

1991
Michael R. Asimow (Law)
Edward G. Berenson (History)
Robert A. Bjork (Psychology)
Margaret FitzSimmons (Urban Planning)
Kenneth R. Lincoln (English)

1992
Bruce L. Baker (Psychology)
Paul B. Bergman (Law)
Robert B. Goldberg (Molecular, Cell, and Developmental Biology)
Peter E. Kollock (Sociology)
Eugen Weber (History)

1993
Calvin B. Bedient (English)
Richard B. Kaner (Chemistry and Biochemistry)
Katherine C. King (Classics)
William G. Ouchi (Management)
Bruce Schulman (History)

1994
David A. Binder (Law)
Jon P. Davidson (Earth and Space Sciences)
Melvin Oliver (Sociology)
Barbara L. Packer (English)
E. Victor Wolfenstein (Political Science)

1995
Noriko Akatsuka (East Asian Languages and Cultures)
Douglas Hollan (Anthropology)
V.A. Kolve (English)
Jerome Rabow (Sociology)
Paul V. Reale (Music)

1996
Walter Allen (Sociology)
Judith A. Carney (Geography)
William M. Gelbart (Chemistry and Biochemistry)
Phyllis A. Guzé (Medicine)
Peter B. Hammond (Anthropology)

1997
Uptal Banerjee (Molecular, Cell, and Developmental Biology)
Christine D. Gutierrez (Education)
Susan McClary (Musicology)
Arnold B. Scheibel (Neurobiology, Psychiatry and Biobehavioral Sciences)
Ivan Szelenyi (Sociology)

1998
George W. Bernard (Dentistry)
Verónica Cortinez (Spanish and Portuguese)
Wayne A. Dollase (Earth and Space Sciences)
Jayne E. Lewis (English)
Joshua S.S. Muldavin (Geography)

1999
Grace Ganz Blumberg (Law)
Alessandro Duranti (Anthropology)
Richard H. Gold (Radiological Sciences)
N. Katherine Hayles (English)
Bernard Weiner (Psychology)

2000
Scott H. Chandler (Physiological Science)
Efrain Kristal (Spanish and Portuguese)
Hector F. Myers (Psychology)
David Sklansky (Law)
Robert N. Watson (English)

2001
Michael J. Colacurcio (English)
Glen M. MacDonald (Geography)
Kevin Terraciano (History)
James W. Trent (Education)
Brian Walker (Political Science)

2002
Christopher R. Anderson (Mathematics)
Steven G. Clarke (Chemistry and Biochemistry)
Anne K. Mellor (English)
Lee Todd Miller (Pediatrics)
Grant S. Nelson (Law)

2003
Joseph J. DiStefano III (Computer Science, Medicine)
Robin L. Garrell (Chemistry and Biochemistry)
A.P. Gonzalez (Film, Television, and Digital Media)
Mitchell B. Morris (Musicology)
Kirk J. Stark (Law)

2004
David B. Kaplan (Philosophy)
Kathryn A. Morgan (Classics)
Mark R. Morris (Physics and Astronomy)
Jesús Torrecilla (Spanish and Portuguese)
Joan Waugh (History)

2005
Roger Bourland (Music)
Robert G. Fovell (Atmospheric and Oceanic Sciences)
Elma González (Ecology and Evolutionary Biology)
Elizabeth A. Marchant (Spanish and Portuguese)
Mike Rose (Education)
Keith D. Stolzenbach (Civil and Environmental Engineering)

2006
Robert A. Gurval (Classics)
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Patricia M. McDonough (Education)
Albert J. Moore (Law)
Kenneth A. Nagy (Ecology and Evolutionary Biology)
David L. Rigby (Geography)
Geoffrey W. Symcox (History)

2007
John A. Agnew (Geography)
Devon Carbado (Law)
Valerie J. Matsumoto (Asian American Studies, History)
Behzad Razavi (Electrical Engineering)
Daniel G. Solórzano (Education)
Blaire Van Valkenburgh (Ecology and Evolutionary Biology)

2008
Elizabeth L. Bjork (Psychology)
Peggy M. Fong (Ecology and Evolutionary Biology)
Linda C. Garro (Anthropology)
Teofilo F. Ruiz (History)

2009
Roger Detels (Epidemiology)
Luisa M. Irue-Jarre (Molecular, Cell, and Developmental Biology)
Yung-Ya Lin (Chemistry and Biochemistry)
Mark B. Moldwin (Earth and Space Sciences)
Susan J. Plann (Applied Linguistics, Spanish and Portuguese)

2010
Katsushi Arisaka (Physics and Astronomy)
Daniel T. Blumstein (Ecology and Evolutionary Biology)
John T. Caldwell (Film, Television, and Digital Media)
Albert J. Courey (Chemistry and Biochemistry)
Jerry Kang (Law)

2011
Ann E. Carlson (Law)
Andrew Christensen (Psychology)
Ian Krouse (Music)
Patricia E. Phelps (Integrative Biology and Physiology)
Yahya Rahmat-Samii (Electrical Engineering)
Philip W. Rundel (Ecology and Evolutionary Biology)

2012
C. Cindy Fan (Geography)
Brandon Koretz (Geriatric Medicine)
Mignon R. Moore (Sociology)
Claudia Parodi-Lewin (Spanish and Portuguese)
Jonathan P. Stewart (Civil and Environmental Engineering)
Christopher S. Tang (Management)

2013
Michael F. Carey (Biological Chemistry)
John J. Colicelli (Biological Chemistry)
Rachelle H. Crochie-Watson (Integrative Biology and Physiology)
Jonathan H. Grossman (English)
Lynn A. Hunt (History)
David Delgado Shorter (World Arts and Cultures/Dance)
Megan McDonnell Sweeney (Sociology)

2014
Paul H. Barber (Ecology and Evolutionary Biology)
Earl G. Freymiller (Dentistry)
Neil K. Garg (Chemistry and Biochemistry)

2015
Hilary A. Godwin (Environmental Health Sciences)
Hiroshi Motomura (Law)
Felicity A. Nussbaum (English)

2016
Joseph E. Bristow (English)
Mark S. Goorsky (Materials Science and Engineering)
Frank A. Laski (Molecular, Cell, and Developmental Biology)
Elisabeth C. Le Guin (Musicology)
James O. Lloyd-Smith (Ecology and Evolutionary Biology)
Steven A. Margulis (Civil and Environmental Engineering)

2017
Donald G. Buth (Ecology and Evolutionary Biology)
Alex C. Purves (Classics)
Eric Sung (Dentistry)
Abigail G. Saguy (Gender Studies, Sociology)
Ingrid Eagles (Law)
Alvaro Sagasti (Molecular, Cell, and Developmental Biology)

2018
Lorrie A. Frasure-Yokley (Political Science)
Christopher M. Kelly (Society and Genetics)
David W. MacFadyen (Comparative Literature, Musicology)
Vilma Ortiz (Sociology)
C.E.B. Reas (Design/Media Arts)
Sarah Abrevaya Stein (History)

2019
Anastassia Alexandrova (Chemistry and Biochemistry)
Kathleen Bawn (Political Science)
Gregory F. Grether (Ecology and Evolutionary Biology)
Katsuya Hirano (History)
Eric S. Sheppard (Geography)
Stephanie A. White (Integrative Biology and Physiology)

2020
E. Tendayi Achiume (Law)
Neveen S. El-Farra (Medicine)
MarySue V. Heilemann (Nursing)
David D. Kim (Germanic Languages)
Tamara J. M. Levitz (Comparative Literature)
Matthew D. Lieberman (Psychology)

2021
Alan D. Castel (Psychology)
Yogita Goyal (African American Studies, English)
Cheryl I. Harris (African American Studies, Law)
Thu-huong Nguyen-vo (Asian American Studies, Asian Languages and Cultures)
Gina R. Poe (Integrative Biology and Physiology)
Joshua F. Samani (Physics and Astronomy)

2022
Hannah C. Appel (Anthropology)
Kyle C. Cavanaugh (Geography)
Scott L. Cummings (Law)
Eric J. Deeds (Integrative Biology and Physiology)
Peter J. Hudson (African American Studies, History)
Non-Academic Senate Recipients

In spring of 1985, the Office of Instructional Development (now Center for the Advancement of Teaching) began sponsorship of awards to three instructors who are not members of the Academic Senate. This category includes lecturers, and adjunct and clinical faculty members. All non-Academic Senate faculty members who are nominated by their departments are eligible. Recipients are selected by the Academic Senate Committee on Teaching, using the same criteria as those used for Academic Senate members.

The Luckman Distinguished Teaching Awards Program was established in late 1991 after receipt of a generous gift from Harriet and Charles Luckman. Awards given for 1992 through 1997 were named the Luckman Distinguished Teaching Awards.

1985
- L. Geoffrey Cowan (Communication Studies)
- Mary Elizabeth Perry (History)
- Linda Diane Venis (English)

1986
- David Cohen (Mathematics)
- Johanna Harris-Heggie (Music)
- Paul Von Blum (Interdisciplinary)

1987
- Carol D. Berkowitz (Pediatrics)
- Jeffrey I. Cole (Communication Studies)
- Cheryl Giuliano (Writing Programs)

1988
- Jeanne Gunner (Writing Programs)
- Art Huffman (Physics and Astronomy)
- David G. Kay (Computer Science)

1989
- S. Scott Barchy (History)
- Bonnie Lisle (Writing Programs)
- Kenneth R. Pfieffer (Civil Engineering, Psychology)

1990
- Lisa Gerrard (Writing Programs)
- Andrus Durstenfeld (Biology)
- Dorothy Phillips (Physiological Science)

1991
- Marde S. Gregory (Speech)
- Betty A. Luceigh (Chemistry and Biochemistry)
- Cheryl Pfoff (Writing Programs)

1992
- Janet Goodwin (Applied Linguistics, Teaching English as a Second Language)
- Janette Lewis (Writing Programs)
- Yihua Wang (East Asian Languages and Cultures)

1993
- Stephen Dickey (English)
- Sondra Hale (Anthropology)
- Jutta Landa (Germanic Languages)

1994
- Steven K. Derian (Law)
- Linda Jensen (Applied Linguistics, Teaching English as a Second Language)
- Shelby Popham (Writing Programs)

1995
- Nicholas Collaros (French)
- Kristine S. Knaplund (Law)
- Christopher Mott (English)

1996
- Scott Bowman (Political Science)
- Timothy Tangherlini (Scandinavian Section)
- G. Jennifer Wilson (Honors, Undergraduate Programs)

1997
- William McDonald (Film and Television)
- Stuart Slavin (Pediatrics)
- Sung-Ock Sohn (East Asian Languages and Cultures)

1998
- Paul Frymer (Political Science)
- George Gadda (Writing Programs)
- Julie Giese (English)

1999
- Patricia Gilmore-Jaffe (Writing Programs)
- Emily Schiller (English)
- Scott Votey (Emergency Medicine)

2000
- Nicole Dufresne (French)
- Thomas Holm (Law)
- Richard P. Usatine (Family Medicine)

2001
- George Leddy (Geography, International Development Studies)
- Sandra Mano (Writing Programs)
- L. Jean Perry (Molecular, Cell, and Developmental Biology)

2002
- Steven Hardinger (Chemistry and Biochemistry)
- Colleen K. Keenan (Nursing)
- Cynthia Merrill (Writing Programs)

2003
- Marjorie A. Bates (Chemistry and Biochemistry)
- Anita McCormick (Writing Programs)
- Richard Stevenson III (Dentistry)

2004
- Andrew Hsu (Philosophy)
- Kimberly Jansma (French and Francophone Studies)
- Jennifer Westbay (Writing Programs)

2005
- Susan Griffin (Writing Programs)
- William Grisham (Psychology)
- Anahid Keshishian (Near Eastern Languages and Cultures)

2006
- Roger E. Bohman (Molecular, Cell, and Developmental Biology)
- Jo Ann Darron-Rodriguez (Social Welfare)
- Gerald Wilson (Ethnomusicology)
2007
Nancy Ezer (Near Eastern Languages and Cultures)
Fred A. Hagigi (Health Services)
Eric Marin (Film, Television, and Digital Media)

2008
Leigh C. Harris (Writing Programs)
Chi Li (Ethnomusicology)
Robert B. Trelease (Pathology and Laboratory Medicine)

2009
Brent Corbin (Physics and Astronomy)
Laurence Lavelle (Chemistry and Biochemistry)
Fariba Younai (Dentistry)

2010
Patrick D. Goodman (Law)
Amy H. Kaji (Medicine)
Rory M. Kelly (Film, Television, and Digital Media)

2011
Latifeh E. Hagigi (Near Eastern Languages and Cultures)
Dario Nardi (Anthropology)
John (Jay) Phelan (Life Sciences Core Curriculum)

2012
Stuart Biegel (Education)
Ronald Cooper (Integrative Biology and Physiology)
Michael Lazarus (Medicine)

2013
Randall J. Fallows (Writing Programs)
Ganna Kudyma (Slavic Languages and Literatures)
Joan R. Schleper (Nursing)

2014
Teddi L. Chichester (Writing Programs)
Robert F. Foster (Management)
Mitchem A. Huehls (English)

2015
Mary Paige Greene (Mathematics)
Eric H. Sussman (Management)
Pavel Wonsowicz (Law)

2016
Ting-Ling Chang (Dentistry)
Gregory J. Rubinson (Writing Programs)
Jeremy D. Smoak (Near Eastern Languages and Cultures)

2017
Mary F. Corey (History)
Benjamin James Lewis (Linguistics)
Jason D. Napolitano (Medicine)

2018
Karen J. Cunningham (English)
Zhao Li (Chemistry and Biochemistry)
Dana Cairns Watson (Writing Programs)

2019
Jennifer Casey (Chemistry and Biochemistry)
Juliet A. Falce-Robinson (Spanish and Portuguese)
Jorja J. Leap (Social Welfare)

2020
Cindy C. Kratzer (Education)
John G. Branstetter (Political Science)
Margaret E. Davis (Writing Programs)

2021
Justin B. Bernstein (Law)
Anthony R. Friscia (Integrative Biology and Physiology)
Tara L. Prescott-Johnson (Writing Programs)

2022
Carey S. Nachenberg (Computer Science)
Diana Rigueur (Molecular, Cell, and Developmental Biology)
Laurel A. Westrup (Writing Programs)

Gold Shield Faculty Prize

The $30,000 Gold Shield Faculty Prize, an award for academic excellence, was created by the Gold Shield Alumnae of UCLA in celebration of their fiftieth anniversary in 1986. The prize is funded by an endowment of $250,000 raised by Gold Shield for this purpose, which has grown to over $450,000. Guidelines provide that the prize “recognize and reward UCLA faculty members who have demonstrated extraordinary accomplishment in teaching and in research or creative activity...and who have made a significant contribution to undergraduate education.” Preference for recipients is given to faculty members in mid-career, who do not often receive the extra professional incentives available to distinguished senior faculty.

The Gold Shield Faculty Prize is awarded to each recipient for scholarly use. The awardee is selected every year by a committee of peers appointed by the Academic Senate. Student and Gold Shield representatives are included. Recipients must come from fields that have undergraduate programs at UCLA.

1986-88
Michael E. Jung (Chemistry and Biochemistry)

1988-90
Patricia M. Greenfield (Psychology)

1990-92
Jeffrey C. Alexander (Sociology)

1992-94
J. William Schopf (Earth and Space Sciences)

1994-96
Albert R. Braunmuller (English)

1996-98
Peter M. Narins (Physiological Science)

1999-00
Robert B. Goldberg (Molecular, Cell, and Developmental Biology)

2000-02
Utpal Banerjee (Molecular, Cell, and Developmental Biology)

2002-04
Richard B. Kaner (Chemistry and Biochemistry)
Nobel Laureates

In accordance with Alfred Nobel’s will, Nobel Prizes are awarded to “those who, during the preceding year, have conferred the greatest benefit to humankind.” Considered among the most prestigious awards in their field, Nobel Prizes are awarded in the fields of chemistry, economics, literature, peace, physics, and physiology or medicine. Since their 1901 inception, Nobel Prizes have been awarded to University of California faculty 71 times. Of those, seven UCLA professors have been so honored.

Willard F. Libby, 1908–1980 (Chemistry), 1960
Julian S. Schwinger, 1918–1994 (Physics), 1965
Donald J. Cram, 1919–2001 (Chemistry), 1987
Paul D. Boyer, 1918–2018 (Chemistry), 1997
Louis J. Ignarro, 1941– (Physiology or Medicine), 1998
Lloyd S. Shapley, 1923–2016 (Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel), 2012
Andrea M. Ghez, 1965– (Physics), 2020

UCLA University Professors

The title University Professor is reserved for scholars of international distinction, who are recognized and respected as teachers of exceptional ability. Appointments may be made from distinguished tenured faculty. University Professors are appointed by the Regents, at the recommendation of the president after consultation with the chancellor and Academic Senate of the appointee’s home campus.

In over 50 years, only 40 professors throughout the UC system have ever been appointed University Professor. Since 1972, six UCLA faculty have been given this honor, including one active UCLA faculty member.

Donald J. Cram, 1919–2001 (Chemistry and Biochemistry), 1988
Robert B. Edgerton, 1931–2016 (Psychiatry and Biobehavioral Sciences), 1996
M. Frederick Hawthorne, 1928–2021 (Chemistry and Biochemistry), 1998
Julian S. Schwinger, 1918–1994 (Physics), 1980
Lynn Townsend White, Jr., 1907–1987 (History), 1972
Owen N. Witte, 1949– (Microbiology, Immunology, and Molecular Genetics), 2016
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