

# UNIVERSITY OF CALIFORNIA BULLETIN

PUBLISHED AT BERKELEY, CALIFORNIA

Volume XXX • September 20, 1936 • Number 9

## GENERAL CATALOGUE • 1936-37 •

UNIVERSITY OF CALIFORNIA  
AT LOS ANGELES

*For sale by the*  
STUDENTS' COÖPERATIVE BOOK STORE  
LOS ANGELES

Price, Twenty-five cents

# **Administrative Bulletins of the University of California**

1936-37

---

The administrative bulletins of the University of California present information concerning the colleges, schools, and departments of the University. For copies of the bulletins or other information concerning instruction at Los Angeles, address the Registrar of the University of California at Los Angeles; for other bulletins, and for information concerning the departments at Berkeley, address the Registrar of the University of California, Berkeley; bulletins of the schools and colleges in San Francisco may be had by addressing the deans in charge. The publications are sent free except those for which a price (which includes postage) is given.

---

## **Bulletins Referring Primarily to the University of California at Los Angeles**

The General Catalogue of the University of California at Los Angeles: containing general information about the University, requirements for admission, for the bachelor's degree in the College of Letters and Science, in the College of Business Administration, in the Teachers College, and in the Branch of the College of Agriculture in Southern California; for the master's and the doctor's degrees, and for teaching credentials; students' fees and expenses; and announcements of courses of instruction in the University of California at Los Angeles. Price, 25 cents.

The University of California at Los Angeles—An Introduction to the Los Angeles Campus: An illustrated circular of information.

The Announcement of Graduate Study at the University of California at Los Angeles.

The Announcement of the College of Business Administration.

The Schedule of Classes, University of California at Los Angeles: containing the time-schedule of exercises and an office directory of officers of instruction and administration. Published in February and August of each year for the semester immediately following. Price, 10 cents.

The Catalogue of Officers and Students, Section II (University of California at Los Angeles). Published annually in October. Price, 35 cents.

The Announcement of the Summer Session of the University of California at Los Angeles.

---

## **General Bulletins, and Bulletins Referring Primarily to Divisions of the University at Berkeley and Davis**

The General Catalogue of the University of California (primarily for those interested in the Undergraduate Division at Berkeley): General information about the University, its organization, the requirements for admission to undergraduate status, and for the bachelor's degree in the colleges of Letters and Science, Agriculture, Chemistry, Commerce, Engineering, and Mining; requirements for certificates in several curricula; students' fees and expenses, and announcements of courses of instruction in the departments at Berkeley. Price, 25 cents.

*(Continued on third page of cover)*

# University of California Bulletin

Volume XXX • Berkeley, California, September 20, 1936 • Number 9

---

## GENERAL CATALOGUE

# UNIVERSITY OF CALIFORNIA AT LOS ANGELES

FOR THE ACADEMIC YEAR

1936-1937

405 HILGARD AVENUE, LOS ANGELES, CALIFORNIA

## UNIVERSITY OF CALIFORNIA BULLETIN

A SERIES IN THE ADMINISTRATIVE BULLETINS OF THE UNIVERSITY OF CALIFORNIA. ENTERED JULY 1, 1911, AT THE POST OFFICE AT BERKELEY, CALIFORNIA, AS SECOND-CLASS MATTER, UNDER THE ACT OF CONGRESS OF JULY 16, 1894. ISSUED MONTHLY FROM OCTOBER TO APRIL, AND THREE TIMES A MONTH FROM MAY TO SEPTEMBER.

---

Letters of inquiry concerning the University of California at Los Angeles should be addressed to the *Registrar, University of California at Los Angeles, Los Angeles, California.*

Letters of inquiry concerning the University in general should be addressed to the *Registrar, University of California, Berkeley, California.*

For the list of bulletins of information concerning the several colleges and departments see pages 2 and 3 of the cover.

In writing for information please mention the college, department, or study in which you are chiefly interested.

---

The registered cable address of the University of California at Los Angeles is UCLA.

# CONTENTS

PAGE

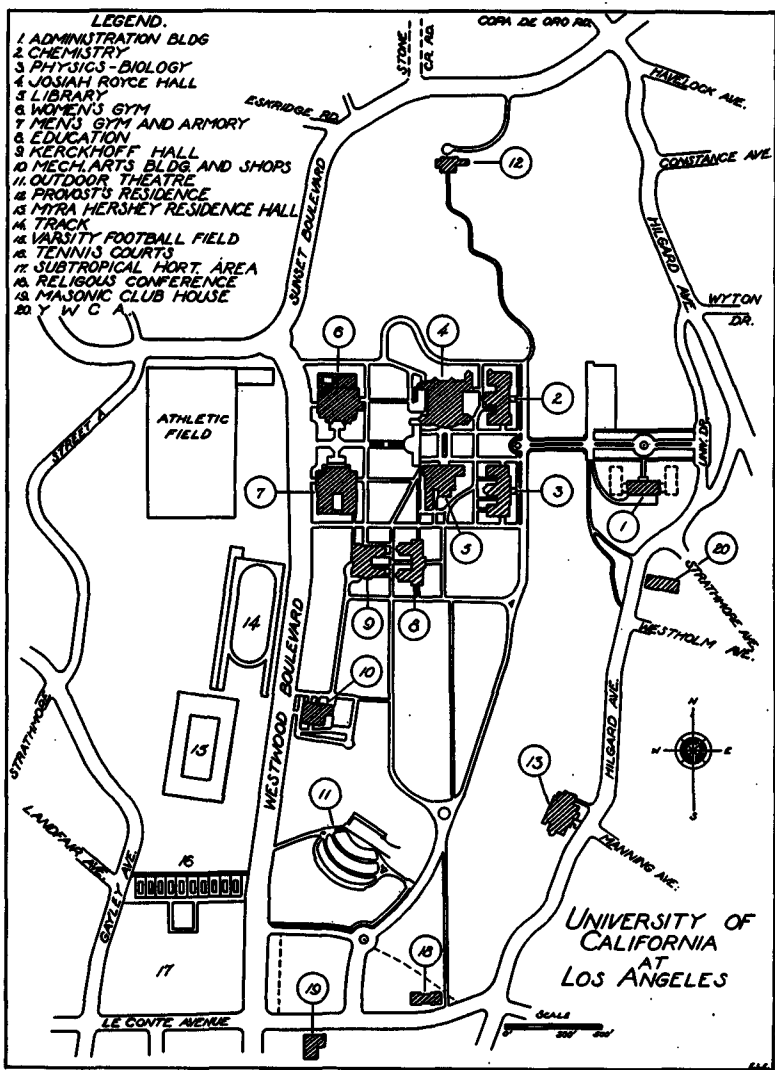
Calendar	7
Regents of the University	9
Officers and committees of the Regents	10
Administrative officers	11
The University	12
History—Organization	14
Administration	15
University of California at Los Angeles	17
History and development	17
Site of the campus	18
Survey of curricula	19
Summer Sessions	19
University Extension	20
Admission to the University	21
Student Status	21
Admission to undergraduate status	21
Admission in freshman standing	21
(1) Admission by certificate from accredited high schools	22
(2) Admission by examination	23
Removal of admission deficiencies for freshman matriculation	24
Admission in advanced standing	26
Removal of scholarship deficiencies by students from other colleges	27
Preparation for University curricula	28
Admission of special students	29
Admission from schools and colleges in foreign countries	31
Admission to graduate status	31
Unclassified status	32
General information	33
Regulations concerning students	33
Registration	33
Medical examinations—Medical facilities	33
Late admission and registration	33
Student responsibility	34
Units of work and credit: study-list limits	35
Subject A: English composition	36
Piano test	37
Military Science and Physical Education	37
Gymnasiums and athletic facilities	38
American Institutions	39
Authority of instructors	39
Examinations	39
Credit by examination for private study	40
Grades of scholarship; grade points	40
Conditions and failures	41
Scholarship rules	42
Honorable dismissal and leave of absence	43
Discipline	43
Degrees and teaching credentials	44
The Library	44

	PAGE
Student Fees—Scholarships—Loans—Prizes . . . . .	45
Fees . . . . .	45
Refunds . . . . .	47
Undergraduate scholarships . . . . .	48
Loans . . . . .	50
Prizes . . . . .	50
Living Accommodations—Expenses—Employment—Student Activities	51
Living accommodations and general expenses for women . . . . .	51
Living accommodations and general expenses for men . . . . .	52
Employment . . . . .	52
University Religious Center . . . . .	53
Public lectures, concerts, and art exhibitions . . . . .	54
The Associated Students . . . . .	54
Undergraduate Curricula . . . . .	56
College of Letters and Science . . . . .	56
Lower division, junior certificate . . . . .	57
Upper division . . . . .	59
Letters and Science list of courses . . . . .	61
Majors for the degree Bachelor of Arts . . . . .	62
Departmental majors . . . . .	63
Curriculum for medical technicians . . . . .	68
Curriculum in sociology . . . . .	68
Honors . . . . .	69
Preparation for professional curricula . . . . .	70
Pre-Chemistry . . . . .	70
Pre-Dental . . . . .	70
Pre-Engineering . . . . .	72
Pre-Legal . . . . .	73
Pre-Medical . . . . .	74
Pre-Mining . . . . .	77
Nursing . . . . .	78
Pre-Optometry . . . . .	79
Professional curricula in other divisions of the University . . . . .	80
Journalism . . . . .	81
College of Business Administration . . . . .	83
Lower division . . . . .	83
Upper division . . . . .	84
Honors . . . . .	85
Teachers College . . . . .	86
Credentials . . . . .	86
Requirements for graduation . . . . .	86
Majors . . . . .	89
Honors . . . . .	91
Requirements for teaching credentials . . . . .	91
Elementary . . . . .	91
Kindergarten-Primary . . . . .	91
Junior High School . . . . .	91
Special Secondary . . . . .	91
General Secondary . . . . .	91
Junior College . . . . .	93

	PAGE
Branch of the College of Agriculture in Southern California . . . . .	94
Requirements for graduation . . . . .	94
Honors . . . . .	97
Graduate Study . . . . .	98
Requirements for the Master's degree . . . . .	98
Requirements for the Doctor's degree . . . . .	101
Academic residence for graduate students . . . . .	103
Announcement of courses . . . . .	105
Agriculture . . . . .	106
Art . . . . .	110
Astronomy . . . . .	115
Business Administration . . . . .	117
Chemistry . . . . .	123
Classical Languages . . . . .	126
Economics . . . . .	130
Education . . . . .	133
English . . . . .	137
French . . . . .	142
Geography . . . . .	145
Geology . . . . .	149
German . . . . .	153
History . . . . .	156
Home Economics . . . . .	160
Italian . . . . .	164
Life Sciences Group . . . . .	165
Bacteriology . . . . .	165
Botany . . . . .	166
Zoology . . . . .	169
Mathematics . . . . .	173
Mechanic Arts . . . . .	177
Military Science and Tactics . . . . .	181
Music . . . . .	184
Philosophy . . . . .	187
Physical Education for Men . . . . .	190
Physical Education for Women . . . . .	193
Physics . . . . .	198
Political Science . . . . .	202
Psychology . . . . .	207
Spanish . . . . .	211
Subject A . . . . .	214
Training Department . . . . .	215
Index . . . . .	220

# LEGEND.

- 1 ADMINISTRATION BLDG
- 2 CHEMISTRY
- 3 PHYSICS-BIOLOGY
- 4 JOSIAH ROYCE HALL
- 5 LIBRARY
- 6 WOMEN'S GYM
- 7 MEN'S GYM AND ARMORY
- 8 EDUCATION
- 9 KERCKHOFF HALL
- 10 MECH. ARTS BLDG. AND SHOPS
- 11 OUTDOOR THEATRE
- 12 PROVOST'S RESIDENCE
- 13 MYRA HERSHEY RESIDENCE HALL
- 14 TRACK
- 15 VARSITY FOOTBALL FIELD
- 16 TENNIS COURTS
- 17 SUBTROPICAL HORT. AREA
- 18 RELIGIOUS CONFERENCE
- 19 MASONIC CLUB HOUSE
- 20 Y. W. C. A.



UNIVERSITY OF  
CALIFORNIA  
AT  
LOS ANGELES



## CALENDAR\*

1936

Sept. 1, Tuesday	Applications for admission to undergraduate or graduate study in September, 1936, with complete credentials, should be filed on or before this date to avoid penalty of late application fee.
Sept. 8, Tuesday	9:00 A.M., Examination in Subject A.
Sept. 9, Wednesday	Admission Day: academic and administrative holiday in all departments.
Sept. 10, Thursday	Consultation with advisers by new students.
Sept. 11, Friday	<div style="display: flex; align-items: center;"> <div style="font-size: 3em; margin-right: 10px;">{</div> <div> <p>Registration of old students and reentrants (graduates and undergraduates):</p> <p>8:00 A.M.—9:30 A.M.—L—Q.</p> <p>9:30 A.M.—11:00 A.M.—R—Z.</p> <p>12:00 M.—1:30 P.M.—A—E.</p> <p>1:30 A.M.—3:00 P.M.—F—K.</p> <p>3:00 P.M.—4:00 P.M.—All initials.</p> <p>Registration of new students (graduates and undergraduates):</p> <p>8:00 A.M.—9:30 A.M.—A—L.</p> <p>9:30 A.M.—11:00 A.M.—M—Z.</p> <p>11:00 A.M.—1:00 P.M.—All initials.</p> <p>Registration of any student, old or new:</p> <p>11:00 A.M.—1:00 P.M.</p> </div> </div>
Sept. 12, Saturday	
Sept. 14, Monday	Instruction begins.
Sept. 19, Saturday	Special examination in Subject A.
Sept. 21, Monday	Last day to file registration books or to change study lists without fee.
Sept. 28, Monday	Last day to file application for admission to candidacy for the master's degree or for the secondary teaching credentials in February, 1937.
Oct. 2, Friday	Last day to add courses to study lists.
Oct. 9, Friday	Last day to drop courses from study lists without penalty of grade F (failure).
Nov. 6, Friday	End of mid-term period.
Nov. 18, Friday	Last day to file without fee, notice of candidacy for the bachelor's degrees in February.
Nov. 26, Thursday	{ Thanksgiving recess.
Nov. 29, Sunday	
Dec. 5, Saturday	Last day to file without fee, applications for supervised teaching.
Dec. 5, Saturday	Final examination in Subject A.
Dec. 14, Monday	Christmas recess begins.

1937

Jan. 4, Monday	Classes begin after Christmas recess.
Jan. 25, Monday	{ Final examinations, first semester, 1936-37.
Feb. 8, Wednesday	
Feb. 2, Tuesday	Applications for admission to undergraduate or graduate study in February, 1937, with complete credentials, should be filed on or before this date to avoid penalty of late application fee.
Feb. 8, Wednesday	Last day of first semester, 1936-37.
Feb. 10, Wednesday	9 A.M., Examination in Subject A.
Feb. 11, Thursday	Consultation with advisers by new students.

\* For the calendar of the departments at Berkeley (which differs from the one given here) application should be made to the Registrar, University of California, Berkeley. Registration for the first semester at Berkeley will begin August 20, 1936; for the second semester, January 14, 1937.

1937

Feb. 12, Friday	{ Registration of old students and reentrants (graduates and undergraduates): 8:00 A.M.—9:30 A.M.—A—E. 9:30 A.M.—11:00 A.M.—F—K. 12:00 M.—1:30 P.M.—L—Q. 1:30 P.M.—3:00 P.M.—R—Z. 3:00 P.M.—4:00 P.M.—All initials.
Feb. 18, Saturday	{ Registration of new students (graduates and undergraduates): 9:00 A.M.—1:00 P.M.—All initials. Registration of any student, old or new: 10:30 A.M.—1:00 P.M.
Feb. 15, Monday	Instruction begins.
Feb. 15, Monday	Last day to file applications for undergraduate scholarships at Berkeley for 1937–38.
Feb. 20, Saturday	Last day to file (at Berkeley) applications for fellowships and graduate scholarships for 1937–38, tenable at Berkeley.
Feb. 20, Saturday	Special examination in Subject A.
Feb. 22, Monday	Washington's Birthday: an academic and administrative holiday in all departments.
Feb. 28, Tuesday	Last day to file registration books or to change study lists without fee.
Mar. 1, Monday	Last day to file application for admission to candidacy for the master's degree or for the secondary teaching credentials in June or in August, 1937.
Mar. 1, Monday	Last day to file applications for fellowships and graduate scholarships for the academic year 1937–38, tenable at Los Angeles.
Mar. 5, Friday	Last day to add courses to study lists.
Mar. 12, Friday	Last day to drop courses from study lists without penalty of grade F (failure).
Mar. 28, Tuesday	Charter Day.
Apr. 1, Thursday	Last day to file applications for undergraduate scholarships for the academic year, 1937–38.
Apr. 7, Wednesday	End of mid-term period.
Apr. 8, Thursday	{ Spring recess.
Apr. 11, Sunday	
Apr. 24, Saturday	Last day to file without fee, applications for supervised teaching.
May 1, Saturday	Last day to file without fee, notice of candidacy for the bachelors' degrees in June.
May 8, Saturday	Final examination in Subject A.
May 10, Monday	Last day for filing in final form with the committee in charge, theses for the master's degree to be conferred in June, 1937.
May 30, Sunday	Memorial Day: May 31, Monday, academic and administrative holiday in all departments.
May 26, Wednesday	{ Final examinations, second semester, 1936–37.
June 5, Saturday	
June 11, Friday	
June 26–Aug. 6	Eighteenth Annual Commencement at Los Angeles. Summer Session at Los Angeles (tentative).

## THE REGENTS OF THE UNIVERSITY

**NOTE.**—The regular meetings of the Regents are held as follows: on the second Friday in February, August, October, November, and December, in San Francisco; on the day preceding Charter Day in March in Berkeley; on the day preceding Commencement at Berkeley in May in Berkeley; on the second Friday of September, January, and April, and on the day preceding Commencement at Los Angeles in June in Los Angeles. The meetings are held at such places as may from time to time be determined, but ordinarily at the Governor's Office, State Building, San Francisco; and at Kerckhoff Hall in Los Angeles. The July meeting is usually omitted. Ordinarily committees meet at 901 Crocker Building, San Francisco.

### REGENTS EX OFFICIO

**HIS EXCELLENCY FRANK F. MERRIAM, B.S.**  
Governor of California and President of  
the Regents  
Sacramento

**GEORGE JUAN HATFIELD, J.D.**  
Lieutenant-Governor of California  
417 Montgomery st  
San Francisco

**EDWARD CRAIG**  
Speaker of the Assembly  
111 West Imperial Highway  
Brea

**VIERLING KERSEY, M.A., LL.D.**  
State Superintendent of Public Instruction  
Mull bldg, Sacramento

**A. BLANCHARD MILLER**  
President of the State Board of Agriculture  
Fontana

**JOSEPH MOORE CUMMING**  
President of the Mechanics Institute  
85 Post st, San Francisco

**RALPH TALCOTT FISHER, M.A.**  
President of the California Alumni Association  
American Trust Co., Oakland

**ROBERT GORDON SPROUL, B.S., LL.D.**  
President of the University  
219 California Hall, Berkeley

### APPOINTED REGENTS

The term of the appointed Regents is sixteen years, and terms expire March 1 of the year indicated in parenthesis. The names are arranged in the order of original accession to the Board.

**GARRET WILLIAM MCENERNEY (1952)**  
2002 Hobart bldg, San Francisco

**WILLIAM HENRY CROCKER, Ph.B. (1940)**  
Crocker First National Bank, San Francisco

**JAMES KENNEDY MOFFITT, B.S. (1940)**  
41 First st, San Francisco

**CHARLES ADOLPH RAMM, B.S. (1944)**  
1100 Franklin st, San Francisco

**EDWARD AUGUSTUS DICKSON, B.L. (1942)**  
425 S Windsor blvd, Los Angeles

**JAMES MILLS (1942)**  
828 West Surf av, Balboa

**CHESTER HARVEY ROWELL, Ph.B., LL.D. (1952)**  
The Chronicle, San Francisco

**MORTIMER FLEISHACKER (1950)**  
Anglo-California National Bank, San Francisco

**GEORGE I. COCHRAN, LL.D. (1946)**  
501 West Sixth st, Los Angeles

**MRS. MARGARET RISHHEL SARTORI (1938)**  
725 W Twenty-eighth st, Los Angeles

**JOHN RANDOLPH HAYNES, Ph.D., M.D. (1938)**  
429 Consolidated bldg, Los Angeles

**JOHN FRANCIS NEYLAN (1944)**  
Crocker First National Bank bldg, San Francisco

**CHARLES COLLINS TEAGUE, LL.D. (1946)**  
Santa Paula

**SIDNEY M. EHRMAN, B.L., LL.B. (1948)**  
700 Nevada Bank bldg, San Francisco

**JOHN GALLWEY, M.D., Ph.D., LL.D. (1948)**  
1195 Bush st, San Francisco

**AMADEO PETER GIANNINI (1950)**  
Bank of America, 1 Powell st, San Francisco

## OFFICERS OF THE REGENTS

His Excellency Frank F. Merriam, B.S.  
President  
Sacramento

William Henry Crocker, Ph.B.  
Chairman  
Crocker First National Bank, San Francisco

Robert M. Underhill, B.S.  
Secretary and Treasurer  
219 California Hall, Berkeley

Luther A. Nichols, A.B.  
Comptroller  
118 California Hall, Berkeley

Jno. U. Calkins, Jr., B.L., J.D.  
Attorney  
901 Crocker bldg, San Francisco

Deming G. MacLise, B.S.  
Assistant Secretary and Assistant Comptroller  
48 Library, University of California at Los Angeles

Ira F. Smith, B.S.  
Assistant Comptroller  
University Farm, Davis

F. Stanley Durie  
Assistant Comptroller  
108 U. C. Hospital, San Francisco

George D. Mallory, A.B.  
Assistant Treasurer  
219 California Hall, Berkeley

Ashley H. Conard, B.L., J.D.  
Associate Attorney for the Board of Regents and Attorney in Nonresidence Matters  
901 Crocker bldg, San Francisco

STANDING COMMITTEES OF THE BOARD OF REGENTS  
FOR THE YEAR 1936-1937\**Agriculture:*

Regents Mills, Miller, Teague, Giannini, Hatfield, and Craig

*Educational Policy:*

Regents Rowell, Moffitt, Ramm, Mrs. Sartori, Ehrman, Teague, and Fisher

*Educational Relations:*

Regents Kersey, Rowell, Ramm, Neylan, and Fisher

*Endowments:*

Regents Mrs. Sartori, Cochran, McEnerney, Fleishhacker, Neylan, Teague, and Fisher

*Engineering:*

Regents Ramm, Cumming, Mills, Miller, and Craig

*Executive Committee:*

This committee consists of the chairmen of all standing committees and the President of the California Alumni Association

*Finance:*

Regents Moffitt, McEnerney, Fleishhacker, Crocker, Neylan, Cochran, Ehrman, Giannini, and Dickson

*Grounds and Buildings:*

Regents Fleishhacker, Dickson, Ramm, Cumming, Neylan, Teague, Ehrman, and Hatfield

*Jurisprudence:*

Regents McEnerney, Ehrman, Cochran, Hatfield, and Neylan

*Letters and Science:*

Regents Ehrman, Ramm, Moffitt, Kersey, Mrs. Sartori, and Fisher

*Library, Research and Publications:*

Regents Cochran, Galloway, Moffitt, Rowell, and Kersey

*Lick Observatory:*

Regents Neylan, Crocker, Cumming, Galloway, Fleishhacker, and Ramm

*University of California Medical School:*

Regents Crocker, Moffitt, Ramm, Haynes, Galloway, Neylan, Ehrman, and Giannini

*University of California at Los Angeles and Scripps Institution of Oceanography:*

Regents Dickson, Teague, Cochran, Mrs. Sartori, Haynes, Kersey, Craig, and Fisher

*Winemaking School:*

Regents Giannini, Cumming, and Moffitt

\*The President of the Board of Regents and the President of the University are *ex officio* members of all committees of the Board. In each committee the name of the chairman is first and the name of the vice-chairman is second.

# UNIVERSITY OF CALIFORNIA AT LOS ANGELES

## ADMINISTRATIVE OFFICERS

---

- ROBERT GORDON SPROUL, B.S., LL.D., President of the University.  
WILLIAM WALLACE CAMPBELL, Sc.D., LL.D., President of the University,  
Emeritus.  
DEMING G. MACLISE, B.S., Assistant Comptroller of the University, and  
Assistant Secretary of the Regents.  
HARRY MUNSON SHOWMAN, E.M., M.A., Registrar.  
MERTON E. HILL, Ed.D., Director of Admissions.  
CLARENCE HALL ROBISON, Ph.D., Associate Director of Admissions.  
JOHN EDWARD GOODWIN, B.L., B.L.S., Librarian.  
LILLIAN RAY TITCOMB, M.D., Physician for Women.  
DONALD MACKINNON, M.D., Physician for Men.  
M. BURNET PORTER, Appointment Secretary.  
MILDRED L. FOREMAN, M.A., Manager, Bureau of Occupations.
- 

- VERN O. KNUDSEN, Ph.D., Dean of Graduate Study.  
———, Dean of the College of Letters and Science.  
HOWARD SCOTT NOBLE, M.B.A., C.P.A., Dean of the College of Business Ad-  
ministration.  
MARVIN LLOYD DARSIE, Ph.D., Dean of the Teachers College.  
HELEN MATTHEWSON LAUGHLIN, Dean of Women.  
ANNE STONEBRAKER, A.B., Assistant Dean of Women.  
EARL JOYCE MILLER, Ph.D., Dean of Men.  
HURFORD E. STONE, Ph.D., Assistant Dean of Men.  
J. HAROLD WILLIAMS, Ph.D., Dean of the Summer Session.  
LEON D. BATCHELOR, Ph.D., Director of the Branch of the College of Agricul-  
ture in Southern California.  
ROBERT W. HODGSON, M.S., Assistant Director of the Branch of the College of  
Agriculture in Southern California.

# THE UNIVERSITY OF CALIFORNIA

THE UNIVERSITY OF CALIFORNIA is composed of academic colleges, professional schools, divisions, departments of instruction, museums, libraries, research institutes, bureaus, and foundations, and the University of California Press, situated on seven different campuses throughout the State, namely: Berkeley, Los Angeles, San Francisco, Davis, Riverside, Mount Hamilton and La Jolla. A list of the divisions on each campus follows:

## I. AT BERKELEY

### The Colleges of

Letters and Science,

Agriculture (including the Department of Agriculture, the Agricultural Experiment Station, the Agricultural Extension Service, and the Giannini Foundation of Agricultural Economics),

Chemistry,

Commerce,

Engineering (including the Surveying Camp at Fairfax),

Mining,

Pharmacy (first two years of the B.S. curriculum).

### The Schools of

Architecture,

Education,

Jurisprudence,

Librarianship,

Medicine (first year).

The University Extension Division (offering instruction wherever classes can be formed, or anywhere in California by correspondence, and providing lectures, recitals, moving pictures and other material for visual instruction).

The California Museum of Vertebrate Zoölogy.

The Museum of Paleontology.

The Anthropological Museum.

The Institute of Child Welfare.

The Institute of Experimental Biology.

The Institute of Social Sciences.

The Bureau of International Relations.

The Bureau of Public Administration.

The University of California Press.

**II. AT LOS ANGELES**

University of California at Los Angeles:

College of Letters and Science,

College of Business Administration,

Teachers College,

The Branch of the College of Agriculture in Southern California, including the courses of instruction in Subtropical Horticulture and the Agricultural Experiment Station's activities at Los Angeles,\*

The Lower Division in Chemistry, Engineering, and Mining,

Graduate Study (in academic fields, and in agriculture),

The Summer School of Surveying,

Institute for Social Science Research,

The Senator William Andrews Clark Memorial Library.

Los Angeles Medical Department. Graduate instruction only.

**III. AT SAN FRANCISCO**

Medical School (second, third, fourth, and fifth years, including the University Hospital and the Training School for Nurses).

The George Williams Hooper Foundation (for Medical Research).

College of Dentistry.

College of Pharmacy (Three-year curriculum and last two years of the B.S. Curriculum).

California School of Fine Arts.

Hastings College of the Law.

**IV. AT DAVIS**

The Branch of the College of Agriculture and the University Farm, including a branch of the Department of Agriculture and the Agricultural Experiment Station.

**V. AT RIVERSIDE**

The Branch of the College of Agriculture in Southern California, including the Citrus Experiment Station and Graduate School of Tropical Agriculture.\*

**VI. AT MOUNT HAMILTON**

The Lick Astronomical Department (Lick Observatory).

**VII. AT LA JOLLA**

The Scripps Institution of Oceanography.

**ELSEWHERE**

In addition to the principal divisions named above, the University maintains the W. K. Kellogg Institute of Animal Husbandry at Pomona and several field stations of the Agricultural Experiment Station in various parts of the State.

\* The Branch of the College of Agriculture in Southern California includes all activities of the College of Agriculture at Riverside and Los Angeles.

**HISTORY OF THE UNIVERSITY**

The establishment of the University of California in 1868 came as the result of three separate movements—one originating in private initiative, one in State action, and one in Federal action.

Private action owed its inception to the foresight of the Reverend Henry Durant, who, in 1853, opened in Oakland the Contra Costa Academy, under the auspices of the Presbytery of San Francisco and of the Congregational Association of Oakland. The name was soon changed to College School, in order to signify that the undertaking was only preparatory to a projected college. In 1855 the institution was incorporated under the name of College of California and was formally opened in 1860. Classes were graduated from 1864 to 1869, inclusive. In 1856 the College obtained a tract of land five miles to the north of Oakland and ten years later the name of Berkeley was given to the townsite about the new college campus.

State action had its start in the Constitutional Convention of 1849, which incorporated into the fundamental law recognition of and provision for a State University. There was constant public agitation down to 1868 for making the provisions effective.

Federal action began in 1853 when Congress gave the State 46,000 acres of land for a "seminary of learning." In 1862 the Morrill Act provided an additional grant of public lands for the establishment of an Agricultural, Mining, and Mechanical Arts College.

These three forces began working together to one end—the establishment of a University of California. The College of California contributed its buildings and four blocks of land in Oakland and its 160 acres of land in Berkeley; the Federal Government, the congressional gift of 150,000 acres of public lands; and the State, its property accumulated for the purpose, together with new legislative appropriations. The legislative act creating the University of California was signed by Governor Henry H. Haight on March 23, 1868, and the new institution opened its doors for instruction in September, 1869.

The first President was Henry Durant (1869–72). He was followed by Daniel Coit Gilman (1872–75), John LeConte (1875–81), William T. Reid (1881–85), Edward S. Holden (1885–88), Horace Davis (1888–90), Martin Kellogg (1890–99), Benjamin Ide Wheeler (1899–1919), David Prescott Barrows (1919–23), William Wallace Campbell (1923–30), Robert Gordon Sproul (1930–).

**Organization**

The University of California, under the terms of the Constitution of the State, is a public trust, charged with the function of providing education of collegiate grade. Through aid from the State and Federal governments, and by private gifts, it provides instruction in literature and the arts, in the sci-



ences, and in the professions of architecture, engineering, teaching, law, medicine, dentistry, nursing, and pharmacy. Instruction in all of the colleges of the University is open to all qualified persons, without distinction of sex.

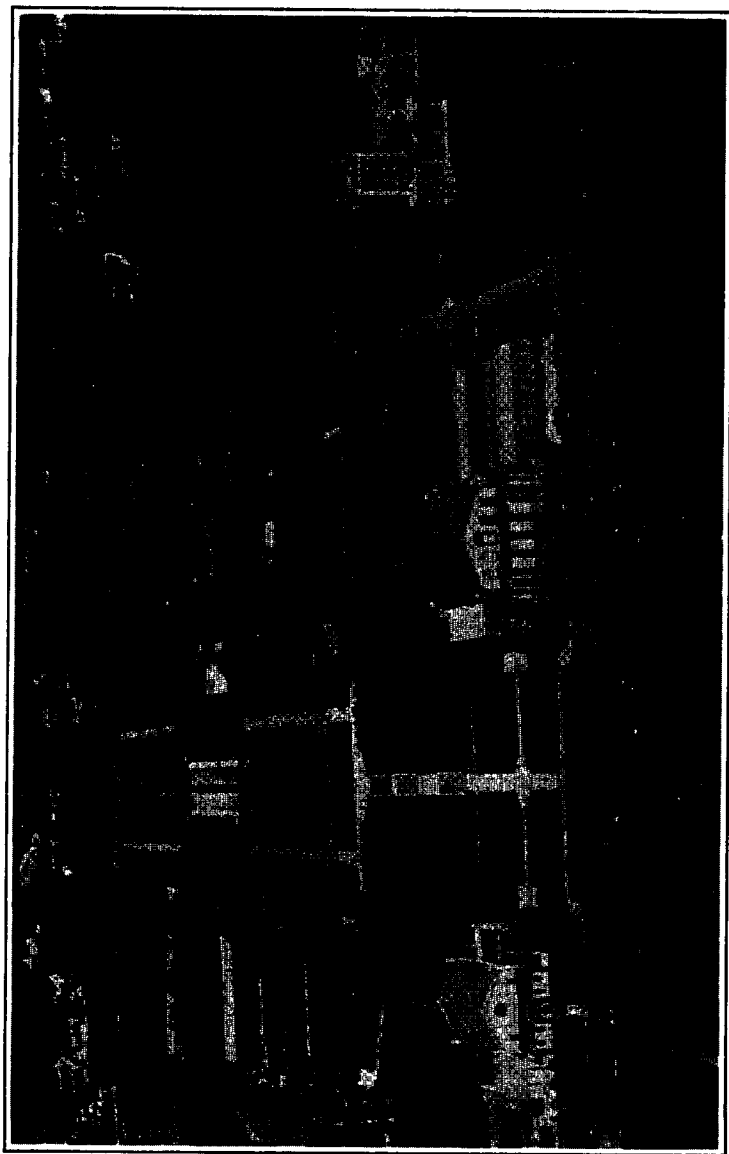
### ADMINISTRATION

The administration of the University of California is entrusted, under the State Constitution, to a corporation styled THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, consisting of the Governor, the Lieutenant-Governor, the Speaker of the Assembly, the State Superintendent of Public Instruction, the President of the State Board of Agriculture, the President of the Mechanics Institute of San Francisco, the President of the California Alumni Association, and the President of the University as members *ex officio*, and sixteen other regents appointed by the Governor. This corporation has "full powers of organization and government, subject only to such legislative control as may be necessary to insure compliance with the terms of the endowments of the University and the security of its funds." The corporation is also vested with the legal title and the management and disposition of the property of the University and the property held for its benefit, and has the power to take and hold, either by purchase, or by donation or by gift, testamentary or otherwise, or in any other manner, without restriction, all real and personal property for the benefit of the University or incidental to its conduct. It is further authorized to delegate to its committees or to the faculty or to others such authority or functions in the administration of the University as it may deem wise. Pursuant to this authority it has created an academic administrative body called the Academic Senate.

The Academic Senate consists of the President, Vice-Presidents, Deans, Directors, the Registrars (at Berkeley and Los Angeles), the University Librarian, the Librarian of the University of California at Los Angeles, and all professors and instructors giving instruction in any curriculum under the control of the Academic Senate. Instructors of less than two years' service are not entitled to vote.

The Academic Senate is divided into two sections: The Northern Section includes members of the Senate whose duties lie primarily in Berkeley, San Francisco, or Davis, or at Mt. Hamilton; the Southern Section includes members of the Senate whose duties lie primarily in Los Angeles, Riverside, or La Jolla. The President of the University is Chairman, *ex officio*, of each Section of the Academic Senate.

The Senate, subject to the approval of the Regents, determines the conditions for admission, for certificates, and for degrees. It authorizes and supervises all courses of instruction in the academic and professional colleges and schools. It recommends to the Regents all candidates for degrees in course and has general supervision of the discipline of students.



THE EAST CENTRAL PORTION OF THE CAMPUS—1985

# UNIVERSITY OF CALIFORNIA AT LOS ANGELES

## HISTORY AND DEVELOPMENT

IN MARCH, 1881, the legislature of California created the Los Angeles State Normal School. Five acres of ground were donated at the corner of Fifth Street and Grand Avenue—the present site of the Los Angeles City Library. Instruction was begun in August, 1882, with a faculty of three teachers and an enrollment of sixty-one students.

Following a legislative appropriation in 1911, a new site of twenty-five acres on North Vermont Avenue was obtained for the Normal School. In the fall of 1913 the cornerstone was laid for the first building, Millspaugh Hall, named to commemorate Jesse F. Millspaugh, who was president during the period 1904–1917. The School was moved into its new quarters in September, 1914, where it existed until the summer of 1919.

Through legislative action made effective by the Governor's signature on July 24, 1919, the grounds, buildings, and records of the Los Angeles State Normal School were transferred to the Regents of the University of California. In September of that year, university instruction was begun under the name, Southern Branch of the University of California. The educational facilities were expanded to include the freshman and sophomore years in Letters and Science beginning with September, 1919; the third and fourth years with September, 1923 and 1924, respectively. The degree of Bachelor of Arts was conferred in the College of Letters and Science for the first time in June, 1925. In 1922 the teacher training courses were organized as a Teachers College. The degree of Bachelor of Education was conferred for the first time in June, 1923. On February 1, 1927, the name of the institution was changed to UNIVERSITY OF CALIFORNIA AT LOS ANGELES.

The University is now engaged in building a new physical plant upon a campus of three hundred eighty-four acres recently bought and presented to it by the cities of Santa Monica, Venice, Beverly Hills, and Los Angeles. The removal to the new site from North Vermont Avenue took place in August, 1929, and instruction in all departments was begun in the new buildings on September 23, 1929.

By action of the Regents the Branch of the College of Agriculture in Southern California was established in November, 1930, providing resident instruction at the University of California at Los Angeles in the plant science curriculum, with a major in subtropical horticulture. The College of Business Administration was established in June, 1935, with instruction beginning in September, 1936.

On August 8, 1933, graduate study at the University of California at Los Angeles leading to the degrees of Master of Arts and Master of Science, and

to the Certificates of Completion for the general secondary and junior college teaching credentials, was authorized by the Regents, to begin in September, 1933. Accordingly one hundred and fifty candidates were admitted to work in the following fields: botany, economics, education, English, geography, geology, history, mathematics, philosophy, physics, political science, psychology, and zoölogy; the first master's degrees were conferred in June, 1934. To the fields first made available there have been added agriculture (subtropical horticulture), chemistry, French, German, home economics, Latin, microbiology, physical education, and Spanish. Beginning in September, 1936, candidates for the Ph.D. degree will be accepted in the fields of English, history, mathematics, and political science. It is expected that other fields will be added in subsequent years, as circumstances warrant.

The University of California at Los Angeles is administered by the President through the Vice-President and Provost, who is appointed by the Regents on the recommendation of the President of the University.

### SITE OF THE CAMPUS

The campus of the University of California at Los Angeles is situated on the lower south slope of the Santa Monica Mountains which overlook Hollywood and the western part of Los Angeles; the Pacific Ocean, visible from the grounds, is five miles distant in a direct line. The warmest month of the year is August, with a mean temperature of about 68°, the coolest is January with a mean temperature of 49°; the annual rainfall is about 18 inches, mostly between December and March. Proximity to the ocean insures an even temperature without extremes; the daily range of variation is about fifteen degrees.

The University campus is within the corporate limits of the city of Los Angeles, west of Beverly Hills. It extends along the south side of Sunset Boulevard from Hilgard Avenue to Veteran Avenue, and is bounded on the south by LeConte and Gayley avenues; automobiles should turn south from Sunset Boulevard at Hilgard Avenue, or north from Wilshire Boulevard at Westwood Boulevard.

The campus may be reached by bus as follows: From *Los Angeles* business district (Fifth and Hill streets), Los Angeles Motor Coach line, via Wilshire Boulevard, and Pacific Electric Co. Castellammare bus line, via Sunset Boulevard. From *Los Angeles*, western terminus of Pico car line, Bay Cities Transit Co. bus, via Pico and Westwood boulevards. From *Hollywood* (North Vermont Avenue and Hollywood Boulevard), Pacific Electric Co. bus, via Hollywood and Sunset Boulevards. From *Santa Monica*, Pacific Electric Co. bus via Wilshire Boulevard, and Bay Cities Transit Co. bus via Santa Monica Boulevard. From *Culver City*, William Thompson Transportation Co. bus via Motor and Overland avenues.

Students coming to Los Angeles by rail may ordinarily obtain tickets and check baggage to West Los Angeles without additional cost if done at the time when the railroad ticket is purchased. The cost of carfare and baggage transfer from Los Angeles is thereby considerably reduced.

### **SURVEY OF CURRICULA**

Instruction at the University of California at Los Angeles is offered in (a) the College of Letters and Science, with a curriculum leading to the degree of Bachelor of Arts and curricula of the earlier years of the College of Dentistry, of the Medical School, of the College of Engineering, of the College of Mining, of the College of Chemistry, and of the Training School for Nurses; (b) the Teachers College, with curricula leading to the degree of Bachelor of Education; (c) the College of Business Administration, with curricula leading to the degree of Bachelor of Science; and (d) the Branch of the College of Agriculture in Southern California, with a curriculum in subtropical horticulture, leading to the degree of Bachelor of Science. Students electing other curricula in the College of Agriculture may register at Los Angeles for the first two years and then transfer to Berkeley or Davis to complete the requirements for the degree. Graduate study, leading to the degrees of Master of Science and Master of Arts, to the degree of Doctor of Philosophy (in English, history, mathematics, and political science), and to the Certificates of Completion for the general secondary and junior college teaching credentials, also is available at the University of California at Los Angeles.

### **SUMMER SESSIONS**

The Summer Session of six weeks is designed for teachers and other persons who are unable to attend the University in the fall and spring sessions, as well as for students in the regular sessions who wish to shorten their college courses, or who have been unable to enroll in needed subjects. Any adult of good moral character, considered by the faculty to be of sufficient maturity and intelligence to profit by attendance upon the exercises of the session, may be admitted to the Summer Session. The courses of instruction are of University level, and credit toward University degrees may be given to students who comply with the conditions of work and examinations imposed by the instructors in charge.

The tuition fee for the Summer Session is \$35, irrespective of the number of courses taken.

The ANNOUNCEMENT OF THE SUMMER SESSION is issued in January of each year, and may be obtained by addressing University of California at Los Angeles Summer Session, 405 Hilgard Avenue, Los Angeles, California.

Summer Sessions are conducted by the University at Berkeley, Los Angeles, and at Davis. An Intersession of six weeks immediately precedes the Summer Session at Berkeley.

### UNIVERSITY EXTENSION

The Extension Division offers facilities to men and women who seek some form of higher education, but are prevented from taking up residence at the University. Thus, through its Extension Division, the University of California makes available to adults living in any part of the State and engaged in the pursuit of their vocations, opportunities similar to those offered to students in residence.

The work is carried on through five departments:

(1) **Class Instruction.** Classes are organized in cities and towns wherever a sufficient number of people can be gathered who wish to study the same subject. Instruction is offered in art, business methods, economics, education, engineering subjects, geography, history, languages, law, literature, mathematics, political science, psychology, public speaking, science, Americanization, etc.

(2) **Correspondence Instruction.** Courses are given by mail in art, astronomy, composition and literature, drawing, economics, education, engineering, history, the languages, mathematics, music, philosophy, physics, political science, psychology, etc. Courses may begin at any time.

(3) **Lectures,** singly or in series, are provided for any committee, club, organization, or community in the State that will make the necessary arrangements for hearing them.

(4) **Labor Education** offers educational facilities designed to serve the needs of industrial workers.

(5) **Visual Instruction.** The Extension Division circulates visual aids such as stereopticon slides and motion picture films, which cover many phases of educational work.

Persons desiring to take advantage of the facilities offered by any one of these departments may receive detailed information by addressing the Extension Division, University of California, 801 Hillstreet Building, Los Angeles, or California Hall, Berkeley, California.

## **ADMISSION TO THE UNIVERSITY**

---

### **STUDENT STATUS**

THE STUDENTS who are admitted to the University of California at Los Angeles fall into two main groups: the undergraduates, and the graduate students.

The undergraduates fall again into two groups: the regular students, and the special students.

The regular students are persons who have met all the requirements for admission to the University and who are pursuing within the University programs of study that comply with the established rules and regulations and lead, usually after four years' study, to the degrees of A.B., or B.S., or Ed.B.

The special students are those persons twenty-one years of age or over who have not had the opportunity to fulfill the requirements laid down for the admission of regular students. Each student in this group is admitted only after special consideration. A special student cannot be a candidate for a degree. A special student may, however, at any time attain the status of regular student by satisfying all the requirements for that status in the college that he desires to enter.

The graduate students are graduates of this University or of other institutions with equivalent requirements for graduation, who are carrying on advanced (graduate) work for higher degrees or teaching credentials. A graduate student may also register in unclassified status for the purpose of taking undergraduate courses only.

Detailed information concerning admission to each student status follows.

### **ADMISSION TO UNDERGRADUATE STATUS**

The rules concerning admission to undergraduate status are administered by the Board of Admissions. Prospective applicants for admission should address the Director of Admissions, who will supply the necessary forms of application. Every applicant for admission to the University is required to pay, at the time the first application is filed, an application fee of \$3. Remittance should be made payable to the Regents of the University of California.

#### **Admission in Freshman Standing**

The University of California admits in freshman standing on evidence, either by (1) certificate or by (2) examination, with satisfactory scholarship, of fifteen matriculation units of work, which must include the general fields of history, English, foreign language, mathematics, and science (see below).

## I. ADMISSION BY CERTIFICATE

A graduate of an accredited high school may enter the University in freshman standing, provided the following conditions have been satisfied:\*

1. *Graduation*.—Graduation from an accredited high school usually requires the completion of sixteen matriculation units or credits in selected subjects.

2. *Subject requirement*.—The high school program must include the following:

- (a) 1 unit of History—any two half-units of history, civics, or fourth-year social science approved by the principal.
- (b) 3 units of English—courses in English, dramatics or journalism approved by the principal.
- (c) 2 units of Mathematics—two half-units of elementary or higher algebra and two semesters of the following: plane geometry, solid geometry, trigonometry.
- (d) 1 unit of Science—a single laboratory science open only to third or fourth-year students, either chemistry, physics, biology, botany, physiology or zoölogy. (Only chemistry or physics apply on the science requirement for the junior certificate.)
- (e) 2 units of one Foreign Language—either French, German, Greek, Latin, Italian or Spanish.
- (f) { 1 unit of either advanced mathematics not already offered for requirement (c); or chemistry or physics not already offered for requirement (d); or an additional unit of the foreign language offered for requirement (e);  
or 2 units of a foreign language not offered for requirement (e).

3. *Scholarship requirement*.—Marks are interpreted on a system of four passing grades: A (superior), B (better than average), C (average), and D (barely passing). Principals are requested to interpret all grades in accordance with this system. *Semester grades are counted* rather than year grades. The grade requirements are based on the high school record of years *Ten to Twelve, inclusive*.

a. The applicant's record in the senior high school or in the tenth, eleventh, and twelfth years (that is, the last three years of a four-year high school), must show that he has attained an average grade of B in all the subjects which are offered in fulfillment of requirements (a)–(f), inclusive. In computing the average, a semester grade of A may be used with any semester grade of C in any of the prescribed courses, whether in the same or in a different field, to obtain a B average. No subject may be counted toward requirements (a)–(f)

\* Subject A: English Composition. An examination in English composition designed to test the applicant's ability to write English without gross errors in spelling, grammar, diction, sentence structure and punctuation, is required of all undergraduate intrants. The examination is given at the opening of each semester and at the opening of the summer session. Students who do not pass in the examination are required to take the Course in Subject A without unit credit toward graduation. For further information see page 86.



in which the applicant has received a grade of D in the senior high school or the years corresponding to it.

b. For work completed in the junior high school or ninth grade of the four-year high school, subject credit is given for any of the (a), (b), (c), or (e) subjects completed. Any passing grade is acceptable in these courses.

*Repeated grades.*—A grade earned by repeating a course may not be counted as higher than C even though a higher grade may be reported. Credits reported in this way will be accepted, however, in fulfillment of specific subject requirements. For example, the applicant who earned grade D, E, or F in plane geometry in either semester may repeat the work of that semester with the expectation that if he attains grade C or higher upon repetition he will be regarded as having fulfilled the specific subject requirement in plane geometry. This rule does not apply to grades earned in this manner prior to March, 1931.

The plan of admission in freshman standing, outlined above and known officially as the "1933 Plan," appears to be the best single plan of admission to the University of California that has yet been devised; for, in general, it has been found that students who meet the requirements of this plan are capable of doing the most satisfactory university work. It is important, therefore, that every prospective student acquaint himself with these requirements while he is in high school and strive to meet them.

Often students reach the junior or senior year of high school without having planned to enter the University of California. Such students who have a high scholarship average and who decide late in their high school years that they wish to enter the University are encouraged to submit their transcripts for evaluation. This is in keeping with the University's policy that no worthy student shall be denied admission if his previous record makes it appear that his scholastic ability is of sufficiently high order to insure success in university work. For several years students have been admitted in freshman standing *who have no scholarship shortage* in their high school record but whose pattern of high school subjects failed in one way or another to conform to the above-stated subject requirements. Each applicant in this classification is given individual consideration by the Board of Admissions upon presentation of his official high school record.

## II. ADMISSION BY ENTRANCE EXAMINATION

An applicant for admission whose school work in California or elsewhere does not, in the opinion of the Board of Admissions, entitle him to admission by certificate as described above, may be admitted by passing examination in the required subjects of the high school program (see page 22, and under 8c below).

The University does not conduct matriculation examinations. An applicant seeking admission by examination will be required to take the examina-

tions of the College Entrance Examination Board. These examinations are held in the week beginning on the third Monday in June (in 1937, June 19-26, inclusive) at the following places in California: Los Angeles, Berkeley, San Rafael, Stanford University, Santa Barbara, Carpinteria, La Jolla, Ojai, Avalon, and Claremont. A circular giving information concerning the examinations and the necessary application form may be obtained directly from the College Entrance Examination Board, 431 West 117th Street, New York City. Applications and the required fee (\$10) should reach the Board on or before May 17, 1937.

The examinations of the College Entrance Examination Board also may be used to remove deficiencies in scholarship or subject requirements for admission by certificate (see under 8a and 8b below).

### Removal of Admission Deficiencies

Deficiencies in the scholarship or subject requirements for admission in freshman standing by certificate may be removed as follows:\*

(1) *By courses in the University of California Extension Division* which offers work of high school level and college courses (class and correspondence). These courses may be taken to remove entrance deficiencies. The courses should be completed with satisfactory grades and in a proper amount in the field or fields in which the deficiencies were incurred. Furthermore, all requirements for admission to the University in advanced standing must be satisfied. The program of studies proposed for this purpose should be approved in advance by the Director of Admissions.

(2) *By courses in the University of California Summer Sessions* (Berkeley and Los Angeles), and the Intersession (Berkeley).—Elementary college courses and a limited number of courses of high school level are offered. Advice respecting the selection of these courses and the grades required should be obtained from the Director of Admissions.

(3) *By enrollment in the Nondegree Curriculum at the Branch of the College of Agriculture of the University of California at Davis.*—Entrance deficiencies may be removed by the satisfactory completion of an appropriate program made up of nondegree or degree courses, or a program combining both types of work. Advice in respect to this work should be sought from the Recorder, Branch of the College of Agriculture, Davis, or from the Director of Admissions, University of California at Los Angeles, or University of California, Berkeley, California.

(4) *By courses in other four-year colleges* completed with satisfactory

---

\* For information concerning removal of scholarship deficiencies for admission in advanced standing, see page 28.

grades in the field or fields in which the deficiencies were incurred.\* The requirements for admission in advanced standing also must be satisfied.

(5) *By courses in junior colleges or state colleges* completed with satisfactory grades and in proper amount in the field or fields in which the deficiencies were incurred.\* Furthermore, all requirements for admission to the University in advanced standing must be satisfied. See statement on page 26.

(6) *By junior college noncertificate courses* representing work of non-university level taken after high school graduation. The scholarship standards for these courses are those required for work taken in the high school. Work that is clearly repetition may be offered to make up a subject, but not a scholarship deficiency; other work must be completed with A or B grades in order to make up scholarship deficiencies. But see (a) and (b) on page 27.

(7) *By postgraduate courses in accredited high schools.*

(8) *By College Entrance Board examinations* which offer three ways of removing deficiencies:

(a) *Selected examinations.*—A graduate of an accredited high school may remove deficiencies in the subject or scholarship requirements for admission by certificate by passing examinations in the subjects in which the deficiencies occur.

(b) *Examination in three fields of study.*—A high school graduate who has completed the required subjects of the high school program, (a) to (f) inclusive, as described on page 22, but who has scholarship deficiencies, may qualify for admission by passing, in a single examination period, examinations representing three distinct fields of study. The candidate is permitted to select three of the four fields listed below in which to be examined.

(i) History, 1 unit; or English, 3 units.

(ii) Mathematics. This examination must include either elementary algebra and plane geometry, 2 units, or must be 1 unit of advanced mathematics, if such work is presented in satisfaction of requirement (f).

(iii) Science. This examination must be in chemistry, or physics, or biology, or zoölogy, or botany, or physiology—1 unit. If chemistry or physics is presented in satisfaction of requirement (f), the examination in science must be in the subject thus presented.

\* Work of college level undertaken to remove high school deficiencies usually is accepted at the rate of three semester units for one matriculation unit; that is, a year's work in a subject in the high school. Ordinarily, no credit for advanced standing will be assigned for work of college level employed in the removal of *subject deficiencies*, although the grades received in such courses will be considered in the determination of the applicant's scholarship standing for admission.

Normally, full University credit will be assigned for work of college level employed for the removal of deficiencies in the scholarship requirements for admission in freshman standing, subject to the usual rules respecting the acceptance of credit for advanced standing.

Definition of "field."—Credits earned in courses above the high school level may be presented as follows: economics, history, or political science for requirement (a); any English for (b); any standard college mathematics for (c); any laboratory science as previously defined for (d); Latin, Greek, French, Spanish, German, or Italian for (e); any mathematics as defined above or foreign language or laboratory chemistry or physics for (f).

(iv) Foreign language. This examination must be in the 2 units of language presented in satisfaction of requirement (e); provided that if, foreign language is presented in satisfaction of requirement (f), the examination must cover all the work in foreign language presented in satisfaction of both requirement (e) and requirement (f).

(c) *Examinations in from 10 to 15 units*, including the required subjects of the high school program (a) to (f), may be taken by an applicant for admission whose school work in California or elsewhere does not, in the opinion of the Board of Admissions, entitle him to admission by certificate as above-described or to admission by examination in a limited number of subjects as described under (8b). The precise number of examinations that each applicant must take will be determined by the Board of Admissions.

NOTE.—The following information is primarily for high school principals and faculty advisers.

*Accrediting of schools in California.*—An accredited high school is one that has been officially recognized by the University as fulfilling the regulations laid down by the Regents of the University for the accrediting of secondary schools in California. Principals' applications for accrediting must be filed at Berkeley on or before the first day of November of each school year. The list of accredited schools is published by the University annually in the month of June or July. For blank forms of application for accrediting and for other information, school principals may communicate with Professor Clarence Paschall, in charge of accreditation.

*Responsibility of high school authorities.*—The responsibility for the granting of certificates to high school student lies with the high school authorities, and students naturally will be guided by their respective principals in making their preparation for entrance to the University.

Upon the high school authorities rests also the responsibility for determining the scope and content of courses preparatory to admission to the University and for certifying the course to the University under the proper subject designation of the high school program.

### Admission in Advanced Standing

An applicant for admission to the University in advanced standing, in order to be so admitted, must present evidence satisfactory to the Board of Admissions respecting the work completed by him at other collegiate institutions and the grades of scholarship attained therein.\* A thoroughly satisfactory scholarship record, as distinguished from a record which is poor or of barely passing grade, is required for admission. No applicant may disregard his col-

\* A fee of \$3 must accompany each application for admission. Remittance should be made payable to the Regents of the University of California.

legiate record and apply for admission in freshman standing; he is subject without exception to the regulations governing admission in advanced standing.

Each applicant also will be required to present evidence that he has completed in full the subject and grade requirements prescribed for the admission of high school graduates in freshman standing. For a statement concerning the removal of deficiencies in these requirements see page 24.

An applicant from a junior college or state college in California, who upon graduation from high school did not qualify for admission in freshman standing, must present evidence that he has removed all entrance deficiencies and that he has completed in addition

(a) Not less than 60 university semester units of work acceptable for advanced standing in the college of the University to which admission is sought, with a satisfactory average of scholarship, which is defined as a C average or higher in all college work submitted for advanced standing, or

(b) Not less than 15 university semester units of work in courses acceptable for advanced standing in the college of the University to which admission is sought, with a distinctly high average of scholarship.

The student should note that credit toward a degree in the University of California for an extension course or courses completed in another institution will be given only upon the satisfactory passing at this University of an examination in the course or courses concerned, unless the other institution maintains a classification of extension courses similar to that established by the University of California.

*Subject A: English Composition.*—Credit for Subject A (English Composition) is given upon certificate to those students who enter the University with credentials showing the completion elsewhere of the required training in composition. Of all other students, an examination by this University, at Berkeley or at other centers of instruction, is required.

*Surplus matriculation credit.*—There is no provision for advanced standing in the University on the basis of surplus high school credit.

*Teaching experience.*—No University credit is given for teaching experience. Students presenting evidence of successful teaching experience may substitute approved courses in education for part or all of the regular requirements in Supervised Teaching upon the recommendation of the Director of the Training Department.

### **Removal of Scholarship Deficiencies by Applicants from Other Colleges**

Applicants otherwise eligible who seek to transfer from other institutions of collegiate rank but whose college record fails to show a satisfactory scholarship average may be admitted only when the deficiency has been removed by addi-

tional work completed with grades sufficient to offset the shortage of grade points. This may be accomplished by work (1) in the intersession, summer or postsession, or (2) in the Extension Division of the University, or (3) in other approved higher institutions.

### **PREPARATION FOR UNIVERSITY CURRICULA**

In addition to those subjects required for admission to the University, outlined on page 22, certain preparatory subjects are recommended for each University curriculum which, if included in the high school program, will give the student a more adequate background for his chosen field of study. The table on page 30 indicates for each college and curriculum those preparatory subjects which, in the opinion of University authorities, are desirable.

Attention is directed especially to the fact that physics and chemistry are recommended in the preparation for each of these University curricula (with a single exception) in the College of Letters and Science. This has been done, not only because of the value of each or both of these subjects as preparation for the courses of a particular curriculum, but also because completion of these subjects in the high school will meet a part of the requirements for the junior certificate in the college and thereby give the student greater opportunity in his freshman and sophomore years at the University to take studies of his own choosing (electives).

Especial care should be exercised by the high school student in selecting a foreign language. The study of a foreign language is important not only because of its broad cultural preparation but also because a reading knowledge of foreign languages may be very useful in the pursuit of advanced work in many departments of the University. For department requirements and recommendations see page 30.

The high school student who plans to enter the University of California, but who at the outset of his high school course is uncertain concerning which of the several University curricula he may wish to follow, should provide himself with a wide range of opportunities by completing in the high school a program of studies somewhat as follows: history, 1 unit; English, 3 units; elementary algebra, 1 unit; plane geometry, 1 unit; algebraic theory,  $\frac{1}{2}$  unit; trigonometry,  $\frac{1}{2}$  unit; solid geometry,  $\frac{1}{2}$  unit; chemistry, 1 unit; physics, 1 unit; foreign language, 4 units; freehand drawing,  $\frac{1}{2}$  unit; and geometrical drawing, 1 unit; total, 15 units.

The student is cautioned with respect to the choice of electives that vocational or activities courses in the high school are not regarded as acceptable substitutes for basic academic studies in the preparation for University curricula. Unless this caution is observed, the student, even though he has been admitted to the University, may find that he is not equipped to do all the work necessary for the bachelor's degree in the normal four-year period.

*Explanatory note to table on following page.*—In this table the amount of high school credit is shown in standard units, a unit representing the measure of a subject taken throughout the school year of from thirty-six to forty weeks and constituting approximately one quarter of a full year's work in the high school.

Under Foreign Language in the table specific recommendations are shown by numerals indicating the amount of credit. The asterisk (\*) where used indicates an acceptable substitute for a language specifically recommended.

The letters prefixed to the title of the college or curriculum have the following significance:

*a*—Complete major offered only at Berkeley.

*b*—The first two years may be taken at Los Angeles.

*c*—The student may make up a program of one year's work at Los Angeles and then transfer to Berkeley.

*d*—Complete major offered only at Los Angeles.

If no letter is prefixed, the complete curriculum is offered at both Berkeley and Los Angeles.

### ADMISSION OF SPECIAL STUDENTS

Special students are students of mature years who have not had the opportunity to complete a satisfactory high school program, but who, by reason of special attainments, may be prepared to undertake certain courses in the University. The conditions for the admission of each applicant will be assigned by the Director of Admissions. A personal interview ordinarily will be necessary before final action can be taken. In general, special students are required to confine their attention to some special study and its related branches.

Transcripts of record from all schools attended beyond the eighth grade are required. Applicants for special status may be required to take an aptitude test and the examination in Subject A. Prospective applicants should communicate with the Director of Admissions, who will supply forms of application for admission and for transcripts of high school record.

Applicants will not be admitted directly from the high schools to the status of special student. The graduates of high schools are expected to qualify for admission in accordance with the usual rules; students so admitted, if not candidates for degrees, may, with the approval of the proper study-list officer, pursue elective or limited programs.

No person under the age of 21 years will be admitted as a special student, but the mere attainment of any given age is not in itself a qualification for admission.

The University has no "special courses"; all courses are organized for regular students—that is, for students who have had the equivalent of a good

# HIGH SCHOOL SUBJECTS REQUIRED FOR THE SEVERAL UNDERGRADUATE CURRICULA AND SUGGESTED ELECTIVES†

College and Curriculum†	History	English	Mathematics				Lab. Sci.		Foreign Language						Freehand Draw.	Geometrical Draw.	Electives
			El. Alg., Pl. G.	Alg. Theory	Trigonom.	Solid Geom.	Chemistry	Physics	French	German	Greek	Italian	Latin	Spanish			
College of Letters and Science:																	
aAnthropology.....	3	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	1
aArchitecture.....	1	3	2	-	-	-	1	1	3	3	-	-	-	-	-	-	1
abArt.....	1	3	2	-	-	-	1	1	4	4	-	-	-	-	-	-	2
Astronomy.....	1	3	2	1	-	-	1	1	2	2	-	-	-	-	-	-	4
Bacteriology.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	2
Botany.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	1
Chemistry.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	2
Economics.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	2
Education.....	2	4	2	-	-	-	1	1	2	2	-	-	-	-	-	-	2
English.....	2	3	2	-	-	-	1	1	3	3	-	-	-	-	-	-	1
French.....	1	3	2	-	-	-	1	1	4	4	-	-	-	-	-	-	1
Geography.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	1
Geological Sciences.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	1
German.....	1	3	2	-	-	-	1	1	-	4	-	-	-	-	-	-	1
Greek.....	1	3	2	-	-	-	1	1	-	-	3	-	-	-	-	-	1
History.....	3	3	2	-	-	-	1	1	-	-	-	-	-	-	-	-	3
aHousehold Art.....	3	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	3
Household Science.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	5
aItalian.....	1	3	2	-	-	-	1	1	-	-	-	4	2	-	-	-	1
aJournalistic Studies.....	2	3	2	-	-	-	1	1	3	3	-	-	-	-	-	-	3
Latin.....	1	3	2	-	-	-	1	1	2	2	-	-	4	-	-	-	1
Mathematics.....	1	3	2	1	-	-	1	1	2	2	-	-	-	-	-	-	1
abMusic.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	3
abNursing (Five Year Course).....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	3
aOriental Languages.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	3
aPaleontology.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	3
Philosophy.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	5
abPhysical Education & Hygiene.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	5
Physics (and abOptometry).....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	2
Political Science.....	3	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	1
Pre-Dental.....	1	3	2	-	-	-	1	1	-	4	-	-	-	-	-	-	3
Pre-Legal.....	1	3	2	-	-	-	1	1	-	-	-	-	3	-	-	-	4
Pre-Medical.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	2
Psychology.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	3
aPublic Health (Hygiene).....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	3
abPublic Speaking.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	3
aSemitic Languages.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	3
aSlavic Languages.....	2	4	2	-	-	-	1	1	-	3	-	-	-	-	-	-	3
aSocial Institutions.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	3
Spanish (and abPortuguese).....	1	3	2	-	-	-	1	1	-	-	-	-	2	4	-	-	1
Zoology.....	1	3	2	-	-	-	1	1	2	2	-	-	2	-	-	-	1
abCollege of Chemistry.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	1	1
College of Commerce (Berkeley).....	1	3	2	1	-	-	1	1	2	2	-	-	-	-	-	-	3
abCollege of Engineering.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	1	2
abCollege of Mining.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	4
aCollege of Pharmacy.....	1	3	2	-	-	-	1	1	-	2	-	-	2	-	1	-	1
College of Agriculture:																	
aSubtropical Horticulture.....	1	3	2	-	-	-	1	1	-	-	-	-	2	-	-	-	4
aForestry; Landscape Design.....	1	4	2	-	-	-	1	1	-	-	-	-	2	-	-	1	1
aOther Agricultural Curricula.....	1	3	2	-	-	-	1	1	-	-	-	-	2	-	-	-	4
Teachers College (Los Angeles):																	
Art.....	2	3	2	-	-	-	1	1	4	4	-	-	-	-	-	-	2
Commerce.....	1	3	2	1	-	-	1	1	2	2	-	-	-	-	-	-	3
Education.....	3	3	2	-	-	-	1	1	4	4	-	-	-	-	-	-	1
Home Economics.....	1	3	2	-	-	-	1	1	-	2	-	-	-	-	-	-	5
Mechanic Arts.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	2
Music.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	3
Physical Education.....	1	3	2	-	-	-	1	1	2	2	-	-	-	-	-	-	5
College of Business Administration (Los Angeles).....	1	3	2	1	-	-	1	1	2	-	-	-	-	-	1	-	2

† See Explanatory Note, on page 29.



high school education and have been fully matriculated. Special students may be admitted to those regular courses for which, in the judgment of the instructors, they have satisfactory preparation. *A special student will seldom be able to undertake the work of the engineering and professional colleges or schools until he has completed the prerequisite subjects.*

A special student may at any time attain the status of regular student by satisfying all the matriculation requirements for admission to the University.

Instruction is not offered in such essential preparatory subjects as elementary English, United States history, elementary physics, nor, except in the Summer Sessions or in the Extension Division, in elementary algebra, plane geometry, or elementary chemistry.

Students more than 24 years of age at the time of admission are excused from military science.

### ADMISSION FROM SCHOOLS AND COLLEGES IN FOREIGN COUNTRIES

Credentials from schools and colleges in foreign countries are evaluated in accordance with the regulations governing admission.

An applicant whose education has been conducted in a language other than English must satisfy the Board of Admissions that his command of English is sufficient to permit him to profit by instruction in this University. The applicant's knowledge of English will be tested by an oral and written examination. The admission of an applicant who fails to pass this examination will be deferred until such time as he has acquired the required proficiency in the use of English.

*Language credit for a foreign student.*—College credit for the mother tongue of a foreigner and for its literature is given only for courses taken in native institutions of college level, or for upper division or graduate courses actually taken in the University of California, or in another English-speaking institution of approved standing.

### ADMISSION TO GRADUATE STATUS

Applications for admission to graduate study will be received from graduates of recognized colleges and universities who propose to work for the degrees of Master of Arts or Master of Science, or for the degree of Doctor of Philosophy in the fields of English, history, mathematics, and political science, or for the certificates of completion leading to the general secondary or junior college teaching credentials. Completed applications with supporting documents should be in the hands of the Registrar not later than September 1, 1936, for the semester beginning September, 1936, and not later than February 2, 1937, for the semester beginning February, 1937. Failure to observe these dates will necessitate the payment of a late application fee of \$2.

The number of applicants that can be admitted is strictly limited. The basis of selection is the promise of success in the work to be undertaken, evidenced largely by the previous college record. In general a minimum undergraduate scholarship equivalent to a 1.50 grade-point average (half way between grades C and B) at the University of California at Los Angeles is prescribed. Notification of acceptance or rejection is sent to each applicant as soon as possible after the receipt of his application. *Applicants are warned not to make definite arrangements without such notice*, on the assumption that they will be accepted for admission.

Applications are to be made upon the form provided for the purpose by the Registrar, and must be accompanied by the application fee (see below); transcripts of previous work must be submitted in accordance with the instructions on the application form.

An application fee of \$3 is required of every student applying for admission to graduate status, even though he may have been in previous attendance at the University in other than graduate status; it is returned to applicants who are not accepted, but may not be refunded to a person who has been accepted and who does not enroll.

#### **UNCLASSIFIED STATUS**

Attention is called to the possibility of registration in "unclassified status," open to students holding degrees from recognized institutions; no limitation is placed upon the number of students in this status. An unclassified student is in general admitted to any undergraduate course for which he has the prerequisites; he may not enroll in any graduate course, nor is any assurance implied of later admission to graduate status. In the event of admission to graduate study the grade point requirements for degrees and credentials will apply to all work done in unclassified status; degree credit may be allowed for such work upon the approval of the department of the candidate's field of study.

## **GENERAL INFORMATION**

---

### **REGISTRATION**

EACH STUDENT REGISTERS in the University of California at Los Angeles on days appointed for this purpose, at the beginning of each semester. Registration covers the following steps: (1) filling out application, paying fees, and receiving in exchange a card showing that the applicant has been enrolled in the University; (2) enrolling in courses according to instructions which will be posted on the University bulletin boards.

### **MEDICAL EXAMINATIONS**

Each applicant must also appear before the University Physicians and pass a medical examination, to the end that the health of the University community as well as that of the individual may be safeguarded. Evidence, satisfactory to the University Physicians, of successful immunization against smallpox is required.

A medical examination is required of every student each year; returning students are requested to make appointments with the University Physicians at the time of registration.

### **Medical Facilities**

The University of California at Los Angeles provides medical service on the campus for the care of emergencies, with physicians and trained nurses in charge. There are no facilities for hospital care. Students are entitled to medical consultation and advice; every entering student receives a medical examination; thereafter an examination is required each year.

### **LATE ADMISSION AND REGISTRATION**

The student or prospective student should consult the calendar of the University of California at Los Angeles (which differs from the calendar of the departments at Berkeley) and acquaint himself with the dates upon which students are expected to register and begin their work at the opening of the session. Failure to register upon the stated registration day is certain to cause difficulty in the making of a satisfactory program and to retard the progress both of the student himself and of each class to which he may be admitted.

The student who registers after the opening of the session and who later is found to be deficient in his work may not plead late admission as an excuse for his deficiency.

*A fee of \$2 is charged for late registration; this fee applies both to old students and to new.*

A qualified student or applicant who fails to register upon the stated registration day on the opening of the session, but who, nevertheless, appears *during the first two weeks* of instruction, will in general be permitted to register. After the first week, however, he may be required to obtain the written approval of all the instructors in charge of his proposed courses, as well as of the dean of his proposed college, before his registration may be completed. The qualifications of an applicant for admission to the University *after the first two weeks* of instruction will be given special scrutiny by the Associate Director of Admissions and the dean of the college to which admission is sought.

*Transfer to the University of California at Los Angeles in February.*—It is of special importance that a student in another institution who desires to transfer to the University of California at Los Angeles after the stated registration day of the second semester should communicate in advance with the Office of Admissions, and should await assurance that late admission will be permitted before discontinuing studies in progress elsewhere. The applicant should state specifically the college in the University to which he wishes admission, and the amount of advanced credit which he expects to offer at the time of transfer.

### STUDENT RESPONSIBILITY

Each student is responsible for compliance with the regulations printed in this Catalogue and with official notices published in the *Daily Bruin*, or posted on official bulletin boards.

The presentation of a study list by a student and its acceptance by the college evidence an obligation on the part of the student to perform the designated work faithfully and to the best of his ability. Any student who discontinues, without formal notice, University exercises in which he is a regularly enrolled attendant, does so at the risk of having his registration privileges curtailed or entirely withdrawn.

Application for leave to be absent, or excuse for having been absent from a University exercise, should be made to the instructor; if for unavoidable cause the student absents himself from all college exercises for one day or several days he should present his excuse to the dean of his college. Excuse to be absent does not relieve the student from completing all the work of each course to the satisfaction of the instructor in charge.

Ample provision is made for the student who desires to withdraw from courses in which he is regularly enrolled. Petition for change in study list should be presented to the Registrar. Attendance upon all exercises is obligatory pending receipt of formal permission to discontinue.

For regulations concerning withdrawals from the University see page 43 of this Catalogue.

It is the duty of the student to inform the Registrar of changes of address.

### UNITS OF WORK AND CREDIT: STUDY-LIST LIMITS

Both matriculation and university work are measured in "units." In the high school a *standard secondary unit* is the measure of a subject pursued throughout the school year of thirty-six to forty weeks and constitutes approximately one-fourth of a full year's work. A university *unit of registration* represents one hour of a student's time at the University, each week, during one semester, in lecture or recitation, together with the time necessary for preparation; or a longer time in laboratory or other exercises not requiring preparation. Credit for 120 units in the College of Letters and Science, in the College of Business Administration, and in the Teachers College, and 130 in the College of Agriculture, distributed according to the requirements of the college, is necessary for a bachelor's degree.

A student on scholastic probation, or subject to supervision of the Committee on Reinstatement, is limited to a program of 12 units each semester, to which may be added the required  $\frac{1}{2}$ -unit course in physical education.

In the College of Letters and Science or in the Teachers College a student may present a study list aggregating 12 to 16 units each semester without special permission.\* During his first semester in residence a student may not receive credit for more than 16 units of work. After the first semester a student may on petition carry a program of not more than 18 units, if in the preceding semester he attained an average of at least two grade points for each unit of credit in his total program (of 12 units or more). A student whose record during the preceding semester was free of all deficiencies, and who is in good academic standing, may without special permission submit a program of  $\frac{1}{2}$  unit in excess, provided the  $\frac{1}{2}$  unit is in required physical education. The student may not, however, count toward the degree more than the allowable study-list maximum of his college. All courses in military science and physical education and repeated courses are to be counted in study-list totals. Any work undertaken in the University or elsewhere simultaneously with a view to credit toward a degree must also be included.

In the College of Business Administration, a student who is not restricted in his study list and who is not on probation may present a study list aggregating 12 to 18 units a semester without special permission with respect to quantity of work, save that in his first semester of residence the maximum must be 16 units.

\* Certain courses which do not give units of credit toward the degree, nevertheless displace units from a student's allowable program, as follows:

Commerce B (Shorthand) by 2 units.

Course in Subject A by 2 units.

Mechanic Arts A by 2 units.

In the College of Agriculture a regular student who is free from deficiencies in the work of the previous semester, and who is in good academic standing may register for not more than 18 units. To this maximum may be added the required physical education course of  $\frac{1}{2}$  unit.

Students enrolled in the lower division who are carrying work preparatory to admission to the junior year of the College of Chemistry, the College of Engineering, or the College of Mining, and who are free from deficiencies in the work of the previous semester, may register for not more than 18 units of new work. Students with deficiencies will be limited to 16 units, including repeated work. If students in these professional curricula later transfer to nonprofessional curricula in Letters and Science, their credits will be reduced in accordance with the limits of that college.

A special student ordinarily will have his study list specified at the time of his admission; it is limited to 16 units.

Regulations concerning study-list limits for graduate students will be found in the *Announcement of Graduate Study*.

#### **SUBJECT A: ENGLISH COMPOSITION**

1. With the exceptions noted below, every undergraduate entrant must, at the time of his first registration at the University of California at Los Angeles, take an examination known as the *Examination in Subject A* designed to test his ability to write English without gross errors in spelling, grammar, diction, sentence-structure, and punctuation.

2. The examination in Subject A is given at the opening of each semester and at the opening of the Summer Session (see REGISTRATION CIRCULAR to be obtained from the Registrar of the University of California at Los Angeles). A second examination for late entrants is given not later than two weeks after the first examination in each semester; for this examination a fee of \$1 is charged. Papers submitted in the examination will be rated as either "passed" or "failed." Any student who is not present at the examination in Subject A which he is required to take will be treated as one who has failed.

3. Every student who does not pass in the examination in Subject A will be required to take, immediately after his failure, a course of instruction known as the *Course in Subject A*, which gives no units of credit toward graduation, but which reduces the maximum program allowed the student by two units. Should any student fail in the course in Subject A he will be required to repeat the course in the next succeeding semester of his residence in the University. The course in Subject A will be given each semester, three hours a week.

4. If in the judgment of the instructor in the class in Subject A a student shows excellence in English composition through a period of at least two weeks, the instructor is authorized to give him a final grade of passing in Subject A, to permit him to withdraw from further attendance, and to drop the subject

from his study list (thereby making it possible for the student to add two units of work to his program), and to refund a portion of the \$10 fee.

5. A student who has not passed the examination or course in Subject A will not be admitted to any University course in oral or written composition; he will not be granted a Junior Certificate or given junior standing; he will not be granted a bachelor's degree.

6. A student who has failed in an examination in Subject A may not have the privilege of taking a subsequent examination; he must obtain credit in the subject through passing the course in Subject A.

7. A student who passes Subject A is not required, but is advised to continue his training in oral or written composition.

8. Failure in the examination does not prevent admission to the University of California.

*Exemption.*—A student who has received a satisfactory rating in the College Entrance Examination Board examination in English 1-2 or in the Comprehensive Examination in English will receive credit for Subject A. A student who has passed an examination in Subject A given by the University of California at Berkeley or any other seat of the University, or given under the jurisdiction of the University at any junior college or other assigned place, if the papers are read by the Committee on Subject A, will receive credit for Subject A.

A student who enters the University of California at Los Angeles with advanced standing, and who has satisfactory credit for a college course in English Composition, will be exempt from the requirement in Subject A.

## **PIANO TEST**

Every student entering the Kindergarten-Primary curriculum must show ability to play on the piano music suitable for use with young children. Application for the test may be made to the departmental adviser. The test should be taken at the time of admission; it must be taken before the student may be assigned to practice teaching. See footnote on page 91.

## **MILITARY SCIENCE AND PHYSICAL EDUCATION**

Every undergraduate student, man or woman, must, upon admission, report immediately to the proper officer for enrollment in physical education,\* in accordance with the directions in the *Registration Circular* or the announcements which may be posted on the bulletin boards. Every able-bodied male undergraduate who is under twenty-four years of age at the time of admis-

\* The University requirements in physical education referred to in this section cover Physical Education 3 (men) and 4 (women),  $\frac{1}{2}$  unit courses which are required of students in each semester of the first and second years.

sion, and who is a citizen of the United States, must report immediately for enrollment in military science. The student must list the courses in military science and physical education upon his study card with other University courses. Upon petition a student more than twenty-four years of age at the time of admission may be excused from military science and physical education.

Petitions from students for excuse from, or deferment of, military science or physical education, filed by the petitioner after the expiration of two weeks following the date of the student's registration, will not be received except for illness or physical disability occurring after such date. A student who petitions to be excused from one of these subjects should nevertheless present himself to the proper instructors for enrollment while action on his petition is pending.

Information concerning the requirements in military science and physical education, including a statement of the grounds upon which a student may be excused from this work, may be obtained from the Registrar.

If a student subject to these requirements lists the prescribed course or courses on his study list, and thereafter without authority fails to appear for work in such course or courses, the neglect will be reported to the dean of his college. With the approval of the Vice-President and Provost of the University of California at Los Angeles, the dean will suspend the student from the University for the rest of the semester, and will notify the Registrar. On recommendation of the professor in charge of the work, and with the approval of the Vice-President and Provost, the dean is authorized to reinstate the student and will notify the Registrar of such reinstatement.

The student is referred to the announcements of the departments of Military Science and Tactics and Physical Education in this Catalogue.

### **Gymnasiums and Athletic Facilities**

Separate gymnasiums for men and women were completed in the summer of 1932; each has an open air swimming pool. The building for men is 200 by 260 feet and has a gymnasium floor 100 by 150 feet; one wing of the building houses the headquarters of the department of military science and tactics. The building for women is of equal size and contains two gymnasium floors, of which the larger is 72 by 100 feet. These buildings are conveniently situated near the athletic grounds and tennis courts.

### **Lockers**

Lockers will be issued, as long as they are available, to registered students who have purchased standard locks. These are sold at \$1.00 each, and may be used by the purchaser as long as desired, or may be transferred by him to another student.



### **AMERICAN INSTITUTIONS**

Every candidate for a degree or teaching credential is required to present evidence of knowledge concerning the Constitution of the United States and American institutions and ideals. This is normally done by successful completion of the course American Institutions 101 or of certain other courses in the departments of History and Political Science, accepted by the Committee on American Institutions. The requirements may also be satisfied by an examination conducted each semester by the Committee which covers essentially the material of the course American Institutions 101. No fee is required for this examination, nor is degree credit granted for it. Detailed instructions, with dates of examinations, are posted upon the official bulletin boards at the proper times, or may be had at the information desk of the Registrar's office.

### **AUTHORITY OF INSTRUCTORS**

No student will be permitted to enter upon the study of any subject if, in the opinion of the instructor, he lacks the necessary preparation to insure competent work in the subject.

Every student is required to attend all his class exercises and to satisfy the instructor in each of his courses of study, in such way as the instructor may determine, that he is performing the work of the courses in a systematic manner.

Any instructor, with the approval of the Vice-President and Provost of the University of California at Los Angeles, may at any time exclude from his course any student who, in his judgment, has neglected the work of the course. Any student thus excluded will be recorded as having failed in the course of study from which he is excluded, unless the faculty otherwise determines.

### **EXAMINATIONS**

Final examinations are required in all undergraduate courses except laboratory courses, and other courses which, in the opinion of the Committee on Courses, because of resemblance to laboratory courses, require special treatment. In laboratory courses final examinations are held at the option of the department in charge. All examinations will, so far as practicable, be conducted in writing, and a maximum time will be assigned beforehand for each examination, which no student will be allowed to exceed. The time for examination sessions will not be more than three hours.

Any department may examine a student, at the end of the semester immediately preceding his graduation, in the major subject in which such department has given instruction.

No student will be excused from assigned examinations.

Any student tardy at an examination may be debarred from taking it, unless an excuse for his tardiness, entirely satisfactory to the examiner, is presented.

Reexaminations are permitted only for the purpose of removing conditions (grade E). In courses of the Summer Session, however, reexaminations for the removal of deficiencies are not provided by the University. A student who has received grade B, C, D, or F in any course is not allowed a reexamination.

Concerning examinations for the removal of conditions see under "Conditions and Failures," below.

Application for examination for advanced standing on the basis of work done before entrance to the University should be made to the Admissions Office at the time of entrance to the University. If a student who has already matriculated proposes to enter upon study outside the University of California with a view to asking the University to examine him upon that work and to allow him credit toward the degree, he must make all arrangements *in advance* with the department concerned and with the Associate Director of Admissions; fees are required for such validation examinations.

#### **CREDIT BY EXAMINATION FOR PRIVATE STUDY**

Provision is made whereby an undergraduate student in residence and in good standing may under certain conditions take examinations for degree credit either (a) in courses offered in the University, without formal enrollment in them, or (b) in subjects appropriate to the student's curriculum, but not given by the University. The results of all such examinations, with grades and grade points, are entered upon the student's record in the same manner as for regular courses of instruction (see Grades of Scholarship below); no fees are required.

Arrangements must be made in advance with the dean of the student's college; his approval is necessary before an examination can be given.

The application form for examinations may be obtained from the Registrar.

#### **GRADES OF SCHOLARSHIP: GRADE POINTS**

The final result of the work of the students in every course of instruction will be reported to the Registrar in six grades, four of which are passing, as follows: A, excellent; B, good; C, fair; D, barely passed; E, conditioned; F, failed.

Grade E (conditioned) indicates a record below passing grade, but one which may be raised to a passing grade without repetition of the course, by passing a further examination on the subject-matter of the course, or by performing other tasks required by the instructor. Grade F (failure) indicates a record so poor that it may be raised to a passing grade only by repetition of the course.

No student will receive credit in any course in which he may have received grade F, except upon successful repetition of that course.

The term "incomplete" will not be used in reporting the work of students. The instructor is required, for every student, to assign a definite grade (A, B, C, D, E, or F) based upon the work actually accomplished, irrespective of the circumstances which may have contributed to the results achieved.

In all colleges and curricula at the University of California at Los Angeles grade points or quality units are assigned to the respective scholarship grades as follows: A, 3 points a unit; B, 2 points a unit; C, 1 point a unit; D, no points a unit; E, minus 1 point a unit; F, minus 1 point a unit. Removal of grade E or F will entitle the student to as many grade points as may have been lost by the condition or failure, but no more. For exceptions permitted in certain cases in which grade E is assigned, see under Conditions and Failure, below.

A candidate for the bachelor's degree in the College of Letters and Science, in the Teachers College,\* in the College of Agriculture, in the College of Business Administration, or in the College of Chemistry must have attained at least as many grade points or quality units as there are time units or quantity units in the credit value of *all courses undertaken* by him in the University of California in and after August, 1921; in the Colleges of Engineering and Mining this regulation also applies to candidates for the bachelor's degree for all courses undertaken after January, 1930.

### CONDITIONS AND FAILURES

For the removal of a condition a student may, on petition, have the privilege of either a reexamination with the class next repeating the subject or a special examination out of class; in courses of the Summer Session, however, reexaminations for the removal of deficiencies are not provided. For every such examination a formal permit, to be obtained in advance on petition filed with the Registrar, must be shown to the instructor in charge of the examination. For every course in which a special examination is undertaken for the removal of a condition, a fee of \$2 is charged; there is no fee for a reexamination (final examination taken with a class), provided the final examination is the only task required by the instructor for the removal of the condition. The fee for two or more special examinations undertaken to remove conditions during a single semester is \$3. A form of petition for a special examination or for admission to an examination with a class, together with instructions for procedure, may be obtained from the Registrar.

A condition in a course in which a final examination is regularly held may not be removed, unless the student has passed a satisfactory final examination in the course, either at the time when the course was originally taken, or at a later time, as above provided.

\* Candidates for teaching credentials must also maintain a C average in supervised teaching.

If a student has been conditioned in a course because of omitting certain parts of the required work, or because of unsatisfactory performance, the instructor may require the satisfactory completion of that work before the condition in the course is removed. Such tasks count as a special examination, subject to the fee prescribed for a special examination.

Removal of grade E (conditioned) by reexamination or otherwise entitles the student to receive *as many grade points as have been lost by the condition, but no more*. An exception to this rule is permitted, however, when the deficiency consists solely in the omission of the final examination or other required exercise, due to illness, or other circumstances over which the student has no control. In such circumstances the student may petition to have that grade assigned which he would have received had the work been completed without delay, together with the appropriate number of grade points. His petition must set forth in detail the reasons for his failure to complete the work; it should receive endorsement by the instructor that the work, as far as presented, was satisfactory. The Registrar will then refer the petition to the proper authority for decision.

If a student who has incurred a condition in any course fails to make up the condition by the end of the next semester of his residence in which the course is regularly given, then the condition becomes a failure and can be made up only by repetition of the course.

Any student who is reported as having failed in any prescribed course in military science or physical education, or the course in Subject A, will be required to repeat the course during his next regular semester of residence in which the course may be given.

A student who fails to attain grade D or a higher grade in any course following an examination for the removal of a condition will be recorded as having received grade F (failure) in the course.

#### **SCHOLARSHIP RULES: DISMISSAL FOR FAILURE TO MEET MINIMUM REQUIREMENTS**

The following regulations are effective in all the academic colleges of the University:

(1) Any student who fails to maintain a C average in two consecutive semesters of attendance may be (a) warned, (b) assigned to a special adviser, (c) limited with respect to study list.

(2) *Probation.* Any student whose record at the close of either regular semester shows a total deficiency of more than ten grade points will be placed on probation.

(3) *Dismissal.* Any student whose record for any regular semester falls below a D average, irrespective of his grade point standing, or any student who fails to maintain a C average while on probation, becomes subject to dis-

missal. A student dismissed for unsatisfactory scholarship will be excluded from the University for an indefinite period, with the presumption that his connection with the University will be ended by such exclusion.

Students at Los Angeles coming under the above regulations are subject to the supervision of the Committee on Reinstatement, which has adopted a policy of limiting study lists of students under its charge to twelve units or less, exclusive of required physical education.

### **HONORABLE DISMISSAL AND LEAVE OF ABSENCE**

A *letter of honorable dismissal* is issued on request to a student in good standing who withdraws without the expectation of resuming his work in the same semester at Los Angeles. A *brief leave of absence* may be issued, as an exceptional privilege, to a student who finds it necessary to withdraw for two weeks or longer, but who wishes to retain his status in his classes and to resume his work before the close of the current semester, upon a date to be fixed by the University.

A student is in good standing if he is entitled to enjoy the normal privileges of a student in the status in which he is officially registered. Students dismissed by reason of scholarship deficiencies, and students under supervision or on probation, may receive letters of honorable dismissal which bear a notation concerning their scholarship; students under censure or suspension may not receive an honorable dismissal but may receive transcripts of record which bear a notation concerning such censure or suspension. A student who withdraws from the University before the end of the session without giving notice of withdrawal to the Registrar, may be debarred from subsequent registration.

### **DISCIPLINE**

When a student enters the University it is taken for granted by the University authorities that he has an earnest purpose and that his conduct will bear out this presumption. If, however, he should be guilty of unbecoming behavior or should neglect his academic duties, the University authorities will take such action as, in their opinion, the particular offense requires. Students who fail to make proper use of the opportunities freely given to them by the University must expect to have their privileges curtailed or withdrawn.

*Degrees of discipline.*—There are five degrees of discipline: warning, censure, suspension, dismissal, and expulsion. Censure indicates that the student is in danger of exclusion from the University. Suspension is exclusion from the University for a definite period. Dismissal is exclusion for an indefinite period with the presumption that the student's connection with the University will be ended by it. Expulsion is the most severe academic penalty, and is final exclusion of the student from the University.

The Vice-President and Provost of the University of California at Los Angeles is entrusted with the administration of student discipline with full power to act.

### DEGREES AND TEACHING CREDENTIALS

Detailed statements of requirements for degrees and teaching credentials issued by the University will be found in this Catalogue under headings of the several colleges and departments; for the master's degree, the doctor's degree, and the higher teaching credentials, see also the *Announcement of Graduate Study*.

Every undergraduate candidate for a degree or for the completion of a regular University curriculum leading to a teaching credential should fill out a form in his registration book, indicating his candidacy. The Registrar will then consult with the appropriate dean, and will advise the student whether the program he is undertaking will satisfy the requirements of his curriculum.

*Senior residence.*—Every candidate for the bachelor's degree is required to have been enrolled throughout the senior or final year of residence in that college of the University in which the degree is to be taken; the last 24 units must be done in residence while so enrolled. It is permissible to offer a total of twelve weeks of intersessions, summer sessions, or postsessions as equivalent to one semester; but in any event the student must complete in resident instruction either the fall or spring semester of his senior year. The regulation applies both to students entering this University from another institution and to students transferring from one college to another within the University.

### THE LIBRARY

The Library has more than 250,000 volumes that are accessioned and approximately 2150 periodicals and continuations are regularly received.

The Library is open daily. From Monday to Friday, inclusive, the hours are from 7:45 A.M. to 10 P.M.; Saturday, from 7:45 A.M. to 5 P.M.; Sunday, from 2 P.M. to 5 P.M. The reading rooms accommodate about 900 students.

Supplementing the general library is the Senator William Andrews Clark Memorial Library of about 15,000 volumes featuring primarily English literature and history of the United States Northwest.

## STUDENT FEES—SCHOLARSHIPS—LOANS—PRIZES

### FEES\*

The incidental fee, \$27, which must be paid each semester by all undergraduates on the date of registration, covers expenses of students other than the cost of their instruction, and entitles them to the use of gymnasium, tennis courts, baths, soap, towels, washrooms, etc.; consultation, medical advice or dispensary treatment in the event of illness; and meets in part the expenses in connection with registration and graduation. It also includes the rights and privileges of membership in the Associated Students, valued at \$4; see page 54. This fee is not remitted in whole or in part for those students who may not desire to make use of any or all of these privileges. If a student withdraws from the University within the first three weeks from the date of his registration, a portion of this fee will be refunded. The incidental fee for graduate and unclassified students is \$23 each semester; it does not include membership in the Associated Students.

Fees and deposits are payable preferably in cash. If a check is presented the face amount must not exceed all the fees to be paid.

*Tuition fee.*—The University charges a tuition fee to every student whose legal residence is not in the State of California. A student entering the University for the first time should read carefully the rules† which govern the de-

\* During registration and for the first few days of instruction, fees will be paid as part of the registration procedure. Thereafter, they will be paid in the office of the Comptroller, 42 Library. The cashier's department of this office is open from 8:30 A.M. to 3 P.M. daily, and from 8:30 A.M. to 12 M. on Saturday.

† Each nonresident student at the University of California must pay a tuition fee for each semester of his attendance at the University. Nonresident tuition fees are payable at the time of registration.

The term "nonresident student" is construed to mean any person who has not been a bona fide resident of the State of California for more than one year immediately preceding the opening day of a semester during which he proposes to attend the University.

The residence of each student is determined in accordance with the rules for determining residence prescribed by the provisions of Section 52 of the Political Code of California, provided, however:

1. That every alien student who has not made a valid declaration of intention to become a citizen of the United States, as provided by the laws thereof, prior to the opening day of a semester during which he proposes to attend the University, is deemed to be a nonresident student.

2. That no person is deemed to have made a valid declaration of intention to become a citizen of the United States whose declaration of intention at the time when it is presented in support of an application for classification as a resident student in the University has lost its force or effectiveness, or who can not, under said declaration, without renewing the same or making a new declaration, pursue his declared intention of becoming a citizen of the United States.

Every person who has been, or who shall hereafter be classified as a nonresident student shall be considered to retain that status until such time as he shall have made application in the form prescribed by the Registrar of the University for reclassification, and shall have been reclassified as a resident student.

Every person who has been classified as a resident student shall, nevertheless, be subject to reclassification as a nonresident student and shall be reclassified as a nonresident student whenever there shall be found to exist circumstances which, if they had existed at the time of his classification as a resident student, would have caused him to be classi-

termination of residence, to the end that he may be prepared, in the event of classification as a nonresident of California, to pay the required tuition fee. This fee must be paid at the time of registration. The attention of prospective students, who have not attained the age of twenty-two years and whose parents do not live in the State of California, is directed to the fact that presence in the State of California for a period of more than one year immediately preceding the opening day of the semester during which it is proposed to attend the University, does not, of itself, entitle the student to classification as a resident of California. Applicants for admission who are in doubt about their residence status, should consult the Attorney for The Regents in Nonresidence Matters. On the day preceding the opening day of registration and during the first week of instruction of each semester he may be consulted upon the campus at a place which may be ascertained by inquiry at the Information Desk in the Registrar's Office; throughout the registration period, he may be consulted during the hours of registration at the place where registration is being conducted.

Tuition in the academic colleges is free to residents of the State of California. Nonresidents of California are required to pay a tuition fee of \$75 each semester. This fee is in addition to the incidental fee. The tuition fee for nonresident students may be remitted in whole or in part for students in full graduate standing in other than professional schools and colleges.\* An alien who has not made, prior to the opening day of a semester during which it is proposed to attend the University, a valid declaration of intention to become a citizen of the United States, is classified as a nonresident of California.

*The eligibility of a student to register as a resident of California may be determined only by the Attorney for The Regents in Nonresidence Matters.* Every entering student, and every student returning to the University after an absence, is required to make a "Statement as to Residence" on the day of registration, upon a form which will be provided for that purpose, and his status as to residence will be determined by the Attorney soon after registra-

---

tioned as a nonresident student. If any student who has been classified as a resident student shall be determined to have been erroneously so classified, he shall be reclassified as a nonresident student, and if the cause of his incorrect classification shall be found to be due to any concealment of facts or untruthful statement made by him at or before the time of his original classification, he shall be required to pay all tuition fees which would have been charged to him except for such erroneous classification, and shall be subject also to such discipline as the President of the University may approve.

\* The nonresident tuition fee may be remitted in whole or in part in the case of students in full graduate status (except in the professional schools and except in the case of foreign students whose tuition is paid by their governments) who have proved that they are distinguished scholars and who are carrying full programs of work toward the fulfillment of requirements for higher degrees. No graduate student in full graduate standing, no matter how distinguished his scholarship may have been, will be exempted from the payment of the tuition fee if he is merely carrying some lower division courses for his cultural advancement. The term "distinguished scholarship" in connection with the question of exemption from the payment of the tuition fee shall be interpreted as meaning an A— or B+ average in at least the last year of study in which the student has engaged. Students exempted from the tuition fee pay only the incidental fee. Petitions for exemption from the nonresident tuition fee should be filed with the Registrar.



tion. Old students are advised that application for reclassification as a resident of California must be filed within ten days after regular registration; by late registrants, within one week after registration. Application for a change of classification with respect to some preceding semester will not be received under any circumstances.

*Other fees.*—If a student registers for less than 12 units the tuition fee is as follows: minimum, \$25; \$5 a unit for work aggregating six to eleven units or fraction thereof.

Fine for delayed payment of any of the above fees or of departmental fees or deposits, \$1. Departmental fees and deposits must be paid within seven days after registration. Students will save time if all fees are paid at the time they register.

*Application fee, \$3.* This fee is charged every applicant for admission to the University, and is payable at the time the first application is filed. Applicants for graduate status must pay this fee, even though it may have been paid once in undergraduate status; see page 32.

*Late application for admission, \$2.*

*Late registration, \$2.* (After date set as registration day.)

*Late filing of registration book, \$1.* (More than seven days after registration.)

*Late examination in Subject A, \$1.*

*For courses added or dropped after date set for filing registration book, \$1 a course.*

*For reinstatement of lapsed status, \$5.*

*For duplicate registration card, \$1.*

*For late application for teaching assignment, \$1.*

*Medical examination: original appointment, or deferment arranged in advance, no fee; fee for a second appointment, \$1.*

*Laboratory and departmental fees.*—In laboratory and certain other courses, a charge is made to cover materials used. Students should refer to the latter part of this Catalogue, where such fees are listed for each department. The total charge for students in the elementary laboratories may amount to from \$5 to \$30 a year.

*Deposit required of applicants for teaching positions who register with the Appointment Secretary:* Persons registering with the Appointment Secretary are required to make a deposit of \$5 to cover the clerical cost of correspondence and copying of credentials.

### Refunds

Refund of a part of the incidental fee is made to a student who withdraws from the University within four weeks from the date of his registration.

Refund on the nonresident fee of \$75 is made in accordance with a schedule on file in the offices of the Registrar and Cashier; dates are computed from the first day of instruction of the semester.

No claim for refund of fees will be considered unless such claim is presented during the fiscal year to which the claim is applicable. No student will be entitled to a refund except upon surrender to the Comptroller of his registration certificate and receipt. Students should preserve their receipts.

### **UNDERGRADUATE SCHOLARSHIPS**

The Committee on Scholarships of the University of California at Los Angeles recommends annually for award a limited number of scholarships to students in the University of California at Los Angeles. Because of the limited number of scholarships available, the Committee must restrict the awards to students who have been in attendance at least one semester (except for the LaVerne Noyes Scholarship and for the Mira Hershey Hall Scholarships described below). The Committee rates all candidates with respect to scholarship, need, and character, and bases its recommendations upon relative ratings of all the candidates applying at any one time. Applications for these scholarships with letters and testimonials, should be filed with the Registrar on or before the 25th day of March preceeding the academic year for which the awards are to be made; if received later they will not ordinarily be considered until the following year. A blank form of application, which gives all the necessary information, may be obtained from the Registrar.

The scholarships awarded for the year 1936-37 are as follows:

*University Scholarships*: seventeen at \$200 each.

*Charles N. and Jennie W. Flint Scholarships*: three at \$100 each.

*E. B. Campbell Scholarships*: four of \$50 each, awarded to freshmen who have completed one semester at the University of California at Los Angeles.

*Lena De Groff Scholarships*: four of \$80 each, and one of \$75.

*Cercle Français—Pi Delta Phi Scholarship* of \$75.

*Louis D. Beaumont Fellowship* of \$250, awarded to a senior student whose major is economics.

*The Governor Pardee Scholarship* of \$300.

*The Governor Stephens Scholarship* of \$300.

*The Governor Merriam Scholarship* of \$300.

*M. Effie Shambaugh Scholarship* of \$50.

*Walter Loewy Scholarship* of \$250.

A limited number of scholarships known as the LaVerne Noyes Scholarships are available to needy veterans of the World War or their children.

Certain scholarships are available for students in the College of Agriculture; for definite information consult the **PROSPECTUS OF THE COLLEGE OF AGRICULTURE**.

In addition to the above-enumerated scholarships, there are several whose recipients are named by the donors; among them is the *American Legion Auxiliary Scholarship*, which is awarded to the child of a World War veteran.

### **Mira Hershey Hall and Bowles Hall Scholarships for Freshmen**

The University will make available for the year 1936-37, thirteen freshman scholarships for men, who are to live at Bowles Hall on the Berkeley campus, and a like number for women who are to live in the Mira Hershey Hall on the Los Angeles campus. The value of each scholarship will be a credit of one-half the cost of board and room in the dormitory (approximately \$180).

The selection of the beneficiaries of these scholarships is to be made through the agency of the California Alumni Association, with the approval of the respective scholarships committees of the University. Appointments to these scholarships are to be contingent upon the matching by the alumni of each such scholarship with an equivalent cash scholarship for some other student. To this end the State has been divided into thirteen districts and alumni chairmen living in these districts have been appointed by the officers of the Alumni Association, who will in turn select other alumni to assist them.

Any district alumni committee that is successful in raising money for a cash scholarship (minimum \$180) will have the privilege of naming a man for a Bowles Hall scholarship, or a woman for a Mira Hershey Hall scholarship and also to make a nomination for the cash scholarship. If the committee raises enough money for two cash scholarships, it may name a man for a Bowles Hall scholarship, and a woman for a Mira Hershey Hall scholarship, and nominate the two students to receive the cash awards. Holders of cash scholarships may be either men or women and may elect to attend the University at Berkeley, Los Angeles, Davis, or San Francisco.

The local alumni committees are entirely free to nominate whomever they desire; the appointments are subject to the approval of the University Committees on Scholarships. Names of entering freshmen who have applied for scholarships will be sent to the respective chairmen through the Alumni Association, and may be used by them as a basis for setting up a list of candidates for consideration by their committees, but they need not in any way limit their selection of candidates to these groups.

The University hopes that in the selection of the beneficiaries of these awards the committees will select persons not only with substantial scholastic ability but also of high character and good qualities of leadership, and who give promise of reflecting credit upon themselves and the University.

### LOANS

Various organizations and individuals have contributed toward the building up of several student loan funds. The gifts for this purpose are administered by the University in accordance with the conditions laid down by the donors, and are sufficient to make small loans, for short periods of time and usually without interest, to students in an emergency. For further information, apply to the Dean of Men or the Dean of Women.

### PRIZES

The following prizes have been awarded in recent years:

*The J. Gimbel Award.*—A medal and prize given by Mr. J. Gimbel to the man who has shown the best attitude toward the University in athletic endeavor.

*The Ernest Dawson Prize.*—Awarded to the senior or junior student owning the best book collection made during his college years.

*Pi Mu Epsilon Prize.*—Awarded on the basis of a competitive examination in mathematics including calculus.

*Chi Omega Prize.*—Awarded for the best essay on topics in the field of the social sciences.

*A. E. Teague Prize.*—Awarded for the best poetry of the year written by a student of the University of California at Los Angeles.

*Bertha Hall Memorial Prizes.*—Awarded to graduates in kindergarten-primary education creating the best music or rhythm for young children.

*Blue Circle C Society Honor Medal.*—Awarded on the basis of scholarship, character, and service.

*Medals of the Government of France.*—Awarded for meritorious record in scholarship in French.

*Phi Beta Awards.*—Awarded to the outstanding senior for activity and scholarship in the respective fields of music and drama.

*Alpha Chi Sigma Prize.*—Awarded on the basis of a competitive examination in chemistry, open to students who are taking, or who have taken, freshman chemistry but have not had more advanced work in chemistry.

## LIVING ACCOMMODATIONS—EXPENSES EMPLOYMENT—STUDENT ACTIVITIES

---

### LIVING ACCOMMODATIONS AND GENERAL EXPENSES FOR WOMEN

A LIST OF APPROVED ACCOMMODATIONS for women students is prepared for distribution at the beginning of each semester by the Dean of Women and may be obtained at her office, 116c Josiah Royce Hall. No woman is permitted to complete her registration until her living accommodations have received the approval of the Dean of Women. *Women are not permitted to live in public apartments unless satisfactory arrangements concerning chaperonage are made in advance with the Dean of Women.*

Mira Hershey Hall, made available by the will of the late Miss Mira Hershey, is the only dormitory maintained on the Los Angeles campus. It is conveniently situated on the campus and accommodates one hundred thirty-one women students. Board and room costs \$45 a month. Applications for residence should be filed with the Dean of Women as early as possible.

A number of desirable privately owned halls of residence offer accommodations to women; two, each with a capacity of fifty students, provide board and room for from \$35 to \$47.50 a month; others, with capacities ranging from twenty to ninety-nine, have housekeeping accommodations for from \$12.50 to \$20 a month. Fifteen dollars a month is suggested as a sufficient amount for food for housekeeping students. Private homes offer housekeeping accommodations for as low as \$10 a month, and board and lodging for \$30 a month.

Self-supporting women students usually can get board and lodging in exchange for three hours of household work daily. All self-supporting women should consult the staff of the Dean of Women with respect to their plans.

General University expenses which must be met by every student of the University may be found under "Fees," pages 45-47. The cost of books and stationery is estimated at from \$18 to \$40 a year.

Extracurricular expenses may be kept at a minimum. The expense of participating in general and honorary or professional organizations need not cost more than \$5 a semester. Membership in a social sorority may be estimated at from \$15 to \$20 a month, in addition to the cost of board and lodging.

The student living at home, although she may have no expense for board and lodging, must plan for transportation and lunch on the campus. While transportation varies according to the location of each student's home, \$10 a month is an average estimate. Lunches may be estimated at \$5 to \$6 a month. Some students reduce or eliminate this expense by bringing their lunches from home.

Personal expenses are obviously variable items. The average woman student's estimate for clothing is from \$100 to \$300 for each University year; for drugs and beauty shop, from \$15 to \$40; for recreation, from \$10 to \$50.

### **LIVING ACCOMMODATIONS AND GENERAL EXPENSES FOR MEN**

The cost of attending the University varies greatly with the individual student; however, the majority of men students living away from home spend between \$600 and \$800 a year. The incidental fee amounts to \$54 a year, and books and laboratory fees range from \$30 to \$60 a year, depending upon the courses taken. This item will be higher for students specializing in fields which require much laboratory work. Students classified as nonresidents of California must also pay the tuition fee of \$75 each semester.

The cost of board and room is estimated as from \$35 to \$45 a month. A list of rooming and boarding houses for men is prepared by the Dean of Men, and may be obtained at Room 212, Josiah Royce Hall. The University does not maintain on the Los Angeles campus any dormitories for men. Students attending the University and living at home should make an estimate of the cost of transportation and include this item in the year's budget.

The initiation fees for professional fraternities vary from \$5 to \$12, and for social fraternities from \$50 to \$100. The dues for social fraternities average about \$5 a month and the cost of living in a fraternity house, including dues, ranges from \$45 to \$55 a month. This amount does not include the cost of social affairs which may be given by the fraternity in the course of the year.

There are many students working for a part of their expenses and a few who are entirely self-supporting. It is difficult, however, to find suitable employment in the vicinity of the campus and it is unwise for a student to enter the University without adequate funds to complete the year or without a satisfactory combination of savings and prearranged employment.

### **EMPLOYMENT**

#### **Bureau of Occupations**

Students desiring employment should register with the Bureau of Occupations, 308 Kerckhoff Hall.

Little can be done in obtaining employment for students who are not actually on the ground to negotiate for themselves. Since, in general, it is difficult for a stranger to get remunerative employment, no student should come to Los Angeles expecting to become self-supporting at once but should have on hand sufficient funds to cover the expenses of at least the first semester.

Board and lodging can frequently be had in exchange for three hours of household work daily. Limited opportunities also exist for obtaining employ-

ment on an hourly basis in the following fields: typing and stenography, clerical work, housework, care of children, general manual labor, etc. The rates paid for this kind of employment vary from twenty-five to fifty cents an hour. A student qualified to do tutoring and other specialized types of work can occasionally find employment on a more remunerative basis.

Only in rare instances can a student be entirely self-supporting. With reasonable diligence a student can give from twelve to twenty-five hours a week to outside work without seriously interfering with a University course of from twelve to sixteen units. Students seeking employment should always bear in mind, however, that not every kind nor every amount of outside work is entirely compatible with the student's main purpose at the University, namely, his education.

In 1935-36 the Federal Government provided funds at this institution for approximately six hundred jobs, paying students from \$10 to \$20 a month. These students were selected according to need and scholarship by an administrative committee of the University. No assurance can be given of the continuation of this policy, but needy students are advised to make application at the Bureau of Occupations, Room 308 Kerekhoff Hall, after August 1, 1936, to determine if similar aid will again be made available.

### **Appointment Office for Teachers**

Applicants for teaching or tutoring positions should apply at the office of the Appointment Secretary, 123 Education Building. Upon the request of school officials the Appointment Secretary recommends teachers who, in the opinion of the faculty, are able to fill satisfactorily the positions for which teachers are being sought. In order to do this it is necessary that the Appointment Secretary have detailed information concerning the vacancies to be filled. The Secretary makes every effort to assist applicants to obtain positions of the kind for which they are best fitted. Students are urged to make occasional calls at the office of the Appointment Secretary throughout their entire course. There is no expense, to school officials seeking teachers, for the services of this office.

### **UNIVERSITY RELIGIOUS CENTER**

In the immediate vicinity of the campus, at 10845 LeConte Avenue, is the University Religious Center where official representatives of the Jewish, Catholic, Episcopal, Methodist, Presbyterian, Baptist, Congregational, Disciple, Lutheran, Unitarian, and Latter Day Saints denominations, and the Y.M.C.A. have student headquarters. At this common center, which is open

## 54 *Lectures, Concerts, Art Exhibitions; Associated Students*

at all times, are held religious discussion groups, lectures, Bible classes, social gatherings, luncheons, dinners, and other student meetings.

The Y.W.C.A. occupies its own building, near the Hilgard Avenue entrance to the campus.

### **PUBLIC LECTURES, CONCERTS, AND ART EXHIBITIONS**

As opportunity offers, the University presents to its members and to the public lectures of general and of special or scholarly interest by qualified persons. These lectures are intended to supplement and stimulate the work of all departments of the University.

The musical interests of the University are served by numerous concerts, open also, without charge, to the public. The University Organ, installed in 1930 as the gift of an unnamed donor, makes possible the offering of a regular series of programs. In 1935-36 these comprised sixty-one week-day noon recitals, and thirty-eight weekly Sunday concerts, besides special concerts, and music incidental to other gatherings. Besides the organ, there are special concerts, which in 1935-36 included recitals in the fall and spring semesters by John Crown, the Bartlett-Frankel Quartet, Dr. George Liebling, four concerts by the Los Angeles Philharmonic Orchestra, programs of Christmas and Easter music by the University A Cappella Choir, recitals by the Noack Quartet, and by Winfried Wolf.

The Department of Fine Arts schedules a series of exhibitions of painting, design, and craft-work in its exhibition hall. These have illustrated the work of students, local artists, national exhibitors, and occasionally of old masters. A series of dance recitals was presented in 1935-36 under the auspices of the Department of Physical Education for Women and the University Dramatic Society.

### **THE ASSOCIATED STUDENTS**

The extracurricular activities are administered and controlled by the Associated Students, in which all undergraduates hold membership by virtue of paying at registration the regular University incidental fee. The organization has an executive council composed of a president, two vice-presidents, two representatives of groups, and the chairmen of five activity boards. The activity boards control the activities in definite fields, such as debating, athletics, dramatics, and publications; the council coordinates the work of these boards and administers the general business of the Association.

Members are entitled to participation in the affairs of the Associated Students, to a subscription to the *California Daily Bruin*, to free admission to many athletic contests, and to reduced rates to all other athletic contests, as well as to dramatic, social, and similar events coming under the jurisdiction of the Associated Students.



The Students' Coöperative Book Store is owned and operated by the Associated Students.

The *California Daily Bruin* and *The Southern Campus* are the official publications of the students. The *California Daily Bruin* contains news of all campus and college activities, official University announcements, and is under direct charge of an editor and a manager appointed by the Council. *The Southern Campus* is the yearbook and contains a record of the college life of the year. It is edited, managed, and financed by the students.

## COLLEGE OF LETTERS AND SCIENCE

THE CURRICULA of the College of Letters and Science include for the student three elements that are characteristic and essential in the education of men and women of culture and intelligence: breadth of culture, a basic knowledge of some one field of human intellectual endeavor, and personal self-command and ability of leadership so far as these may be developed through freedom of choice.

In respect to breadth of culture, no specific courses are required in the present curricula, but the student must select courses within certain designated groups which represent the more important fundamental forms of human intellectual endeavor. Some of these groups are alternatively elective, that is, the student has a choice between two or more groups of studies. The choice from designated study groups is at present required only of students in the lower division, the freshmen and sophomores. The students in the upper division, having learned the fundamentals, enjoy a wide freedom in choosing at their own will from the cultural studies that are abundantly available.

No person is educated who has not mastered, with some degree of proficiency, some one field of study: therefore, in his first two years (that is, in the lower division) the student is guided by certain requirements so that he may be equipped for intensive study in a field of his own choice, to be carried possibly through several years, and including distinctly advanced work in the study, or field of study, that he decides upon as his "major."

The University's purpose is to send forth graduates who have, through the opportunities available to them, developed power of leadership and initiative. To this end is the freedom of choice that the students enjoys in increasing measure as his college work progresses. Freedom of election of studies affords a valuable opportunity for personal growth in moral and mental stature: but it also affords opportunity for an unwise selection of courses. This danger, which is inherent in any elective program of study, the College has endeavored to minimize in two ways. It has laid down moderate requirements in order to insure a distribution of studies that will lead, first, to a balanced range of interests, and, second, to a disciplined concentration of thought. A further provision to prevent an unwise exercise of freedom of choice is through the development of the faculty adviser system, described below.

## LOWER DIVISION

*Junior Certificate Requirements*

The work of the lower division comprises the studies of the freshman and sophomore years. The Junior Certificate in the College of Letters and Science is required for admission to the upper division.

A student who transfers from another college of this University or from another institution must meet the Junior Certificate requirements; but, if credit of 60 or more units is allowed him, he is given upper division standing and may meet subject shortages concurrently with degree requirements.

Every student, upon his matriculation in the University, is assigned to an adviser who will gladly assist him in the selection and arrangement of his course of study, and to whom he may go when problems of a social or a scholastic nature arise. A student whose major is not yet determined has a general adviser, under whose supervision he remains until the junior year, or until the major is determined. While the student may occasionally be summoned to confer with his adviser, it is his privilege at all times to seek an interview during the hours designated on the adviser's door card.

Certain courses taken in the high school are accepted as fulfilling in part or in whole some of the Junior Certificate requirements. The student should so arrange his high school program as to reduce the required work in the fields of foreign language, mathematics, and natural science. However, the fulfillment of Junior Certificate requirements in the high school does not reduce the number of units required in the University for the Junior Certificate (60) or for the degree (120).

The degree requirement of 120 units is calculated on the assumption that the student will normally take 15 units of work each semester, including the prescribed work in military science and physical education. The Junior Certificate will be granted on the completion of not less than 60 units of college work and the fulfillment of the following general and specific requirements:

(a) *General University requirements.*†

Subject A.‡

Military Science and Tactics, 6 units (men).

Physical Education, 2 units.

(b) *Foreign Language.*—At least 15 units in not more than two languages. Each year of high school work in a foreign language not duplicated by college work will be counted in satisfaction of 3 units of this requirement, without, however, reducing the total number of units required for the Junior Certificate (60) or for the degree (120). Courses given in English by a foreign language department will not be accepted in fulfillment of this requirement.

† For information concerning exemption from these requirements apply to the Registrar.

‡ An examination in Subject A (English Composition) is required of all entrants at the time of their first registration in the University. For further regulations concerning Subject A, see page 86.

(c) *Matriculation Mathematics*.—Elementary algebra and plane geometry. If these subjects were not completed in the high school, they may be taken in the University of California Extension Division or Summer Sessions, but will not be counted as part of the 60 units.

(d) *Natural Science*.—At least 12 units chosen from the following list, of which more than one unit must be in laboratory work. Courses marked with an asterisk meet the laboratory requirement.

High School Physics,\* 3 units (1 high school credit).

High School Chemistry,\* 3 units (1 high school credit).

Astronomy 1A, 1B.

Bacteriology 1,\* 6.

Biology 1, 12.

Botany 1A\*, 1B.\*

Chemistry 1A,\* 1B,\* (2A-2B),\* 5,\* 6A,\* 6B,\* 8.

Geography 3.

Geology 1A, 1B, 1C, 1D.

Paleontology 1.

Physics (1A-1B),\* (1C-1D),\* 1AD,\* 1BC,\* (2A-2B),\* 4A-4B.

Physiology (1, 2).\*

Zoology 1A,\* 1B.\*

(e) *Year Courses*.—A year course in each of *three* of the following groups. This requirement may not include courses other than those specified below.

(1) English, public speaking.

(2) Foreign language (additional to b).

(3) Mathematics.

(4) Social sciences.

(5) Philosophy.

#### *Group 1—English and Public Speaking*

English 1A-1B, 36A-36B; Public Speaking 1A-1B.

#### *Group 2—Foreign Languages*

French: any two consecutive courses from the following: A, B, C, D, CD, 5A, 5B.

German: any two consecutive courses from the following: A, B, C, D, CD, 5A, 5B, 6A-6B.

Greek 1A-1B, 4A-4B, or 101, 102.

Italian: any two consecutive courses from the following: A, B, C, D.

Latin: two consecutive courses from the following: A, B, C, D; 5A-5B, 102, 106.

Spanish: any two consecutive courses from the following: A, B, C, D, CD, 5A, 5B.

*Group 3—Mathematics*

A total of six units chosen from the following courses: C, F, 2, 6, 7, 8, 3A, 3B, 4A.

*Group 4—Social Sciences*

Anthropology 1A-1B.	History 4A-4B.	Political Science 3A-3B.
Economics 1A-1B.	History 5A-5B.	Political Science 31A-31B.
Geography 1A-1B.	History 8A-8B.	Psychology 1A-1B.

*Group 5—Philosophy*

Philosophy 1A-1B.	Philosophy 2A-2B.	Philosophy 3A-3B.
-------------------	-------------------	-------------------

*Summer Session Courses.*—Students who desire to satisfy the specific subject requirements for the Junior Certificate in the summer sessions, may use only those courses which are the equivalent of courses offered in the fall or spring sessions listed as acceptable in meeting Junior Certificate requirements and which are designated by the same numbers with the prefix "S."

Requirements (b), (c), (d), and (e) may be met in whole or in part by the completion of acceptable courses in the summer sessions. For a list of such courses, see the announcements of the summer sessions. The requirements in units must be met in fall.

*University Extension.*—Students who desire to satisfy the specific subject requirements for the Junior Certificate in the University of California Extension Division may use only those courses which are the equivalents of courses offered in the fall or spring session listed as acceptable in meeting Junior Certificate requirements.

*Honorable mention with the Junior Certificate.*—Honorable mention will be granted with the Junior Certificate in accordance with the regulations on Honors, page 69.

## UPPER DIVISION

Only those students who have been granted the Junior Certificate signifying their completion of lower division requirements, or who have been admitted with 60 or more units of advanced standing, will be registered in the upper division.

The degree of Bachelor of Arts will be granted upon the following conditions:

1. The total number of units in college courses in the lower and upper divisions offered for the degree must be at least 120, of which at least 108 must be in courses chosen from the Letters and Science List of Courses (see page 61).

2. The student must attain a C average (one grade point for each unit of credit) in all courses in which he has received a final report on the basis of work undertaken by him in the University in and after August, 1921. See also regulations concerning negative grade points, page 41.

3. At least 50 units of college work must be completed after the receipt of the Junior Certificate.

4. At least 36 units of work must be completed in upper division courses selected from the Letters and Science List of Courses (see page 61).

5. A major of 24 upper division units in one of the following subjects must be completed according to the rules given below under the heading "Majors for the Degree of Bachelor of Arts."

Astronomy	Geography	Mathematics
Bacteriology	Geology	Philosophy
Botany	German	Physics
Chemistry	Greek	Political Science
Economics	History	Psychology
English	Household Science	Spanish
French	Latin	Zoölogy

All students are required to take at least 6 units in their major (either 3 units each semester or 2 units one semester and 4 units the other) during their last or senior year.

6. The course in American Institutions 101 (or its equivalent) must be completed by all candidates for the degree.

7. All candidates for the degree are required to have been enrolled during the senior or final year of residence in the College of Letters and Science. At least the final 24 units of work must have been completed in the College of Letters and Science. It is permissible to offer a total of twelve weeks of inter-sessions, summer sessions, or post-sessions as equivalent to one semester; but in any event the student must complete in resident instruction either the fall or spring semester of his senior year. The regulation applies to students entering this University from other institutions or from the University of California Extension Division, and to students transferring from other colleges of this University.

8. No student is permitted to transfer from one major department to another after the opening of the last semester of his senior year.

9. Any department offering a major in the College of Letters and Science may require from the candidates for the degree a general final examination in the department.

Students who fail in the lower division to attain an average of one grade point for each unit of work taken in any department may be denied the privilege of a major in that department.

The major department may submit to the Dean of the College the name of any student who in the opinion of the department cannot profitably continue in the department, together with a statement of the basis for this opinion, and the probable cause of the lack of success. The Dean may permit a change

in the major, or may, with the approval of the Vice-President and Provost, require the student to withdraw from the college.

10. Students who transfer to the University of California at Los Angeles from other institutions or from the University of California Extension Division with senior standing at the time of admission must complete at least 18 units of work in upper division courses, including at least 12 units in their major department.

*Minors.*—No minors are required for the degree of Bachelor of Arts, but students preparing for teaching credentials should consult the advisers of the proper departments for the minors required for credentials.

#### LETTERS AND SCIENCE LIST OF COURSES

At least 108 units offered for the degree of Bachelor of Arts must be in courses chosen from the Letters and Science List of Courses, and the 36 units in upper division courses required in the upper division must be selected from the same list.

Any course not included in the Letters and Science List of Courses but required or accepted by a department as part of its major or as a prerequisite therefor, will, for students offering a major in that department at graduation, but for no others, be treated as if it were in the Letters and Science List of Courses.

The following list refers to the courses as given in the departmental offerings for the year 1936-37:

Agriculture. Entomology 1, 134, Plant Nutrition 110, Plant Pathology 120.  
Art. 1A-1B, 2A-2B, 4A-4B, 32, 121A-121B, 131A-131B, 137A-137B, 144A-144B, 161, 164A-164B, 172A-172B.

Astronomy. All undergraduate courses.

Business Administration. 131, 132, 136, 140, 145, 153, 180.

Chemistry. All undergraduate courses except 10.

Classical Languages. All undergraduate courses.

Economics. All undergraduate courses.

Education. 103, 120, 123A-123B, 150, 170.

English:

English. All undergraduate courses.

Public Speaking. All undergraduate courses.

French. All undergraduate courses.

Geography. All undergraduate courses.

Geology. All undergraduate courses.

German. All undergraduate courses.

History. All undergraduate courses except 11.

Home Economics. 1A-1B, 11A-11B, 110, 118A-118B, 120, 125, 136A-136B, 159, 162A-162B, 164, 168, 199A-199B.

**Italian.** All undergraduate courses.

**Life Sciences.** All undergraduate courses in Bacteriology, Biology, Botany, Paleontology, Physiology, and Zoölogy.

**Mathematics:**

Mathematics. All undergraduate courses except 19.

Civil Engineering. All undergraduate courses.

**Mechanic Arts.** Mechanical Engineering D, 1, 2, 6.

**Military Science and Tactics.** All undergraduate courses.

**Music.** All undergraduate courses except 7A-7B, 18A-18B, 46ABCD, 108A-108B, 109A-109B, 112A-112B.

**Philosophy.** All undergraduate courses.

**Physical Education for Men.** 1 and 3.

**Physical Education for Women.** 2, 4, 44, 104, 114A-114B, 180B.

**Physics.** All undergraduate courses.

**Political Science.** All undergraduate courses.

**Psychology:**

Psychology. All undergraduate courses except 119.

Anthropology. All undergraduate courses.

**Spanish.** All undergraduate courses.

#### MAJORS FOR THE DEGREE OF BACHELOR OF ARTS

A major consists of a substantial group of coördinated upper division courses. The 24 upper division units required in the major may represent courses in one or more departments.

Majors may be offered for the degree in any of the subjects listed on page 60. The general outline of the content of these majors may be found under the respective department headings below. The details of the program must be approved by a representative of the department chosen.

Special attention is called to the courses listed under the departmental announcement as preparation for the major. In general, it is essential that these courses be completed before upper division major work is undertaken. In any event they are essential requirements for the completion of the major.

Not more than 30 units of upper division courses taken in one department after receiving the Junior Certificate will be counted toward the degree.

The 24-unit major must, in its entirety, consist (1) of courses taken *in resident instruction* at this or another university (fall, spring, and summer sessions), and (2) of courses taken in the University of California Extension Division with numbers having the prefix XL, XB, or X.

The student must attain an average grade of C (1 grade point for each unit of credit) in all courses offered for the major.

Courses numbered in the 300 series or 400 series are not accepted as part of the major.

See further under Regulations for Study Lists, on page 35.



## DEPARTMENTAL MAJORS IN THE COLLEGE OF LETTERS AND SCIENCE

### ASTRONOMY

*Preparation for the Major.*—Required: General lower division physics (Physics 1A-1B-1C-1D, or in meritorious cases, Physics 2A-2B, or the equivalent); plane and spherical trigonometry, plane analytic geometry, and differential and integral calculus (Mathematics C, F, 3A, 3B, 4A, or their equivalents). Recommended: A reading knowledge of French and German.

*The Major.*—Astronomy 103A-103B, 104A-104B, 117A-117B; and at least six additional upper division units in astronomy, physics, or mathematics, selected according to some definite plan approved by the Department of Astronomy.

### CHEMISTRY

*Preparation for the Major.*—Required: Chemistry 1A-1B, which must be passed with a grade of C or better before any further work in chemistry is taken; Physics 1A-1C; trigonometry, Mathematics 8, 3A-3B, and a reading knowledge of German. Recommended: a second course in chemistry, Physics 1B-1D, Mathematics 4A-4B.

*The Major.*—All units in chemistry in excess of fourteen are counted as upper division units when taken by a student in the upper division. The minimum requirement for the major is: Chemistry 6A-6B (6), 8 and 9 (6), 110 (3), 110B (3), 111 (4). The remainder of the twenty-four required upper division units may be taken in chemistry or allied subjects in accordance with some definite plan approved by the department. A student whose work in the major subject does not average C or better will be required to withdraw from the department.

### CLASSICAL LANGUAGES

*Preparation for the Major.*—(A.) *Latin.*—Required: four years of high school Latin, or two years of high school Latin and Courses C and D; courses 3A-3B, 5A-5B. Recommended: Greek, German, French. (B.) *Greek.*—Required: either course 1A-1B or 4A-4B, or two years of high school Greek; and 5A or 5B, or 100A-100B (which may be taken concurrently with courses 101 and 102); and History 111A-111B. Recommended: Latin, French, German.

*The Major.*—(A.) *Latin.*—Courses 102, 106, 117, 120, 140, 191, and History 111A-111B. Six units of upper division courses in Greek may be substituted for History 111A-111B. (B.) *Greek.*—Courses 101, 102, 103, 104, 105, 114, plus six units of upper division courses in Latin, English, French, German, Spanish, philosophy, ancient or medieval history, to be chosen with the approval of the department.

### ECONOMICS

*Preparation for the Major.*—Required: Economics 1A-1B, Business Administration 1A-1B and one other sequence chosen from the social science list (Junior Certificate requirement e-4) or Philosophy 1A-1B.

*The Major.*—Twenty-four upper division units including Economics 100 and Business Administration 140. Courses in business administration on the Letters and Science List, if approved in advance by the Department of Economics adviser, may be offered toward the twenty-four units required for the economics major, provided the total of such business administration courses, includ-

ing course 140, does not exceed ten units. Additional business administration courses, whether or not on the Letters and Science List, may be elected, subject to the limitation that not more than a total of thirty upper division units from the Departments of Economics and Business Administration may be counted toward the bachelor's degree.

**CURRICULUM IN SOCIOLOGY.**—Students specializing in sociology are referred to page 68 of this catalogue.

#### ENGLISH

*Preparation for the Major.*—Courses 1A-1B and 36A-36B, or the equivalent, with an average grade of C. Recommended: History 5A-5B; ancient and modern foreign languages. A reading knowledge of French or German is required for graduate work toward a higher degree.

*The Major.*—1. Students must present, in the first half of the junior year, a program to be examined and approved by the departmental adviser to upper division students. The program may be amended from time to time after consultation with the department representative.

2. The program must comprise 24 units of upper division courses, including the restricted junior course, to be taken in the junior year.

3. The student must maintain an average grade of C in upper division English courses, and at the end of the senior year must pass a comprehensive final examination.

#### FRENCH

*Preparation for the Major.*—French A, B, C, D, or their equivalents. Two years of high school Latin or Latin A and B, or the equivalent, must be completed before the beginning of the senior year. History 4A-4B, Philosophy 3A-3B, and a modern language are strongly recommended.

*The Major.*—Required: twenty-four units of upper division French, including courses 101A-101B, 109A-109B, 112A-112B. Any of the remaining upper division courses except 140A-140B and 109M-109N may be applied on the major. With the permission of the department four units of the twenty-four may be satisfied by appropriate upper division courses in the following departments: English, German, Greek, Latin, Spanish, Italian, or philosophy.

#### GEOGRAPHY

*Preparation for the Major.*—Required: Geography 1A-1B, 3, and 5B, Geology 1C or 1A. Recommended: Botany 1A, Economics 1A-1B, one year of history, Physics 1A-1B, Political Science 3A-3B, Geology 1B, and at least one modern foreign language.

*The Major.*—The minimum requirement for the major is eighteen or twenty-one units of upper division work in geography, including courses 101, 113, 115, plus six or three units selected, with the approval of the department, from some one of the following departments: botany, economics, geology, history, political science.

#### GEOLOGY

*Preparation for the Major.*—Required: Chemistry 1A-1B; elementary physics; Civil Engineering 1LA, 1FA; Geology 1A-1B; Mineralogy 3A-3B; trigonometry; engineering drawing. Certain of these preparatory courses may be postponed to the upper division by permission of the department. Recommended: French and German.

## Departmental Majors in the College of Letters and Science 65

**The Major.**—Courses 102A–102B, 103, 199A–199B, and at least ten units of other upper division courses in the department which may include paleontology. Certain allied courses in chemistry, physics, biological sciences, and geography are recommended. The student's program is to be made out in accordance with some definite plan approved by the department.

### GERMAN

**Preparation for the Major.**—Required: Courses A, B, C, D, and 6A–6B or their equivalents. Recommended: History 4A–4B, English 1A–1B, Philosophy 3A–3B.

**The Major.**—Twenty-four units in upper division courses, including courses 105A–105B, 106A–106B, 117, 118A–118B, and at least four units made up from the senior courses 111A–111B and 119. Students looking forward to the secondary credential should take also 106C–106D.

### HISTORY

**Preparation for the Major.**—Required: (1) Courses 4A–4B or 5A–5B, and (2) Course 8A–8B, or equivalent preparation for students transferring from other departments or other institutions. Recommended: Political Science 3A–3B, Political Science 31A–31B, Economics 1A–1B, Geography 1A–1B, and Philosophy 3A–3B. One of these recommended courses may be substituted for one of the required history courses, with the approval of the department.

Recommended: French, German, Latin, Spanish, Italian, or Scandinavian language. For upper division work in history a reading knowledge of French or German, or both, is highly advisable; for graduate work, indispensable.

**The major.**—Twenty-four units of upper division work in history. In certain cases two to six upper division units in either political science or economics approved by the department may be counted on the major.

The major must include a year course in European history [one of the following: 111A–111B, 112A–112B, 121A–121B, 142A–B–C–D (any two consecutive semesters), 153A–153B] and a year course in American history (one of the following: 162A–162B, 171A–171B).

At least one advanced course must follow a general course in the same field, chosen within one of the following sequences: Course 111A–111B, 112A–112B, 121A–121B, or 142A–B–C–D (any two consecutive semesters), or 153A–153B, followed by 199A–199B in European history; 162A–162B, or 171A–171B, followed by 199A–199B in American history. Only one advanced course need be taken.

### HOUSEHOLD SCIENCE

**Preparation for the Major.**—Home Economics 11A–11B, 43A; Chemistry 1A–1B, 8; Economics 1A–1B; Physiology 1.

**The Major.**—Required: eighteen units in home economics, including (1) course 162A–162B; (2) at least six units chosen from 110, 118A, 120; (3) five to eight units chosen from 118B, 125, 159, 164, 168, 199A, 199B; and six additional units to be selected with the approval of the department from upper division courses in chemistry, economics, psychology, or zoölogy.

### LIFE SCIENCES

**Preparation for the Major in Bacteriology.**—Bacteriology 1, Chemistry 1A–1B, Zoölogy 1A–1B, Botany 1B, Physics 2A–2B, French or German. Recommended: Chemistry 5, 8, 9; Zoölogy 4.

*The Major in Bacteriology.*—Bacteriology 103 (four units) and Bacteriology 199A–199B (four units) together with sixteen units of upper division work in related subjects selected from the following series: Zoölogy 101, 105, 106, 107, 107C, 111, 111C, Botany 105A, 120, Chemistry 107A–107B, Home Economics 159, Plant Nutrition 110, Plant Pathology 120. Courses are to be chosen with the approval of the department.

*Preparation for the Major in Botany.*—Botany 1A–1B, 6, and 7, Chemistry 1A–1B or 2A–2B, German A, B. In addition to these courses, certain phases of botanical work require Geology 1A–1B, Physics 2A–2B, Bacteriology 1, and Zoölogy 1A.

*The Major in Botany.*—Seventeen units of upper division botany, including courses 105A–105B, and 106A–106B; and in addition seven units in botany or in related courses—bacteriology, chemistry, geology, paleontology, and zoölogy—to be chosen with the approval of the department.

*Preparation for the Major in Zoölogy.*—Zoölogy 1A–1B, and one year of college chemistry, preferably Chemistry 1A–1B. French and German are recommended.

*The Major in Zoölogy.*—Eighteen units of upper division work in zoölogy and six units of upper division work chosen from zoölogy or from related courses in anthropology, bacteriology, botany, chemistry, entomology, genetics, geography, home economics, paleontology, philosophy, physics, physiology, or psychology.

#### MATHEMATICS

*Preparation for the Major.*—Required: Courses C (or the equivalent), 8, 3A, 3B, 4A, and 6, with an average grade of C, except that students who have completed two years of high school algebra and also trigonometry may be excused, upon examination, from course 8. Course 109 may be replaced, by permission, by the equivalent course 4B. Recommended: physics, astronomy, and a reading knowledge of French and German.

*The Major.*—Courses 111, 112A–112B, and 119, together with fourteen additional upper division units, must be included in every mathematics major. The student must maintain an average grade of C in upper division courses in mathematics.

Students who are preparing to teach mathematics in high school are advised to elect courses 101, 102, 104, 190.

#### PHILOSOPHY

*Preparation for the Major.*—Twelve units of lower division courses in philosophy, including course 3A–3B.

*The Major.*—Twenty-four units in upper division courses, not more than six of which may be taken in allied courses in other departments with the approval of the departmental adviser. Not later than the beginning of the senior year, the student must submit for approval to the department a statement of the courses which he expects to offer in fulfillment of major requirements for graduation.

#### PHYSICS

*Preparation for the Major.*—Required: Physics 1A, 1B, 1C, 1D, or their equivalents (in meritorious cases Physics 2A–2B may be accepted); Chemistry 1A–1B; Mathematics C, 3A, 3B, 4A, or their equivalents. Recommended: a reading knowledge of German and French.

*The Major.*—Eleven units of upper division physics, consisting of 105, 107A, 108B, 110A; and thirteen units chosen from other upper division courses in

physics, Mathematics 119, 122A-122B, 124, 125, Chemistry 110, and Astronomy 117A-117B, 199A-199B. At least nine of these latter thirteen units shall be courses in the Department of Physics.

#### POLITICAL SCIENCE

*Preparation for the Major.*—Course 3A-3B, or its equivalent, and one of the following: courses 10, 31A-31B, 34, Economics 1A-1B, Geography 1A-1B, History 4A-4B, History 5A-5B, or History 8A-8B.

Students intending to select political science as a major subject are advised to take one course in political science throughout the year in each of the freshman and sophomore years.

*The Major.*—Twenty-four units in upper division courses, not more than six of which may be taken in courses approved by the department in history, economics, philosophy, psychology, or geography. The work must be divided among the different fields of political science in accordance with the requirements of the department. A copy of the regulations may be secured from the departmental adviser.

#### PSYCHOLOGY

*Preparation for the Major.*—Required: A year laboratory course in one of the following natural sciences: zoölogy, physiology, chemistry, physics. Recommended: French, German, and Economics 1A-1B or 30A-30B.

*The Major.*—Required: Psychology 106A, 107A, and twelve other units in upper division courses in psychology. The remaining six units may be chosen from other upper division courses in psychology, or from the following, subject to the approval of the department: any upper division courses in philosophy, anthropology, zoölogy, physics; Business Administration 153; Education 120, 123A-123B; Economics 186, 188.

#### SPANISH

*Preparation for the Major.*—(1) Courses A, B, C, D, and 5A-5B or 5AB, or the equivalent to be tested by examination. (2) Students who wish to make Spanish their major subject must have maintained at least an average grade of C in the college courses in Spanish taken prior to obtaining the Junior Certificate. (3) A minimum of two years of high school Latin or French, or Latin A and B, or English 36A-36B, or History 8A-8B. This requirement must be completed before entering upon the senior year. (4) Only students who pronounce Spanish correctly and read it fluently will be admitted to upper division courses. Students transferring from other institutions may be tested by oral examinations. (5) English 1A-1B.

**NOTE.**—Students who have not completed course 5A-5B or 5AB in the lower division must take 101A-101B.

*The Major.*—Required: twenty-four units of upper division courses including 102A-102B and 116A-116B. The remaining units may include not more than four units of upper division work in French or Latin, or may be completed from courses 101, 104, 108, 109, 110, and 115.

Students who fail to maintain at least an average grade of C in the Spanish courses taken in the upper division will, upon approval of the Dean of the College of Letters and Science, be excluded from the major in Spanish.

The department recommends as a supplementary choice among the free electives: (1) history of the country or countries most intimately connected with the major; (2) additional study in Latin and English literature; (3) French, German, and Greek language and literature; (4) the history of philosophy.

## SPECIAL CURRICULA

In addition to the departmental majors, the College of Letters and Science offers, subject to the requirements for the Junior Certificate and for the degree, the following curricula.

*Curriculum for Medical Technicians*

(with the major in Bacteriology, Chemistry, or Zoölogy)

## Required:

1. The premedical curriculum (see page 73).
2. The following courses, together with such other courses as may be required for the major in bacteriology, chemistry, or zoölogy:
 

Bacteriology 1, General Bacteriology.....	4 units
Bacteriology 103, Advanced Bacteriology.....	4
Chemistry 9, Methods of Organic Chemistry.....	3
Chemistry 107A-107B, Biological Chemistry.....	6
(or Home Economics 159, Metabolism Methods, 3 units)	
Zoölogy 4, Microscopical Technique.....	2
Zoölogy 111, Parasitology.....	2
Zoölogy 111c, Parasitology Laboratory.....	2

*Curriculum in Sociology*

(with the major in Economics)

## Required:

## LOWER DIVISION

- |   |         |
|---|---------|
| Economics 1A-1B, Principles of Economics..... | 6 units |
| Economics 30A-30B, Social Institutions.....   | 6       |
| Psychology 1A-1B, General Psychology.....     | 6       |

## Recommended:

- |  |   |
|--|---|
| Business Administration 1A-1B, Principles of Accounting..... | 6 |
| Business Administration 18A-18B, Commercial Law.....         | 6 |
| Geography 1A-1B, Elements of Geography.....                  | 6 |
| Geography 8, Geographic Basis of Human Society.....          | 3 |
| Political Science 3A-3B, American Government.....            | 6 |
| Philosophy 2A-2B, Introduction to Philosophy.....            | 6 |
| Philosophy 3A-3B, History of Philosophy.....                 | 6 |
| Philosophy 40, Problems of Ethics and Religion.....          | 2 |
| History 4A-4B, History of Modern Europe.....                 | 6 |
| Biology 1, Fundamentals of Biology.....                      | 3 |
| Biology 12, General Biology.....                             | 3 |

## Required:

## UPPER DIVISION

- |   |         |
|---|---------|
| Economics 100, Economic Theory.....   | 3 units |
| Business Administration 140, Statistics<br>(or Psychology 107A, Mental Measurement and the Use of<br>Statistics)..... | 4 or 3  |
| Economics 181, Poverty and Dependency.....  | 2       |
| Economics 186, Population Problems.....   | 3       |
| Economics 187, Social Pathology.....  | 2       |
| Economics 188, Crime and Delinquency.....   | 2       |
| Psychology 145A-145B, Social Psychology.....  | 4       |

20 or 19 units

Remaining units to complete the major selected from:

Economics 199, Special Problems in Sociology.....	2 units
Economics 106, Economic Reform.....	3
Economics 150, Labor Economics.....	3
Home Economics 168, Family Relationships.....	2
Philosophy 121, Social and Political Philosophy.....	3
Philosophy 112, Philosophy of Religion.....	3
Philosophy 173, The Social Mind.....	2
Education 120, Principles of Education.....	3
Education 123A-123B, History and Philosophy of Education....	6

### HONORS

*Honorable Mention with the Junior Certificate—*

1. Honorable mention is granted with the Junior Certificate to students who attain at least an average of 2 grade points for each unit undertaken.
2. The list of students who receive honorable mention with the Junior Certificate is sent to the chairmen of departments.
3. A student who gains honorable mention has thereby attained the honors status for his first semester in the upper division.

*Honor Students in the Upper Division—*

1. An honor list is prepared in the fall semester, and also in the spring semester if the Committee on Honors so decides, and is published in the CATALOGUE OF OFFICERS AND STUDENTS. The department of the student's major is named in this list.
2. The honor list includes the names of:
  - (1) Students who have received honorable mention with the Junior Certificate and who are in their first semester of the upper division.
  - (2) Upper division students who have an average of at least 2 grade points for each unit undertaken in all undergraduate work at the University of California at Los Angeles.
  - (3) Other upper division students specially approved for listing in the honors status by the Committee on Honors, either upon recommendation made to the committee by departments of instruction, or upon such other basis as the committee may determine.

*Honors with the Bachelor's Degree—*

1. Honors are granted at graduation only to students who have completed the major with distinction, and who have a general record satisfactory to the Committee on Honors.
2. Before Commencement each department determines, by such means as it deems best (for example, by means of a general final examination), what students it will recommend for honors at graduation, and reports its recommendations to the Registrar.

3. Students who, in the judgment of their departments, display marked superiority in their major subject, may be recommended for the special distinction of highest honors.
4. The Committee on Honors shall consider departmental recommendations and shall confer with the several departments about doubtful cases. The Committee is empowered at its discretion to recommend to the Committee on Graduation Matters that honors be not granted to any student who has failed to attain a B average in the major, or in the upper division, or in all undergraduate work.
5. The list of students to whom honors or highest honors in the various departments have been awarded is published in the COMMENCEMENT PROGRAM.

### **PREPARATION FOR VARIOUS PROFESSIONAL CURRICULA**

Certain courses given at the University of California at Los Angeles may be used as preparatory to admission to the professional colleges and schools of the University in Berkeley and in San Francisco.

#### **PRE-CHEMISTRY**

In addition to the major in chemistry in the College of Letters and Science, the department offers the first two years of the curriculum of the College of Chemistry, leading to the B.S. degree. To complete this curriculum, the student must transfer to the University of California at Berkeley at the end of the second year. Before entering upon this program, the student should consult the pre-chemistry adviser; ordinarily the student in chemistry finds more freedom in his program by enrolling in the College of Letters and Science.

*Preparation.*—Students who propose to enter the College of Chemistry should include in their high school programs physics (one year), chemistry (one year), mathematics, including trigonometry (three years), German (two years), and geometrical drawing (one year). Without this preparation it will be difficult or impossible to complete the required curriculum within four years.

A satisfactory reading knowledge of scientific German before the junior year is essential. A reading knowledge of French will also be of advantage.

#### **PREDENTAL CURRICULA**

The College of Dentistry provides the following curricula: (A) a five-year program leading to the degree of Doctor of Dental Surgery (the first year's work, a minimum of 30 units, to be taken in the College of Letters and Science at Los Angeles or Berkeley and the rest in the College of Dentistry at San Francisco); (B) a six-year academic and professional curriculum leading to the degree of Bachelor of Science at the end of five years (two years in the College of Letters and Science at Los Angeles or Berkeley, followed by three



years in the College of Dentistry), and to the degree D.D.S. in one additional year; (c) a curriculum of two years (at San Francisco) for the training of Dental Hygienists, leading to a Certificate of Graduation. The requirements for admission to these curricula are identical with the requirements for admission to the academic departments of the University.

#### FIVE-YEAR CURRICULUM

##### PROGRAM OF FIRST YEAR\*

*(At Los Angeles or Berkeley)*

General University requirements: Subject A, Military Science, Physical Education.

Chemistry 1A-1B, 10 units.

Physics 2A-2B, 6 units.

English, 6 units.

Electives from the Letters and Science List of Courses (page 61).

The minimum total number of units required for admission to the College of Dentistry under this curriculum is 30. The second, third, fourth, and fifth years of this curriculum are given in San Francisco. The ANNOUNCEMENT OF THE COLLEGE OF DENTISTRY may be obtained from the Dean of the College of Dentistry, University of California Medical Center, San Francisco, California.

#### SIX-YEAR CURRICULUM

##### FIRST AND SECOND YEARS

*(At Los Angeles or Berkeley)*

The combined six-year curriculum leading to the degrees of Bachelor of Science and Doctor of Dental Surgery in the College of Dentistry includes two years in the College of Letters and Science at Berkeley or Los Angeles and four years in the College of Dentistry in San Francisco.

This curriculum presupposes the completion of the following subjects in the high school: English, three years; history, one year; mathematics, two years (algebra and plane geometry); chemistry, one year; physics, one year; foreign language, three years. The language begun in the high school should be continued in the University. The Junior Certificate requirements will be more easily met if foreign language has been pursued four years in the high school.

---

\* This program is intended for students registering at Berkeley or Los Angeles in August, 1936, and will be discontinued at the close of the academic year, 1936-37. All students entering the College of Dentistry in and after August, 1937, will be required to present credentials which will fulfill the requirements for the six-year academic (undergraduate) and professional curriculum, above-described.

In obtaining the Junior Certificate the following specific requirements must be met in order that the curriculum may be completed in the normal time:

Chemistry 1A-1B.

Six additional units in chemistry including three units of laboratory in either organic chemistry or quantitative analysis.

Physics 2A-2B, 6 units.

English, 6 units.

The program of the first two years, including the above, must meet the requirements for the Junior Certificate in the College of Letters and Science (See page 57).

Information concerning the third, fourth, fifth, and sixth years in this curriculum are given in the ANNOUNCEMENT OF THE COLLEGE OF DENTISTRY. Address the Dean of the College of Dentistry, University of California Medical Center, San Francisco, California.

#### PRE-ENGINEERING CURRICULA

CIVIL ENGINEERING	Units first semester	Units second semester
<i>Freshman</i>		
Subject A (if required) .....	..	..
Military Science 1A-1B .....	1½	1½
Physical Education .....	½	½
Mathematics 8-3A .....	3	3
† Physics 1A-1B .....	3	3
Chemistry 1A-1B .....	5	5
Civil Engineering 1LA-1LB .....	2	2
Civil Engineering 1FA-1FB .....	1	1
Civil Engineering 3 (s.s.) .....	..	(3)
	<hr/> 16	<hr/> 16
<i>Sophomore</i>		
Military Science 2A-2B .....	1½	1½
Physical Education .....	½	½
Mathematics 3C-4B .....	6	3
Mechanical Engineering 2 .....	..	3
Astronomy 3 .....	..	1
Civil Engineering 8 .....	..	2
Physics 1C-1D .....	3	3
Geology 1A .....	3	..

#### RAILROAD AND IRRIGATION

Mechanical Engineering 1 .....	3	..
Elective .....	..	..
	<hr/> *	<hr/> *

\* Normal total, 16 units.

† By taking Mechanical Engineering 1 (3) in the first semester, and Mathematics 8AB (6) in the second semester of the freshman year the student may complete the entire physics requirement in the sophomore year, taking Physics 1AD-1BD (6-6).

## SANITARY AND MUNICIPAL

	Units first semester	Units second semester
Chemistry 5 or 8.....	3	..
Elective.....	..	..
	*	*

## MECHANICAL, ELECTRICAL, AND †AGRICULTURAL ENGINEERING

*Freshman*

Subject A (if required).....	..	..
Military Science 1A-1B.....	1½	1½
Physical Education.....	½	½
Mathematics 8, 3AB.....	3	6
†Physics 1A-1B.....	3	3
Chemistry 1A-1B.....	5	5
Civil Engineering 1LA.....	2	..
Civil Engineering 1FA.....	1	..
	16	16

*Sophomore*

Military Science 2A-2B.....	1½	1½
Physical Education.....	½	½
Mathematics 4A-4B.....	3	3
Mathematics 10A-10B.....	2	2
Physics 1C-1D.....	3	3
Civil Engineering 8.....	2	..
Mechanical Engineering 10B.....	..	2
Mechanical Engineering 2, 6.....	3	3
Electives.....	..	..
	*	*

## PRELEGAL CURRICULUM

Professional instruction in law in the University of California is given in the School of Jurisprudence in Berkeley and in the Hastings College of the Law in San Francisco.

Admission to the School of Jurisprudence in candidacy for the degree of Bachelor of Laws in the three-year curriculum is limited to students holding an approved bachelor's degree in arts or science, which may be obtained in the College of Letters and Science of the University of California at Los Angeles. The School of Jurisprudence also offers a graduate curriculum of one year leading to the degree of Doctor of Science of Law (J.S.D.), open only to applicants who hold both an academic bachelor's degree and an approved professional degree in law.

The Hastings College of the Law offers a curriculum of three years leading to the degree of Bachelor of Laws; admission to this college is limited to hold-

\* Normal total, 16 units.

† By taking Mechanical Engineering 1 (8) in the first semester, and Mathematics 3AB (6) in the second semester of the freshman year the student may complete the entire physics requirement in the sophomore year, taking Physics 1AD-1BD (6-6).

‡ Students intending to major in Agricultural Engineering should omit Civil Engineering 8 and Mechanical Engineering 10B, and adjust their programs so as to include Economics 1A-1B and Geology 1A.

ers of the Junior Certificate or its equivalent. The College of Letters and Science of the University of California at Los Angeles grants this Junior Certificate upon completion of the requirements stated on page 57.

#### **PREMEDICAL CURRICULUM: THREE YEARS**

It is assumed that in this curriculum the student will have completed in the high school the following subjects: English, three years; history, one year; mathematics, two years (elementary algebra and plane geometry); chemistry, one year; physics, one year; foreign language, two years. The Junior Certificate requirements will be more easily met if the foreign language has been pursued four years in the high school.

It is very important for students to bear in mind that the class entering the Medical School is at present limited, the basis of selection being scholarship during the premedical years; in the past there have been a great many more applicants than could be admitted. Premedical students who, upon the conclusion of their third (junior) year, find themselves thus excluded from the Medical School, will be unable to obtain the bachelor's degree in the College of Letters and Science at the end of the fourth year, unless they plan their program with this contingency in mind. They should, therefore, either enter a departmental major at the beginning of the junior year, at the same time meeting all premedical requirements, or include in their premedical program a sufficient number of appropriate courses in some major department. Provision for the completion of such a major does not prejudice the student's eligibility for admission to the Medical School.

For matriculation in the Medical School—the five-year curriculum leading to the degree of Doctor of Medicine—the student must have attained senior standing in the premedical curriculum in the College of Letters and Science (see page 76).

All applicants for admission to the Medical School are required to take the Medical Aptitude Test of the Association of American Medical Colleges. This examination will be given in December, 1936, for students applying for admission to a medical school in 1937; information concerning the place and date may be obtained from the Registrar.

Applicants for admission to the Medical School for any academic year must be filed with the Registrar, University of California, Berkeley, not later than March 1 prior to the opening of the fall session. Later applications presented by resident students of the University are subject to a special fee. Applications received after April 1 will not be considered in making up the list of matriculants for the ensuing academic year.

Owing to the limitation of enrollment in the classes of the Medical School, candidates are selected on the basis of their academic standing in subjects of the premedical curriculum, particular emphasis being placed on the required subjects.

The number of students who may be admitted to each first-year class from institutions outside the State of California is limited to five, and of these five not more than one will be selected from institutions of any one state.

The Committee on Admission to the Medical School is authorized to refuse admission to students who have low academic records and to those of obvious physical, mental, or moral disability.

An applicant for admission to the Medical School who in any year is unsuccessful in gaining admission to the School on account of an inferior scholarship record, may at once present a second application for admission. With this application there should be submitted a statement in detail concerning the studies and other employments, if any, to be undertaken in furtherance of the applicant's preparation for the work of the Medical School. Obviously, this statement should be submitted to the Committee on Admissions before the additional preparatory work is undertaken. If the applicant's plan receives the committee's approval, his name will then be listed with the names of other applicants for admission to the Medical School at the beginning of the next succeeding university year, and his success in gaining admission will depend upon his scholarship rank as a member of the group of applicants for that year.

An accepted applicant who finds it impossible to begin his work in the Medical School in August, or a student who actually enters at that time and begins his work, but finds it necessary to withdraw in his first year, loses his place in the list of applicants and is required, in the event he desires to begin his work in a later year, to reapply with the group of applicants for that year. Applicants for admission to the Medical School are required to pass a satisfactory medical examination prior to the time of first registration in the School. Students in attendance in San Francisco are examined annually.

The State law governing the practice of medicine in California prescribes that every person, before practicing medicine or surgery, must produce satisfactory testimonials of good moral character and a diploma issued by some legally chartered medical school, the requirements of which shall have been, at the time of granting such diploma, in no particular less than those prescribed by the laws of the State, and which shall have received the approval of the Board of Medical Examiners that year. The requirements for matriculation in the University of California Medical School cover also the requirements of the Association of American Medical Colleges, provided that the high school program includes physics and chemistry.

For further information see the annual ANNOUNCEMENT OF THE MEDICAL SCHOOL, to be obtained from the Dean's office, University of California Medical School, Medical Center, Third and Parnassus avenues, San Francisco.

The following tabulated curriculum represents a satisfactory arrangement of work to meet the entrance requirements for the Medical School:

## PREMEDICAL PROGRAM

A. For students who have completed *two* years of foreign language in high school.

	<i>First Year</i>	Units first semester	Units second semester
Subject A (examination or course in Subject A) .....	..	..	..
Military Science (for men) .....	1½	1½	1½
Physical Education .....	½	½	½
Chemistry 1A-1B .....	5	5	5
*English 1A-1B .....	3	3	3
†Foreign language .....	5	3 or 5	3 or 5
Electives as necessary to make up units .....	..	..	..
	16	16	16
<i>Second Year</i>			
Military Science (for men) .....	1½	1½	1½
Physical Education .....	½	½	½
Zoölogy 1A-1B .....	5	5	5
Year course (Requirement "e" for the Junior Certificate) ..	3	3	3
Year course (Requirement "e" for the Junior Certificate) ..	3	3	3
Chemistry 8 .....	3	..	..
Chemistry 5 .....	..	3	3
	16	16	16
<i>Third Year</i>			
American Institutions 101 .....	2	..	..
Physics 2A-2B .....	4	4	4
Electives .....	10	12	12
	16	16	16

B. For students who have completed *four* years of foreign language in high school.

	<i>First Year</i>		
Subject A (examination or course in Subject A) .....	..	..	..
Military Science (for men) .....	1½	1½	1½
Physical Education .....	½	½	½
Chemistry 1A-1B .....	5	5	5
*English 1A-1B .....	3	3	3
Year course (Requirement "e" for the Junior Certificate) ..	3	3	3
Year course (Requirement "e" for the Junior Certificate) ..	3	3	3
	16	16	16

\* English 1A-1B. If the student fails to pass the examination in Subject A it will be necessary to postpone English 1A-1B until he has completed the course in Subject A, for which no units are allowed.

† Foreign Language. The Medical School requirement is 10 units of credit in either French or German, and the Junior Certificate requirement is 15 units of foreign language in not more than two languages. These may be satisfied partly in the high school. The student's program should be made to satisfy these requirements.

*Second Year*

	Units first semester	Units second semester
Military Science (for men).....	1½	1½
Physical Education.....	½	½
Zoölogy 1A-1B.....	5	5
Chemistry 8.....	3	..
Chemistry 5.....	..	3
Electives (Foreign language if necessary to complete 15 units for Junior Certificate).....	6	6
	<hr/> 16	<hr/> 16

*Third Year*

American Institutions 101.....	2	..
Physics 2A-2B.....	4	4
Electives.....	10	12
	<hr/> 16	<hr/> 16

**PRE-MINING**

Students in the College of Mining may elect one of four curricula: (1) Mining Engineering; (2) Metallurgy; (3) Economic Geology; and (4) Petroleum Engineering. Each is a four-year curriculum and leads to the degree of Bachelor of Science in Mining with the completion of 139 units of work.

These four curricula have a common requirement for the first year, after which the student is expected to elect the one in which he wishes to specialize. In the second year the courses listed at the beginning of the column are common requirements for all students in the College of Mining. In addition to these, each student is required to take the courses listed under his particular option.

*Freshman*

Subject A (if required).....	..	..
Military Science 1A-1B.....	1½	1½
Physical Education.....	½	½
Mathematics 8-3A.....	3	3
Chemistry 1A-1B.....	5	5
Civil Engineering 1LA-1LB.....	2	2
Civil Engineering 1FA-1FB.....	1	1
*Mining 5A-5B.....	(1)	(1)
†Physics 1A-1B.....	3	3
Civil Engineering 3 (s.s.).....	..	(3)
	<hr/> 16	<hr/> 16

*Sophomore*

Military Science 2A-2B.....	1½	1½
Physical Education.....	½	½
Mathematics 3C-4B.....	6	3
Physics 1C-1D.....	3	3
Mineralogy 3A-3B.....	3	3
Geology 1A.....	3	..

\* Mechanical Engineering D is the nearest substitute for Mining 5A-5B offered at the University of California at Los Angeles.

† See footnote under Civil Engineering, p. 72.

*Undergraduate Curricula*

	Units first semester	Units second semester
<b>MINING</b>		
†Metallurgy 2 .....	..	3
†Mining 1A-1B .....	(3)	..
Mechanical Engineering 1.....	3	..
	—	—
	*	*
<b>METALLURGY</b>		
Chemistry 6A-6B.....	3	3
Mechanical Engineering 1.....	3	..
	—	—
	*	*
<b>ECONOMIC GEOLOGY</b>		
Chemistry 6A-6B .....	3	3
Paleontology 1.....	2	..
	—	—
	*	*
<b>PETROLEUM ENGINEERING</b>		
Chemistry 5 .....	3	..
Mechanical Engineering 1.....	3	..
Mechanical Engineering 2.....	..	3
	—	—
Normal total .....	16	16

**CURRICULA IN NURSING**

The Training School for Nurses, in connection with the University Hospital in San Francisco, offers a five-year curriculum leading to the degree of Bachelor of Science and a Certificate in Nursing. Normally the work of the first two years is taken in the College of Letters and Science at Los Angeles or Berkeley, and the final three years in the University of California Training School for Nurses in San Francisco. For further information concerning this curriculum, see the ANNOUNCEMENT OF THE CURRICULA IN NURSING, which may be obtained from the Director of the Training School for Nurses, University of California Hospital, San Francisco, California.

Registered nurses may receive the degree Bachelor of Science in three years upon completing, with an average grade of not lower than C, the work for the Junior Certificate in the College of Letters and Science at Los Angeles or at Berkeley. The program at Los Angeles is suggested below; for definite Junior Certificate requirements see page 57.

See also page 80 of this Catalogue concerning curricula in Public Health, Public Health Nursing, and Nursing Education.

\* Normal total, 18 units.

† Mining 1A-1B and Metallurgy 2 are not offered at the University of California at Los Angeles. It is suggested that Chemistry 5 be taken in lieu of Metallurgy 2.



## CURRICULUM AT LOS ANGELES

(Combined college and nursing course)

Suggested program for the first two years in the College of Letters and Science.

<i>First Year</i>	Units first semester	Units second semester
Subject A (see p. 36).....	..	..
Physical Education.....	$\frac{1}{2}$	$\frac{1}{2}$
Chemistry 1A.....	5	..
Or Chemistry 2A-2B.....	(4)	(4)
Economics 1A-1B.....	3	3
†Electives.....	..	..
Normal total.....	16	16

*Second Year*

Physical Education.....	$\frac{1}{2}$	$\frac{1}{2}$
Physiology 1, 2.....	5	..
Psychology 1A-1B.....	3	3
Zoölogy 35.....	..	3
Bacteriology 1.....	..	4
†Electives.....	..	..
Normal total.....	16	16

## PRE-OPTOMETRY

The University offers a four-year program with a major in physics-optometry, leading to the degree of Bachelor of Arts and the Certificate in Optometry. The first two years may be taken at Los Angeles; the last two must be taken at Berkeley. The following curriculum outline should be followed, with such choice of electives as will meet the requirement for the Junior Certificate in the College of Letters and Science (see page 57).

<i>First Year</i>	Units first semester	Units second semester
Subject A (see page 36).....		
Military Science 1A-1B.....	$1\frac{1}{2}$ or 0	$1\frac{1}{2}$ or 0
Physical Education.....	$\frac{1}{2}$	$\frac{1}{2}$
Chemistry 1A-1B.....	5	5
English 1A-1B.....	3	3
Physics 2A-2B.....	4	4
Electives.....	..	..
Normal total.....	16	16

†Suggested electives for the completion of the Junior Certificate: First year: German A, B, or French A, B; English 1A-1B, or Public Speaking 1A-1B. Second year: Philosophy 1A-1B.

	<i>Second Year</i>	
	Units first semester	Units second semester
Military Science 2A-2B .....	1½ or 0	1½ or 0
Physical Education .....	½	½
Mathematics 3A .....	3	..
Psychology 1A .....	..	3
Physiology 1, 2 .....	3	2
Foreign Language .....	5	5
Electives .....	..	..
Normal total .....	16	16

### PROFESSIONAL CURRICULA IN OTHER DIVISIONS OF THE UNIVERSITY

*Architecture.*—The School of Architecture in Berkeley offers a curriculum of two years subsequent to the bachelor's degree, leading to the degree of Graduate in Architecture. The College of Letters and Science in Berkeley also offers a four-year program leading to the degree of Bachelor of Arts; students desiring this program may take only academic courses in the College of Letters and Science of the University of California at Los Angeles, and are consequently advised to enroll at Berkeley in order to complete the curriculum in four years.

*Librarianship.*—The School of Librarianship in Berkeley offers a curriculum of two years subsequent to the bachelor's degree, leading at the end of the first year to the Certificate in Librarianship, and at the end of the second year to the degree of Master of Arts. The bachelor's degree may be obtained in the College of Letters and Science of the University of California at Los Angeles.

*Pharmacy.*—Two curricula in pharmacy are available; one of three years leading to the Certificate of Graduation in Pharmacy is given in the College of Pharmacy in San Francisco; a four-year curriculum leads to the degree Bachelor of Science in Pharmacy. The first two years of this latter curriculum are given in Berkeley (one year may be taken at Los Angeles); the last two years are given in San Francisco.

*Public Health.*—In Berkeley a program of seven years is offered, based on matriculation in the Medical School, leading to the degree of Doctor of Medicine, at the end of five years, and to the degree of Doctor of Public Health in two additional years. Students of medicine in the University of California may present one year of the specific Public Health program in fulfillment of the fifth year in the Medical School, thus reducing by one year the time required for the degree of Doctor of Public Health.

*Public Health Nursing.*—The College of Letters and Science in Berkeley offers to regular students\* of the College who have been certified as registered

\* In and after August, 1937, the Junior Certificate of the College of Letters and Science will be required for admission to the curricula in Public Health Nursing and Nursing Education.

nurses, a course of one and one-half years in the department of Hygiene, leading to the Certificate in Public Health Nursing.

*Nursing Education.*—The College of Letters and Science in Berkeley offers to regular students\* of the College who have been graduated from approved schools of nursing, a course of one and one-half years in the Department of Hygiene, leading to the Certificate in Nursing Education.

*Social Service.*—The College of Letters and Science in Berkeley offers a one-year program subsequent to the bachelor's degree, leading to a Certificate of Completion of the Curriculum in Social Service in the Department of Economics. The bachelor's degree may be obtained in the College of Letters and Science of the University of California at Los Angeles. Students intending to enter the curriculum should communicate with the Committee on the Curriculum in Social Service, Department of Economics, University of California, Berkeley, at an early period in the undergraduate program for assistance and advice in planning his undergraduate preparation.

#### JOURNALISM

The University of California at Los Angeles does not offer a curriculum in journalism; a student who desires to prepare himself in this field should enroll in the College of Letters and Science and with the assistance of his adviser, arrange a program containing fundamental courses in English, economics, history, political science, modern languages, and science.

---

\* In and after August, 1937, the Junior Certificate of the College of Letters and Science will be required for admission to the curricula in Public Health Nursing and Nursing Education.

## THE COLLEGE OF BUSINESS ADMINISTRATION

COURSES WHICH CONSTITUTE the curriculum of the College of Business Administration are designed to give students who choose to work toward the Bachelor of Science degree a well-balanced introduction to professional careers in business. Certain fundamental courses are included in the requirements for the completion of the Junior Certificate which should give the student the proper background for more technical offerings when the upper division is reached. Not later than the beginning of the senior year, the student is expected to be able to make an intelligent choice of a major field in which advanced work will be completed in the more specialized professional fields of accounting, banking and finance, marketing, or management and industry. While the greatest value of such specialization is largely dependent upon a wise choice in one of those basic fields, students who desire to obtain a more general business training may work toward that end by taking the general business major. Details covering all phases of the work offered in the College are set forth below, under Lower Division and Upper Division requirements.

Every student, upon his matriculation in the University, is assigned to an adviser who will gladly assist him in the selection and arrangement of his course of study, and to whom he may go when problems of a social or a scholastic nature arise. While the student may occasionally be summoned to confer with his adviser, it is his privilege at all times to seek an interview during the hours designated on the adviser's door card.

A student already enrolled in the College of Letters and Science of the University wishing to transfer either from Economics or Pre-Commerce who has completed not more than two semesters' work (32 units) by September, 1936, will be expected to meet all the Junior Certificate requirements of the College of Business Administration. If more than 32 units have been finished as of that date, the student must complete the Junior Certificate requirements of Economics or Pre-Commerce after which a transfer, without loss of credit, may be made to the College of Business Administration.

*Summer Session courses.*—Students who wish to satisfy the specific subject requirements in the summer sessions, may use only those courses which are the equivalent of courses offered in the fall or spring sessions listed as acceptable in meeting requirements and which are designated by the same numbers with the prefix "S."

*University Extension.*—Students who desire to satisfy the specific subject requirements in the University of California Extension Division may use only those courses which are the equivalents of courses offered in the fall or spring sessions listed as acceptable in meeting the requirements.

## LOWER DIVISION

*Junior Certificate Requirements*

The Junior Certificate of the College of Business Administration will be required for admission to the upper division of the College. It will be granted to students who have completed 64 units of college work, with a grade point average in all work done in the University of not lower than 1.00 (a C average), and who have satisfied requirements (a) to (d) below. While some of these requirements may be satisfied by work in the high school, work done prior to graduation from high school will not be counted as part of the 64 units.

A student who is not restricted in his study list and who is not on probation may present a study list aggregating 12 to 18 units a semester without special permission with respect to quantity of work, save that in his first semester of residence the maximum must not exceed 16 units. A student who is not under the supervision of the Committee on Reinstatement but has a deficiency in the work of the previous semester is limited to 16 units. All courses in Military Science and Physical Education and repeated courses are to be counted in the totals.

*(a) General University requirements:*

Subject A.

Military Science and Tactics, 6 units (men).

Physical Education, 2 units.

*(b) Either:*

*Foreign Language.*—At least 16 units in one foreign language. Each year of high school work in this language, not duplicated by college courses taken by the student, will count as 3 units in satisfaction of this requirement, but will not reduce the total number of units for the Junior Certificate or the degree.

Or:

*Natural Science.*—At least 14 units chosen from the following list, including not less than 4 units of college courses with laboratory work. (Courses marked with an asterisk (\*) meet the laboratory requirement.) Each year of chemistry or physics completed in the high school will count as 3 units in satisfaction of the natural science requirement, but will not reduce the total number of units for the Junior Certificate or the degree.

High School Chemistry.

High School Physics.

Chemistry 2A-2B, 8 units.\*

Physics 2A-2B, 8 units.\*

Zoölogy 1A, 5 units.\*

Botany 1A, 4 units.\*

Astronomy 1A, 3 units.

Biology 1, 3 units.

Geology 1c, 3 units.

(c) *Social Science*.—At least 6 units in social science chosen from the following list:

Political Science 3A–3B, 6 units.

History 4A–4B, 6 units; 8A–8B, 6 units; 46, 3 units.

Psychology 1A–1B, 6 units.

(d) *Required courses*:

Business Administration 1A–1B, 6 units.

Economics 1A–1B, 6 units.

English 1A, 3 units.

Geography 5A–5B, 6 units.

Mathematics 2, 3 units.

Mathematics 8, 3 units.

Public Speaking 1A, 3 units.

*Approved courses for electives in the College*.—All undergraduate courses in the Letters and Science List (see page 61) and Commerce 16 and 17 will be accepted for credit toward the B.S. degree.

#### UPPER DIVISION

The Junior Certificate is required as a prerequisite to registration in the upper division, except for students who have been granted 64 or more units of advanced standing. The student must complete at least 50 units of credit after qualifying for the Junior Certificate, of which a minimum of 36 units must consist of upper division courses.

(a) *University requirement*: American Institutions 101, or its equivalent, is required of all candidates for the degree of Bachelor of Science.

(b) *General requirements*:

Business Administration 18A–18B, 100, 120, 140, 160A, 180.

Economics 135.

(c) *Three units from the following*:

Business Administration 110, 145.

Economics 131A–131B, 150, 171, 173.

(d) *At least nine upper division units in one of the five following majors*:

The major must be started not later than the beginning of the second semester prior to the date of graduation.

(1) *Accounting*: Business Administration 160B, 161, 162, 163.

(2) *Banking and Finance*: Business Administration 131, 132, 136, 139.

(3) *Marketing*: Business Administration 184, 185, 186; Economics 195.

(4) *Management and Industry*: Business Administration 121, 125, 144, 153, 155.

(5) *General Business*: Business Administration 125, 131, 160B, 184.

(e) All candidates for the B.S. degree are required to take at least 12 units of electives outside the Department of Business Administration.

**SUMMARY—UNITS AND GRADE POINT REQUIREMENTS  
FOR BACHELOR OF SCIENCE DEGREE**

Junior Certificate requirements..... 64 units with 64 grade points

**Upper Division requirements:**

General requirements .....27 units

Major requirement ..... 9 units

University requirement ..... 2 units

Electives.....18 units

---

Total..... 56 units

---

Total requirements for B.S. degree...120 units with 120 grade points

**HONORS**

*Honors.*—The Executive Committee of the College will recommend for Honors or Highest Honors such students as it may judge worthy of that distinction.

## THE TEACHERS COLLEGE

THE TEACHERS COLLEGE is organized on the basis of four years of combined academic and professional work leading to the degree of Bachelor of Education and one or more of the following teaching credentials:

1. The Kindergarten-Primary Credential, valid in the kindergarten and grades one, two, and three of the elementary school.
2. The Elementary Credential, valid in the eight grades of the elementary school.
3. The Junior High Credential, valid in the junior high school.
4. The Special Secondary Credential of the following types: Art, Commerce, Home Making, Industrial Arts Education, Music, and Physical Education. These credentials are valid in the high school, junior high school, and elementary school.

Certificates of Completion leading to the General Secondary and Junior College Credentials are granted to students enrolled for graduate study who complete the requirements as given on pages 91-93.

### Special Secondary Credential in Vocational Arts

A two-year curriculum leading to the special secondary teaching credential in vocational arts is maintained under the provisions of the Smith-Hughes Act. This course is open to experienced journeymen workmen who are high school graduates. All applications must be approved by the Supervisor of Trade and Industrial Teacher Training of the Division of Vocational Education. A statement of the requirements of the Limited Credential in Industrial Arts Education will be found in Bulletin No. 12 published by the State Board of Education, July 15, 1935.

### REQUIREMENTS FOR THE DEGREE OF BACHELOR OF EDUCATION

- I. Completion of 120 units of credit with a corresponding number of grade points.
- II. Presentation of a certificate of physical fitness from the Medical Examiners of the University of California at Los Angeles.
- III. Recommendation of the major department and of the Department of Education.
- IV. Satisfactory completion of the following program:
  1. Lower Division.

The work of the freshman and sophomore years leading to the Junior Certificate of the Teachers College ordinarily comprises 64 units of univer-



sity credit. The Junior Certificate, however, is awarded on completion of a minimum of 60 units of university credit, with a grade-point average of 1.00 (a C average), including:

(a) General University requirements:

Subject A.

Military Science and Tactics, 6 units (men).

Physical Education, 2 units.

(b) Foreign Language. At least 15 units in not more than two languages. Two years or more of high school work in a single foreign language will be counted in satisfaction of this requirement at the rate of three units a year unless the student duplicates the work in the University.

(c) Matriculation Mathematics: elementary algebra and geometry. Instruction in these subjects is not given in the fall or spring sessions of the University.

(d) Natural Science. Twelve units chosen from the following list, including either high school physics or chemistry, or a university course with at least two units of laboratory work. (Courses marked with an asterisk have laboratory work.) Physics and chemistry taken in the high school will each count in satisfaction of 3 units of this requirement but will not reduce the number of units for the Junior Certificate or the degree.

High School Physics.\*

High School Chemistry.\*

Astronomy 1A-1B.

Bacteriology 1.\*

Biology 1, 12.

Botany 1A\*-1B.\*

Chemistry 1A,\* 1B,\* 2A,\* 2B,\* 5,\* 6A,\* 6B,\* 8.

Geology 1A, 1B, 1C, 2C.

Geography 3.

Paleontology 1.

Physics 1A,\* 1B,\* 1C,\* 1D,\* 2A,\* 2B,\* 4A, 4B.

Physiology 1,\* 2.\*

Zoölogy 1A,\* 1B.\*

(e) English 1A-1B or Public Speaking 1A-1B or 2A-2B.

(e) Psychology 1A-1B.

(e) A year course chosen from the following:

Economics 1A-1B.

Geography 1A-1B.

History 4A-4B, or 5A-5B, or 8A-8B.

Political Science 3A-3B.

Philosophy 1A-1B, 2A-2B, 3A-3B.

Mathematics—Six units chosen from the following: C, F, 2, 3A, 3B, 4A, 6, 8. High school plane trigonometry and plane analytic geometry will be accepted in partial satisfaction of this requirement, each to count 2 units. This will not reduce the number of units required for the Junior Certificate or the degree.

## 2. Upper Division.

- (a) The Junior Certificate is required as a prerequisite to registration in the upper division, except for students who have been granted 60 or more units of advanced standing.
- (b) The student must complete at least 50 units of credit after qualifying for the Junior Certificate, of which a minimum of 36 units must consist of upper division courses.
- (c) The final year of residence,\* including at least 24 units of credit must be completed in the Teachers College. Courses taken in the summer sessions may be offered in satisfaction of 12 units of this requirement.
- (d) The course in American Institutions 101, or its equivalent, is required of all candidates for the degree of Bachelor of Education.
- (e) A major, consisting of from 18 to 30 units of approved upper division courses, must be completed in one of the following fields:

Art, Commerce, Education, Home Economics, Mechanic Arts, Music, Physical Education.

The major in education is designed primarily to prepare students for teaching in the elementary schools of the State with specialization for either the kindergarten and primary grades, or for the upper grades and the junior high school. Ordinarily the student pursuing a major in education may so plan his program as to qualify for either the elementary and kindergarten-primary credentials or the elementary and junior high school credentials.

Majors in art, commerce, home economics, mechanic arts, music, and physical education prepare the student to teach these subjects in the secondary schools, and lead to the special secondary credential. By careful planning it is possible for major students in these fields to qualify for the general junior high school credential. Requirements for both special secondary and general elementary credentials cannot ordinarily be met within the limits of the four-year course.

The student must attain an average scholarship of C grade or better for all courses comprising the major.

---

\* If the candidate for a teaching credential holds a bachelor's degree he must complete at least one semester of not less than 15 units in resident instruction in the Teachers College. Ordinarily credentials are not obtainable from this institution on the basis of summer sessions alone.

- (f) In addition to the major, two minors are required. A minor is defined as from 12 to 18 units of coördinated courses in any University department. Students majoring in art, commerce, home economics, mechanic arts, music, and physical education must complete as one minor 18 units of approved courses in education.

## MAJORS IN THE TEACHERS COLLEGE

### ART

*Preparation for the Major.*—Courses 1A-1B, 2A-2B, 4A-4B, 8A-8B, 9A, 12, 32.

*The Major, leading to the Special Secondary Teaching Credential in Art.*—Twenty-seven units of upper division courses; this program may be taken in one of three specified lines, and must be arranged with a departmental adviser.

*The Minor in Education.*—Education 103, 170; Directed Teaching, 6-10 units; Art 160A-160B, 180.

### COMMERCE

*Preparation for the Major.*—Business Administration 1A-1B, 2A or 2B, 18A or 18B; Commerce 16, 17, 18A-18B; Economics 1A-1B; Geography 1A-1B, or 5A-5B, or any combination of the group; and History 45 or 46.

*The Major, leading to the Special Secondary Credential in Commerce.*—Twenty-four units of advanced work approved by the Department of Business Administration. At least twelve units should be selected from the following courses in Business Administration: 100, 120, 131, 132, 140, 153, 160A-160B, 161, 162, 180. The remaining units should be selected from upper division courses in economics or some other social science which is approved by the Department of Business Administration.

*The Minor in Education.*—Education 103, 170; Directed Teaching, 8 units; Commerce 197, 198.

### EDUCATION

*Preparation for the Major.*—Biology 1, 12; Geography 1A-1B; Psychology 1A-1B.

*The Major.*—Eighteen units of upper division courses, including:

Education 100 or Psychology 112

Education 101 or Psychology 119

Education 102 or Psychology 107A

Education 103 or 120 or 123A-123B

Education 104 or 105\* or 138 or 150

Electives in education to total 18 units (Psychology 110 may be offered as an elective in education).

**NOTE:** Requirements for teaching credentials will be found on page 91.

\* Required for the Kindergarten-Primary Credential.

## HOME ECONOMICS

*Preparation for the Major.*—Courses 1A-1B, 2, 11A-11B, 43A; Art 22; Chemistry 2A-2B, 10; Physiology 1; Economics 1A.

*The Major, leading to the Special Secondary Credential in Home Making.*—Courses 108, 110, 118A, 120, 162A-162B, 164, 168, and 5 units of advanced home economics approved by the department.

*The Minor in Education.*—Education 103, 170; Directed Teaching, 6-10 units; Home Economics 390A-390B.

## MECHANIC ARTS

*Preparation for the Major.*—Mechanical Engineering D; Mechanic Arts 11, 14, 15A-15B, 16, 17A, 18A, 21; recommended, mathematics and physics.

*The Major, leading to the Special Secondary Credential in Industrial Arts Education.*—Thirty units of work approved by the department; of this twenty-four units must be in upper division courses.

*The Minor in Education.*—Education 103, 160, 164, 170; Directed Teaching, 6-10 units; Mechanic Arts 190.

## MUSIC

*Preparation for the Major.*—Courses 1A-1B, 2A-2B, 7A-7B, 14A-14B, 35A-35B.

*The Major, leading to the Special Secondary Credential in Music.*—Courses 104A-104B, 105A-105B, 108A-108B, 109A-109B, 111A-111B, 114A-114B.

*The Minor in Education.*—Education 103, 170; Directed Teaching, 6-10 units; Music 112A-112B.

## PHYSICAL EDUCATION FOR MEN

*Preparation for the Major.*—High school chemistry or Chemistry 2A or Zoölogy 1A; Physiology 1; Biology 1 (if Zoölogy 1A is not taken); Zoölogy 35; Physical Education 1, 3 (2 units), 5.

*The Major, leading to the Special Secondary Credential in Physical Education.*—Courses †120, 131, 140, 149, 156A-156B, 182, †190, †192A-192B.

*The Minor in Education.*—Education 103, 170; Directed Teaching, 6-10 units, Physical Education 154, 155A-155B.

## PHYSICAL EDUCATION FOR WOMEN

*Preparation for the Major.*—Courses 30A-30B, 32A-32B, 33A-33B, 35, 42A-42B, 43A-43B, and Chemistry 2A-2B or 1A, Biology 1, Zoölogy 35, Physiology 1, Home Economics 32.

*The Major, leading to the Special Secondary Credential in Physical Education.*—Physical Education 120, 149, 150, 180A-180B, 181A-181B, 182, 183, 190, 192A-192B.

*The Minor in Education.*—Education 103, 170; Directed Teaching 6-10 units; Physical Education 121A-121B, 121C-121D.

† Courses so marked are listed with the Department of Physical Education for Women.

**HONORS**

Honorable mention with the Junior Certificate and honors with the degree of Bachelor of Education are awarded on the same basis as in the College of Letters and Science. (See pages 69, 70.)

**REQUIREMENTS FOR TEACHING CREDENTIALS****1. The Elementary Credential—**

- (a) The degree of Bachelor of Education with a major in education.
- (b) Completion of Art 330A-330B; Mathematics 19; Music 360A-360B; Physical Education 111A-111B. History 39 is recommended but not required.
- (c) Education 390 and Supervised Teaching E190A-E190B.

**2. The Kindergarten-Primary Credential—**

- (a) The degree of Bachelor of Education with a major in education.
- (b) Completion of Art 330A-330B; Education 105, 306; Music 360A-360B; Physical Education 111A-111B.
- (c) Examination in piano.\*
- (d) Education 390 and Supervised Teaching K190A-K190B.

**3. The Junior High School Credential—**

This credential is awarded only in conjunction with the Elementary or Special Secondary credentials. The requirements are the completion of a major and a minor, or two minors, in fields taught in the junior high school, and eighteen units in education including Education 170 and supervised teaching at the junior high school level in one of the general subject fields.†

**4. The Special Secondary Credentials—**

These credentials are awarded upon the completion of all requirements for the degree of Bachelor of Education with majors in art, commerce, home economics, mechanic arts, music, or physical education, provided that the minor in education is satisfactorily completed.

The courses comprising these majors are listed on pages 89, 90.

**5. The General Secondary Credential—**

The Certificate of Completion leading to the General Secondary Credential

---

\* Candidates for the Kindergarten-Primary Credential must pass an examination in piano before the Junior Certificate is awarded. (The student must show capacity to play such music as "Songs for the Little Child" by Kohlsaat and Baker, and music for rhythmic interpretation of the type in Robinson's "School Rhythms.")

† Teaching for special type credentials is not accepted for this requirement.

is granted to students who qualify for admission to graduate study, under the following conditions:

- (a) Completion of 24 units of resident study subsequent to the receipt of the bachelor's degree of which not less than ten must be completed at the University of California at Los Angeles; residence of at least one regular semester is required. The Certificate of Completion can not be obtained solely on the basis of summer session work or advanced standing.
- (b) Eighteen\* units of courses in education, including
  - (1) Education 170
  - (2) Six units chosen from Education 103, 112, 120, 123A, 123B, 150, Psychology 110
  - (3) Education 320A-320B, Supervised Teaching (restricted to graduate students, with a prerequisite of nine units in education, including Education 170).
  - (4) Electives to total 18 units. Upper division courses in education, or departmental courses for secondary teachers.
- (c) Completion of a teaching major approved by the department of not less than 24 units of upper division and graduate courses in one of the following fields:
 

Agriculture	Geography	Mathematics
Botany	Geology	Physical Education
Chemistry	German	Physics
Economics	History	Political Science
English	Home Economics	Spanish
French	Latin	Zoölogy
- (d) Completion of a teaching minor (not less than 18 units, of which 9 to 12 must be upper division or graduate courses) in any of the foregoing fields, or in art, astronomy, Greek, mechanic arts, music, public speaking. A minor in a modern foreign language must include 12 units of upper division courses.
- (e) A scholastic average of 1.75 must be maintained for all work undertaken after receipt of the bachelor's degree; the same requirement holds for the courses comprising the teaching major, including the upper division courses taken before receipt of the bachelor's degree. A grade of C or better must be presented in Education 320A and 320B.
- (f) At least 6 units of graduate courses (200 series) must be completed in the fields of the teaching major and (or) minor.
- (g) A knowledge of the United States Constitution as attested by examination or an approved course.

---

\* Not less than six units to be completed subsequent to the receipt of the bachelor's degree.

- (h) Certificate of fitness by the medical authorities of the University of California at Los Angeles.
- (i) Evidence of a satisfactory command of spoken English.
- (j) Recommendation for the credential by the department of the candidate's major.

#### **6. The Junior College Credential—**

The Certificate of Completion leading to the Junior College Credential is awarded to students who hold, or who have completed all requirements for, the master's (or doctor's) degree, upon completion of the following requirements:

- (a) Residence in the University of California at Los Angeles for at least one regular semester. The Certificate of Completion can not be obtained solely upon the basis of summer session work, or of advanced standing.
- (b) Ten units of courses in education approved by the Department of Education, of which at least six units must be completed subsequent to the receipt of the bachelor's degree. Education 179 and 320A-320B are required. Education 320A-320B is restricted to graduate students.
- (c) Completion of a graduate major (not less than 12 units of graduate courses or not less than 8 units of graduate courses with a thesis) in a field represented in the junior college. Majors may be offered at the University of California at Los Angeles in the following fields:

Agriculture	Geology	Physics
Botany	German	Political Science
Chemistry	History	Psychology
Economics	Latin	Spanish
English	Mathematics	Zoölogy
French	Microbiology	
Geography	Philosophy	

- (d) Completion of a teaching minor (not less than 18 units of which 9 to 12 are upper division or graduate courses) in any of the foregoing fields or in art, astronomy, Greek, home economics, mechanic arts, music, physical education, public speaking. A minor in a modern foreign language must include 12 units of upper division courses.
- (e) A knowledge of the United States Constitution as attested by examination or an approved course.
- (f) Certificate of fitness by the medical authorities of the University of California.
- (g) Evidence of a satisfactory command of spoken English.
- (h) Recommendation for the credential by the department of the candidate's major.

## **THE BRANCH OF THE COLLEGE OF AGRICULTURE IN SOUTHERN CALIFORNIA—LOS ANGELES**

THE COLLEGE OF AGRICULTURE of the University of California, through its Branch in southern California, offers at Los Angeles the Plant Science curriculum and the major in Subtropical Horticulture leading to the Bachelor of Science degree, and graduate work in this field leading to the degree Master of Science. Students electing other majors in this curriculum may spend the freshman and sophomore years at Los Angeles and then transfer to the campus where their major work is offered.

Students electing other curricula in the College of Agriculture—Animal Science, Agricultural Economics, Entomology and Parasitology, Forestry, and Soil Science—and those electing the curriculum in Agricultural Engineering may spend the first two years at Los Angeles and then transfer to Berkeley or Davis without serious loss of time. Students who plan to major in Landscape Design are advised to transfer to Berkeley at the beginning of the sophomore year. Students who register at Los Angeles with the intention of later transferring to Berkeley or Davis to pursue other curricula or to obtain majors in the Plant Science curriculum other than Subtropical Horticulture are requested to consult the PROSPECTUS OF THE COLLEGE OF AGRICULTURE and the adviser in Agriculture at Los Angeles.

### **REQUIREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURE**

#### **PLANT SCIENCE CURRICULUM, MAJOR IN SUBTROPICAL HORTICULTURE**

The candidate for the degree of Bachelor of Science in the College of Agriculture must complete the following requirements:

(1) Four years of university residence. The senior year must be spent in the College of Agriculture at this University.

The student should note that in order to complete the work in agriculture within the normal four-year period, prerequisites must be systematically met and the proper sequence of courses followed. Unnecessary delay will thereby be avoided. It is advisable, therefore, for the student who wishes to receive his bachelor's degree in agriculture at the University of California to take as much of his undergraduate program as possible in the University.

(2) One hundred and thirty semester units of university work, with at least an equal number of grade points, in addition to matriculation units and Subject A. (The Subject A examination in English composition is required of



every undergraduate student at the time of his first registration in the University.) Further regulations concerning Subject A are given on page 36.

(3) Thirty-six of the 130 units must be in upper division courses (courses numbered 100-199). Not more than 4 units may be in lower division physical education courses.

(4) Nine units of mathematics, including trigonometry. Matriculation work may be offered toward this requirement, with each year of high school work valued at 3 units. The student normally satisfies this requirement before the end of his sophomore year.

(5) In addition to requirement 4 above every student must complete the requirements as listed under the following curriculum:

#### PLANT SCIENCE CURRICULUM

(a) Students must complete the following:

	Units
Chemistry . . . . .	16
Botany and Plant Physiology . . . . .	12
Physics . . . . .	6
Bacteriology . . . . .	4
Economics . . . . .	6
Geology . . . . .	3
Genetics . . . . .	4
Plant Pathology . . . . .	4
Plant Nutrition . . . . .	4
Entomology . . . . .	4
Zoölogy . . . . .	4
American Institutions . . . . .	2
Military and Physical Education . . . . .	8
	<hr/>
	77

(b) Students also must take a major with the minimum of twelve (12) units of upper division work in Subtropical Horticulture.

(c) A summer course may be prescribed in addition to the above as a major requirement.

#### FRESHMAN AND SOPHOMORE YEARS

During the freshman and sophomore years the following schedule will normally be followed. For example of programs in other curricula of the College of Agriculture students should consult the PROSPECTUS OF THE COLLEGE OF AGRICULTURE and the adviser for agricultural students at Los Angeles.

The College of Agriculture requirements for graduation are the same whether the student registers at Berkeley, Davis, or Los Angeles.

## EXAMPLE OF PROGRAM—PLANT SCIENCE CURRICULUM

<i>Freshman Year</i>	Units first semester	Units second semester
Military Science . . . . .	1½	1½
Physical Education . . . . .	½	½
Botany 1, 2 . . . . .	4	4
Chemistry 1A-1B . . . . .	5	5
Physics 2A-2B or 4A-4B . . . . .	4 or 3	4 or 3
Economics 1A . . . . .	..	3
Geology 1A . . . . .	3	..
	<hr/> 18 or 17	<hr/> 18 or 17

<i>Sophomore Year</i>		
Military Science . . . . .	1½	1½
Physical Education . . . . .	½	½
Botany 109, 101 . . . . .	3	4
Chemistry 5, 8 . . . . .	3	3
Zoölogy 1A . . . . .	5	..
Bacteriology 1 . . . . .	..	4
Business Administration 1A . . . . .	3	..
Subtropical Horticulture 2 . . . . .	..	3
Subtropical Horticulture 1 . . . . .	..	1
	<hr/> 16	<hr/> 17

There is no Junior Certificate in the College of Agriculture. Consequently students who are unable to meet the above-outlined program of study during the first two years may take some of the requirements in their junior or senior years. It should be noted, however, that any great departure from the above program may delay graduation beyond the normal four-year period.

## JUNIOR AND SENIOR YEARS

The additional required courses—Entomology 134, Zoölogy 100A (Genetics), Plant Nutrition 110, Plant Pathology 120 and American Institutions 101—together with such electives in any department as may be approved by the major adviser will be taken during the junior and senior years. Entomology 1, normally taken in the sophomore year, may be substituted for course 134. For elective courses in other departments the latter pages of this Catalogue should be consulted.

Students should consult the major adviser relative to the 12 units required for the major in Subtropical Horticulture. Certain courses are required—100, 101 and 102—while others are optional.

### OTHER CURRICULA

The requirements in the other curricula offered by the College of Agriculture will be found in the PROSPECTUS OF THE COLLEGE OF AGRICULTURE. Programs suitable for the conditions at Los Angeles may be had from the adviser in Agriculture, who should be consulted.

### HONORS

Students who become candidates for the bachelor's degree in the College of Agriculture may be recommended for honors on the basis of the quality of the work done in the regular curriculum.

I. *Honorable mention with Junior Standing* (that is, students who have completed 64 units in their freshman and sophomore years).

- (1) Honorable mention is granted with junior standing to students who attain at least an average of 2 grade points for each unit of credit undertaken. Such students will remain in honors status unless their average for all work at the end of any semester falls below 2 grade points for each unit undertaken.
- (2) The list of students who receive Honorable Mention is sent to the chairman or study-list officer of the College before the beginning of the next semester. The list of those in honors status is published in the CATALOGUE OF OFFICERS AND STUDENTS.

II. *Honors with the Bachelor's Degree.*

- (1) Honors are granted at graduation only to students in honors status who have completed the major with distinction, and who have a general record satisfactory to the Committee on Honors.
- (2) Students who, in the judgment of the Committee on Honors, show marked superiority in their major subject may be recommended for the special distinction of Highest Honors.
- (3) A list of students to whom Honors or Highest Honors in the College have been awarded is published in the COMMENCEMENT PROGRAM.

## GRADUATE STUDY

---

### REQUIREMENTS FOR THE MASTER'S DEGREE

*Preliminary preparation.* The preliminary training for the candidate for the degree of Master of Arts or of Master of Science should be substantially the equivalent of that represented by the corresponding bachelor's degree of the University of California. A bachelor's degree in the University of California represents eight years of systematic high school and collegiate work distributed according to the requirements of the University for the particular college or course in which the student takes his degree. If the candidate's undergraduate preparation is found to be seriously deficient in breadth or fundamental training, or if it fails to provide a proper foundation for advanced work in the department or departments of the candidate's choice, it may be necessary for him to give some time to completing specified undergraduate courses before his application for admission to graduate status can receive favorable consideration.

*The degree.* The degree Master of Arts is awarded to students meeting the prescribed requirements in any of the major subjects of graduate study at the University of California at Los Angeles with the exception of agriculture; in this field the degree of Master of Science is awarded. However, students in mathematics or science who, in addition to requirements for the master's degree, have completed those of the degree of Bachelor of Science, may be awarded the degree of Master of Science.

*Major fields.* The major fields for graduate study are:

Agriculture (Subtropical Horticulture)	*Home Economics
Botany	Latin
Chemistry	Mathematics
Economics	Microbiology
Education	Philosophy
English	*Physical Education
French	Physics
Geography	Political Science
Geology	Psychology
History	Spanish
	Zoölogy

*Residence.* The minimum period of academic residence required is one year, of which at least one semester must be in regular session at Los Angeles. It

---

\* For 1936-37 graduate work is offered leading to the General Secondary Credential, but not to the master's degree.

may be met in part by residence in summer sessions of the University (each to count as one-fourth of a year) or in the Graduate Division at Berkeley. A student is not regarded as in residence unless he is actually attending, in a regular session, regularly authorized university exercises amounting to at least 4 units of upper division or graduate level, or at least 2 units of similar work during a summer session. Irrespective of the total credit obtained in summer sessions, not less than 4 units of the required graduate courses must be earned in a regular semester at Los Angeles. While ordinarily all of the work for the master's degree is expected to be done in residence, graduates of this University or other approved candidates may complete a part of their work in absence, subject to the approval of the Graduate Council and the regulations relating to study in absence, and subject to the minimum residence requirement of one year.

*Extension and Correspondence courses.* Courses taken in the Extension Division or by correspondence are not accepted in satisfaction of unit requirements for a higher degree or for the general secondary or junior college teaching credentials, although upon special approval they may be used to satisfy subject requirements for the credentials.

*Application for advancement to candidacy.* Advancement to candidacy must take place not later than one semester prior to the date of completion of requirements for the degree. Attention of students is called to the fact that admission to candidacy is not automatic. It requires a formal application distinct from registration. A date, one week after the filing of study lists, is set in each semester as the final date for application for candidacy by persons hoping to qualify for the degree at the close of that semester.

*Amount and distribution of work.* A student will pursue one of the following plans for the fulfillment of the requirements for the master's degree, at the option of the department of his major field. All requirements for the degree under either plan must be completed not later than one calendar year from the completion of the unit requirement.

*Plan I: Thesis Plan.* Under this plan the student must complete 20 semester units and in addition he must write a thesis. The courses must be graduate courses or upper division undergraduate courses. At least 8 of the 20 units must be strictly graduate work in the major subject; no unit credit is allowed for the thesis. It is expected that the work of the graduate course, or courses, together with the thesis ordinarily will amount to not less than half of the entire work presented for the degree. Provided the foregoing general and the special departmental requirements are met, the work may be distributed among any courses in the 100 or 200 series. The student is subject to guidance by the major department respecting the distribution of his work among the departments. The major department may also require such exami-

nations as may be considered necessary to test the candidate's knowledge in the field of his work.

*Plan II: Comprehensive Examination Plan.* Under this plan 24 units of upper division and graduate courses are required, of which at least 12 units must be in strictly graduate courses in the major subject. The student is subject to guidance by the major department respecting the distribution of his work among the departments.

A comprehensive final examination in the major subject, to be of such nature and to be conducted in such manner as may be determined by the department concerned, is required of every candidate.

*Grade requirements.* Only courses in which the student is assigned grades A, B, or C may be counted in satisfaction of the requirements for the master's degree. Furthermore, the student must maintain an average of B (2 grade points for each unit of work undertaken) in these courses *and also in all courses elected at the University subsequent to the bachelor's degree.* Three points a unit are assigned to grade A; two points to grade B; one point to grade C; none to grade D; minus one point to grades E and F.

*Foreign Language.* A reading knowledge of a modern foreign language (other than that of the major subject, if the major is a foreign language) is required of all candidates for the master's degree. The department of the candidate's major must approve the language selected, and will conduct the examination.

*Acceptance of work completed in graduate status elsewhere.* The following regulation governs the acceptance of work completed in graduate status at other institutions: The entire program for the master's degree must be completed in residence at this University. In exceptional cases, a limited amount of credit obtained in regular sessions of institutions of high standard may be accepted toward fulfilling the minimum unit requirements for the master's degree. In no instance, however, will more than 4 units be allowed, and then only to students of superior scholarship. Where such allowance is made it cannot be used to reduce the minimum residence requirement or the minimum requirement in strictly graduate (200) courses.

*Summer Session work for the master's degree.* Students who plan to offer Summer Session courses in partial fulfillment of the requirements for the master's degree should be careful to select only courses especially designated as acceptable for this purpose. Not all upper division courses given in the Summer Session may be offered in satisfaction of the requirements for the master's degree. A list of acceptable courses is published annually for the use of students in the Summer Session. The maximum study list of graduate work permitted in the Summer Session is 4 units. The complete requirement of graduate courses can not be met in summer sessions alone; at least one regular semester is necessary.

In planning a program for a higher degree it must be borne in mind that the members of the regular staff are not all on duty in the summer months. Admission to candidacy does not constitute a claim upon the vacation time of members of the faculty for direction of thesis work.

*Theses.* Specific requirements concerning theses will be found in the ANNOUNCEMENT OF GRADUATE STUDY at the University of California at Los Angeles.

## **REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY**

Students desiring to become candidates for the doctor's degree should note at the outset that the degree of Doctor of Philosophy is granted by the University of California not alone for the fulfillment of technical requirements, such as residence and the completion of fundamental courses within a given field which is chosen as the field of study, but rather upon the following: the student's general grasp of the subject matter of a large field of study, his distinguished attainments in that field, his critical ability and power to analyze problems, as well as to coördinate and correlate the data from a number of allied fields in such fashion as to serve the progress of ideas in those fields. In addition to all of these things, the student must show the power to make an original contribution to the knowledge of his chosen field of study through his dissertation, and, throughout his career as a graduate student, to give evidence of his ability to work independently.

*Fields of study for 1936-37.* The fields of study for 1936-37 open to candidates for the degree of Doctor of Philosophy are: English, history, mathematics, and political science. Other fields and departments will be added to this list in 1937-38 or subsequently, as circumstances warrant.

*Preliminary preparation.* A prospective candidate for the degree of Doctor of Philosophy must hold a bachelor's degree from one of the colleges of this University, based upon a curriculum that shall have included the requirements for full graduate status in the department of his major subject, or must have pursued successfully a course of study equivalent to that represented by such a degree.

*Residence (attendance) required.* The minimum residence requirement for the doctor's degree is two years, one (ordinarily the second) of which must be spent in continuous residence at the University of California at Los Angeles. (See also *Program of study*, below.)

*Foreign language requirement.* A reading knowledge of French and German is required. This requirement must be satisfied before advancement to candidacy for the Ph.D. degree. The applicant must pass an examination consisting of a translation of a passage from each language of at least 500 words, so chosen as to be typical of the literature of the proposed field of study. The

examination is under the charge of the committee appointed to conduct the qualifying examinations, and this committee is responsible for reporting the results. The committee itself may set the examination or may delegate the conduct of the examination to a committee or to a department. The translation must be made without the aid of a dictionary. Copies of the original passages and the translations must be filed with the Dean of Graduate Study. The department or group of departments primarily concerned with the applicant's field of study may, with the approval of the Graduate Council, substitute the requirement of another language for either French or German if in any specific case such substitution is deemed desirable.

*Program of study.* Recommendation for the degree is based upon the attainments of the candidate rather than upon the length of time of study; ordinarily not less than three full years will be found necessary. A program of study must be approved by the Graduate Council embracing a field of investigation previously approved by the department or group of departments concerned, and extending over the full time of study.

*Notice of intended candidacy.* Notice of intention to proceed to candidacy for the Ph.D. degree should be given as early as possible in a graduate student's career, preferably at the end of the first semester of graduate study. Such notice should be given to the department or group of departments which represent the field of study selected by the student, and to the Dean of Graduate Study.

Upon receipt of notice a doctoral committee will be appointed to assist the student in making out his program of study and in preparing for the qualifying examinations.

*Qualifying examinations.* Before admission to candidacy a student must have passed a series of qualifying examinations (both written and oral, including tests of a reading knowledge of the required foreign languages) before his doctoral committee.

*Advancement to candidacy.* Applicants for admission to candidacy for the degree of Doctor of Philosophy must report in person to the Dean of Graduate Study, who determines whether all formal requirements have been met.

The candidate must file his application, properly approved by the committee conducting the qualifying examinations.

A minimum period of resident study approximately equivalent to two semesters must intervene between the date of formal advancement to candidacy and the date of the final examination.

*Dissertation.* A dissertation on a subject chosen by the candidate, bearing on the principal subject of study and of such character as to show power to prosecute independent investigation, is required of every candidate for the degree. In its preparation the candidate will be guided by a committee, ordinarily his doctoral committee, which will also pass upon the merits of the com-



pleted dissertation; the approval of the committee, as well as that of the Graduate Council, is required before the award of the degree is recommended. Special emphasis will be laid upon the dissertation requirement, and the degree will under no circumstance be given merely for the completion of a course of study, however extensive.

The dissertation must be typewritten or printed: specific instruction concerning the form may be had upon application to the Registrar. Two copies of the approved dissertation (if typewritten, the original and the first carbon) must be filed with the Registrar two weeks before the proposed date of the final examination, for subsequent disposition in the University Library. However in special cases the Graduate Council may authorize the final examination to be taken before the dissertation is accepted.

*Final examination.* The final examination of the candidate will be conducted by his doctoral committee: it will be oral, and will deal primarily with questions arising out of the relations of the dissertation to the general field of study in which the dissertation lies. Admission to the final examination may be restricted to members of the committee, members of the Academic Senate, and guests of equivalent rank at other institutions.

#### DEFINITION OF ACADEMIC RESIDENCE FOR GRADUATE STUDENTS

Every graduate student must register for, attend, and complete upper division courses (courses in the 100 series) or graduate courses (courses in the 200 series) amounting to at least 4 units a week for each semester, in order to satisfy the minimum residence requirement in candidacy for any higher degree or certificate issued by the University.

# ANNOUNCEMENT OF COURSES FOR THE ACADEMIC YEAR, 1936-37

## CLASSIFICATION AND NUMBERING

Courses are classified and numbered as follows:

*Undergraduate courses.* These are of two kinds, lower division and upper division.

A lower division course (numbered 1-49, or sometimes indicated by a letter if the subject is one usually given in high school) is open to freshmen and sophomores, and does not count as upper division work in any department.

An upper division course (numbered 100-199) is advanced study in a field which has been pursued in the lower division, or elementary work in a subject of sufficient difficulty to require the maturity of upper division students.

*Graduate courses* (numbered 200-299). As a condition for enrollment in a graduate course the student must submit to the instructor in charge of the course evidence of satisfactory preparation for the work proposed; adequate preparation will consist normally of the completion of at least 12 units of lower division work basic to the subject of the graduate course, irrespective of the department in which such basic work may have been completed.

*Professional courses* (numbered 300-399). The designation 300-399 includes highly specialized courses dealing with methods of teaching specific subjects. Such courses may not be offered in partial fulfillment of the requirements for the major in Education, but are acceptable toward academic degree programs within the limitations prescribed by the various colleges.

## ABBREVIATIONS

In the following list of courses, the credit value of each course in semester hours is indicated by a number in parentheses after the title. A unit of credit is one hour of the student's time at the University, weekly, during one session in lecture or recitation, together with the time necessary in preparation for; or a longer time in laboratory or other exercises not requiring preparation. The session in which the course is given is shown by the Roman numeral I for the first semester, or II for the second semester. A course given throughout the year is designated Yr. Hours, when not stated, will be arranged. The final assignment of hours is made in the SCHEDULE OF CLASSES to be obtained at the time of registration.

*Year courses.* A course given throughout the year is designated by a double number. Economics 1A-1B is an example. Each half of the course constitutes a semester's work. The first half is prerequisite to the second unless there is an explicit statement to the contrary. The instructor makes a final report on the student's work at the end of each semester. Unless otherwise noted, the student may take the first half only and receive final credit for it.

## AGRICULTURE

LEON D. BATCHELOR, Ph.D., Professor of Orchard Management, and Director of the Branch of the College of Agriculture in Southern California, Riverside.

ROBERT W. HODGSON, M.S., Professor of Subtropical Horticulture, and Assistant Director of the Branch of the College of Agriculture in Southern California.

MARTIN R. HUBERTY, Engr., Associate Professor of Irrigation Investigations and Practice.

SIDNEY H. CAMERON, Ph.D., Assistant Professor of Subtropical Horticulture.

FREDERICK F. HALMA, Ph.D., Assistant Professor of Subtropical Horticulture.

ERRE A. MILLER, M.S., Assistant Professor of Plant Pathology.

VID APPLEMAN, Ph.D., Instructor in Subtropical Horticulture.

MER R. EGGERS, B.S., Associate in Subtropical Horticulture.

H. H. SMITH, Ph.D., Lecturer in Entomology.

*Prereqs and Science List.*—Entomology 1, 134, Plant Nutrition 110, Plant Physiology 120.

*Division Courses.*—All upper division courses announced by this department presuppose at least junior standing in the College of Agriculture. Students and seniors in other colleges may elect such courses in the Department of Agriculture as they are qualified to pursue.

*Prereqs for the Major in Subtropical Horticulture.*—Course 2 or the equivalent and the requirements in the Plant Science Curriculum (see pages 100 and 101 of the Catalogue, or the Prospectus of the College of Agriculture).

*Prereqs for the Minor in Subtropical Horticulture.*—Twelve units of upper division courses, including 100, 101, and 102.

*Prereqs for Other Majors in the Plant Science Curriculum.*—See the requirements of the College of Agriculture and consult the adviser for students in the Department of Agriculture.

*Laboratory Fees.*—Entomology 1, \$2; 134, \$3; Irrigation 105, \$2; Plant Nutrition 110, \$2; Plant Pathology 120, 130, \$2; Subtropical Horticulture 100, \$3; 101, \$2.

## ENTOMOLOGY

## LOWER DIVISION COURSE

## 1. General Entomology. (4) II.

Mr. Smith

Lectures, M W F, 8; laboratory, W, 2-5. Fee, \$2.

Recommended: Zoölogy 1A.

A general course designed to provide the student with a well-rounded knowledge of entomology, including the fundamental facts and principles of insect life and control.

\* In residence second semester only, 1936-37.

## UPPER DIVISION COURSE

134. **Insects Affecting Subtropical Fruit Plants.** (4) II. Mr. Smith  
 Lectures, Tu Th, 8; laboratory, Tu Th, 1-4. Fee, \$3.  
 Prerequisite: Zoölogy 1A; Entomology 1 or 124 (Berkeley or Davis) recommended.  
 Specialized study of the biology, nature of injury, and control of the more important insects affecting citrus and other subtropical fruit plants.

GRADUATE COURSES  
(Given at Riverside)†

- 200A-200B. **Seminar in Entomology.** (1-1) Yr. Mr. Quayle in charge  
 201A-201B. **Research in Entomology.** (1-6; 1-6) Yr.  
 Mr. Quayle, Mr. H. S. Smith, Mr. Boyce

## IRRIGATION INVESTIGATIONS AND PRACTICE

## UPPER DIVISION COURSE

- \*105. **Principles of Irrigation Practice.** (4) I. Mr. Huberty  
 Lectures, M W, 10; laboratory, M W, 2-5. Fee, \$2.  
 Prerequisite: Physics 2A or the equivalent; Botany 1A-1B or the equivalent.  
 Sources of water; movement of water in the soil; irrigation methods and practices; water requirements of plants; quality of irrigation water; irrigation agencies; water rights; farm pumping plants; planning of farm irrigation systems.

## PLANT NUTRITION

## UPPER DIVISION COURSE

110. **The Soil as a Medium for Plant Growth.** (4) II. Mr. Appleman  
 Lectures, M W F, 9; laboratory, W, 2-5. Fee, \$2.  
 Prerequisite: Chemistry 1A-1B, 5, 8.  
 Composition and properties of soils; soil and plant interrelations; culture solution studies; current theory of the soil solution; effects on the soil and plant of the addition of fertilizers and soil amendments.

GRADUATE COURSES  
(Given at Riverside)†

- 202A-202B. **Research in Soils.** (1-6; 1-6) Yr. Mr. Kelley  
 203A-203B. **Research in Plant Physiology.** (1-6; 1-6) Yr. —  
 205A-205B. **Seminar in Plant Physiology.** (1-1) Yr. — in charge  
 237A-237B. **Seminar in Soils.** (1-1) Yr. Mr. Kelley in charge

## PLANT PATHOLOGY

## UPPER DIVISION COURSES

120. **Plant Diseases.** (4) I. Mr. Miller  
 Lectures, Tu Th, 8; laboratory, M W, 2-5. Fee, \$2.  
 Prerequisite: Botany 1A-1B or the equivalent, and Bacteriology 1.  
 A general fundamental course treating of the nature, cause, and control of plant diseases.

\* Not offered, 1936-37.

† Inquiries concerning graduate instruction at Riverside should be sent to the Dean of the Graduate Division, Berkeley; the listing here is for the reader's convenience.

**130. Diseases of Subtropical Fruit Plants. (3) I.** **Mr. Miller**

Lectures, M F, 9; laboratory, F, 2-5. Fee, \$2.

Recommended: Plant Pathology 120.

The pathology of citrus and other subtropical fruit plants. The distribution, economic importance, nature, cause, and control of the principal diseases.

**GRADUATE COURSES***(Given at Riverside)†***201A-201B. Seminar in Plant Pathology. (1-1) Yr.** **Mr. Fawcett in charge****230A-230B. Research in Plant Pathology. (1-6; 1-6) Yr.****Mr. Fawcett, Mr. Horne****SUBTROPICAL HORTICULTURE****LOWER DIVISION COURSES****2. Elements of Fruit Production. (3) II****Mr. Hodgson**

Lectures, M W F, 11.

Prerequisite: Botany 1A-1B or equivalent.

This course is equivalent to Pomology 2A, given at Berkeley and at Davis.

The principles and practices of fruit growing, with special reference to subtropical regions. The climatic, soil, and moisture requirements and adaptations of fruit trees; selection of site, propagation, planting, orchard management practices, harvesting, and preparation for market. Survey of the industry in the United States.

**3. Orchard Practices. (1) II.****Mr. Eggers**

Laboratory, Tu, 1-4.

Prerequisite or concurrent: course 2 or the equivalent. Normally taken concurrently.

A laboratory course in orchard practice—demonstration of propagation, planting, training, pruning, fruit-thinning and other orchard operations—designed to supplement the lectures in course 2.

**UPPER DIVISION COURSES****100. Systematic Subtropical Pomology. (4) I.****Mr. Halma**

Lecture, Tu Th, 1; laboratory, Tu Th, 2-5.

Prerequisite: Subtropical Horticulture 2, or equivalent. Fee, \$3.

The botanical classification and relationships of the principal fruits; horticultural races and groups; growth and bearing habits; bud and fruit morphology; varietal characters.

**101. Citriculture. (4) II.****Mr. Hodgson, Mr. Cameron**

Lectures, M W F, 10; laboratory, S, 8-11.

Prerequisite: Chemistry 1A-1B, Subtropical Horticulture 2 and 100, or equivalent.

Not open to students who took course 106 prior to September, 1935.

The characteristics of the citrus fruits and their responses to environmental influences and cultural practice; the economics of the citrus fruit industry.

Four Saturday field trips will be required.

† Inquiries concerning graduate instruction at Riverside should be sent to the Dean of the Graduate Division, Berkeley; the listing here is for the reader's convenience.

- 102. Subtropical Fruits Other Than Citrus. (3) I.** Mr. Cameron  
Lectures, M W F, 8.  
Prerequisite: Subtropical Horticulture 2 or equivalent, and 100 (concurrently).

A survey of the knowledge concerning the requirements and responses of the major subtropical fruit plants other than *Citrus*; the economics of their industries. The fruits considered will include walnut, pecan, almond, fig, olive, avocado, date, and oriental persimmon.

Two Saturday field trips will be required.

- 103A. Proseminar. (2) I. F, 10-12.** The Staff (Mr. Hodgson in charge)  
Open only to senior students majoring in subtropical horticulture.  
A critical review and discussion of reading assignments.

- 104. Advanced Subtropical Horticulture. (3) II. M W F, 8.** Mr. Cameron  
Prerequisite: Subtropical Horticulture 2, or equivalent, Botany 7 or equivalent, and Subtropical Horticulture 100 and 102.

Not open to students who took course 102 prior to September, 1935.

An analysis of the knowledge concerning the responses of fruits trees to environmental and cultural influences, with special reference to subtropical regions.

- 199A-199B. Special Study for Advanced Undergraduates. (2-4; 2-4) Yr.**  
The Staff (Mr. Hodgson in charge)  
Prerequisite: senior standing and consent of instructor.

#### GRADUATE COURSES

- 201A-201B. Research in Subtropical Horticulture. (1-6; 1-6) Yr.**  
Mr. Cameron in charge  
**205A-205B. Seminar in Subtropical Horticulture. (1-1) Yr. M, 4-6.**  
Mr. Hodgson in charge

(Given at Riverside)†

- 201A-201B. Research in Subtropical Horticulture. (1-6; 1-6) Yr.**  
Mr. Batchelor

#### ANTHROPOLOGY, see p. 209.

---

† Inquiries concerning graduate instruction at Riverside should be sent to the Dean of the Graduate Division, Berkeley; the listing here is for the reader's convenience.

## ART

GEORGE JAMES COX, R.C.A., Professor of Art.

NELLIE HUNTINGTON GERE, Associate Professor of Fine Arts.

LOUISE PINKNEY SOOY, Associate Professor of Fine Arts.

BESSIE E. HAZEN, Ed.B., Assistant Professor of Fine Arts, Emeritus.

HELEN CLARK CHANDLER, Assistant Professor of Fine Arts.

BELLE H. WHITICE, Associate in Fine Arts.

HELEN M. HOWELL, Ed.B., Associate in Fine Arts and Supervisor of Art Training.

VIRGINIA VAN NORDEN WOODBRIDGE, Ed.B., Associate in Fine Arts.

LOUISE GUTHRIE THOMPSON, Ed.B., Associate in Fine Arts.

CLARA BARTRAM HUMPHREYS, M.A., Associate in Fine Arts.

MARJORIE HARRIMAN, Ed.B., Associate in Fine Arts.

ANNITA DELANO, Associate in Fine Arts.

ADELAIDE MORRIS, M.A., Associate in Fine Arts.

BERYL KIRK SMITH, Associate in Fine Arts.

LAURA F. ANDRESON, Ed.B., Associate in Fine Arts.

ANNIE C. B. MCPHAIL, Associate in Fine Arts.

JOHN W. LOVE, Associate in Fine Arts.

ADRIAN D. KELLER, B.S. in E.E., Associate in Mechanic Arts.

NATALIE WHITE, M.A., Supervisor of Training, Art.

Instruction is offered by the department in the following fields:

*Appreciation and History of Art:* Courses 1A-1B, 101A-101B, 121A-121B, 131A-131B, 161.

*Art Education:* Courses 160A-160B, 180, 330A-330B.

*Costume:* Course 183A-183B.

*Crafts:* Courses 9A-9B, 119A-119B, 129A-129B, 139A-139B, 179. 33

*Design:* Courses 2A-2B, 12, 32, 132A-132B, 172A-172B.

*Drawing and Painting:* Courses 4A-4B, 137A-137B, 144A-144B, 164A-164B.

*House Design and Decoration:* Courses 156A-156B, 186A-186B.

*Illustration:* Courses 135, 165A-165B.

*Theatre:* Courses 8A-8B, 168.

*Special Study for Advanced Students:* Course 199A-199B.

### The Teachers College

*Preparation for the Major.*—Courses 1A-1B, 2A-2B, 4A-4B, 8A-8B, 9A, 12, 32.

*The Major.*—Twenty-seven units of upper division courses. This program may be taken in one of three specified fields, and must be arranged with a departmental adviser.

*The Minor in Education.*—Education 103, 170, Directed Teaching, six to ten units; Art 160A-160B, 180.

For students with major or minor in art, courses 1A and 2A (or 330A) are prerequisite to all other courses in the department except certain courses which may be taken concurrently with them.

### The College of Letters and Science

*Letters and Science List.*—Courses 1A-1B, 2A-2B, 4A-4B, 32, 121A-121B, 131A-131B, 137A-137B, 144A-144B, 161, 164A-164B, and 172A-172B are included in the Letters and Science List of Courses. For regulations governing this list, see page 61. A major in art is not offered in the College of Letters and Science.

*Laboratory Fees.*—Courses 39A, 39B, 119A, 119B, 330A, 330B, \$2; 164A, 164B, \$5.

### LOWER DIVISION COURSES

#### 1A-1B. Aesthetics. (2-2) Yr.

Mr. Cox, Miss Gere

This course duplicates courses 1 and 11 given prior to September, 1936.

Review of the great epochs. The origin and function of the arts and their practical relation to contemporary civilizations.

#### 2A-2B. Art Structure. (2-2) Beginning each half year.

Miss Harriman, Mrs. Thompson

Not open to students who took course 22 prior to September, 1936.

Fundamental course in creative design.

#### 4A-4B. Drawing and Painting. (2-2) Beginning each half year.

Mrs. Smith, Mrs. Thompson

Principles of perspective. Elementary painting.

#### 8A-8B. Art of the Theatre. (1-1) Yr.

Mr. Love

The visual art of the theatre; skill in the use of the materials and equipment of the modern stage.

#### 9A-9B. Elementary Crafts. (2-2) Yr.

Miss Whitice, Miss Andreson

Prerequisite: courses 1A, 2A.

This course duplicates courses 9 and 19 given prior to September, 1936.

The fundamental processes of the major crafts.

#### 12. Typographical Composition. (2) I, II.

Miss McPhail, Mrs. Smith

Prerequisite: courses 1A, 2A.

Emphasis upon lucidity, directness, and beauty of lettering. The nature of the project as a determining factor in the selection of typographical forms. The composition of hand-lettered surfaces.

#### 32. Art Structure. (2) I, II.

Miss Delano

Prerequisite: Courses 1A, 2A-2B, 4B.

This course duplicates course 32A given prior to September, 1936.

The development of the ability to create imaginatively with line, space, and color in unified relations.

### UPPER DIVISION COURSES

#### 101A-101B. History and Appreciation of Costume and Furniture. (2-2) Yr.

Mrs. Sooy and Staff

This course duplicates courses 21 and 101 given prior to September, 1936.

Lectures, demonstrations, and field trips.



**119A-119B. Ceramics and Clay Modeling.** (2-2) Yr. Mr. Cox, Miss Andreson  
 Prerequisite: courses 1A, 2A-2B. Fee, \$2 per half year.  
 This course duplicates courses 119 and 198 given prior to September, 1936.  
 Pottery, related to art and industry; sculpture for the contemporary scene.

**121A-121B. History of Art.** (2-2) Yr. Miss Gere  
 Prerequisite: course 1A.  
 Required of all majors in art.  
 Occidental architecture and allied arts from paleolithic times to the present. Oriental paintings.

**129A-129B. Art of the Book.** (2-2) Yr. Miss Whitice  
 Prerequisite: courses 1A, 2A-2B, 9A.  
 This course duplicates course 29A-29B given prior to September, 1936.  
 129A. Study of the book from historical and aesthetic standpoints. Practical work to gain knowledge of types of construction and skill in handling binding materials.

129B. Study of the work of noted binders and of famous presses. Fine or extra binding. Finishing, including the decoration of books forwarded in leather in course 129A.

**131A-131B. History of Sculpture and Painting.** (2-2) Yr. Miss Gere  
 Prerequisite: course 1A.  
 European, American, and contemporary sculpture and painting.

**132A-132B. Industrial Design.** (2-2) Yr. Miss Delano  
 Prerequisite: courses 2A-2B, 4A-4B.  
 This course duplicates courses 32B and 152B given prior to September, 1936.

Study of materials, processes, and functions of the art industries leading to original design.

**135. Book Illustration.** (2) I. Mr. Cox, Mrs. Thompson  
 Prerequisite: courses 32A, 144A.  
 Pen and ink, wood engraving, color.

**137A-137B. Landscape Painting.** (2-2) Yr. Miss Delano, Miss Chandler  
 Prerequisite: course 32A.  
 This course duplicates courses 137 and 177 given prior to September, 1936.  
 The development of personal vision and individual expression as applied to landscape painting. Survey of modern and traditional schools.

**139A-139B Weaving.** (2-2) Yr. Miss Whitice  
 Prerequisite: courses 1A, 2A-2B. Fee, \$2 per half year.  
 This course duplicates course 39A-39B given prior to September, 1936.  
 History and development of weaving. Experience in technique and processes.

**144A-144B. Advanced Painting.** (2-2) Yr. Miss Chandler, Miss Delano  
 Prerequisite: courses 2A-2B, 4A-4B.  
 This course duplicates courses 134A and 152A given prior to September, 1936.

The study of line, light, color, and space as a basis for the interpretation of observed facts. The development of techniques and creative expression.

**156A-156B. House Planning and Decoration. (2-2) Yr. Mrs. Woodbridge**

Prerequisite: course 101A.

156A. A general cultural course, considering the home as a unit of beauty. The arrangement of garden, house, floor plan, and furniture are studied as functional and decorative problems. Laboratory, lectures, and demonstration.

156B. The study of architectural forms and design applied to interior decoration. General research into the essentials of the historic periods. Emphasis upon original adaptation and creation.

**160A-160B. Principles of Art Education. (2-2) Yr.**

Miss Howell

Prerequisite: junior standing.

160A. A study of objectives, child growth and development, and principles of education as related to art education.

160B. A study of method and the curriculum in art education.

**161. History of Mohammedan and Oriental Art. (2)**

Miss Gere

Prerequisite: course 1A.

Architecture and allied arts: Mohammedan, Indian, Chinese, Korean, and Japanese. Comparison of oriental and occidental art.

**164A-164B. Life Class. (2-2) Yr.**

Mr. Cox, Mrs. Smith

Fee, \$5 per half year.

This course duplicates courses 134B and 164 given prior to September, 1936.

Objective drawing and expressive interpretation of the figure; its use in original composition.

**165A-165B. Advertising Illustration. (2-2) Yr.**

Miss McPhail

Prerequisite: course 32.

The graphic expression of the selling thought. The practical and economic possibilities of reproduction. The selection, simplification, and organization of telling pictorial or visual ideas.

The creative employment of modern techniques and mechanical processes directed toward the development of versatility and power in conception and expression, with economy of means.

**168. Stage Directing. (1) II.**

Mrs. Sooy

Prerequisite: course 8A-8B and senior standing.

Duties of staff and crew; conduct of rehearsals. Emphasis on unity of visual elements of the theatre.

**172A-172B. Advanced Composition. (2-2) Yr.**

Miss Chandler

Prerequisite: course 134A.

This course duplicates courses 175 and 154 given prior to September, 1936.

**179. Metal Craft. (2) II.**

Miss Whitice

Prerequisite: course 132A.

Original work in copper, brass, and silver.

**180. Theory and Philosophy of Art Education. (2) II.**

Mrs. Sooy

Prerequisite: course 160A-160B.

Economic and social significance of aesthetic development. Comparative study of existing theories and practices.

**183A-183B. Costume Design. (2-2) Yr.** Mrs. Sooy, Mrs. Woodbridge

Prerequisite: courses 8A-8B, 32.

183A. Costume of the theatre. 183B. Modern costume.

**186A-186B. Advanced Interior Decoration. (2-2) Yr.**

Prerequisite: course 156A-156B.

Mrs. Sooy, Mrs. Woodbridge

186A. Study of the cultivation of style in interior design. Original creation is emphasized through a study of unusual color harmonies and form arrangements. The influence of fashion in interior decoration is demonstrated.

186B. The technique of interior decoration. Shop practice through actual problems in interior design in stores and home.

**199A-199B. Special Studies for Advanced Students. (2-2) Yr.**

Mr. Cox, Mrs. Sooy, Miss Chandler

Prerequisite: senior standing, and the approval of the instructor.

This course duplicates courses 191 and 199 given prior to September, 1936.

Advanced individual work upon specific problems connected with art and education.

#### PROFESSIONAL COURSE

**330A-330B. Fine and Industrial Art Education. (3-3) Beginning each semester.** Mrs. Humphreys, Miss Morris, Miss White, Miss Andreson, Mr. Keller

This course duplicates courses 22 and 330 given prior to September, 1936.

## ASTRONOMY

FREDERICK C. LEONARD, Ph.D., Associate Professor of Astronomy.

JOSEPH KAPLAN, Ph.D., Associate Professor of Physics.

*Letters and Science List.*—All undergraduate courses in astronomy are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

*Preparation for the Major.*—Required: General physics (Physics 1A-1B-1C-1D, or, in meritorious cases, Physics 2A-2B, or their equivalents); plane and spherical trigonometry, plane analytic geometry, and differential and integral calculus (Mathematics C, F, 3A, 3B, 4A, or their equivalents). Recommended: a reading knowledge of French and German.

*The Major.*—At least eighteen upper division units of astronomy, including courses 103A-103B and 117A-117B, and as many more upper division units as are required to make a total of twenty-four, chosen from courses in astronomy, physics, or mathematics, with the approval of the department.

## LOWER DIVISION COURSES

- 1A. **Elementary Astronomy: The Fundamentals.** (3) I, M W F, 11;  
II, M W F, 8.

Mr. Leonard

A cultural course for non-technical students in the general principles and the fundamental facts of astronomy, with particular emphasis on the solar system. Small sections for discussion and questions also are held.

- 1B. **Elementary Astronomy: The Stellar System.** (3) II, M W F, 11.

Prerequisite: course 1A.

Mr. Leonard

Results of recent researches in sidereal astronomy and astrophysics, and progress through the use of modern methods, especially the spectroscopic and the photographic. This course is a continuation of course 1A.

3. **Practical Astronomy for Engineering Students.** (1) II. Tu, 1-3.

Mr. Leonard

Prerequisite: sophomore standing; Civil Engineering 1FA and credit or registration in Civil Engineering 1FB, or the consent of the instructor.

A course intended primarily for civil engineering students; the principles of practical astronomy and spherical trigonometry as they relate to the needs of such students; solution of the fundamental problems of practical astronomy; use of the *Almanac*; computing.

## UPPER DIVISION COURSES

A year each of college physics and plane analytic geometry is prerequisite to all the upper division courses in astronomy, except 125. Lower division courses in astronomy are not necessarily prerequisite to any of the upper division courses.

- 103A-103B. **The Solar System.** (3-3) Yr. M W F, 9.

Mr. Leonard

The general principles and the fundamental facts of astronomy, pertaining primarily to the solar system, are developed and discussed in detail.

For observational work in connection with this course, students may elect course 104A-104B, subject to the prerequisites announced.

**\*104A-104B. Practical Astronomy.** (3-3) Yr. M W F, 11. Mr. Leonard  
An observing period, Tu, 7 to 10 p.m., may be substituted each week for any one of the regular class periods.

Prerequisite: spherical trigonometry, differential calculus, and either Astronomy 3 or 103A (103A may be taken concurrently with 104A).

The elements of practical astronomy, including the theory and the application of the equatorial telescope, the filar-position micrometer, the transit instrument, the astronomical clock, the sextant, and the surveyor's transit; the reduction of observations; and the use of star maps, star catalogues, and the *Almanac*.

**107. The Method of Least Squares.** (2) I. M F, 8. Mr. Leonard

Prerequisite: differential and integral calculus.

The theory of errors and least squares and its application to the solution of astronomical, physical, and engineering problems.

**117A-117B. Astrophysics and Stellar Astronomy.** (3-3) Yr. Mr. Kaplan  
M W F, 11.

A laboratory period will occasionally be substituted, by appointment, for one of the regular class periods.

A general review of astrophysics and stellar astronomy, with particular reference to the application of the spectroscope to the solution of problems in these fields. Open to qualified upper division students whose major subject is astronomy, some other physical science, or mathematics.

**\*125. The History of Astronomy.** (3) I. M W F, 8. Mr. Leonard

Prerequisite: courses 1A and 1B, or one upper division course in astronomy.

**199A-199B. Special Studies in Astronomy or Astrophysics.** (2-2) Yr.

Mr. Leonard, Mr. Kaplan

Prerequisite: the consent of the instructor.

Investigation of special problems, or presentation of selected topics, chosen according to the preparation and the requirements of the individual student.

**BAACTERIOLOGY**—See page 165

**BOTANY**—See page 166.

---

\* Not to be given, 1936-37.

**BUSINESS ADMINISTRATION**

HOWARD SCOTT NOBLE, M.B.A., C.P.A., Professor of Accounting and Dean of the College of Business Administration.

IRA N. FRISBEE, M.B.A., C.P.A., Associate Professor of Accounting.

FLOYD F. BURTCHETT, Ph.D., Assistant Professor of Banking and Finance.

GEORGE W. ROBBINS, M.B.A., Assistant Professor of Marketing.

PAUL A. DODD, Ph.D., Assistant Professor of Management and Industry.

RALPH CASSADY, Ph.D., Assistant Professor of Marketing.

JOHN C. CLENDENIN, Ph.D., Instructor in Banking and Finance.

EVA M. ALLEN, Associate in Commercial Practice.

ESTELLA B. PLOUGH, Associate in Commercial Practice.

HARRY SIMONS, M.A., Associate in Accounting.

WILLIAM F. BROWN, M.A., Lecturer in Marketing.

PERRY MASON, M.A., C.P.A., Lecturer in Accounting.

ARNOLD G. EGER, LL.B., Lecturer in Business Law.

**The College of Business Administration**

*Preparation for the Major.*—Business Administration 1A-1B, Economics 1A-1B, English 1A, Public Speaking 1A, Mathematics 8 and 2; *either* 14 units of natural science (chosen from the accepted list) *or* 16 units in one foreign language; Geography 5A-5B; 6 units chosen from the following: Political Science 3A-3B, History 4A-4B, 8A-8B, 46, Psychology 1A-1B.

In the natural science option, a minimum of 4 units shall be university courses with laboratory. The following courses are accepted toward the requirement: high school physics (3), high school chemistry (3), Chemistry 2A-2B (8), Physics 2A-2B (8), Geology 1C (3), Biology 1 (3), Zoölogy 1A (5), Botany 1A (4), Astronomy 1A (3).

In the foreign language option, each year of the elected language taken in high school not duplicated by college courses taken by the student, shall count as 3 units.

**The Major.**

1. Business Administration courses: 18A-18B, Business Law (6); 100, Theory of Business (2); 120, Business Organization (3); 140, Business Statistics (4); 160A, Advanced Accounting (3); 180, Elements of Marketing (3). Economics 135, Money and Banking (3).

2. Six units chosen from the following: Business Administration courses: 110, Real Estate Principles (3); 145, Principles of Insurance (3). Economics Courses: 131A-131B, Public Finance (4); 150, Labor Economics (3); 171, Public Utilities (3); 173, Economics of Transportation (3).

3. Nine upper division units in one of the following five majors: Accounting, Banking and Finance, Management and Industry, Marketing, General Business. (For courses offered in the various majors, see page 84.)

*Electives.*—All undergraduate courses in the Letters and Science List (see page 61) and Commerce 16 and 17 will be accepted for credit toward the B.S. degree.

### The Teachers College

The Junior Certificate requirements are as listed on page 87.

*Preparation for the Major.*—Business Administration 1A-1B, 2A or 2B, 18A or 18B; Commerce 16, 17, 18A-18B; Economics 1A-1B; Geography 1A-1B, or 5A-5B, or any combination of the group; and History 45 or 46.

*The Major, leading to the Special Secondary Credential in Commerce.*—Twenty-four units of advanced work approved by the Department of Business Administration. At least twelve units should be selected from the following courses in Business Administration: 100, 120, 131, 132, 140, 153, 160A-160B, 161, 162, 180. The remaining units should be selected from upper division courses in economics or some other social science which is approved by the Department of Business Administration.

*The Minor in Education.*—Education 103, 170; Directed Teaching, 8 units; Commerce 197, 198.

### The College of Letters and Science

*Letters and Science List.*—Courses 131, 132, 136, 140, 145, 153, and 180. For regulations governing this list, see page 61.

*Fees.*—Commerce A, \$6; Commerce B, \$10; Commerce 16, \$2.50.

### LOWER DIVISION COURSES

**1A-1B. Principles of Accounting.** (3-3) Beginning each semester.

Two hours lecture, and two hours laboratory. Mr. Noble and the Staff

This course duplicates Economics 14A-14B given prior to September, 1936.

**2A-2B. Accounting Laboratory.** (1-1) Yr.

Mrs. Allen

Should be taken only concurrently with course 1A-1B.

This course duplicates Economics 15A-15B given prior to September, 1936.

**18A-18B. Business Law.** (3-3) Yr.

Mr. Eger

This course duplicates Jurisprudence 18A-18B given prior to September, 1936.

Law in its relationship to business. Essentials of the law of contracts, agency, sales, negotiable instruments, partnerships, and private corporations.

### UPPER DIVISION COURSES

Business Administration 1A-1B and Economics 1A-1B are prerequisite to all upper division courses.

**\*100. Theory of Business.** (2) I, II.

Mr. Dodd

Prerequisite: senior standing.

Influence of certain fundamental laws in economics upon the practical processes of production, distribution, the price system, profits, and wages. The coördination of business activities under imperfect competition. The nature of social and economic forces which modify and direct business policies.

\* Open only to students registered in College of Business Administration and to graduate students who have had the necessary preliminary preparation.

**†110. Real Estate Principles. (3) I, II.**

Mr. —

Real estate as a business. Economic principles of real estate values. Appraising, listing, selling, renting, and leasing property. Property management and real estate investments.

**120 Business Organization. (3) I, II.**

Mr. Cassady

A study of the business unit and its functions from the point of view of management. The coordination of production, finance, marketing, personnel and accounting in a going business. The relation of the enterprise to the industry in general, to the business cycle, to law and government, and to the public.

**\*121. Industrial Management. (3) I, II.**

Mr. Dodd

This course duplicates Economics 120 given prior to September, 1936.

Development of scientific management, and its present application in modern industry. Problems and principles of plant location and construction, layout of machinery, storing of materials, and routing of production orders are developed in the light of observations made during visits to representative factories.

**\*125. Organization and Management Problems. (3) II.**

Mr. Mason

Prerequisite: senior standing.

This course duplicates Economics 121 given prior to September, 1936.

A case method study of the practical problems involved in the organization and management of business enterprises. Emphasis is placed upon the correlation of functions and activities in the organization of operating departments.

**131. Corporation Finance. (3) II.**

Mr. Burtchett

This course duplicates Economics 133 given prior to September, 1936.

A study of the financial structures and financial problems of business corporations. The instruments and methods of financing a corporation will be considered in their social, legal, and economic effects as well as in their effects on the corporation and the shareholders.

**132. Investments. (3) I.**

Mr. Burtchett

This course duplicates Economics 134 given prior to September, 1936.

The principles underlying investment analysis and investment policy; the chief characteristics of civil and corporate obligations and stocks. Investment trusts and institutional investors, forms, problems, and policies. Relation of money markets and business cycles to investment practice.

**136. International Finance and Exchange. (3) I.**

Mr. Burtchett

Prerequisite: Economics 135.

Movements of capital, money, credit, and gold between countries; relation of internal fiscal policies to international exchange markets and rates. Rates of foreign exchange and forces bearing upon fluctuations in rates. Problems arising from financial relations between countries on different monetary standards: gold, silver, bi-metallic, managed currency standards. Institutions, practices, policies and contracts of international finance and exchange.

\* Open only to students registered in College of Business Administration and to graduate students who have had the necessary preliminary preparation.

\* Not offered, 1936-37.



**\*139. Applied Business Finance. (3) I, II.**

Mr. Clendenin

Prerequisite: Economics 135. Economics 138 recommended.

An intensive study of the financial operations of business; work of the credit department, the comptroller's or treasurer's office; preparation of financial reports for stockholders and for public authorities; credit analysis; credit bureaus and their services; consumer installment contracts and financing; bank relations in general. This course emphasizes the short-term financial problems and practices of all types of business enterprise.

**140. Business Statistics. (4) I, II.**

Mr. Frisbee

This course duplicates Economics 140 given prior to September, 1936.

Recommended for the first half of the junior year.

Sources of statistical data; construction of tables, charts, and graphs; study of statistical methods; averages, measures of deviation, index numbers, secular trend, seasonal variation, correlation; study of business cycles; practical applications of statistical methods in business problems.

**\*144. Business and Statistical Research. (2) I, II.**

Mr. Dodd

Prerequisite: senior standing.

Exhaustive study of some representative problems, such as the effects of technological improvements upon production costs, influence of foreign competition upon home marketing, and the changes in labor costs brought about by the N.I.R.A. codes. These studies will be made possible by close cooperation with various industrial organizations in southern California.

**145. Principles of Insurance. (3) II.**

Mr. Clendenin

Prerequisite: course 140 and Economics 135.

Description of the major types of insurance: life, property, casualty, etc.; interpretation of the contracts under which such insurance is written; regulation and control of insurance companies; general principles of mortality and premium calculation; basic legal principles of property and equity law as involved in the transfer of risks; distribution system of underwriting; organization of the insurance carrier companies.

**153. Personnel Management. (3) I.**

Mr. Dodd

This course duplicates Economics 151 given prior to September, 1936.

A study of the administration of human relations in industry; the development of employment relations; problems and methods of selecting and placing personnel; problems and methods of labor maintenance; the joint control of industry; the criteria of effective personnel management.

**\*155. Problems in Industrial Relations. (2) II.**

Mr. Dodd

Prerequisite: either course 153 or Economics 150.

An advanced course giving special consideration to the present day problems of industrial relations in industry. Special investigations, reports on cases involving collective bargaining, conciliation and arbitration, and employees' representation plans under the law. The legal requirements of individual establishments leading toward the development of social security.

**160A-160B. Advanced Accounting. (3-3) Yr.**

Mr. Noble, Mr. Frisbee

This course duplicates Economics 160A-160B given prior to September, 1936.

Continuation of corporation and of partnership accounting; insolvency and receivership accounts; specialized financial statements; estate accounting; consolidated balance sheets; actuarial accounting; advanced theory problems.

\* Open only to students registered in College of Business Administration and to graduate students who have had the necessary preliminary preparation.

**\*161. Cost Accounting. (3) I.**

Mr. Mason

This course duplicates Economics 161 given prior to September, 1936.

Accounting in manufacturing enterprises. Cost systems; accounting for material, labor, and overhead; distribution of overhead; effective cost reports.

**\*162. Auditing. (3) II.**

Mr. Frisbee

Prerequisite: course 160A-160B.

This course duplicates Economics 162 given prior to September, 1936.

Accounting investigations, balance sheet audits, and detailed audits performed by public accountants. Valuation, audit procedure, working papers, and audit reports.

**\*163. Federal Tax Accounting. (3) I.**

Mr. Frisbee

Prerequisite: course 160A-160B.

A study of the current federal revenue act as relating to income taxation, excess profits taxes, estate taxes, capital stock taxes, and gift taxes.

**180. Elements of Marketing. (3) I, II.**

Mr. Robbins, Mr. Cassady

This course duplicates Economics 123 given prior to September, 1936.

A survey designed to give a basic understanding of the major marketing methods, institutions, and practices. The problems of retailing, wholesaling, choosing channels of distribution, advertising, coöperative marketing, pricing, market analysis, and marketing costs are defined from the standpoint of the consumer, the middleman, and the manufacturer.

**\*184. Sales Management. (3) I.**

Mr. Robbins

Prerequisite: course 180.

An intensive study of sales methods from the point of view of the sales manager. Includes the study of merchandising policy, choice of channels of distribution, market research and analysis, prices and credit terms, sales methods and campaigns; organization of sales department, management of sales force, and budgetary control of sales.

**\*185. Advertising Principles. (3) I, II.**

Mr. Brown

Prerequisite: course 180.

A study of the history and development of modern advertising; its objectives and its institutions; its economic implications, and its place in the sales plan. Study and practice in retail and general advertising, in organizing the campaign, in selection of media, in the mechanics and methods of testing and research.

**\*186. Retail Store Management. (3) II.**

Mr. Cassady

A study of retailing methods from the standpoint of the owner and manager. Includes the study of purchasing, planning stocks, inventory methods, arithmetic or markup, accounting for stock control, pricing, style merchandising, store layout, and store location.

**199A-199B. Special Problems in Business Administration. (2-2) Yr.**

The Staff

Prerequisite: senior standing, six units of upper division courses in business administration and the consent of the instructor.

\* Open only to students registered in the College of Business Administration and to graduate students who have had the necessary preliminary preparation.

**COMMERCE****Teachers College**

†A. **Typing.** (No credit) I, II. Tu Th, 10, 11; M F, 1; Tu Th, 1. Mrs. Allen  
Fee, \$6.

A study of the principles involved in learning to use the typewriter.

†B. **Shorthand.** (No credit) I. M W F, 10 Mrs. Allen  
Fee, \$10.

A study of the beginning principles of Gregg shorthand. Sight reading, penmanship drills, dictation.

16. **Advanced Typing.** (2) I, II. Tu Th, 9, 2. Mrs. Allen

Prerequisite: Commerce A or the equivalent. Fee, \$2.50.

A study of the principles and practice of teaching typing. Business letters, outlines, legal papers, filing, tabulation. Technique emphasized.

17. **Shorthand.** (3) Mrs. Allen

Prerequisite: Commerce B or the equivalent.

A study of the principles and practice of teaching shorthand. The completion of the Gregg Manual. Advanced reading, dictation, transcription.

18A-18B. **Penmanship.** (2-2) Beginning each semester. Mrs. Plough

18A. A study of the principles of business handwriting; a survey of the methods of teaching penmanship in the elementary schools.

18B. Advanced study and practice in handwriting; a survey of the methods of teaching penmanship in the secondary schools.

197. **Methods of Teaching Commercial Subjects.** (2) I. Tu Th, 8.

Mrs. Allen

A study of the principles and problems of teaching commercial subjects in the secondary schools.

198. **Commercial Education.** (2) II. Tu Th, 8. Mr. Noble

Educational institutions offering training in commerce. These include the secondary school, the university, the business school, the correspondence school and many others. Emphasis is placed on the secondary school.

---

† Although Commerce B gives no credit, it is counted on a student's allowable program as two units. Commerce A may be added to the allowable program.

## CHEMISTRY

- WILLIAM CONGER MORGAN, Ph.D., Professor of Chemistry.  
MAX S. DUNN, Ph.D., Associate Professor of Chemistry.  
WILLIAM R. CROWELL, Ph.D., Associate Professor of Analytical Chemistry.  
G. ROSS ROBERTSON, Ph.D., Associate Professor of Organic Chemistry.  
\*JAMES B. RAMSEY, Ph.D., Associate Professor of Chemistry.  
HOSMER W. STONE, Ph.D., Assistant Professor of Chemistry.  
WILLIAM G. YOUNG, Ph.D., Assistant Professor of Chemistry.  
FRANCIS E. BLACET, Ph.D., Assistant Professor of Chemistry.  
JAMES D. MCCULLOUGH, Ph.D., Instructor in Chemistry.  
C. ERNST REDEMANN, A.B., Associate in Chemistry.

*Letters and Science List.*—All undergraduate courses in chemistry except 10 are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

*Preparation for the Major.*—Required: Chemistry 1A-1B, which must be passed with a grade of C or better before any further work in chemistry is taken; Physics 1A-1C; trigonometry, Mathematics 8, 3A-3B, and a reading knowledge of German. Recommended: a second course in chemistry, Physics 1B-1D, Mathematics 4A-4B.

*The Major.*—All units in chemistry in excess of fourteen are counted as upper division units when taken by a student in the upper division. The minimum requirement for the major is: Chemistry 6A-6B (6), 8 and 9 (6), 110 (3), 110B (3), 111 (4). The remainder of the twenty-four required upper division units may be taken in chemistry or allied subjects in accordance with some definite plan approved by the department. A student whose work in the major subject does not average C or better will be required to withdraw from the department.

*Curriculum for Medical Technicians.*—For details see page 68.

*Pre-Chemistry.*—The University of California at Los Angeles offers only the first two years of the curriculum of the College of Chemistry. Students intending to pursue their studies in this college should consult the lower division departmental adviser before making out their programs.

*Laboratory Fees.*—These fees cover the cost of material and equipment used by the average careful student. Any excess over this amount will be charged to the individual responsible. The fees are as follows: Courses 1A, 1B, \$14; 2A, 2B, \$10; 5, 6A, 6B, \$17; 9, \$27; 10, \$10; 101, \$27; 107A, 107B, \$10; 111, \$22; 120, \$17; 199, \$15.

## LOWER DIVISION COURSES

Students who have not had high school chemistry may take course 2A in preparation for course 1A. However, in any combination of 2A-2B with 1A-1B, the total amount of credit will not exceed the normal credit for 1A (5 units) or for 1A-1B (10 units).

\* In residence second semester only, 1936-37.

**1A-1B. General Chemistry. (5-5) Beginning each semester.**

Mr. Morgan and the Staff  
Lectures, M W F, 10 (for those beginning in September); M W F, 8 (for those beginning in February); laboratory, six hours.

Prerequisite: high school chemistry, or physics and trigonometry. Fee, \$14 per semester.

Required in the Colleges of Engineering, Chemistry, Agriculture, and of pre-medical and pre-dental students and of majors in chemistry, bacteriology, and household science.

**2A-2B. General Chemistry. (4-4) Yr.**

Mr. Dunn

Lectures, M W F, 11; laboratory, three hours.

No prerequisite; high school chemistry is recommended. Fee, \$10 per semester.

This course (or 1A-1B) is required of all home economics and physical education majors, and should be elected by students desiring chemistry as a part of a liberal education.

**5. Quantitative Analysis. (3) I, II.**

Mr. Crowell

Lecture, Th, 9; laboratory, six hours.

Prerequisite: course 1A-1B. Fee, \$17.

A course in gravimetric and volumetric analysis, shorter than 6A-6B. Required of pre-medical students, of petroleum engineers, and of sanitary and municipal engineers.

**6A-6B. Quantitative Analysis. (3-3) Yr.**

Mr. Crowell

Lecture, Tu, 9; laboratory, six hours.

Prerequisite: course 1A-1B. Fee, \$17 each semester.

Required of economic geologists, chemistry majors, and College of Chemistry students. Course 6A is required of metallurgy students.

**8. Elementary Organic Chemistry. (3) I, II. Mr. Morgan, Mr. Robertson**

M W F, 9.

Prerequisite: course 1A-1B or 2A-2B; concurrent enrollment in course 9 is advisable.

This course is required of pre-medical and pre-dental students, sanitary and municipal engineers, petroleum engineers, chemistry and household science majors, and College of Chemistry students.

**9. Methods of Organic Chemistry. (3) I, II. Mr. Robertson, Mr. Young**

Lectures and quizzes on principles of laboratory manipulation Tu, Th, 8; laboratory, six hours.

Prerequisite or concurrent: course 8. Fee, \$27.

Required of petroleum engineers, pre-medical and pre-dental students, chemistry majors, and College of Chemistry students.

**10. Organic and Food Chemistry. (4) I.**

Mr. Robertson

Lectures, M W F, 8; laboratory, three hours.

Prerequisite: course 1A-1B or 2A-2B. Fee, \$10.

Required of home economics majors.

## UPPER DIVISION COURSES

- 101. Advanced Organic Laboratory.** (3) II. Mr. Robertson  
Laboratory, nine hours.  
Prerequisite: courses 8 and 9 and the ability to read scientific German.  
Fee, \$27.  
Introduction to research methods, analytic and synthetic.
- 102. Advanced Organic Lectures.** (3) II. M W F, 9. Mr. Morgan  
Prerequisite: course 8.  
Recommended for pre-medical students and majors in chemistry.
- 107A-107B. Biological Chemistry.** (3-3) Yr. Mr. Dunn  
Lectures, Tu Th, 8; laboratory, three hours.  
Prerequisite: courses 5, 8, and 9. Fee, \$10 each semester.
- 110. Physical Chemistry.** (3) I. Mr. Ramsey  
M W F, 10.  
Prerequisite: course 5 or 6A; Physics 1A, 1C.  
Required of chemistry majors and College of Chemistry students. Prerequisite to all later work in physical chemistry.  
Lectures and problems.
- 110B. Advanced Physical Chemistry.** (3) II. Mr. Ramsey  
M W F, 10.  
Prerequisite: course 110.  
Required of chemistry majors.  
Lectures and problems. A continuation of course 110.
- 111. Physical Chemistry Laboratory.** (4) II. Mr. Ramsey  
Lecture, one hour; laboratory, nine hours.  
Prerequisite: course 110 and calculus. Fee, \$22.  
Physico-chemical problems and measurements.
- 120. Advanced Inorganic Chemistry.** (3) I. Mr. Stone  
Lecture, one hour; laboratory, six hours.  
Prerequisite: courses 6A-6B and 110. Fee, \$17.  
Preparation and experimental study of substances. Designed primarily to illustrate the factors which influence equilibrium and the speed of chemical reactions. Correlation of material by means of the periodic system.
- 195. Special Topics.** (1) II. The Staff  
Open to properly qualified juniors and seniors who receive the approval of the instructors in charge.
- 199. Problems in Chemistry.** (3) I, II. The Staff  
Prerequisite: junior standing with such special preparation as the problem may demand. Fee, \$15.

## GRADUATE COURSES

- 203A. Thermodynamics from the Standpoint of Chemistry.** (3-6) II. Mr. Ramsey
- 251B. Seminar in Chemistry.** (3) II. Mr. Robertson, Mr. Young
- 280A-280B. Selected Problems in Chemistry.** (3-6; 3-6) Yr.  
Mr. Blacet, Mr. Crowell, Mr. Dunn, Mr. Ramsey,  
Mr. Robertson, Mr. Young

## CLASSICAL LANGUAGES

ARTHUR PATCH MCKINLAY, Ph.D., Professor of Latin.

FREDERICK MASON CAREY, Ph.D., Associate Professor of Latin and Greek.

DOROTHEA CLINTON WOODWORTH, Ph.D., Assistant Professor of Latin and Greek.

HERBERT BENNO HOFFLEIT, Ph.D., Assistant Professor of Latin and Greek.

*Letters and Science List.*—All undergraduate courses in classical languages are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

The student may take the major in classical languages either in Latin or in Greek.

*Preparation for the Major.*

A. *Latin.*—Required: four years of high school Latin, or two years of high school Latin and courses C and D; courses 3A–3B, 5A–5B. Recommended: Greek, German, French.

B. *Greek.*—Required: either course 1A–1B or 4A–4B, or two years of high school Greek; and 5A or 5B, or 100A–100B (which may be taken concurrently with courses 101 and 102); and History 111A–111B. Recommended: Latin, French, German.

*The Major.*

A. *Latin.*—Courses 102, 106, 117, 120, 140, 191, and History 111A–111B. Six units of upper division courses in Greek may be substituted for History 111A–111B.

B. *Greek.*—Courses 101, 102, 103, 104, 105, 114, plus six units of upper division courses in Latin, English, French, German, Spanish, philosophy, ancient or medieval history, to be chosen with the approval of the department.

## LATIN

## LOWER DIVISION COURSES

- A. *Beginning Latin.* (3) I. Mr. Carey, Mrs. Woodworth  
M W F, 8, 11.
- B. *Latin Readings.* (3) II. Mr. Hoffleit, Mrs. Woodworth  
M W F, 10, 11.  
Prerequisite: course A or one year of high school Latin.
- C. *Third Year Latin: Review of Grammar; Ovid.* (3) I. Mrs. Woodworth  
M W F, 12.  
Prerequisite: course B or two years of high school Latin.
- D. *Fourth Year Latin: Vergil.* (3) II. M W F, 12. Mr. McKinlay  
Prerequisite: course C or three years of high school Latin; or B with special permission of the instructor.
- GA. *Latin Prose Composition.* (1) I. Tu, 10. Mr. Carey  
Prerequisite: two years of high school Latin or Latin B.
- 3A–3B. *Latin Prose Composition.* (2–2) Yr. Tu Th, 11. Mrs. Woodworth  
Prerequisite: three years of high school Latin.

- 5A. A Survey of Latin Literature.** (3) I, II. Mr. Carey, Mrs. Woodworth  
I, M W F, 11; II, M W F, 12.  
Prerequisite: four years of high school Latin or Latin D.
- 5B. A Survey of Latin Literature.** (3) II. Mr. McKinlay  
M W F, 11.  
Prerequisite: course 5A.
- 40. Latin Boots.** (1) I. Th, 8. Mr. McKinlay  
Knowledge of Latin not required.

UPPER DIVISION COURSES

Courses 102 and 106 are prerequisite to 117, 120, 140, and 191.

- 102. Silver Latin.** (3) I. M W F, 2. Mr. Hoffleit  
Prerequisite: Latin 5A-5B.
- 104A-104B. Latin Composition.** (1-1) Yr. Tu, 1. Mrs. Woodworth  
Prerequisite: Latin 3A-3B.  
Ciceronian Prose—104A, Narration; 104B, Exposition.
- \*104C-104D. Latin Composition.** (1-1) Yr. Tu, 1. Mrs. Woodworth  
Prerequisite: Latin 3A-3B.  
Ciceronian Prose—104C, Exposition; 104D, Argumentation.
- 106. Tacitus: Annals.** (3) II. M W F, 2. Mr. Hoffleit  
Prerequisite: Latin 102.
- †109A-109B. A Survey of Latin Literature in English.** (2-2) Yr.  
Tu Th, 11. Mr. McKinlay
- 117. Lucretius: Selection; Vergil: Eclogues and Georgics.** (3) II.  
M W F, 2. Mr. Carey  
Prerequisite: courses 102, 106.
- 120. Roman Satire.** (3) II. M W F, 9. Mrs. Woodworth  
Prerequisite: courses 102, 106.
- 140. Ovid: Carmina Amatoria and Metamorphoses.** (3) I. M W F, 9.  
Prerequisite: courses 102, 106. Mr. Carey
- 191. Cicero: Life and Letters.** (3) I. M W F, 2. Mr. McKinlay  
Prerequisite: courses 102, 106.
- 196A-196B. Readings in Medieval Latin.** (2-2) Yr. Mr. McKinlay  
Tu Th, 9.  
Prerequisite: two years of high school Latin.  
Designed as a preparation for students interested in medieval history,  
Old English, French, Spanish, and Latin. Open to properly qualified students  
in the lower division.
- 199A-199B. Problems in Classical Philology.** (2-2)  
Mr. McKinlay and the Staff  
Course 199A is required of candidates for the master's degree.

\* Not offered, 1986-87. Courses 104A and 104B are given in alternation with 104C and 104D. Courses 104C and 104D will be offered in 1987-88. Two units required of Latin majors.

† Not offered, 1986-87.



## GRADUATE COURSES

- †202A-202B. **Roman Prose Writers.** (3-3) Yr. Mr. McKinlay in charge  
 202A. Cicero's Philosophical Works.  
 202B. Roman Historians.
- 205A. **Roman Prose Writers.** (3) I. Mr. McKinlay  
 Cicero's moral and political essays.
- 205B. **Roman Prose Writers.** (3) II. Mrs. Woodworth  
 Latin prose fiction.
- †253A-253B. **Seminar in Latin Studies.** (3-3) Yr. Mr. McKinlay in charge
- 254A. **Seminar in Latin Studies.** (3) I. Mr. Carey  
 Latin comedy.
- 254B. **Seminar in Latin Studies.** (3) II. Mr. Carey  
 Seminar in textual criticism.

## GREEK

## LOWER DIVISION COURSES

- 1A-1B. **Greek for Beginners, Attic Prose.** (3-3) Yr. Mrs. Woodworth  
 M W F, 9.  
 Not open to students who have credit in 4A-4B, or in 1AB-2AB given prior to September, 1935.
- 4A-4B. **Greek for Beginners; New Testament Greek.** (3-3) Yr. Mr. Hoffleit  
 M W F, 10.  
 Not open for credit to students who have credit in course 1A-1B, or in 1AB-2AB given prior to September, 1935.
- 5A-5B. **Readings in Greek.** (2-2) Yr. Mr. McKinlay and the Staff
40. **Greek Roots.** (1) II. Th, 8. Mr. McKinlay  
 This course duplicates course 50 given prior to September, 1935.  
 Knowledge of Greek not required. For scientific majors and others interested in an understanding of the terms they meet.

## UPPER DIVISION COURSES

- Courses 101 and 102 are prerequisite to 103, 104, 105, and 114.
- 100A-100B. **Prose Composition.** (1-1) Yr. Th, 9. Mr. Hoffleit  
 Prerequisite: course 1A-1B.
101. **Homer: Odyssey; Herodotus.** (3) I. M W F, 10. Mrs. Woodworth  
 Prerequisite: course 1A-1B.
102. **Plato: Apology and Crito; Lyric Poets.** (3) II, M W F, 12. Mr. Hoffleit  
 Prerequisite: course 101.
103. **Greek Drama: Euripides and Aristophanes.** (3) II. M W F, 12.  
 Prerequisite: courses 101, 102. Mr. Carey

---

† Not offered, 1936-37.

- \*104. Historical Prose: Herodotus and Thucydides.** (3) I. M W F, 12.  
Prerequisite: courses 101, 102. Mr. Carey
- \*105. Greek Drama: Aeschylus and Sophocles.** (3) II. M W F, 12.  
Prerequisite: courses 101, 102. Mr. Carey
- 109A-109B. Survey of Greek Literature in English.** (2-2) Yr. Mr. Carey  
Tu Th, 9.
- 114. Plato: Republic.** (3) I. Tu Th, 12 and one hour by arrangement.  
Prerequisite: courses 101, 102. Mr. Hoffleit
- †117A-117B. Greek New Testament.** (1-1) Yr. Mr. Hoffleit
- 199A-199B. Problems in Classical Philology.** (2-2) Yr.  
Mr. McKinlay and the Staff

## COURSE IN ANOTHER DEPARTMENT

**History 111A-111B. Ancient History.** (3-3) Yr. Mr. Howard

\* Not to be given, 1936-37. Courses 108 and 114 are ordinarily given in alternation with 104 and 105 respectively. Courses 103 and 114 will be offered in 1936-37.

† Not offered, 1936-37.

## ECONOMICS

GORDON S. WATKINS, Ph.D., Professor of Economics.

EARL JOYCE MILLER, Ph.D., Professor of Economics and Dean of Men.

LEWIS A. MAVERICK, Ed.D., Ph.D., Associate Professor of Economics.

<sup>1</sup>DUDLEY F. PEGRUM, Ph.D., Associate Professor of Economics.

MARVEL M. STOCKWELL, Ph.D., Assistant Professor of Economics.

CONSTANTINE PANUNZIO, Ph.D., Assistant Professor of Economics.

HURFORD E. STONE, Ph.D., Assistant Professor of Economics and Assistant Dean of Men.

MARTIN MAEVERS, M.S., Lecturer in Economics.

FLOYD F. BURTCHETT, Ph.D., Assistant Professor of Banking and Finance.

GEORGE W. ROBBINS, M.B.A., Assistant Professor of Marketing.

*Letters and Science List.*—All undergraduate courses. For regulations governing this list, see page 61.

*Preparation for the Major.*—Required: Economics 1A-1B, Business Administration 1A-1B, and one other sequence chosen from the social science list (Junior Certificate requirement e<sub>1</sub>) or Philosophy 1A-1B.

*The Major.*—Twenty-four upper division units including Economics 100 and Business Administration 140. Courses in business administration on the Letters and Science List, if approved in advance by the Department of Economics adviser, may be offered toward the twenty-four units required for the economics major, provided that the total of such business administration courses, including course 140, does not exceed ten units. Additional business administration courses, whether on the Letters and Science List or not, may be elected, subject to the limitation that not more than a total of thirty upper division units from the Departments of Economics and Business Administration may be counted toward the bachelor's degree.

*Curriculum in Sociology.*—Students specializing in sociology are referred to page 68 of this catalogue.

## LOWER DIVISION COURSES

1A-1B. **Principles of Economics.** (3-3) Beginning each semester.

Two hours lecture, and one hour quiz. Mr. Miller, Mr. Stockwell

30A-30B. **Social Institutions.** (3-3) Yr. Mr. Panunzio

This course duplicates course 185A-185B given prior to September, 1935.

The origin, evolution, structures, and functions of social institutions; social processes; and the idea of progress.

## UPPER DIVISION COURSES

Course 1A-1B is a prerequisite to all upper division courses in economics.

100. **Economic Theory.** (3) I, II.

Mr. Maverick

Value, production, distribution, money, dynamic economics; an introduction to research in economic theory.

<sup>1</sup> In residence first semester only, 1936-37.

**101. History of Economic Thought. (2) II.**

Mr. Maverick

Contributions to economics from ancient and medieval writers; economics as a systematic body of thought since the eighteenth century.

**106. Economic Reform. (3) II.**

Mr. Watkins

Prerequisite: senior standing.

The concepts, criteria, and agencies of economic and social progress; a statement and critical analysis of the theories and programs of modern economic reform movements; the essentials of social readjustment.

**131A-131B. Public Finance. (2-2) Yr.**

Mr. Stockwell

The principles underlying the raising and spending of public money. Property, income, corporation, inheritance, sales taxes and other sources of revenue. Public borrowing. Budgetary procedure. Economic and social significance of the fiscal structure and policies.

**132. Regulation of Industrial Enterprises. (3) I.**

Mr. Pegrum

Prerequisite: senior standing.

The economic functions of business organizations; the economics of industrial production and pricing; the control of competitive enterprise; combinations and monopolies and their control; governmental regulation.

**135. Money and Banking. (3) I, II.**

Mr. Burtchett

The development and functions of money and of credit institutions; the nature of the banking business and its significance in the financial organization of society.

**138. Business Cycles. (3) I.**

Mr. Maverick

Prerequisite: senior standing.

A study of fluctuations in business, as in prices, production, wages, and profits; whether there is a common or general fluctuation; theories of causation; feasibility of forecasting; adjustment of business management to the cycles; possibility of controlling the cycle or alleviating its social effects.

**150. Labor Economics. (3) I.**

Mr. Watkins

An introduction to the problems of industrial relations. The rise of modern industrialism. An examination of the principal problems of industrial relations and the most prominent agencies and methods of improvement. The basis of industrial peace.

**171. Public Utilities. (3) I.**

Mr. Pegrum

The economics of public service corporations from both the public and private points of view; the legal and economic problems of regulation; problems of labor, finance, rate-making, and valuation; state, national, and international problems arising from the development of public utilities.

**\*173. Economics of Transportation. (3) II.**

Mr. Pegrum

A general historical and contemporaneous survey of transportation agencies in the United States; the functions of the different transportation agencies; rate structures; problems of state and federal regulation; coordination of facilities.

\* Not offered, 1986-87.

**181. Poverty and Dependency. (2) II.**

Mr. Stone

Prerequisite: course 187.

Normal and abnormal aspects of poverty as a social problem; evaluation of historical and current methods of dealing with various classes of dependents; current and proposed preventive agencies and methods.

**186. Population Problems. (3) I.**

Mr. Panunzio

Prerequisite: course 30A-30B.

A study of population in the modern period; problems of quantity, migration, city concentration, and quality.

**187. Social Pathology. (3) I, II.**

Mr. Stone

Prerequisite: course 30A-30B.

Fundamentals in the approach to problems of social disorganization; subnormal and abnormal groups and conditions; causes, processes, and results; the agencies and methods of prevention and treatment.

**188. Crime and Delinquency. (2) I.**

Mr. Stone

Prerequisite: course 187.

Crime and delinquency and social maladjustment; theories of crime and punishment; forms and causes of juvenile and adult crime; programs and methods of investigation, prevention and treatment.

**195. Principles of International Trade. (3) I, II.**

Mr. Robbins

International trade examined from the point of view of theory and of the recent trade histories of the major nations; questions of international economic policy, such as tariffs, intergovernmental debts, foreign commercial investments, and commercial treaties. Brief introduction to methods and practices of exporting and importing.

**199. Special Problems in Economics, or Special Problems in Sociology.**

(2) I, II.

The Staff

Prerequisite: senior standing, six units of upper division economics or sociology, and the consent of the instructor.

**GRADUATE COURSES****201A-201B. History of Economic Doctrine. (3-3) Yr.**

Mr. Watkins

**235. Monetary Theory. (2) II.****238. Economic Fluctuations. (2) II.**

Mr. Maverick

**254A-254B. Seminar in Economic Theory. (3-3) Yr.**

Mr. Pegrum

254A. The basic principles of economic theory; the nature of economic science; consumption, production, value and price, distribution.

\*254B. Production economics; competition; imperfect competition; monopoly; overhead costs; the control of enterprise.

\* Not offered, 1936-37.

## EDUCATION

ERNEST CARROLL MOORE, Ph.D., LL.D., Professor of Education and Philosophy.

CHARLES WILKIN WADDELL, Ph.D., Professor of Education and Director of the Training Department.

\*JUNIOUS L. MERIAM, Ph.D., Professor of Education.

MARVIN LLOYD DARSIE, Ph.D., Professor of Education and Dean of the Teachers College.

MERTON E. HILL, Ed.D., Professor of Education and Director of Admissions.

J. HAROLD WILLIAMS, Ph.D., Professor of Education and Dean of the Summer Session of the University of California at Los Angeles.

KATHERINE L. McLAUGHLIN, Ph.D., Associate Professor of Education.

HARVEY L. EBY, Ph.D., Associate Professor of Education.

FREDERICK P. WOELLNER, Ph.D., Associate Professor of Education.

WILLIAM A. SMITH, Ph.D., Associate Professor of Education.

CLARENCE HALL ROBISON, Ph.D., Associate Professor of Education and Associate Director of Admissions.

ETHEL I. SALISBURY, M.A., Associate Professor of Elementary Education and Supervisor of Training.

CORINNE A. SEEDS, M.A., Assistant Professor of Elementary Education and Principal of the Training School.

MAY V. SEAGOE, Ph.D., Instructor in Education.

JESSE A. BOND, M.A., Lecturer in Education and Associate Director of Training.

DAVID F. JACKEY, Ph.D., Lecturer in Education and Supervisor of Trade and Industrial Teacher Training.

## The Teachers College

*Preparation for the Major.*—Biology 1, 12; Geography 1A-1B; Psychology 1A-1B.

*The Major.*—Eighteen units of upper division courses, including

Education 100 or Psychology 112

Education 101 or Psychology 119

Education 102 or Psychology 107A

Education 103 or 120 or 123A or 123B or 150

Education 104 or 105\* or 136.

Electives in education to total 18 units (Psychology 110 may be offered as an elective in education).

\* In residence second semester only, 1936-37.

\* Required for the Kindergarten-Primary Credential.

### The College of Letters and Science

*Letters and Science List.* Course 103, 120, 123A-123B, 150, and 170 are included in the Letters and Science List of Courses. For regulations governing this list, see page 61. A major in education is not offered in the College of Letters and Science.

### UPPER DIVISION COURSES

#### 100. Growth and Development of the Child. (3) I, II. Miss McLaughlin

Prerequisite: Psychology 1A-1B.

A study of intellectual, emotional, and social development during childhood and adolescence. Particular attention is given to problems of mental hygiene during critical growth periods.

#### 101. The Conditions of Learning. (3) I, II. Miss Seagoe

Prerequisite: Psychology 1A-1B.

Speech, writing, number, literature, science considered as social institutions evolved through coöperative intellectual effort. Analysis of the conditions under which the child attains most effective mastery of these skills and knowledges.

#### 102. Introduction to Educational Measurement. (3) I, II Miss Seagoe

Prerequisite: Psychology 1A-1B.

An introduction to the use of standardized tests and elementary statistical procedures in measuring the outcomes of teaching.

#### ✓ 103. Social Foundations of Education. (3) I, II. Mr. Woellner

Education as a factor in social evolution. Analysis of current educational practices in the light of modern social needs.

#### 104. The Curriculum. (3) II. Mr. Meriam

Prerequisite: course 101.

An introduction to the problem of curriculum organization as exemplified in representative courses of study. Emphasis is laid on the planning of activity units appropriate to the varying maturity levels of children.

#### 105. Kindergarten-Primary Education. (3) I, II Miss McLaughlin

The principles and practices underlying current trends in curriculum organization at the kindergarten-primary level. Critical evaluation of representative courses of study and experimental formulation of units of activity showing the continuity of child development.

#### 112. Adolescence. (3) I, II. Mr. Waddell

The physical, mental, moral and social traits of adolescence with special reference to their bearing upon problems of instruction in junior and senior high schools.

#### 120. The Principles of Education. (3) I, II. Mr. Darsie

This course duplicates course 121 given prior to September, 1936.

A critical analysis of the assumptions underlying education in a democratic social order.

#### ✓ 123A-123B. History and Philosophy of Education. (3-3) Yr. Mr. Moore

#### 133. Educational Diagnosis. (2) I. Mr. Williams

Prerequisite: senior standing and consent of instructor.

The use of standard tests and elementary statistical techniques in solving problems of school, class, and individual diagnosis.

- 135. Rural Society and Education.** (3) I, II. Mr. Eby  
A study of the social-economic problems and needs in rural communities as affecting rural education.
- 136. Rural School Curriculum Adaptations.** (3) I, II. Mr. Eby  
The development and direction of the curriculum in a rural school situation; the availability and use of the educational resources in the local environment.
- 137. Rural School Administration.** (3) I. Mr. Eby  
A consideration of the problems, principles, and methods involved in the administration of a rural school system.
- 138. Problems in Rural Education.** (3) II. Mr. Eby  
Prerequisite: senior standing and consent of the instructor.  
A survey of rural school conditions, with an evaluation of the means for their improvement. Special problems. Field visits.
- 142. State and County School Administration.** (2) I. Mr. Darsie  
The organization and administration of state school systems with special reference to the interrelation of federal, state, and county support and organization.
- 143. Administration of Secondary Education.** (2) I. Mr. Hill
- 148. Legal Bases of Public Education in California.** (2) II. Mr. Darsie  
Organization and administration of the California school system, as given in the school law of the state and as interpreted by the rulings of the State Superintendent of Public Instruction and the Attorney General.
- 150. History of American Education.** (3) I, II. Mr. Robison  
The development of significant educational movements in the United States as a basis for analysis of present-day problems.
- 160. Vocational Education.** (2) I. Mr. Jackey  
An attempt to develop an understanding and appreciation of the economic and social significance of vocational education in a democracy.
- 164. Vocational Guidance.** (2) II. Mr. Jackey  
The need of vocational guidance in a changing industrial order. The technique of guidance, as exemplified in case studies.
- 170. Secondary Education.** (3) I, II. Mr. Smith  
Prerequisite: Psychology 1A-1B and senior standing.  
A study of secondary education in the United States, with special reference to the needs of junior and senior high school teachers.
- 179. The Junior College.** (2) I. Mr. Hill
- 181. Principles of Adult Education.** (2) I, II. Mr. Woellner  
An analysis of the adult education movement to ascertain principles for organizing and conducting special and evening classes for mature students. Problems of citizenship, Americanization, and vocational and liberal education will be considered.
- \*198A-198B. Comparative Education.** (2-2) Yr. Mr. Meriam

\* Not offered first semester, 1986-87; students desiring the course should consult the chairman of the department.



## PROFESSIONAL COURSES

- 306. Children's Literature.** (2) I, II. Miss McLaughlin  
Sources of children's literature; basic principles for selection and presentation of suitable materials for young children; evaluation, classification, and placement of recent publications in the field.
- 320A. Introduction to Secondary Teaching.** (2) I, II. Mr. Bond  
Prerequisite to supervised teaching at the secondary level; limited to graduate students who have completed nine units of education including Education 170.
- 390. Introduction to Elementary Teaching.** (4) I, II. Miss Seeds  
Prerequisite to supervised teaching at the elementary level.

## GRADUATE COURSES†

- 213A-213B. Early Childhood Education. Seminar.** (2-2) Yr. Miss McLaughlin
- 243. Administration of Secondary Education.** (2) II. Mr. Hill
- 251A-251B. Elementary Administration and Supervision. Seminar** (2-2) Yr. Mr. Waddell
- 254A-254B. Experimental Education. Seminar.** (2-2) Yr. Mr. Williams
- 270A-270B. Secondary Education. Seminar.** (2-2) Yr. Mr. Smith
- \*276A-276B. Research in Curriculum.** (2-2) Yr. Mr. Meriam
- 279. Problems in Junior College Administration.** (2) II. Mr. Hill

## SUPERVISED TEACHING

For courses in supervised teaching see Training Department (page 217).

\* Not offered first semester, 1936-37; students desiring the course should consult the chairman of the department.

† A thesis is required of all candidates for the master's degree.

## ENGLISH

- FREDERIC THOMAS BLANCHARD, Ph.D., Professor of English.  
 LILY B. CAMPBELL, Ph.D., Professor of English.  
 SIGURD BERNHARD HUSTVEDT, Ph.D., Professor of English.  
 ALFRED E. LONGUEIL, Ph.D., Associate Professor of English.  
 HERBERT F. ALLEN, Ph.D., Associate Professor of English.  
 MARGARET SPRAGUE CARHART, Ph.D., Assistant Professor of English.  
 CARL SAWYER DOWNES, Ph.D., Assistant Professor of English.  
 GEORGE SHELTON HUBBELL, Ph.D., Assistant Professor of English.  
 CARLYLE F. MACINTYRE, Ph.D., Assistant Professor of English.  
 HARRIET M. MACKENZIE, Ph.D., Assistant Professor of English.  
 LLEWELLYN MORGAN BUELL, Ph.D., Assistant Professor of English.  
 MAJL EWING, Ph.D., Assistant Professor of English.  
 FRANKLIN P. BOLFE, Ph.D., Assistant Professor of English.  
 WESLEY LEWIS, Ph.D., Assistant Professor of Public Speaking.  
 ALICE O. HUNNEWELL, B.L.I., Instructor in English.  
 EVALYN A. THOMAS, B.L.I., Instructor in English.  
 JAMES MURRAY, Ed.D., Instructor in Public Speaking.  
 BRADFORD A. BOOTH, Ph.D., Instructor in English.  
 EDWARD N. HOOKER, Ph. D., Instructor in English.  
 KATHERINE E. COLLINS, M.A., Associate in English.  
 DECALVUS W. SIMONSON, M.A., Associate in English.  
 HARRISON M. KARR, M.A., Associate in Public Speaking.  
 PHILIP W. RICE, M.A., Associate in English.

Students must have passed Subject A (either examination or course) before taking any course in English or public speaking. Reference to regulations concerning Subject A will be found on page 36 of this Catalogue.

*Letters and Science List.*—All undergraduate courses in English and public speaking are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

*Preparation for the Major.*—Courses 1A-1B and 36A-36B or the equivalent, with an average grade of C.

Recommended: History 5A-5B; ancient and modern foreign languages. A reading knowledge of French or German is required for graduate work toward a higher degree.

*The Major.*—1. Students must present, in the first half of the junior year, a program to be examined and approved by the departmental adviser to upper division students. The program may be amended from time to time after consultation with the department representative.

2. The program must comprise 24 units of upper division courses, including the restricted junior course, to be taken in the junior year.

<sup>1</sup> In residence first semester only, 1936-37.

3. The student must maintain an average grade of C in upper division English courses, and at the end of the senior year must pass a comprehensive final examination.

**A. Requirements for Admission to Graduate Courses.**

Ordinarily the undergraduate major in English or its equivalent. (No graduate student may take a graduate course in English who has to his credit fewer than twelve units in upper division major courses in English.) This requirement is prerequisite to the twenty-four units demanded for the master's degree. If the candidate is deficient in this prerequisite, he must fulfill it by work undertaken as a graduate student.

**B. Requirements for Advancement to Candidacy.**

1. A reading knowledge of French or German. The test is a written examination, set in the first week of each semester and of the Summer Session. Graduate students are required to take this examination at the beginning of their first semester of residence.

2. The Senior English Comprehensive Examination, with a grade of B. The student who has not met this requirement as a part of the English major at the University of California normally presents himself for the examination at the close of his first semester of graduate work. The examination is set in January, May, and August.

**C. Requirements for the Master's Degree.**

For the general requirements, see page 98. The Department of English follows Plan II (The Comprehensive Examination Plan).

**LOWER DIVISION COURSES**

*Freshman Courses*

\*1A-1B. **First-Year Reading and Composition.** (3-3) Beginning each semester.  
M W F, 8, 9, 10, 11, 12, 2, 3. Mr. Blanchard and Staff  
Open to all students who have received a passing grade in Subject A.

\*4A-4B. **World Literature.** (1-1) Yr. Mr. Blanchard

5A-5B. **Great Books.** (1-1) Yr. Mr. Blanchard

*Sophomore Courses*

English 1A-1B is prerequisite to all sophomore courses in English.

31. **Intermediate Composition.** (2) I, II.

Mr. Downes, Miss MacKenzie, Mr. Rolfe

This course duplicates course 51 given prior to September, 1935.

36A-36B. **Survey of English Literature.** (3-3) Beginning each semester.

Mr. Buell, Miss Carhart, Mr. Downes, Mr. Hubbell, Mr.  
MacIntyre, Miss MacKenzie, Mr. Hooker

36A. Beowulf to Shakespeare. 36B. Shakespeare through Keats.

40. **Introduction to English Literature.** (3) I, II.

Mr. Ewing

Not open to students who have credit for course 36A-36B or 56A-56B.

\* Not offered, 1936-37.

## UPPER DIVISION COURSES

Courses 1A-1B and 36A-36B are prerequisite to all upper division courses in English. Students who have not passed English 3I will be admitted to 106A, 106C, and 106F only upon a test given by the instructor.

**A. The Junior Course:** Course 117J. Designed for juniors whose major or minor subject is English. Sections are limited to forty students each.

**B. The Type Courses:** Courses 114A-114B, 122A-122B, 125C-125D, and 125G-125H. It is understood that major students in English will take at least one of these courses.

**C. The Period Courses:** Courses 151L, 156, 157, 167, 177, and 187. It is understood that major students in English will take at least two of these courses.

**D. General Courses:** Courses 106A 106C, 106F, 110, 130A-130B, and 153.

106A. The Short Story. (2) I, II. Mr. Hubbell

106C. Critical Writing. (2) I, II. Mr. Downes

106F. Exposition. (2) I, II. Miss Carhart

\*110. English Diction and Style. (3) I, II. Mr. Hubbell

114A-114B. English Drama from the Beginning to the Present. (3-3) Yr.  
Miss Campbell, Miss Carhart

117J. Shakespeare. (3) I, II. Mr. Hustvedt, Mr. Buell

A survey of from twelve to fifteen plays, with special emphasis on one chronicle, one comedy, and one tragedy.

\*122A-122B. English Poetry from the Beginning to the Present. (3-3) Yr.  
Mr. Longueil, Mr. Allen

125C-125D. The English Novel from the Beginning to the Present. (3-3) Yr.  
Mr. Blanchard

125G-125H. English Prose from the Beginning to the Present. (3-3) Yr.  
Mr. Ewing, Mr. MacIntyre

130A-130B. American Literature. (2-2) Yr. Mr. Downes, Mr. Hubbell

151L. Chaucer. (3) I, II. Mr. Hustvedt, Mr. Longueil

153. Introduction to the Study of Poetry. (3) I, II.  
Mr. Longueil, Miss MacKenzie

156. The Age of Elizabeth. (3) I, II. Miss Campbell

157. The Age of Milton. (3) I, II. Mr. Hustvedt

167. The Age of Pope and Johnson. (3) I, II. Mr. Blanchard, Mr. Allen

177. The Romantic Age: 1784-1832. (3) I, II. Mr. Longueil, Mr. Allen  
Not open to students who took English 121A prior to September, 1936.

187. The Victorian Period: 1832-1892. (3) I, II. Mr. Allen, Mr. Rolfe

\* Not offered, 1936-37.

## COMPREHENSIVE FINAL EXAMINATION

The Comprehensive Final Examination in the undergraduate major in English must be taken at the end of the senior year. It will consist of one two-hour paper and one three-hour paper, the first of which will take the form of an essay. The examination will cover English literature from the beginning to 1900. The papers will be set by the examining committee of the department. The student's preparation for this examination will presumably extend throughout the entire college course.

This examination is not counted as part of the 24-unit major, but is counted on the 36-unit upper division requirement and on the 120 units required for graduation. It does not affect study-list limits, and should at no time be entered by the student upon his study list. However, the student is advised to limit his program to 13 units during his last semester. Upon his passing the examination the grade assigned by the department will be recorded. Given each semester; credit, 3 units.

## PROFESSIONAL COURSE

361. **The Teaching of English.** (3) I. Tu Th, 12. Miss MacKenzie  
May be counted as part of the eighteen units in education required for the secondary credential.

## GRADUATE COURSES

215. **English Literature of the 17th Century.** (3) I. Mr. Hustvedt  
222. **Shakespearean Tragedy: A Critical Study.** (3) I. Miss Campbell  
223. **Shakespearean Comedy: A Critical Study.** (3) II. Miss Campbell  
\*225A-225B. **The Ballad.** (3-3) Yr. Mr. Hustvedt  
227. **Early English Metrical Romances.** (3) II. Mr. Hustvedt  
\*231. **Marlowe.** (3) II. Miss Campbell  
\*242. **Fielding.** (3) I. Mr. Blanchard  
\*245. **Spenser.** (3) I. Miss Campbell  
248A-248B. **English Literary Criticism.** (3-3) Yr. Mr. Blanchard  
248A. From 1650 to 1700; 248B. From 1700 to 1750.  
\*250. **The Theory of Fiction (1600-1700)** (3) II. Mr. Blanchard

## PUBLIC SPEAKING†

## LOWER DIVISION COURSES

- 1A-1B. **Elements of Public Speaking.** (3-3) Beginning each semester.  
Mr. Karr, Mr. Lewis, Mr. Murray

\* Not offered, 1936-37.

† The University of California at Los Angeles does not offer a major in public speaking. Students wishing to satisfy the requirements for a major in public speaking are referred to the General Catalogue of the Departments at Berkeley.

**2A-2B. The Fundamentals of Expression and Interpretation.** (3-3) Beginning each semester. Mrs. Hunnewell, Miss Thomas

M W F, 8, 9, 11 (for those beginning in September); M W F, 11 (for those beginning in February).

**5A-5B. Principles of Argumentation.** (3-3) Yr. M W F, 10, 2.

Mr. Karr, Mr. Lewis

Prerequisite: course 1A-1B and the consent of the instructor.

**10. Dramatic Interpretation: Shakespeare.** (3) I. M W F, 2. Miss Thomas

**11. Dramatic Interpretation: Greek Tragedy.** (3) II. M W F, 2.

Miss Thomas

#### UPPER DIVISION COURSES

**110A-110B. Third-Year Public Speaking.** (3-3) Yr. —

Prerequisite: course 5A-5B.

**110A. Oral argumentation and debate; preparation of briefs; presentation of arguments.**

**110B. Practice in extemporaneous speaking; preparation of the occasional address. Open to students selected from 110A.**

**111A-111B. Literary Interpretation.** (3-3) Yr.

Miss Thomas

Prerequisite: course 2A-2B.

The study of typical literary forms such as the ballad, the lyric, the essay, and the short story.

**111C-111D. Literary Interpretation.** (3-3) Yr.

Mrs. Hunnewell

Prerequisite: course 2A-2B.

The dramatization of one novel, the oral reading and classroom presentation of selected one-act plays, and the study and abridgement of one three-act play in relation to public reading technique.

**160A-160B. Debates on Public Questions.** (2-2) Yr. —

Prominent questions of current interest are thoroughly studied. Students are expected to do original research, and to submit the results of their study in briefs and written arguments. Oral debates are held in class.

## FRENCH

HENRY RAYMOND BRUSH, Ph.D., Professor of French.

PAUL PÉRIGORD, Ph.D., Professor of French Civilization.

ALEXANDER GREEN FITE, Ph.D., Associate Professor of French.

MYRON IRVING BARKER, Ph.D., Assistant Professor of French.

FRANCIS J. CROWLEY, Ph.D., Assistant Professor of French.

MARIUS IGNACE BIENCOURT, Docteur de l'Université de Paris, Assistant Professor of French.

CLINTON C. HUMISTON, Ph.D., Instructor in French.

MADELEINE LETESSIER, A.B., Associate in French.

LOUIS F. D. BRIOIS, M.A., Associate in French.

ANNA FÉNELON HOLAHAN, M.A., Associate in French.

ALICE HUBARD, M.A., Associate in French.

PAUL BONNET, Lic. ès Lettres, Associate in French.

*Letters and Science List.*—All undergraduate courses in French are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

*Preparation for the Major.*—French A, B, C, D, or their equivalents. Two years of high school Latin or Latin A and B, or the equivalent, must be completed before the beginning of the senior year. History 4A-4B, Philosophy 3A-3B, and a modern language are strongly recommended.

*The Major.*—Required: twenty-four units of upper division French, including courses 101A-101B, 109A-109B, 112A-112B.

Any of the remaining upper division courses except 140A-140B and 109M-109N may be applied on the major. With the permission of the department four units of the twenty-four may be satisfied by appropriate upper division courses in the following departments: English, German, Greek, Latin, Spanish, Italian, or philosophy.

Students with majors in French will also be required to take a comprehensive examination covering history, geography, and other general information concerning France. This examination gives no degree credit.

## LOWER DIVISION COURSES

The ordinary prerequisites for each of the lower division courses are listed under the description of these courses. Students who have had special advantages in preparation may, upon examination, be permitted a more advanced program; or, such students may be transferred to a more advanced course by recommendation of the instructor.

**A. Elementary French.** (5) I, II.

Mr. Briois in charge

**B. Elementary French.** (5) I, II.

Mr. Briois in charge

Prerequisite: course A or two years of high school French.

**C. Intermediate French.** (3) I, II.

Mr. Humiston in charge

Prerequisite: course B or three years of high school French.

**OD. Intermediate French. (5) I, II.** Mr. Humiston in charge  
Prerequisite: course B or three years of high school French.

**D. Intermediate French. (3) I, II.** Mr. Humiston in charge  
Prerequisite: course C or four years of high school French.

**5A-5B. Advanced French. (3-3) Yr.** Mr. Périgord, Mr. Briois  
Prerequisite: course D.

**5AB. Advanced French. (5) II.** Mr. Brush  
Prerequisite: course D.

**\*19. Dramatic Interpretation in French. (2) II.** Miss Letessier  
The study and presentation of a masterpiece of French dramatic literature. Only those students will be eligible for registration in this course who have done, without credit, certain preliminary work required by the department during the preceding semester. The work of the course will end with the production and this production will constitute the examination. This course may be taken only twice for credit.

#### UPPER DIVISION COURSES

The prerequisite to all upper division courses except 109M-109N and 140A-140B is sixteen units in the lower division, including course D with a grade of A or B, or 5A-5B (or 5AB).

Courses 101A-101B and 109A-109B are ordinarily prerequisite to other upper division courses.

All upper division courses, with the exception of 109M-109N and 140A-140B, are conducted mainly in French.

**101A-101B. Composition, Oral and Written. (3-3) Beginning each semester.** Mr. Barker, Mr. Crowley, Mr. Biencourt

**109A-109B. A Survey of French Literature and Culture. (3-3) Yr.** Mr. Périgord

Limited to major students in French. Not open to students who have taken or are taking course 109M-109N.

109A. The Middle Ages, the Renaissance, and the seventeenth century.  
109B. The eighteenth, nineteenth, and twentieth centuries.

**109M-109N. A Survey of French Literature and Culture. (3-3) Yr.** Mr. Humiston

Given in English; does not count on the major in French.

Not open to students who have taken or are taking course 109A-109B.

109M. The Middle Ages, the Renaissance, and the seventeenth century.  
109N. The eighteenth, nineteenth, and twentieth centuries.

**112A-112B. The Nineteenth Century. (2-2) Yr.** Mr. Brush  
Prerequisite: courses 101A-101B and 109A-109B.

112A. From 1789 to 1830.

112B. From 1830 to 1885.

**\*114A-114B. Contemporary French Literature from 1885 to the Present. (2-2) Yr.** Mr. Fite

\* Not offered, 1936-37.



- 115A-115B. **Modern French Drama.** (2-2) Yr. Mr. Fite  
 118A-118B. **The Sixteenth Century.** (2-2) Yr. Mr. Humiston  
 120A-120B. **The Seventeenth Century.** (2-2) Yr. Mr. Barker  
 121A-121B. **The Eighteenth Century.** (2-2) Yr. Mr. Crowley  
 130A-130B. **Grammar, Composition, and Style.** (3-3) Yr. Mr. Fite

Prerequisite: an average grade higher than C in French courses.

Practice in oral and written composition based on selected models. This course is required of all candidates for the certificate of completion of the teacher-training curriculum, or for the degree of Master of Arts.

- 140A-140B. **French Civilization.** (2-2) Yr. Mr. Périgord  
 Presentation of the larger cultural elements in European history as caused, influenced, diffused, or interpreted by the French people.  
 Lectures in English, reading in French or English. Intended primarily for major students in English, history, and economics.

- 199A-199B. **Special Studies in French.** (2-2) Yr. Mr. Biencourt, Mr. Barker  
 Prerequisite: senior standing and at least twelve units of upper division French.

#### PROFESSIONAL COURSE

390. **The Teaching of French.** (2) II. Mr. Brush  
 Prerequisite: courses 101A-101B and 109A-109B, the latter being permitted concurrently.

#### GRADUATE COURSES

- 201A-201B. **Historical Grammar.** (2-2) Yr. Mr. Brush  
 History of French forms, sounds and syntax. An elementary knowledge of Latin is indispensable.  
 204A-204B. **Voltaire and his Age.** (2-2) Yr. Mr. Crowley  
 206A-206B. **Reading and Interpretation of Old French Texts.** (2-2) Yr. Mr. Brush  
 298A-298B. **Special Studies in Literary Criticism.** (2-2) Yr. Mr. Fite

## GEOGRAPHY

GEORGE MCCUTCHEN MCBRIDE, Ph.D., Professor of Geography.

BURTON M. VARNEY, Ph.D., Associate Professor of Geography.

\*CLIFFORD M. ZIERER, Ph.D., Associate Professor of Geography.

MYRTA LISLE MCCLELLAN, B.S., Assistant Professor of Geography.

RUTH EMILY BAUGH, Ph.D., Assistant Professor of Geography.

———, Assistant Professor of Geography.

KAZUO KAWAI, M.A., Instructor in Geography and History.

HALLOCK F. RAUP, Ph.D., Instructor in Geography.

*Letters and Science List.*—All undergraduate courses in geography are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

*Preparation for the Major.*—Required: Geography 1A-1B, 3 and 5B, Geology 1C or 1A. Recommended: Botany 1A, Economics 1A-1B, one year of history, Physics 1A-1B, Political Science 3A-3B, Geology 1B, and at least one modern foreign language.

*The Major.*—The minimum requirement for the major is eighteen or twenty-one units of upper division work in geography, including courses 101, 115, and 113 plus six or three units selected, with the approval of the department, from some one of the following departments: botany, economics, geology, history, political science.

*Laboratory Fees.*—Courses 1A, 1B, \$2.

## LOWER DIVISION COURSES

1A-1B. *Elements of Geography.* (3-3) Beginning each semester.

Miss McClellan, Mr. Raup, ———

Lectures, two hours; laboratory, two hours; field trips. Fee, \$2 per semester.

Course 1A is prerequisite to 1B.

A study of the main features of the physical environment in their relation to man's life and activities.

Not open for full credit to students who have credit for course 5A.

An expenditure of \$4 for field trips may be incurred by students in 1B.

3. *Introduction to Weather and Climate.* (3) I, II.

Mr. Varney

Lectures, two hours; laboratory, two hours.

Prerequisite: sophomore standing.

A study of the earth's atmosphere and the phenomena which produce weather and climate; recording of meteorological observations; work with meteorological instruments; study of weather maps.

\* In residence second semester only, 1936-37.

**5A-5B. Economic Geography. (3-3) Beginning each semester.**

Mr. Raup, —

5A. No prerequisite, but limited to prospective majors in economics and business administration. Not open for full credit to students who have credit for course 1A-1B.

A brief study of those elements of the natural environment essential to a geographic interpretation of economic activities. Several half-day field trips.

5B. Prerequisite: course 5A or 1A-1B.

The principles of economic geography as developed from a study of representative areas, commodities, and industries.

**UPPER DIVISION COURSES**

Course 1A-1B (or, for majors in economics and business administration, 5A-5B) is prerequisite to all upper division courses except 181.

**101. Field Course: the Geography of Los Angeles and its Environs. (3) II.**

Saturdays.

Mr. Zierer

To be taken by major students normally during the junior year.

Registration to be made only after consultation with the instructor.

Selected field studies. The course affords training in field mapping of rural and urban types and in techniques of areal analysis.

**108. The Geographic Basis of Human Society. (3) I, II.**

Miss Baugh

This course duplicates course 8 given prior to September, 1936.

The geographic element in the evolution of primitive cultures and of advanced civilizations. A study of various types of physical habitat in relation to social organization and institutions, together with the corresponding human culture.

**\*111. The Conservation of Natural Resources. (3) I.**

Mr. Zierer

Discussion of current problems in the United States arising in connection with the utilization of lands for forestry, grazing, recreation, agriculture, mining, and other uses.

**113. General Climatology. (3) I.**

Mr. Varney

To be taken by major students normally in the first semester of the junior year.

Course 3 is especially desirable as a preparation for this course.

A study of the underlying principles of climatic phenomena, of the features which characterize the climates of various regions, and of the influence of climatic conditions upon man.

**114. Regional Climatology: Western Hemisphere. (3) II.**

Mr. Varney

Prerequisite: course 113.

A study of the various types of climate, with reference to their underlying causes and to the effects of climate on man in the region.

**115. Physical Bases of Geography. (3) I.**

The origin and geographic significance of representative landscape types. Several field trips required.

\* Not offered, 1936-37.

**121. The Geography of Anglo-America. (3) I.**

Delimitation and analysis of the principal economic geographic divisions of the United States, Canada, and Alaska:

**122A-122B. The Geography of Latin America. (3-3) Yr. Mr. McBride**

122A. South America.

122B. Mexico, Central America, and the West Indies.

A study of the physical conditions characterizing the countries of Latin America, particularly in relation to the life of the inhabitants.

**123A-123B. The Geography of Europe. (2-2) Yr. Miss Baugh**

123A. The Atlantic States of Europe.

123B. Eastern and Southern Europe.

The effect of geographic conditions upon the economic status, political organization, and distribution of population in the present-day states of Europe.

**124. The Geography of Asia. (3) I, II. Mr. Kawai**

A study of the geographic factors which affect the social and economic conditions in the leading countries of eastern Asia.

**131. The Geography of California. (3) I, II. Miss Baugh**

An analysis of geographic conditions in the seven major provinces of California. Utilization of resources, routes of communication, location of settlements and distribution of population in their geographical and historical aspects. Two week-end field trips.

**155. Advanced Economic Geography. (3) II. Mr. Zierer**

A detailed analysis of problems selected from the fields of urban, industrial, and commercial geography.

**171A-171B. The Geographic Setting of American History. (2-2) Yr.**

Mr. McBride

Additional prerequisite: a university course in American history.

A study of the relation of the physical environment to the historical development of the peoples inhabiting the Americas.

171A. Anglo-America. 171B. Latin America.

**173. The Historical Geography of the Mediterranean Region. (2) II.**

Miss Baugh

A study of the geographic factors operative in the Mediterranean lands, particularly in their influence on ancient history.

**181. Current Problems in Political Geography. (2) I, II. Mr. McBride**

Prerequisite: junior standing.

Consideration of the geographical basis of some important problems in domestic and international affairs, with stress upon the geographic principles involved.

**199. Problems in Geography. (2) I, II. Mr. McBride and the Staff**

Open only to seniors who have the necessary preparation for undertaking semi-independent study of a problem. Registration only after conference with the instructor in whose field the problem lies.

## PROFESSIONAL COURSE

**369. The Teaching of Geography. (3) I, II.**

Miss McClellan

Limited to twenty students, registration to be made only after consultation with the instructor.

The fundamental purposes of geography as an instrument of instruction; changing point of view; the basic principles; the various methods of presentation; the use of materials in the presentation of the subject.

## GRADUATE COURSES†

**240. The Growth of Geographic Thought. (3) II.**

Mr. Zierer

**251. Seminar in Regional Geography. (3) I.**

Mr. McBride

The anthropogeography of the tropical plateaus of America.

**255. Seminar in Physical Geography. (3) I.**

Mr. Varney

Oceanic and continental influences on the climates of California.

**275. Advanced Field Problems in Local Geography. (3) II.**

Mr. McBride, Mr. Zierer

---

† A thesis is required of all candidates for the master's degree in geography.

## GEOLOGY

WILLIAM JOHN MILLER, Ph.D., Sc.D., Professor of Geology.  
 EDGAR K. SOPER, Ph.D., Associate Professor of Geology.  
 ALFRED R. WHITMAN, Ph.D., Associate Professor of Geology.  
 U. S. GRANT, Ph.D., Associate Professor of Geology.  
 JOSEPH MURDOCH, Ph.D., Assistant Professor of Geology.  
 ROBERT W. WEBB, M.S., Associate in Geology.

*Letters and Science List.*—All undergraduate courses in geology are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

*Preparation for the Major.*—Required: Chemistry 1A-1B; elementary physics; Civil Engineering 11A, 1FA; Geology 1A-1B; Mineralogy 3A-3B; trigonometry; engineering drawing. Certain of these preparatory courses may be postponed to the upper division by permission of the department. Recommended: French and German.

*The Major.*—Geology 102A-102B, 103, 199A-199B, and at least ten units of other upper division courses in the department which may include paleontology. Certain allied courses in chemistry, physics, biological sciences, and geography are recommended. The student's program is to be made out in accordance with some definite plan approved by the department.

*Laboratory Fees.*—Mineralogy 3A, 3B, \$2.

## GEOLOGY

## LOWER DIVISION COURSES

## 1A. General Geology: Dynamical and Structural. (3) I, II.

Mr. Soper, Mr. Murdoch, Mr. Webb

M W F, 9, 10; and one section meeting per week.

Prerequisite: elementary chemistry.

Two field trips (half-day) required.

A study of the materials and structure of the earth, and of the processes and agencies by which the earth has been, and is being, changed.

Not open to students who have taken or are taking course 1c.

## 1B. General Geology: Historical. (3) I, II.

Mr. Miller

I, M W F, 9; II, M W F, 9, 10.

Prerequisite: course 1A or 1c.

A study of the geological history of the earth and its inhabitants, with special reference to North America.

## 1c. General Geology: Physiographic. (3) I, II.

Mr. Miller, Mr. Soper, Mr. Grant

I, M W F, 8, 10, 11, 12; II, M W F, 8, 11, 12.

Two field trips (half-day) required.

An elementary course dealing with the earth's surface features and the geological laws governing their origin and development.

Not open to students who have taken or are taking course 1A.

**1d. Physiography (2) I.**

Mr. Webb

Lecture, one hour; laboratory, three hours.

Prerequisite: courses 1A or 1C, and 1B.

Two field trips and three extra lecture hours per term may be required.

The principles of physiography in their application to the study of selected regions, especially those of the western United States. Map work, reports, outside reading, and field trips.

**UPPER DIVISION COURSES****102A-102B. Field Geology. (3-3) Yr. S, 9-5.**

Mr. Whitman

Prerequisite: Geology 1B, 103 (may be taken concurrently), and Civil Engineering 11A, 11A.

Credit in this course toward the major is given only to students who take the year's work.

Introduction to field geology. Theory and practice of geologic mapping, and practice in the observation and interpretation of geologic phenomena, entailing weekly field trips into the nearby hills, and occasional longer excursions to points of special interest in a region remarkably rich in geologic features.

**103. Introduction to Petrology. (4) I.**

Mr. Whitman

Lectures, M F, 10; laboratory, M F, 1, 2, 3.

Prerequisite: Geology 1A, Mineralogy 3A-3B, and college chemistry.

The general characteristics, origins, mode of occurrence and nomenclature of rocks, and description of the more common types, accompanied by determinative laboratory practice.

**\*104. Petrographical Laboratory. (3) II.**

Mr. Whitman

Lecture, one hour; laboratory, M F, 1, 2, 3.

Prerequisite: course 103.

Mineral optics and microscopy, and the study of thin sections of rocks.

**106. Economic Geology: Metalliferous Deposits. (3) II.**

Mr. Whitman

M W F, 9.

Prerequisite: courses 1A, 1B, and 103.

A systematic study of ore occurrences, and of the genetic processes and structural factors involved.

**107. Physical Geology of North America. (2) II.**

Mr. Miller

Tu Th, 9.

Prerequisite: courses 1A or 1C, and 1B.

A course in advanced general geology with special reference to a regional study of North America.

**108. Economic Geology; Non-metalliferous Deposits. (2) I.**

Mr. Murdoch

Tu Th, 10.

Prerequisite: courses 1A or 1C, 1B, and elementary chemistry.

Special attention is given to coal, petroleum, building stones, clay, limes, salines, gypsum, fertilizers, and various minor minerals.

\* Not offered, 1936-37.

**111. Petroleum Geology. (3) I.**

Mr. Soper

M W F, 11.

Prerequisite: courses 1A, 1B, 102A, 116.

Geology applied to exploration for petroleum; the geology of the principal oil fields of the world with emphasis upon United States fields; and field methods in oil explorations. Lectures, map work, problems, and field trips to nearby oil fields.

**116. Structural Geology. (3) I.**

Mr. Soper

Lecture, M W, 11; laboratory, W, 2-5.

Prerequisite: courses 1A, 102A (which may be taken concurrently), and

**103. A working knowledge of descriptive geometry is desirable.**

The phenomena of fracture, folding, flow, and the graphic solution of problems with laboratory and field investigations.

**\*119. Geophysics. (2) I.**

Lecture, one hour; laboratory, three hours.

Prerequisite: courses 102A-102B, 116, and a year course in college physics.

A study of geophysical principles and methods with special reference to the location of petroleum and ore-deposits.

**199A-199B. Problems in Geology. (2-2) Yr. To be arranged.**

Mr. Miller and the Staff

Open only to seniors who are making geology their major study. Reports and discussions. Courses 199A and 199B should not be taken concurrently.

**GRADUATE COURSES†****235A-235B. Geology of California. (3-3) Yr.**

Mr. Soper, Mr. Grant

235A. Physical geology of California.

Mr. Soper

235B. Paleontology and stratigraphy of California.

Mr. Grant

**251. Seminar in Petrology. (3) I.**

Mr. Miller

Advanced study of igneous and metamorphic rocks with emphasis on petrogenesis.

**252. Seminar in Geomorphology. (3) II.**

Mr. Miller

Emphasis on general principles and regional studies.

**290A-290B. Selected Problems in Geology. (3-3) Yr.**

Mr. Whitman

290A. Diastrophism.

290B. Advanced economic geology.

\* Not offered, 1986-87.

† A candidate for a master's degree in geology must have to his credit, in addition to the general University requirements, the minimum lower and upper division requirements for the department major or must have completed Geology 107 and 116, and Paleontology 111, or equivalents. Acceptance of the candidate and of his program must be approved by the department. A thesis is required.



**MINERALOGY****LOWER DIVISION COURSE**

**3A-3B. Introduction to Mineralogy.** (3-3) Yr. Mr. Murdoch, Mr. Webb  
Lecture, M, 1; laboratory, six hours.

Prerequisite: elementary chemistry and physics. Fee, \$2 per semester.

Lectures and laboratory practice in crystal morphology and projection, determination of minerals by the physical and chemical properties, and descriptive mineralogy.

**UPPER DIVISION COURSE**

**101. Paragenesis of Minerals.** (2) II.

Mr. Murdoch

Tu Th, 10.

Prerequisite: Mineralogy 3A-3B, Chemistry 1A-1B.

**PALEONTOLOGY†****UPPER DIVISION COURSES**

**111. Systematic Paleontology.** (4) I.

Mr. Grant

Lectures, Tu Th, 11; laboratory, six hours.

Prerequisite: Geology 1B or Paleontology 1.

A general introduction to the study of invertebrate fossils.

**112. Advanced Historical Geology.** (3) II.

Mr. Grant

Lectures, Tu, 11; laboratory, six hours.

Prerequisite: Paleontology 111, Geology 1B.

A general survey of earth history from fossil and physical evidence. The relationship between physical events and faunal evolution is stressed.

**114. Micropaleontology.** (2) II

Lecture, one hour; laboratory, three hours.

Prerequisite: Paleontology 111 and Geology 102A, 102B, 116.

A study of the microscopic fossils with special reference to age determination and correlation of strata in application to oil-field problems.

† Courses in Vertebrate Paleontology may be found in the announcement of the Department of Zoölogy (p. 169).

**GERMAN**

- GUSTAVE OTTO ARLT, Ph.D., Professor of German.  
 ROLF HOFFMANN, Ph.D., Associate Professor of German.  
 FRANK HERMAN REINSCH, Ph.D., Associate Professor of German.  
 ALFRED KARL DOLCH, Ph.D., Assistant Professor of German.  
 PHILIP ROBERT PETSCH, J.D., Instructor in German.  
 GODFREY EHELICH, Ph.D., Instructor in German.  
 CARL W. HAGGE, M.A., Instructor in German.  
 GERALD M. SPRING, Ph.D., Instructor in German.  
 CHRISTEL B. SCHOMAKER, M.A., Associate in German.  
 ELSA VON SENDENHORST-BAUWENS, Associate in German.

*Letters and Science List.*—All undergraduate courses in German are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

*Preparation for the Major.*—Required: courses A, B, C, D, and 6A-6B or their equivalents. Recommended: History 4A-4B, English 1A-1B, Philosophy 3A-3B.

*The Major.*—Twenty-four units in upper division courses, including courses 105A-105B, 106A-106B, 117, 118A-118B and at least four units made up from the senior courses 111A-111B, and 119. Students looking forward to the secondary credential should take also 106C-106D.

**A. Requirements for Admission to Graduate Courses:**

A candidate for admission to graduate courses in German Language and Literature must, in addition to the general University requirements, meet the minimum requirements for an undergraduate major in this department. If the candidate is deficient in this prerequisite he must fulfill it by undergraduate work which is not counted toward his graduate residence.

**B. Requirements for Advancement to Candidacy:**

1. A reading knowledge of a modern foreign language other than German, preferably French.
2. A satisfactory reading and speaking knowledge of German.
3. An elementary comprehensive examination in German literature, language, and history.

**C. Requirements for Master's Degree:**

For the general requirements, see pp. 98-101. The Department of German favors the Comprehensive Examination Plan.

**LOWER DIVISION COURSES**

The ordinary prerequisites for each of the lower division courses are listed under the description of these courses. Students who have had special advantages in preparation may, upon examination, be permitted a more advanced program; or such students may be transferred to a more advanced course by recommendation of the instructor.

**A. Elementary German. (5) I, II.** Mr. Ehrlich in charge  
This course corresponds to the first two years of high school German.

**A-g. Elementary German for Graduate Students. (No credit.)** ———  
Three hours per week.

~~B. Elementary German. (5) I, II.~~ Mr. Ehrlich in charge  
Prerequisite: course A or two years of high school German.

**C. Intermediate German. (3) I, II.** Mr. Hagge in charge  
Prerequisite: course B or three years of high school German.

**D. Intermediate German. (3) I, II.** Mr. Hagge in charge  
Prerequisite: course C or four years of high school German.

**CD. Intermediate German. (5) II.** Mr. Hagge in charge  
Prerequisite: course B or three years of high school German.

**5A-5B. Advanced German. (3-3) Yr.** Mr. Ehrlich  
Prerequisite: course D or consent of instructor.  
This course duplicates course 50A-50B given prior to September, 1935.

**5r. Scientific German. (3) I, II.** Mr. Petsch  
Prerequisite: course D or the consent of the instructor.  
An introduction to science readings, covering all fields of science, but with special emphasis on the field of each individual student.

**6A-6B. Review of Grammar, Composition, and Conversation. (2-2) Yr.** Mr. Dolch in charge  
Prerequisite: course B or three years of high school German.

**19. Dramatic Interpretation in German. (2) I.** Mr. Hoffmann  
The study and presentation of a masterpiece of German dramatic literature. Only those students will be eligible for registration in this course who shall have done, without credit, certain preliminary work required by the department during the preceding semester. The work of the course will end with the production and this production shall constitute the examination. This course may be taken only twice for credit.

#### UPPER DIVISION COURSES

The prerequisite for all upper division courses except 140A-140B is course D (or CD) or the equivalent. Major students are also required to take course 6A-6B.

**104A-104B. Introduction to Modern German Literature. (3-3) Yr.**  
Selected readings from nineteenth century authors. Mr. Reinsch

**105A-105B. German Classics of the Eighteenth Century. (3-3) Yr.**  
Selected works of Lessing, Goethe, Schiller. Mr. Reinsch

**106A-106B. Grammar, Composition, and Conversation. (2-2) Yr.**  
Mr. Hoffmann, Mr. Reinsch

**106C-106D. Grammar, Composition, and Conversation. (2-2) Yr.**  
Prerequisite: course 106A-106B. Mr. Schomaker

- 110A-110B. German Lyrics and Ballads.** (2-2) Yr. Mr. Hoffmann  
German ballad and lyric poetry from the Middle Ages to the present.
- 111A-111B. The German Novel.** (2-2) Yr. Mr. Hoffmann  
Prerequisite: course 104A-104B, 105A-105B, or 106A-106B.  
Selected novels of Goethe, Freytag, Ludwig, Keller, Raabe, Meyer, Fontane, and others.
- 117. History of the German Language.** (2) I. Mr. Dolch  
Prerequisite: course 104A-104B or 105A-105B or 106A-106B.  
This course serves as an introduction to philology.
- 118A-118B. History of German Literature.** (3-3) Yr. Mr. Arlt  
Prerequisite: course 104A-104B or 105A-105B.  
118A: the Middle Ages. 118B: from the Reformation to the death of Goethe.  
Lectures and discussions; collateral reading.
- 119. Middle High German.** (3) II. Mr. Dolch  
Prerequisite: courses 117 and 118A.  
Outline of grammar, selections from the Nibelungenlied, the Kudrun, and the Court Epics.
- 140A-140B. German Civilization.** (2-2) Yr. Mr. Hoffmann  
Prerequisite: junior standing.  
Lectures and reports. Conducted in English. May not be offered as part of the major or minor in German.  
A general survey of the development of German civilization in its more important cultural manifestations.

## GRADUATE COURSES

- 201. Bibliography and Methods of Literary History.** (2) I. Mr. Arlt  
An introduction to the means and methods of graduate study. Lectures and reports. Required of all candidates for the M.A. degree.
- 206. German Literature from Humanism to Gottsched.** (2) I. Mr. Arlt  
Lectures and reports. Conducted as a seminar.
- 221. The Young Goethe.** (2) II. Mr. Reinsch  
Seminar on literary and cultural problems arising from the study of Goethe and his works prior to his journey to Italy in 1786.
- 222. Goethe's "Faust."** (2) I. Mr. Reinsch  
Critical and interpretative study of Goethe's *Faust*, Parts I and II.
- 225. The Nineteenth Century Drama.** (2) II. Mr. Arlt  
Critical and historical study of the German Drama from Romanticism to Naturalism.
- 231. Gothic.** (2) I. Mr. Dolch  
An introduction to the study of Gothic grammar and texts. Graduate students in other language departments may be admitted with consent of the instructor.
- 232. Old High German.** (2) II. Mr. Dolch  
An introduction to the study of Old High German grammar and texts.

## HISTORY

FRANK J. KLINGBERG, Ph.D., Professor of History.

WALDEMAR WESTERGAARD, Ph.D., Professor of History.

\*JOHN CARL PARISH, Ph.D., Professor of History.

JOSEPH B. LOCKEY, Ph.D., Professor of History.

ROWLAND HILL HARVEY, Ph.D., Associate Professor of History.

LOUIS KNOTT KOONTZ, Ph.D., Associate Professor of History.

DAVID K. BJORK, Ph.D., Associate Professor of History.

ANDRÉ LOBANOV-ROSTOVSKY, Associate Professor of History.

LUCY M. GAINES, M.A., Assistant Professor of History.

ROLAND D. HUSSEY, Ph.D., Assistant Professor of History.

\*JOHN W. OLMSTED, M.A. (Oxon.), Assistant Professor of History.

JOHN W. CAUGHEY, Ph.D., Assistant Professor of History.

BRAINERD DYER, Ph.D., Assistant Professor of History.

KAZUO KAWAI, M.A., Instructor in History and Geography.

CLINTON N. HOWARD, Ph.D., Instructor in History.

CHARLES MOWAT, A.B. (Oxon.), Associate in History.

\_\_\_\_\_, Lecturer in History.

\_\_\_\_\_, Lecturer in History.

*Letters and Science List.*—All undergraduate courses in history except 11 are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

*Preparation for the Major.*—Required: (1) courses 4A-4B or 5A-5B, and (2) course 8A-8B, or equivalent preparation for students transferring from other departments or other institutions. Recommended: Political Science 3A-3B, Political Science 31A-31B, Economics 1A-1B, Geography 1A-1B, and Philosophy 3A-3B. One of these recommended courses may be substituted for one of the required history courses, with approval of the department.

Recommended: French, German, Latin, Spanish, Italian, or a Scandinavian language. For upper division work in history a reading knowledge of French or German, or both, is highly advisable; for graduate work, indispensable.

*The Major.*—Twenty-four units of upper division work in history. In certain cases two to six upper division units in either political science or economics approved by the department may be counted on the major.

The major must include a year course in European history [one of the following: 111A-111B, 112A-112B, 121A-121B, 142A-B-C-D (any two consecutive semesters), 153A-153B] and a year course in American history (one of the following: 162A-162B, 171A-171B).

At least one advanced course must follow a general course in the same field, chosen within one of the following sequences: course 111A-111B, 112A-112B, 121A-121B, 142A-B-C-D (any two consecutive semesters), or 153A-153B, followed by 199A-199B in European history; 162A-162B or 171A-171B, followed by 199A-199B in American history. Only one advanced course need be taken.

\* In residence second semester only, 1986-87.

LOWER DIVISION COURSES

- 4A-4B. History of Western Europe.** (3-3) Beginning each half-year.  
 Mr. Bjork, Mr. Lobanov, Mr. Gaines, Mr. Kawai  
 M W F, 8, 9, 10, 12, 2.  
 The growth of Western European civilization from the decline of the Roman Empire to the present time.
- 5A-5B. History of England and Greater Britain.** (3-3) Beginning each semester.  
 Mr. Harvey, Mr. Olmsted, Mr. Howard, Mr. Mowat  
 M W F, 8, 10, 11, 12.
- 8A-8B. History of the Americas.** (3-3) Beginning each semester.  
 Mr. Hussey, Mr. Caughey, Mr. Dyer  
 M W F, 8, 9, 11, 12, 2; Tu Th, 8:30-10.
- \*9A-9B } Great Personalities.** (2-2) Yr. Tu Th, 10.  
**9C-9D }**  
 9A. United States  
 9B. Latin America.  
 9C. England. Mr. Harvey, Mr. Howard  
 9D. Continental Europe. Mr. Lobanov
- 39. Pacific Coast History.** (2) I, II. Mr. Caughey
- 46. Economic History of the United States.** (3) I, II. Mr. Harvey  
 Primarily for sophomores. Open to other students only with the written consent of the instructor.

UPPER DIVISION COURSES

The prerequisite for all upper division courses is course 4A-4B, or 5A-5B, or 8A-8B, or equivalent preparation in history.

- 111A-111B. Ancient History.** (3-3) Yr. M W F, 12. Mr. Howard  
 111A. Greek history to the Roman Conquest.  
 111B. Roman history to the sixth century A.D.
- 112A-112B. Economic History of the Western World.** (3-3) Yr. Mr. Harvey  
 Prerequisite: Economics 1A-1B and History 4A-4B or 8A-8B.  
 112A. From early times to 1750.  
 112B. From 1750 to the present, including a survey of contemporary economic society of the Orient.
- 121A-121B. The Middle Ages.** (3-3) Yr. M W F, 8, 9. Mr. Bjork
- \*131A-131B. The Renaissance.** (2-2) Yr. Mr. Klingberg  
 131A. The civilization of the Renaissance in Italy.  
 131B. The civilization of the Renaissance in northern Europe.
- 142A-B-C-D. Modern Continental Europe since 1648.** (3 units for each semester.) Mr. Westergaard, Mr. Lobanov, Mr. Olmsted  
 142A. From 1648 to 1715. I.  
 142B. From 1715 to 1789. II.  
 142C. From 1789 to 1870. I.  
 142D. From 1870 to 1919. II.

\* Not offered, 1936-37.

**\*144A-144B. History of Northern and Eastern Europe. (2-2) Yr.**

Mr. Westergaard

Prerequisite: senior standing; German or French or Latin or one of the Scandinavian languages, two years of college history, including course 4A-4B or 5A-5B, and one upper division course, preferably in continental or English history.

144A. Rise and decline of the Swedish Baltic empire and the rise of modern Russia.

144B. The Viking Age, Hanseatic League, the struggle for the control of the Baltic.

**149A-149B. History of Russia. (2-2) Yr.**

Mr. Lobanov

Russia from its earliest days to the present.

**\*152A-152B. Constitutional History of England. (2-2) Yr.**

Mr. Howard

Prerequisite: course 5A-5B or 153A-153B or the consent of the instructor.

**153A-153B. Social and Political History of Modern England: 1485 to the Present. (3-3) Beginning each semester.**

Mr. Klingberg, Mr. Harvey, Mr. Howard

M W F, 11, Tu Th, 10-11:30 (for those beginning in September); M W F, 12 (for those beginning in February).

**\*155A-155B. History of the British Empire. (2-2) Yr.**

Mr. Klingberg

Prerequisite: senior standing and two years of college history, including course 4A-4B or 5A-5B or 8A-8B and one upper division course in history.

**162A-162B. History of Hispanic America from 1808 to the Present. (3-3) Yr.**

M W F, 11, 12.

Mr. Lockey, Mr. Hussey

Prerequisite: course 8A-8B, or equivalent preparation approved by the instructor.

**\*164A-164B. History of Inter-American Diplomatic Relations. (2-2) Yr.**

Mr. Lockey

Prerequisite: senior standing and two years of college history, including course 8A-8B or 162A-162B.

**171A-171B. History of the United States. (3-3) Beginning each semester.**

Mr. Parish, Mr. Koontz, Mr. Dyer

A general course dealing with the English colonies and the political history of the United States.

**172A-172B. Constitutional History of the United States. (2-2) Yr.**

Mr. Dyer

Prerequisite: course 171A-171B or the consent of the instructor.

**\*173A-173B. The Civil War and Reconstruction. (2-2) Yr.**

Mr. Dyer

**\*181A-181B. History of the Westward Movement. (2-2) Yr.**

Mr. Parish

Prerequisite: senior standing and two years of college history, including one upper division course. In any event, course 8A-8B or 171A-171B is a prerequisite.

A study of expansion in the United States from the Atlantic to the Pacific.

**188A-188B. History of California. (2-2) Yr.**

Mr. Caughey

Prerequisite: a year course in lower division history and course 39, or equivalent preparation approved by the instructor.

\* Not offered, 1936-37.

**191A-191B. History of the Far East. (3-3) Yr.**

Mr. Kawai

A general survey of the history of the Far East from the earliest times to the present, with emphasis on recent international relations.

**199A-199B. Special Studies in History. (2-2) Yr.**

Mr. Klingberg, Mr. Lockey, Mr. Parish, Mr. Westergaard,  
Mr. Koontz, Mr. Bjork, Mr. Harvey.

The work in each section must be continuous throughout the year.

Prerequisite: senior standing and two years of college history, including one upper division course. For further prerequisites, consult instructors concerned.

Term papers are required each semester. Enrollment is limited to twenty-five.

**Laboratory Work**

Each member of the instructional staff will devote two hours a week to the guidance of groups of students in historical laboratory work, with emphasis on the use of the library and the evaluation and synthesis of historical materials. Supplementary to courses listed above; no additional credit. Students will participate in this plan by rotation, so that only a limited amount of additional time will be required of each student.

**PROFESSIONAL COURSE****390. The Teaching of History and Social Studies. (3) I, II.****GRADUATE COURSES****201. Historiography and Bibliography. (2) I, II.**

Mr. Hussey

**253A-253B. Seminar in English History. (3-3) Yr.**

Mr. Klingberg, Mr. Harvey.

Studies of England during the Napoleonic and post-Napoleonic periods.

**257A-257B. Seminar in European History. (3-3) Yr.**

Mr. Westergaard, Mr. Bjork

Studies in nineteenth century continental history.

**258A-258B. Seminar in United States History. (3-3) Yr.**

Mr. Parish, Mr. Koontz, —

Studies in the expansion of the American people.

**260A-260B. Seminar in Hispanic American History. (3-3) Yr. Mr. Lockey**

Studies in the colonial and early national periods.



## HOME ECONOMICS

HELEN B. THOMPSON, Ph.D., Professor of Home Economics.  
 GRETA GRAY, Ph.D., Associate Professor of Home Economics.  
 VERZ R. GODDARD, Ph.D., Assistant Professor of Home Economics.  
 MARGUERITE G. MALLON, Ph.D., Assistant Professor of Home Economics.  
 LEILA M. DOMAN, Ph.D., Instructor in Home Economics.  
 FLORENCE A. WILSON, M.A., Associate in Home Economics.  
 PAULINE F. LYNCH, M.A., Associate in Home Economics.

MARTHA E. DAVIS, M.S., Lecturer in Home Economics.

A student may select a major in this department either (a) in Home Economics, leading to the degree of Bachelor of Education in the Teachers College and to the Special Secondary Credential in Home Making; or (b) in Household Science, leading to the degree of Bachelor of Arts in the College of Letters and Science.

## THE TEACHERS COLLEGE

*Preparation for the Major in Home Economics.*—Home Economics 1A-1B, 11A-11B, 43A; Art 2A; Chemistry 2A-2B, 10; Physiology 1; Economics 1A.

*The Major in Home Economics, leading to the Special Secondary Credential in Home Making.*—Home Economics 108, 110, 118A, 120, 162A-162B, 164, 168, and five units of advanced home economics approved by the department.

*The Minor in Education.*—Education 103, 170; Directed Teaching, six to ten units; Home Economics 390A-390B.

*Vocational Home Economics.*—A vocational curriculum in home economics is maintained under the provisions of the Smith-Hughes Act. This curriculum leads to the degree of Bachelor of Education and to the Special Secondary Credential in Home Making. It is open to students who have received the Junior Certificate and who have had practical experience in the administration of a home. All applicants must be approved by the Department of Home Economics.

## THE COLLEGE OF LETTERS AND SCIENCE

*Letters and Science List.*—Courses 1A-1B, 11A-11B, 110, 118A-118B, 120, 125, 136A-136B, 159, 162A-162B, 164, 168, and 199A-199B are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

*Preparation for the Major in Household Science.*—Home Economics 11A-11B, 43A; Chemistry 1A-1B, 8; Economics 1A-1B; Physiology 1.

*The Major in Household Science.*—Required: eighteen units in upper division home economics, including (1) course 162A-162B; (2) at least six units chosen from 110, 118A, 120; (3) five to eight units chosen from 118B, 125, 159, 164, 168, 199A, 199B; and six additional units to be selected with the approval of the department from upper division courses in chemistry, economics, psychology, or zoölogy.

**Laboratory Fees.**—Courses 1A, 1B, 175, \$1.50; 33A, 33B, 108, 199A, 199B, \$2; 11B, \$2.50; 110, 120, 125, 159, \$3; 11A, \$4.

### LOWER DIVISION COURSES

#### 1A-1B. Clothing. (3-3) Beginning each semester.

Miss Lynch, Miss Wilson

Prerequisite: matriculation credit in "clothing" or Art 2A.

Fee, \$1.50 per semester.

The study of kinds and qualities of materials for different uses; construction of typical forms of clothing; artistic qualities of dress design, pattern; color and weave of fabrics; individual and social standards in the selection of clothing.

#### 11A. Elementary Food. (3) I, II.

Prerequisites: high school chemistry or Chemistry 2A. Fee, \$4.

The classification, occurrence, and general properties of foodstuffs; the principles involved in food preparation and preservation; compilation of recipes; practice in judging food preparations and in meal service.

#### 11B. Food Economics. (3) I, II.

Prerequisite: course 11A. Fee, \$2.50.

The production, transportation, and marketing of food materials; the legal and sanitary aspects of food products handled in commerce; prices in relation to grades and standards; the practical problems involved in the selection and service of food in school lunch rooms and for social functions involving large groups.

#### 32. Elements of Nutrition. (2) I, II.

Miss Thompson, Miss Goddard

Prerequisite: six units of natural science.

The principles of nutrition and their application in normal and sub-normal conditions of growth and physical development, and as a factor in the health of adults.

#### 43A-43B. Elementary Household Administration. (2-2) Beginning each semester.

Miss Gray, Miss Lynch

43A. Equipment; standard and methods of household work; prices and values of house furnishings; housing.

43B. Management problems including those pertaining to the social aspects of the home in the care and training of children.

### UPPER DIVISION COURSES

#### 102A-102B. Food and Dietetics. (3-3) Yr.

Miss Mallon

Prerequisite: Chemistry 1A-1B, or high school chemistry and Physiology 1. Fee, \$3 per semester.

A brief study of the nutritive values of the food materials; individual food needs in normal and pathological conditions both in adult life and in childhood; planning of dietaries; calculation and preparation of diets with special reference to cost of materials in relation to nutritive standards.

**108. Textiles. (2) I.**

Miss Wilson

Prerequisite: Art 2A, Chemistry 10, Economics 1A. Fee, \$2.

The economic development of the textile industry; history of weaves and patterns; chemical, physical and microscopic examination of textile fibers, yarns and fabrics; bleaching and dyeing; stain removal; laundry processes as they affect color, texture, shrinkage, and durability.

**110. Food Compositions. (3) I, II.**

Miss Goddard

Prerequisite: Chemistry 8 or 10. Fee, \$3.

Detailed study of the proximate principles, the inorganic constituents, and the vitamins with reference to their occurrence in the different food materials, their chemical properties, and their nutritive values as affected by heat or the admixture of other food substances.

**118A-118B. Nutrition. (3-2) Yr.**

Miss Thompson

Prerequisite: Chemistry 8 or 10, Physiology 1.

Discussions of the chemical and biological factors in metabolism, energy transformation, the quantitative relations of the ash constituents, nitrogen and mineral balances in both normal and pathological conditions. Attention is given to recent literature bearing upon growth and upon normal and sub-normal nutrition in infancy and childhood.

**120. Dietetics. (3) I, II.**

Miss Thompson, Miss Mallon

Prerequisite: Chemistry 8 or 10, Home Economics 110 or 118A. Fee, \$3.

Daily food requirements as indicated by the experimental studies that have established the quantitative basis in dietetics; calculations of standard portions and combinations of foods; computations and scoring of dietaries with special reference to food requirements in childhood and adolescence and in varying physiologic conditions at all periods of life.

**125. Experimental Cookery. (2) I.**

Prerequisite: course 110. Fee, \$3.

Quantitative methods in food preparation under controlled conditions.

**136A-136B. Institution Economics. (3-3) Yr.**

Prerequisite: Economics 1A-1B, Home Economics 11B. Fee, \$2 per semester.

The economic principles and problems involved in the organization and administration of institution households such as residence halls, hotels, hospitals, and school lunch-rooms.

**159. Metabolism Methods. (3) I, II.**

Miss Goddard

Prerequisite: Chemistry 8 or 10; Home Economics 118A or equivalent preparation. Fee, \$3.

Observations of the influence of special diets upon various phases of metabolism; practice in the methods of determining blood constituents, basal metabolic rate and nitrogen and mineral excretions.

**162A-162B. Economics of the Household. (2-2) Yr.**

Miss Gray

Prerequisite: Economics 1A-1B, or six or more units in home economics.

162A. Standards of living; size, composition, income and expenditures of American households; study of the factors which have developed the modern household and which influence its activities and its selection and utilization of goods and services.

162B. Readings and reports of recent literature and discussion of the trends in the development of the art of consumption.

**164. Household Sanitation. (2) II.**

Miss Gray

Sanitary standards and methods applicable to household processes.  
Family responsibility for health.

**168. Family Relationships. (2) I.**

Miss Gray

A study of the social development of the home and its contribution to culture at different stages of civilization; modern problems of family life pertaining to the social and personal well-being of the group.

**175. Advanced Study of Costume. (3) II.**

Miss Wilson

Prerequisite: Art 2A, 101A, Home Economics 1A-1B. Fee, \$1.50.  
Practice in the development of designs for individuals and of the adaptation of materials and methods of construction to the various problems of modern costume.

**199A-199B. Problems in Home Economics. (2-2) Yr.**

Miss Thompson, Miss Gray, Miss Goddard

Prerequisite: senior standing with such special preparation as the problem may demand. Fee, \$2 per semester.

Assigned problems for individual investigation, the work of each student to be directed by the instructor in whose division of the field the problem lies.

**PROFESSIONAL COURSES****390A. Development of Home Economics Education. (3) I.**

Prerequisite: Psychology 1A, 1B, nine or more units in home economics.  
This course duplicates course 147A given prior to September, 1936.  
The development of home economics as an educational movement; organization of curricula and present status of courses in different types of schools.

**390B. Principles of Home Economics Teaching. (3) II.**

Prerequisite: Psychology 1A, 1B, six or more units in home economics.  
This course duplicates course 147B given prior to September, 1936.  
Study of typical courses and their presentation; critical review of texts and references for elementary and secondary schools.

**GRADUATE COURSES****202. Personal and Family Economics. (2) II.**

Miss Gray

Critical comparison of surveys, budget studies, financing customs and business planning of families and individuals of varying levels of income.

**251. Seminar in Nutrition. (2) I.**

Miss Mallon

Recent advances in the science of nutrition developed by feeding and metabolism experiments and in the dietetic treatment of disease.

**252. Selected Problems. (2) II.**

Miss Thompson, Miss Gray, Miss Goddard, Miss Mallon

Laboratory or field investigation in nutrition, food economics, or household administration.

## ITALIAN\*

FRANCO BRUNO AVERARDI, J.D., Ph.D., Lecturer in Italian.

CHARLES SPERONI, A.B., Associate in Italian.

*Letters and Science List.*—All undergraduate courses in Italian are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

## LOWER DIVISION COURSES

- |   |                           |
|---|---------------------------|
| <b>A. Elementary Italian.</b> (5) I, II.                              | Mr. Speroni               |
| <b>B. Elementary Italian.</b> (5) I, II.<br>Prerequisite: course A.   | Mr. Speroni               |
| <b>C. Intermediate Italian.</b> (3) I, II.<br>Prerequisite: course B. | Mr. Averardi, Mr. Speroni |
| <b>D. Intermediate Italian.</b> (3) II.<br>Prerequisite: course C.    | Mr. Averardi              |

## UPPER DIVISION COURSES

Sixteen units of lower division courses in Italian are required for admission to any upper division course except 150A-150B. This requirement will become effective in September, 1937.

- |   |              |
|---|--------------|
| <b>103A-103B. Survey of Italian Literature.</b> (3-3) Yr.<br>Given in English, 1936-37. | Mr. Averardi |
| <b>150A-150B. Dante's "Divine Comedy" in English Translation.</b> (3-3) Yr.             | Mr. Averardi |

---

\* The University of California at Los Angeles does not offer a major in Italian. Students wishing to satisfy the requirement for a major in Italian are referred to the General Catalogue of the Departments at Berkeley.

## LIFE SCIENCES GROUP

LOYE HOLMES MILLER, Ph.D., Chairman.

This group is composed of the Departments of Bacteriology, Botany, and Zoölogy, and has been organized in order to coördinate and unify their activities. Through a special committee set up for the purpose, an attempt will be made, while giving fair play to the development of each of the departments, to make their offerings in courses and their work in research articulate to the advantage of all concerned.

## BACTERIOLOGY

THEODORE D. BECKWITH, Ph.D., Professor of Bacteriology.

MERIDIAN R. GREENE, Sc.D., Instructor in Bacteriology.

*Letters and Science List.*—All undergraduate courses in this department are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

*Preparation for the Major.*—Bacteriology 1, Chemistry 1A-1B, Zoölogy 1A-1B, Botany 1B, Physics 2A-2B, French or German. Recommended: Chemistry 5, 8, 9; Zoölogy 4.

*The Major.*—Bacteriology 103 (4 units) and Bacteriology 199A-199B (4 units) together with 16 units of upper division work in related subjects, these to be selected from the following series: Zoölogy 101, 105, 106, 107, 107c, 111, 111c, Botany 105A, 120, Chemistry 107A-107B, Home Economics 159, Plant Nutrition 110, Plant Pathology 120. Courses are to be chosen with the approval of the department.

*Curriculum for Medical Technicians.*—For details, see page 68.

*Laboratory Fees.*—Courses 1, \$12.50; 103, \$15; 199A, 199B, \$8.

## LOWER DIVISION COURSES

## 1. Fundamental Bacteriology. (4) I, II.

Miss Greene

Prerequisite: Chemistry 1A. Fee, \$12.50.

Early history of bacteriology; effects of physical and chemical agencies upon bacteria; biochemical activities of bacteria; the bacteriology of the air, water, soil, milk and dairy products, other foods; industrial applications. The laboratory exercises include an introduction to bacteriological technique.

Students who have credit for Bacteriology 6 will receive only three units for course 1.

## 6. General Bacteriology. (2) II.

Mr. Beckwith

A cultural course for non-technical students.

Students who have credit for Bacteriology 1 will receive only one unit for course 6.

## UPPER DIVISION COURSES

## 103. Advanced Bacteriology. (4) I.

Mr. Beckwith

Prerequisite: course 1. Fee, \$15.

The more advanced principles of the life activities, growth, and morphology of bacteria. The etiology of disease.

199A-199B. **Problems in Bacteriology.** (2-2) Yr. Mr. Beckwith, Miss Greene  
Open to qualified students by special arrangement. Fee, \$8 per semester.

### MICROBIOLOGY

#### GRADUATE COURSES

251A-251B. **Seminar in Microbiology.** (2-2) Yr.

Mr. Beckwith, Mr. Ball, Mr. Plunkett

273A-273B. **Research in Microbiology.** (2-5; 2-5) Yr.

Mr. Beckwith, Mr. Ball, Mr. Plunkett

### BOTANY

OLENUS L. SPONSLER, Ph.D., Professor of Botany.

CARL C. EPLING, Ph.D., Associate Professor of Botany.

ARTHUR W. HAUPT, Ph.D., Associate Professor of Botany.

ARTHUR M. JOHNSON, Ph.D., Assistant Professor of Botany.

ORDA A. PLUNKETT, Ph.D., Assistant Professor of Botany.

FLORA MURRAY SCOTT, Ph.D., Assistant Professor of Botany.

MARTHA HILEND KINSEY, M.A., Associate in Botany.

*Letters and Science List.*—All undergraduate courses in this department are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

*Preparation for the Major.*—Botany 1A-1B, 6 and 7, Chemistry 1A-1B or 2A-2B, German A, B. In addition to these courses, certain phases of botanical work require Geology 1A-1B, Physics 2A-2B, Bacteriology 1, and Zoölogy 1A.

*The Major.*—Seventeen units of upper division botany, including courses 105A-105B and 106A-106B; and in addition, seven units in botany or related courses—bacteriology, chemistry, geology, paleontology, and zoölogy—to be chosen with the approval of the department.

*Laboratory Fees.*—Courses 7, 10, \$3; 6, 111, 120, \$2.

#### LOWER DIVISION COURSES

1A. **General Botany.** (4) I, II.

Mr. Johnson

Lectures, Tu Th, 12; six hours laboratory.

A general course on the structure and functions, growth and reproduction, interrelationships, life habits, and economic relations of the seed plants.

1B. **General Botany.** (4) I, II.

Mr. Haupt, Mr. Plunkett

Lecture, M W, 12; six hours laboratory.

A continuation of course 1A; the evolution of the plant kingdom, dealing with the comparative morphology of all of the great plant groups.

6. **Plant Anatomy.** (3) I.

Miss Scott

Lecture, one hour; laboratory, six hours.

Recommended: course 10. Fee, \$2.

This course duplicates course 109 given prior to 1936-37.

The microscopic structure of the higher plants with particular reference to the development and differentiation of vegetative tissues.

**7. Plant Physiology. (4) I, II.**

Mr. Sponsler

Lecture, two hours; laboratory, six hours.

Prerequisite: Botany 6, and chemistry. Fee, \$3.

This course duplicates course 101 given prior to 1936-37.

Experimental work designed to demonstrate various activities of the plant.

**10. Botanical Microtechnique. (3) I.**

Mr. Haupt

Lecture, one hour; laboratory, six hours.

Prerequisite: course 1A-1B. Fee, \$3.

**UPPER DIVISION COURSES**

*General Prerequisite.*—Botany 1A-1B is prerequisite to all upper division courses, except 102 and 103.

**102. Forest Botany. (3) II.**

Mr. Epling

Lecture, one hour; laboratory, six hours, or equivalent field work.

Identification and distribution of the dominant woody species of California. For forestry majors and others interested in conservation, flood control, and soil erosion.

**103. Economic Botany. (2) I.**

Mr. Johnson

Lectures, two hours.

Prerequisite: course 1A, or its equivalent.

Designed for students in economics and geography. The lectures deal with the growth, distribution, and development of plants which form the basis of a few of the larger industries, such as those concerned with cereals, sugar, fibers, lumber, pulp and paper, cellulose products, etc.

**105A. Algae and Bryophytes. (4) I.**

Mr. Plunkett

Lecture, two hours; laboratory, six hours.

A study of the structure, development, and phylogenetic relationships of the principal orders of fresh water and marine algae, and of liverworts and mosses.

**105B. Pteridophytes and Gymnosperms. (4) II.**

Mr. Haupt

Lecture, two hours; laboratory, six hours.

Structure, development and phylogenetic relationships of the principal orders of ferns and gymnosperms.

**106A-106B. Angiosperms. (3-3) Yr.**

Mr. Epling

Lecture, one hour; laboratory, six hours, and additional field work to be arranged.

This course duplicates course 104A-104B given prior to September, 1936.

Course 102 may, by permission, be substituted for 106A.

A survey of the chief orders and families of the flowering plants involving a study of their structure, phylogenetic classification and geographical distribution. Designed for botany majors, teachers of nature study, and students in the College of Agriculture.

**111. Plant Cytology. (3) II.**

Miss Scott

Lecture, one hour; laboratory, six hours.

Prerequisite: courses 6, 10, and 105A or 105B. Fee, \$2.

Structure and physiology of the cell.



- 114. Advanced Plant Physiology. (3) I.** Mr. Sponsler  
 Conferences and laboratory.  
 Prerequisite: courses 6 and 7, chemistry, and physics.  
 Experimental work on certain functions of the plant.
- 119. Mycology. (3) I.** Mr. Plunkett  
 Lecture, one hour; laboratory, six hours.  
 Structure, development, and classification of the important genera and species of fungi. For students in botany; bacteriology, agriculture, and forestry.
- 120. Phytopathology. (3) II.** Mr. Plunkett  
 Lecture, one hour; laboratory, six hours. Fee, \$2.  
 Prerequisite: course 119.  
 A study of bacterial and fungus diseases of plants.
- 152. General Plant Ecology. (3) II.** Mr. Johnson  
 Lecture, one hour; laboratory and field, six hours.  
 Prerequisite: course 106A-106B.  
 Field and laboratory studies of plant communities and their relation to the environment.
- 195. Special Topics. (2) I, II.** The Staff (Mr. Sponsler in charge)  
 Open only to qualified seniors and graduate students.
- 199A-199B. Problems in Botany. (2-2) Yr.** The Staff (Mr. Sponsler in charge)  
 Prerequisite: senior standing.

#### GRADUATE COURSES

- 252A-252B. Seminar in Principles and Theories of Botany. (2-2) Yr.**  
 Mr. Sponsler, Mr. Epling, Mr. Haupt, Mr. Johnson
- 253A-253B. Seminar in Special Fields of Botany. (1-1) Yr.**  
 Mr. Sponsler, Mr. Epling, Mr. Haupt, Mr. Johnson
- 278A-278B. Research in Botany. (2-5; 2-5) Yr.** Mr. Sponsler in charge

## ZOÖLOGY

LOYE HOLMES MILLER, Ph.D., Professor of Biology.

BENNET M. ALLEN, Ph.D., Professor of Zoölogy.

<sup>1</sup>ALBERT W. BELLAMY, Ph.D., Associate Professor of Zoölogy.

GORDON H. BALL, Ph.D., Associate Professor of Zoölogy.

EDGAR L. LAZIER, Ph.D., Assistant Professor of Zoölogy.

RAYMOND B. COWLES, Ph.D., Assistant Professor of Zoölogy.

RUTH ANDERSON, Ph.D., Assistant Professor of Zoölogy.

SARAH ROGERS ATSATT, Ph.D., Assistant Professor of Zoölogy.

EMILY H. BARTLETT, Ph.D., Instructor in Biology.

WALTER MOSAUER, M.D., Ph.D., Instructor in Zoölogy.

A. MANDEL SCHECHTMAN, Ph.D., Instructor in Biology.

LEIGH M. DODSON, M.A., Associate in Zoölogy.

*Letters and Science List.*—All undergraduate courses in this department are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

*Preparation for the Major.*—Zoölogy 1A-1B, and one year of college chemistry, preferably Chemistry 1A-1B. French and German are recommended.

*The Major.*—Eighteen units of upper division work in zoölogy and six units of upper division work chosen from zoölogy or from *related* courses in anthropology, bacteriology, botany, chemistry, entomology, genetics, geography, home economics, paleontology, philosophy, physics, physiology, or psychology.

*Curriculum for Medical Technicians.*—For details, see page 68.

*Laboratory Fees.*—Physiology 1, 2, \$3; Zoölogy 1A, 1B, \$3; 1C, \$2; 4, \$5; 35, 100A, 100C, 105, \$3; 106, \$7.50; 107C, \$5; 111C, \$3; 112, \$2; 113D, \$2.50; 199A, 199B, \$3.

## ZOÖLOGY

### LOWER DIVISION COURSES

#### 1A. General Zoölogy. (5) I.

Mr. Ball, Mrs. Dodson

Lectures, two hours; quiz, one hour; laboratory, six hours; one required field trip. Fee, \$3.

An introduction to the facts and principles of animal biology.

#### 1B. General Zoölogy. (5) II.

Mr. Lazier, Mrs. Dodson

Lectures, two hours; quiz, one hour; laboratory, six hours. Fee, \$3.

Prerequisite: course 1A.

An introduction to vertebrate morphology, physiology, and embryology.

<sup>1</sup> In residence first semester only, 1986-87.

**1c. Elementary Embryology. (2) II.****Mr. Lazier**

Fee, \$2.

Designed for students who transfer to this University from other institutions without having had the embryological work covered in Zoölogy 1b. This work (or its equivalent in Zoölogy 1b) is required for admission to medical school.

Not open to students who have taken Zoölogy 1b at this University.

**4. Microscopical Technique. (2) I, II.****Miss Bartlett**

Laboratory, six hours; assigned readings.

Prerequisite: course 1A and high school chemistry. Fee, \$5.

The preparation of tissues for microscopical examination.

**35. General Human Anatomy. (3) II.****Miss Atsatt**

Lecture, two hours; laboratory, three hours. Fee, \$3.

Prerequisite: sophomore standing; course 1A or Physiology 1.

**UPPER DIVISION COURSES****100A. Genetics. (4) I.****Mr. Bellamy**

Lectures, two hours; seminar, one hour; laboratory, six hours.

Prerequisite: course 1B or Botany 1B or the equivalent, and junior standing. Fee, \$3.

The student is given an opportunity to become familiar with the principles of heredity and research methods in genetics.

**100B. Advanced Genetics. (2) II.****Mr. Bellamy**

Lectures, two hours; seminar, one hour.

Prerequisite: course 100A.

A continuation of 100A with special reference to experimental evolution. May be taken with 100C.

**100C. Advanced Genetics Laboratory. (2) II.****Mr. Bellamy**

Laboratory, six hours.

Prerequisite or concurrent: course 100B. Fee, \$3.

**101. Physiological Biology. (2) II.****Mr. Bellamy**

Prerequisite: Chemistry 8 and 9, or the equivalent.

Lectures, readings, and demonstrations of certain physico-chemical processes and the principles of living matter.

**\*103. Experimental Zoölogy. (2) II.**

Prerequisite: course 1A.

Lectures, reports on articles in scientific journals and special problems.

**105. Mammalian Embryology. (3) I, II.****Mr. Allen**

Lecture, one hour; laboratory, six hours.

Prerequisite: course 1A and either 1B or 35. Fee, \$3.

**106. Comparative Anatomy of the Higher Vertebrates. (4) I.****Mr. Lazier**

Lecture, two hours; laboratory, six hours.

Prerequisite: course 1A-1B (including embryology) and junior standing. Fee, \$7.50.

A study of the structural relationships of the vertebrates. Dissection of the elasmobranch, amphibian, and mammal.

\* Not offered, 1936-37.

- 107. Cytology. (2) I.** Mr. Allen  
 Prerequisite: course 1A.  
 Lectures and recitations.  
 The structure and activities of the cell, especially in development, in sex determination, and in heredity, with a general survey of histology.
- 107c. Cytology Laboratory. (2) I.** Mr. Allen, Miss Bartlett  
 Prerequisite or concurrent: course 107. Fee, \$5.
- 111. Parasitology. (2) II.** Mr. Ball  
 Prerequisite: course 1A.  
 General discussion of the biological aspects of parasitism and of the animal parasites of man and the domestic animals.
- 111c. Parasitology Laboratory. (2) II.** Mr. Ball  
 Prerequisite or concurrent: course 111. Fee, \$3.
- 112. Advanced Invertebrate Zoölogy. (4) I.** Mr. Lazier  
 Lectures, two hours; laboratory and field, six hours.  
 Prerequisite: course 1A. Course 1B is recommended. Fee, \$2.  
 Morphology, habits, habitats, and life histories of both marine and fresh water invertebrates, with especial reference to local faunas.
- 113. Vertebrate Zoölogy. (2) II.** Mr. Miller  
 Prerequisite: course 1A-1B.  
 Emphasis upon the habits, distribution, and ecology of the avifauna of California.
- 113c. Vertebrate Zoölogy: Laboratory. (2) II.** Mr. Miller
- 113d. Vertebrate Zoölogy. (2) II.** Mr. Cowles  
 Lectures, laboratory, and field work.  
 Prerequisite: course 1A-1B. Fee, \$2.50.  
 Ecology, life history, and taxonomy of the cold-blooded vertebrates.
- 118. Endocrinology. (2) II.** Mr. Allen  
 Prerequisite: course 1A.  
 Not open to students who have taken course 103 prior to September, 1936.  
 Lectures, reports on articles in scientific journals, and special problems.
- 199A-199B. Problems in Zoölogy. (2-2) Yr.** Mr. Allen and the Staff  
 Prerequisite: course 1A-1B and junior standing, with such special preparation as the problem may demand. Fee, \$3 per semester.

#### GRADUATE COURSES

- 251A-251B. Seminar in Zoölogy. (1-2; 1-2) Yr.**  
Mr. Allen, Mr. Ball, Mr. Bellamy, Mr. Miller
- 251C-251D. Second Seminar in Zoölogy. (1-1) Yr.**  
Mr. Allen, Mr. Ball, Mr. Bellamy, Mr. Miller
- 274A-274B. Research in Zoölogy. (2-5; 2-5) Yr.**  
Mr. Allen, Mr. Ball, Mr. Bellamy, Mr. Miller

## BIOLOGY

## LOWER DIVISION COURSES

- 1. Fundamentals of Biology.** (3) I, II. Mr. Cowles, Mr. Haupt  
Students who have taken or are taking Botany 1A or Zoölogy 1A will not receive credit for Biology 1.  
Important principles of biology illustrated by studies of structure and activities of living organisms, both plants and animals. One field trip is required.
- \*10. Fundamentals of Biology: Laboratory and Field.** (1) I, II.  
Prerequisite or concurrent: Biology 1.
- 12. General Biology.** (3) II, M W F, 10. Mr. Cowles, Mr. Miller  
Prerequisite: Biology 1, Botany 1A, or Zoölogy 1A.  
Lectures, readings, reports on materials and field observations.  
Three lectures and one demonstration hour each week with two required field trips.  
A course in systematic and ecologic biology with emphasis on the local environment.

## PALEONTOLOGY†

## LOWER DIVISION COURSE

- 1. General Paleontology.** (2) I, Tu Th, 10. Mr. Miller  
Lectures, quizzes, and two required Saturdays in the field.  
A discussion of the general principles of paleontology, the influences that surrounded the ancient life of the earth, and some of the ways in which animals respond to such influences.
- 104. Vertebrate Paleontology.** (3) I. Mr. Miller  
Lecture, one hour; laboratory, six hours.  
Prerequisite: Zoölogy 1A-1B.  
A study of the fossil land vertebrates of the western hemisphere with reference to the present faunas and distribution.

## PHYSIOLOGY‡

## LOWER DIVISION COURSES

- 1. General Human Physiology.** (3) I. Miss Atsatt  
Lectures, two hours; laboratory, three hours.  
Prerequisite: Chemistry 2A-2B or Chemistry 1A; and Zoölogy 1A or Biology 1. Fee, \$3.  
Majors in zoölogy and students in the pre-medical and pre-dental curricula are admitted only upon the request of their advisers.
- 2. Human Physiology.** (2) I. Miss Atsatt  
Lecture, one hour; laboratory, three hours.  
Prerequisite: Physiology 1 or Zoölogy 1B; or may be taken concurrently with Physiology 1. Fee, \$3.

\* Not offered, 1986-87.

† Courses in Invertebrate Paleontology are offered by the Department of Geology (p. 152).

‡ The University of California at Los Angeles does not offer a major in physiology. Students wishing to satisfy the requirements for a major in physiology are referred to the *General Catalogue* of the Departments at Berkeley.

### MATHEMATICS

EARLE R. HEDRICK, Ph.D., Professor of Mathematics.

GEORGE E. F. SHERWOOD, Ph.D., Professor of Mathematics.

GLENN JAMES, Ph.D., Associate Professor of Mathematics.

PAUL H. DAUS, Ph.D., Associate Professor of Mathematics.

WILLIAM M. WHYBURN, Ph.D., Associate Professor of Mathematics.

MAX ZOERN, Ph.D., Associate Professor of Mathematics.

HARRIET E. GLAZIER, M.A., Assistant Professor of Mathematics.

GUY H. HUNT, C.E., Assistant Professor of Applied Mathematics.

EUPHEMIA R. WORTHINGTON, Ph.D., Assistant Professor of Mathematics.

WENDELL E. MASON, M.S.E., M.E., Assistant Professor of Applied Mathematics.

CLIFFORD BELL, Ph.D., Assistant Professor of Mathematics.

M. R. HESTENES, Ph.D., Instructor in Mathematics.

---

HARRY M. SHOWMAN, E.M., M.A., Lecturer in Mathematics and Registrar.

*Letters and Science List.*—All undergraduate courses in mathematics except 19, and all undergraduate courses in civil engineering, are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

*Preparation for the Major.*—Required: courses C (or the equivalent), 8, 6, 3A, 3B, 4A, with an average grade of C, except that students who have completed two years of high school algebra and also trigonometry may be excused, upon examination, from course 8. Course 109 may be replaced, by permission, by the equivalent course 4B. Recommended: physics, astronomy, and a reading knowledge of French and German.

*The Major.*—Courses 111, 112A-112B, and 119, together with fourteen additional upper division units, must be included in every mathematics major. The student must maintain an average grade of C in upper division courses in mathematics.

Students who are preparing to teach mathematics in high school are advised to elect courses 101, 102, 104, 190.

*Business Administration.*—Freshmen in this college are required to take courses 8 and 2, except that students who have completed two years of high school algebra and also trigonometry may be excused, upon examination, from course 8.

*Pre-Engineering and Pre-Mining.*—The University of California at Los Angeles offers the first two years of the curricula of the Colleges of Engineering and Mining in Berkeley. Students intending to pursue their studies in the engineering colleges at Berkeley should consult the departmental pre-engineering adviser before making out their programs.

The minimum requirements for admission to the courses 3A-3B, 4A-4B or to 3A, 3C-4B are high school algebra, plane geometry, plane trigonometry, and course 8 unless excused as noted above. Prospective engineering students are urged, however, to add, in their high school course, another half-year of algebra and solid geometry to this minimum preparation.

*Fees.*—Civil Engineering 1FA, 1FB, \$5; Civil Engineering 3, \$25.

## LOWER DIVISION COURSES

Students who have not had trigonometry in the high school must elect course C before they will be admitted to any further work except course 8 or course 2.

**C. Trigonometry.** (2) I, II. Tu Th, 10, 11. Mr. Bell, Miss Glazier

Prerequisite: high school geometry and one and one-half years of elementary algebra or course 8.

Not open to students who have had trigonometry in high school.

**F. Spherical Trigonometry.** (1) I, II. Mr. Whyburn

Prerequisite: plane trigonometry.

**2. Mathematics of Finance.** (3) I, II. M W F, 10. Mr. Daus

Prerequisite: course 8.

**3A. Plane Analytic Geometry.** (3) I, II. M W F, 8, 9, 12. Mr. Bell, Mr. Mason

Prerequisite: courses C and 8 or the equivalents.

**3AB. Analytic Geometry and First Course in Calculus.** (6) II. Mr. Daus  
M Tu W Th F, 7:45.

Prerequisite: courses C and 8, or the equivalents.

This course is equivalent to Mathematics 3A and 3B.

**3B. First Course in Calculus.** (3) I, II. Mr. Hunt, Miss Glazier

Prerequisite: course 3A.

**3C. First and Second Courses in Calculus.** (6) I. Mr. Sherwood  
M Tu W Th F, 7:45.

Prerequisite: course 3A.

This course is equivalent to courses 3B and 4A. Engineers must take course 4B also.

**4A. Second Course in Calculus.** (3) I, II. M W F, 10.

Prerequisite: course 3B.

**4B. Third Course in Calculus.** (3) I, II. M W F, 9, 11. Mr. James

Prerequisite: course 4A.

Course 4B may be substituted for Mathematics 109 with the approval of the department.

**6. Solid Analytic Geometry and Determinants.** (2) I, II. Tu Th, 10.

Prerequisite: course 3A and consent of instructor. Mr. James

**7. Elementary Mathematics for Social Sciences.** (3) II. Mr. Hedrick

Prerequisite: course 8 or the equivalent.

This course gives in brief form an introduction to analytic geometry and the calculus, and other mathematical material particularly designed for students of the social sciences.

**8. College Algebra.** (3) I, II. M Tu W Th F, 8, 9, 12.

Mr. Sherwood, Mr. Hunt and the Staff

Prerequisite: at least one year of high school algebra.

Within a few weeks the class meetings will be reduced to three a week for all students except the minority who require extra review and drill.

- 10A. Vectors and Allied Topics. (2) I.** Mr. Bell  
Prerequisite or concurrent: course 4A.  
Prescribed for pre-engineering students in the mechanical and electrical engineering curricula.
- 10B. Elementary Differential Equations and Applications. (2) II.** Mr. Bell  
Prerequisite or concurrent: course 4B.  
Prescribed for pre-engineering students in the mechanical and electrical engineering curricula.  
Not open for full credit to students who have credit for course 119.
- 19. Foundations of Arithmetic. (2) I, II.** Miss Glazier, Miss Worthington  
Prerequisite: sophomore standing.

### UPPER DIVISION COURSES

Students may not elect upper division courses unless they have taken or are taking Mathematics 3B and 4A.

- 101. Elementary Geometry for Advanced Students. (3) I. M W F, 11.**  
Prerequisite: course 3A. Mr. Daus  
Selected topics in elementary geometry, with particular emphasis on recent developments.
- 102. Elementary Algebra for Advanced Students. (3) II. M W F, 2.**  
Prerequisite: courses 8, 3B, and 4A. Miss Worthington  
Selected topics in algebra, with particular reference to modern points of view.
- 104. History of Mathematics. (3) I. M W F, 2.** Miss Glazier  
A non-technical course open to students who have some knowledge of the fundamental ideas of analytic geometry and calculus.
- 109. Third Course in Calculus. (3) I, II. M W F, 9, 11.** —  
Prerequisite: courses 3B and 4A.  
Course 4B may be substituted for Mathematics 109 with the approval of the department.
- 111. Theory of Algebraic Equations. (3) I, II. M W F, 2.**  
Prerequisite: courses 8, 3B, and 4A. Mr. James, Mr. Bell
- 112A-112B. Introduction to Higher Geometry. (2-2) Beginning each semester. Tu Th, 11.** Mr. Daus, Mr. Sherwood  
Prerequisite: courses 6, 3B, and 4A.
- \*113. Synthetic Projective Geometry. (3) II.** Mr. Daus  
Prerequisite: course 112A-112B, or consent of the instructor.
- 114. Modern Geometry. (3) II.** Mr. Sherwood  
Prerequisite: courses 6, 112A-112B.
- 115. Theory of Numbers. (3) I.** Mr. Daus

\* Not offered, 1936-37.



- 119. Differential Equations.** (3) I, II. M W F, 9. Mr. Bell  
Prerequisite: course 109 or its equivalent.  
Not open for full credit to students who have had course 10B.
- 121. Mathematical Theory of Statistics.** (3) II. —  
Prerequisite: course 109 or its equivalent.
- 122A-122B. Advanced Calculus.** (3-3) Yr. M W F, 10. Mr. Hedrick  
Prerequisite: course 109.
- 124. Vector Analysis.** (3) I. Mr. James, Mr. Whyburn  
Prerequisite: course 109 and one year of college physics.
- 125. Analytic Mechanics.** (3) II. Mr. Whyburn  
Prerequisite: course 109 or its equivalent, and Physics 105.
- 190. The Teaching of Mathematics.** (3) II. M W F, 12. Miss Glazier  
Prerequisite: courses 3B and 6A.  
A critical inquiry into present-day tendencies in the teaching of mathematics.
- 199. Special Problems in Mathematics.** (3) I, II. The Staff  
Prerequisite: consent of the instructor.

## GRADUATE COURSES

- \*211. Higher Plane Curves.** (3) I. Mr. Daus
- 215. Non-Euclidean Geometry.** (3) I. Mr. Daus
- 216. Differential Geometry.** (3) II. Mr. James
- 221A-221B. Higher Algebra.** (3-3) Yr. Mr. Zorn
- 224A-224B. Functions of a Complex Variable.** (3-3) Yr. Mr. Hedrick
- 242A-242B. Functions of a Real Variable.** (3-3) Yr. Mr. Whyburn
- 260. Seminars.** (2-3) I, II.

Topics in analysis, geometry, and algebra, and in their applications, by means of lectures and informal conferences with members of the staff. During 1936-37, there will be lecture seminars on the following subjects, in charge of the persons indicated: (a) Algebraic Geometry, Mr. Daus; (b) Differential Geometry, Mr. James; (c) Complex Variables, Mr. Hedrick; (d) Differential Equations, Mr. Whyburn; (e) Algebra, Mr. Zorn.

## CIVIL ENGINEERING\*

- 11A-11B. Plane Surveying Lectures.** (2-2) Beginning each semester. Mr. Hunt, Mr. Mason  
Prerequisite: trigonometry and geometric drawing.
- 1FA-1FB. Plane Surveying Field Practice.** (1-1) Beginning each semester. Mr. Hunt, Mr. Mason  
M or W, 2-5; Tu or Th, 1-4; S, 8-11.  
Prerequisite or concurrent: course 11A-11B. Fee, \$5 per semester.
- 3. Summer Class in Plane Surveying.** (3) Mr. Mason  
Prerequisite: course 1FA-1FB. Fee, \$25.  
Four weeks of field work after the close of the college year.
- 8. Materials of Engineering Construction.** (2) I, II. Tu Th, 12. Mr. Mason  
Prerequisite: sophomore standing.

\* First two years only.

## MECHANIC ARTS

HAROLD W. MANSFIELD, Assistant Professor of Mechanic Arts and Director of Shops.

FOSS R. BROCKWAY, Associate in Mechanic Arts.

JAMES W. MARSH, Associate in Mechanic Arts.

ADRIAN D. KELLER, M.A., Associate in Mechanic Arts.

CHARLES H. PAXTON, B.S., Associate in Mechanic Arts.

THOMAS A. WATSON, Associate in Mechanic Arts.

WENDELL E. MASON, M.S.E., M.E., Assistant Professor of Applied Mathematics.

## THE TEACHERS COLLEGE

*Preparation for the Major.*—Mechanical Engineering D; Mechanic Arts 11, 14, 15A-15B, 16, 17A, 18A, 21; recommended, mathematics and physics.

*The Major, leading to the Special Secondary Credential in Industrial Arts Education.*—Thirty units of work approved by the department, of which twenty-four units must be in upper division courses.

*The Minor in Education.*—Education 103, 160, 164, 170; Directed Teaching, six to ten units; Mechanic Arts 190.

*Special Secondary Credential in Vocational Arts.*—A two-year curriculum leading to the special secondary teaching credential in vocational arts is maintained under the provisions of the Smith-Hughes Act. This course is open to experienced journeymen workmen who are high school graduates. All applications must be approved by the Supervisor of Trade and Industrial Teacher Training of the Division of Vocational Education. A statement of the requirements for the Limited Credential in Industrial Arts Education will be found in Bulletin 12 published by the State Board of Education, July, 1935.

## THE COLLEGE OF LETTERS AND SCIENCE\*

*Letters and Science List.*—Mechanical Engineering D, 1, 2, and 6 are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

*Laboratory Fees.*—Mechanic Arts 11, 14, 15A, 17A, 17B, 18A, 18B, 21, 31, 101A, 101B, 102, 104A, 104B, 105, 107A, 107B, 112, 114, 115, \$3; Mechanical Engineering 10B, \$5.

## MECHANICAL ENGINEERING

D. Engineering Drawing. (2) I, II.

Mr. Mansfield

Section 1, Tu Th, 9; Section 2, Tu Th, 10. Drafting, four hours to be arranged.

Lettering, orthographic projection, pictorial representation, developed surfaces and intersections, dimensioning, fastenings for machinery, working drawings, topographical drawing.

\* The University of California at Los Angeles offers the first two years in preparation for admission to the junior year of the College of Engineering in the University at Berkeley. Students intending to pursue their studies in this college should present their programs for approval to the pre-engineering adviser.

- 1. Elements of Heat Power Engineering.** (3) I. M W F, 11. Mr. Paxton  
Heat engines, steam power plants, boiler room equipment, steam engines, turbines; Diesel and other internal combustion engines; fuels.
- 2. Descriptive Geometry.** (3) I, II. Mr. Paxton  
Lecture, Section 1, Tu, 10; Section 2, Tu, 11. Drafting, afternoons 1-4 (six hours to be arranged).
- 6. Machine Drawing.** (3) I, II. Mr. Paxton  
Lecture, Th, 11. Drafting, afternoons 1-4 (six hours to be arranged). Design and delineation of simple machine parts in the drafting room, with special emphasis upon the production of drawings which conform to standard practice.
- 10B. Treatment of Engineering Materials.** (2) I, II.  
Mr. Mason, Mr. Watson, Mr. Keller  
Prerequisite: Civil Engineering 8. Fee, \$5.

## MECHANIC ARTS

## LOWER DIVISION COURSES

- 11. Bench Work in Wood.** (2) I. Mr. Keller  
Fee, \$3.  
Fundamental hand tool and joinery operations, including the use of saw, plane, chisels, and the layout and development of all joints essential in wood construction. Operation of speed lathe, including spindle, faceplate and chuck turning.
- 13A-13B-13C. Printing.** (2-2-2) Three semesters. Mr. Brockway  
Principles, maintenance, and operation of the school print shop. Problems and practice in job printing, type arrangement, and newspaper make-up; type and equipment.
- 14. Storage Batteries.** (2) I. Mr. Marsh  
Fee, \$3.  
Lead-burning, battery construction, battery charging, equalizing, treatments, cycling, testing; battery testing by use of cadmium electrode, hydrometer, high rate discharge, and the new S.A.E. methods; the chemical reactions and make-up of the battery; plate formation, separators, and electrolytes.
- 15A-15B. The Automobile.** (3-3) Yr. Mr. Brockway, Mr. Marsh  
**15A.** Principles of reconstruction and maintenance. Cut-away and dry chassis units used. Take-down and assembly of automotive units; adjustment and operation of internal-combustion engines; use and construction of automotive measuring devices. Fee, \$3.  
**15B.** Principles of design and operation of internal-combustion engines, clutches, gear sets, frames, springs, wheels, and tires, with demonstrations and instruction in adjustments and general upkeep of the automobile.
- 16. Architectural Drawing.** (2) I. Mr. Mansfield  
An introduction to architectural drawing; the house, plans, elevations, sections, working drawings; architectural symbols and details; perspective drawing; lettering; reproduction by the blue print and other printing processes.

**17A-17B. Machine Shop. (2-2) Yr.**

**Mr. Watson**

Fee, \$3.

Elementary machine shop practice; fundamental operations and tool processes; operations of standard power tools. Personal or research development problems considered.

**18A-18B. Sheet Metal. (2-2) Yr.**

**Mr. Mansfield, Mr. Marsh**

Fee, \$3 per semester.

Work in tin plate, galvanized iron, and other metals; development of patterns in drafting room; use, care, and upkeep of bench and machine equipment.

**19A-19B. Related Technical Subjects. (3-3) Beginning each semester.**

**Mr. Paxton, Mr. Marsh**

**21. General Woodwork. (2) II.**

**Mr. Keller**

Fee, \$3.

Fundamentals of construction as applied to small boats, paddle boards, and surf boards. Building construction including simple form building, framing, and use of the steel square.

**31. Elements of Machine Woodwork. (2) I.**

**Mr. Keller**

Fee, \$3.

Adjustment, maintenance, and use of stationary and portable wood-working machinery, including circular saw, band saw, jointer, router, and shaper. Development of projects and problems as required.

**UPPER DIVISION COURSES**

**101A-101B. Cabinet Work. (3-3) Yr.**

**Mr. Keller**

Fee, \$3 per semester.

101A. Case and furniture making; construction and use of jigs, methods of laying out various parts, preparation and application of paints, stains, and varnishes in finishing and refinishing. Development of models showing correct construction of table corners, rails, legs, and drawers. Brief presentation of period furniture.

101B. Advanced cabinet work and furniture making; brief discussion of design as applied to furniture. The use of carving, inlay, marquetry, upholstering tools, materials and equipment. Construction of advanced projects.

**102. General Shop. (2) I.**

**Mr. Brockway**

Fee, \$3.

Analysis and construction of "projects" involving combined use of various tools, materials, and processes.

**104A-104B. Applied Electricity. (2-2) Yr.**

**Mr. Marsh**

Fee, \$3 per semester.

104A. Direct current electric and magnetic circuits; calculation of field and armature winding; principles of motors and generators; wire splicing, construction of circuits and various projects.

104B. Induction, inductance, alternating current generators and motors; single, two, and three phase currents, star and delta connections, transformers; calculations for winding transformers; construction of projects involving the use of alternating current electricity. Individual problems considered.

**105. Automotive Laboratory. (3) I.****Mr. Marsh**

Fee, \$3.

The Diesel engine, two and four stroke; marine and stationary, automotive and aeronautic types; governors and fuel nozzles; air and airless injection; the use of card indicators and pyrometers in operation; petroleum, fuel and lubricants, and their laboratory tests; gasoline testing for anti-knock qualities.

**106A-106B. Industrial Arts Drawing. (2-2) Yr.****Mr. Mansfield**

Technical sketching, lettering, assembly and detail drawings, tracing and reproduction; drawing and design of shop projects suitable for high school classes.

**107A-107B. Machine Shop. (2-2) Yr.****Mr. Watson**

Prerequisite: course 17A-17B. No prerequisite for graduate students on consent of instructor. Fee, \$3 per semester.

Advanced machine shop practice; machine construction and repair; tool-making; use of precision instruments; development work on research apparatus or personal problems.

**112. General Metal Work. (2) II.****Mr. Brockway**

Fee, \$3.

A study of metals and metal working methods; heat treatments; oxy-acetylene welding, brazing, forging, and plate metal working.

**114. Electric Apparatus. (2) II.****Mr. Marsh**

Prerequisite: course 104A-104B. Fee, \$3.

Electrical instruments and meters, their principles, use, and installation; operation of complete student plant including alternators, transformers, exciters, motors, and synchronous condenser; switchboard work, three phase, single phase and three wire systems of distribution. Lectures, demonstrations, and construction work.

**115. Automobile Reconstruction. (3) II.****Mr. Brockway**

Fee, \$3.

Principles of automobile repair and maintenance for the technical student and individual car owner. Engine reconstruction; trouble location, corrective methods. Modern automotive machine tool use; cylinder grinding, piston fitting and valve reconditioning. Fender and body maintenance.

**125. Tractors. (3) II.****Mr. Brockway**

Fee, \$3.

Diesel and gasoline tractors; principles of operation in laboratory and field; fuels and lubricants; drives and controls. Practice in taking down, assembling, and adjusting. Approved methods of maintenance.

**190. Organization and Administration of Industrial Arts Education. (2) II.****Mr. Mansfield**

## MILITARY SCIENCE AND TACTICS

JOHN S. UPHAM, Colonel, U. S. Army, Professor of Military Science and Tactics.

DON R. NORRIS, Major, U. S. Army, Associate Professor of Military Science and Tactics.

OLIVER E. TRECHTER, Major, U. S. Army, Associate Professor of Military Science and Tactics.

JOHN C. NEWTON, Major, U. S. Army, Assistant Professor of Military Science and Tactics.

WYNOT B. IRISH, Captain, U. S. Army, Assistant Professor of Military Science and Tactics.

JOHN T. ZELLARS, A.B., Major, U. S. Army, Assistant Professor of Military Science and Tactics.

— — —, Assistant Professor of Military Science and Tactics.

*Letters and Science List.*—All undergraduate courses in this department are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

The University of California at Los Angeles does not offer a major in military science and tactics in the College of Letters and Science. In Berkeley, a combination major of military science and either (a) history and political science or (b) jurisprudence may be taken. Students wishing to satisfy the requirements for such a combination major are referred to the General Catalogue of the Departments at Berkeley.

The courses in military training are those prescribed by the War Department for infantry and coast artillery units of the senior division of the Reserve Officers' Training Corps. The basic course in coast artillery, only, is offered in 1936-37. The United States furnishes arms, equipment, uniforms, and some textbooks for the use of the students belonging to such units. An amount necessary to replace articles not returned by the students will be collected by the Comptroller.

The student who is found by the Medical Examiner to be ineligible for enrollment in military science and tactics may be assigned by the Examiner to the individual gymnastics section of Physical Education 3.

The primary object of establishing units of the Reserve Officers' Training Corps is to qualify students for appointment in the Officers' Reserve Corps of the United States Army. Students who complete the advanced course and who participate in such summer camps as the Secretary of War may prescribe are eligible upon graduation for appointment and commission by the President of the United States in the Officers' Reserve Corps, which is intended to furnish a great part of the commissioned personnel for the temporary forces which this nation will require in time of emergency.

The courses are divided into two groups, viz., the basic course and the advanced course, with distinctive missions as indicated below.

### BASIC COURSE

The purpose of this course is to produce better citizenship through sound character development, under the guidance of the Constitution of the United States.

The basic course is prescribed for all first-year and second-year undergraduate male students who are citizens of the United States, able-bodied and under twenty-four years of age at the time of admission to the University. A first-year or second-year student claiming exemption because of non-citizenship, physical disability, or age will present a petition on the prescribed form for such exemption. Pending action on his petition the student will enroll in and enter the course prescribed for his year.

Students who have received training in a junior R. O. T. C. unit may be given advanced standing on the basis of two years junior R. O. T. C. for one year senior R. O. T. C. However, advanced standing will not excuse a student from the two years basic training required by the University unless he elects to take the advanced course, in which event junior R. O. T. C. credit to the extent of 1½ years senior R. O. T. C. credit may be given. Application for advanced standing must be made when registering and must be accompanied by a recommendation from the professor of military science and tactics at the school which the student attended.

#### **1A-1B. Basic Military Training. (1½-1½) Yr.**

Mr. Upham, Mr. Trechter, Mr. Norris, Mr. Zellars,  
Mr. Newton, Mr. Irish, —

†Field, M F, 8, 11, 1.

Instruction in National Defense Act. Obligations of citizenship, military history and policy, current international situation, military courtesy, military hygiene and first aid, map reading, military organization, rifle marksmanship, primary instruction in coast artillery ammunition, weapons and material, leadership to include the duties of a private.

#### **2A-2B. Basic Military Training. (1½-1½) Yr.**

Mr. Upham, Mr. Trechter, Mr. Norris, Mr. Zellars,  
Mr. Newton, Mr. Irish, —

†Field, M F, 8, 11, 1.

Instruction in military history, characteristics of infantry weapons, automatic rifle, musketry, scouting and patrolling, combat principles of the squad and section, leadership to include the duties of a corporal.

### **ADVANCED COURSE**

The purpose of this course is to select and appoint qualified graduates in the Officers' Reserve Corps of the United States Army.

The advanced course is prescribed for such third-year and fourth-year students as have completed the basic course and elect to continue their military training.

Any member of the senior division of the Reserve Officers' Training Corps who has completed two academic years of service in that division, who has been selected for further military training by the Vice-President and Provost of the University of California at Los Angeles and the professor of military science and tactics, and who executes the following written agreement, will be entitled, while not subsisted in kind, to a commutation of subsistence fixed by the Secretary of War in accordance with law (about \$72.00 per year).

† Each student must enroll for two hours of field instruction and one hour of class instruction each week.

....., 193.....  
In consideration of commutation of subsistence to be furnished in accordance with law, I hereby agree to complete the advanced course Infantry R. O. T. C. in this or any other institution where such course is given, to devote five hours per week during such period to military training prescribed and to pursue the courses of camp training during such period as prescribed by the Secretary of War.

.....  
(Signature)

The course of camp training is for six weeks during the summer vacation normally following the student's completion of the first year of the advanced course. The United States furnishes uniform, transportation and subsistence and pays students at the rate prescribed for the seventh enlisted grade of the regular army. Students who attend receive one-half unit of credit for each week of the duration of the camp.

Cadet officers and, so far as practicable, sergeants of the unit, will be appointed from members of the senior and junior classes, respectively.

**103A. Advanced Infantry Training. (3) I, II.**

Tu W Th, 8, 10.

Instruction and practice in the duties of officers in connection with the basic course; instruction in pistol and rifle marksmanship, howitzer company weapons, aerial photographs, combat principles of the rifle platoon, map reading, leadership to include duties of the platoon sergeant.

**103B. Advanced Infantry Training. (3) I, II.**

Mr. Newton

Tu W Th, 8, 10.

Instruction and practice in duties of an officer in connection with the basic course; instruction in machine guns, combat principles of machine gun and rifle platoon, leadership to include duties of the company officer.

**104A. Advanced Infantry Training. (3) I, II.**

Mr. Trechter, Mr. Irish

Tu W Th, 9, 11.

Instruction and practice in the duties of an officer in connection with the basic course; instruction in military history and military law, combat principles of rifle and machine gun platoon, leadership to include duties of company officer and battalion staff.

**104B. Advanced Infantry Training. (3) I, II.**

Mr. Trechter, Mr. Irish

Tu W Th, 9, 11.

Instruction and practice in the duties of an officer in connection with the basic course, instruction in company administration and supply, combat principles to include rifle and machine gun company and howitzer platoon, tanks and mechanization, infantry field signal communications, leadership to include duties of company officers and battalion staff.

Students who satisfactorily complete a course in a Reserve Officers' Training Corps or a military training summer camp conducted by the United States Government may receive credit toward graduation at the rate of one-half unit per week for each course completed. But it is provided (a) that no credit thus earned in or after 1925 shall excuse a student from the courses in military science and tactics required of all male undergraduates during their freshman and sophomore years, and (b) that the total credit thus earned by any student shall not exceed six units.



## MUSIC

ARNOLD SCHOENBERG, Professor of Music.

FRANCES A. WRIGHT, Associate Professor of Music.

LEROY W. ALLEN, M.A., Assistant Professor of Music.

SQUIRE COOP, Lecturer in Music.

ALEXANDER SCHREINER, Lecturer in Music and University Organist.

TUDOR WILLIAMS, Lecturer in Music.

HELEN CHUTE DILL, M.A., Supervisor of Training, Music.

LAVERNA L. LOSSING, M.A., Supervisor of Training, Music.

## The Teachers College

*Preparation for the Major.*—Courses 1A-1B, 2A-2B, 7A-7B, 14A-14B, 35A-35B.

*The Major, leading to the Special Secondary Credential in Music.*—Courses 104A-104B, 105A-105B, 108A-108B, 109A-109B, 111A-111B, 114A-114B.

*The Minor in Education.*—Education 103, 170; Directed Teaching, 6-10 units; Music 112A-112B.

## The College of Letters and Science

*Letters and Science List.*—All undergraduate courses except 7A-7B, 18A-18B, 46ABCD, 108A-108B, 109A-109B, 112A-112B. A major in music is not offered in the College of Letters and Science.

## LOWER DIVISION COURSES

1A-1B. *Solfeggio.* (3-3) Yr.

Miss Wright

Elementary theory, dictation, and music reading. Basic course for the major in music.

Elementary theory: preparation for harmony; working knowledge of major and minor scales; diatonic chord lines and intervals.

Dictation: one, two, and three part melodic dictation.

2A-2B. *The History and Appreciation of Music.* (2-2) Yr. Mr. Schreiner

The consideration of music from formal, esthetic, and historical standpoints.

\*7A-7B. *Elementary Voice.* (2-2) Yr.

Mr. Williams

9A-B-C-D. *Chorus.* (1 unit each semester.)

Mr. Coop

10A-B-C-D. *Orchestra.* (2 units each semester.)

Mr. Allen

14A-14B. *Counterpoint.* (2-2) Yr.

Mr. Schoenberg

Prerequisite: course 35A-35B.

This course duplicates course 101A-101B given prior to September, 1936. In 1936-37, this course may be counted as upper division credit on the major or minor in music.

\* Restricted to major students in music.

15A-15B. Strings, Elementary. (2-2) Yr.	Mr. Allen
16A-16B. Brass, Elementary. (2-2) Yr.	Mr. Allen
17A-17B. Woodwind, Elementary. (2-2) Yr.	Mr. Allen
18A-18B. Piano, Elementary. No credit. Yr. Restricted to students in the Teachers College. This course displaces one unit on the students' study list.	—
35A-35B. Harmony. (3-3) Yr.	Mr. Schreiner
37A-37B. Piano, Intermediate. (2-2) Yr.	Miss Wright
46A-B-C-D. University Band. (1 unit each semester.)	Mr. Allen

# UPPER DIVISION COURSES

The piano requirement, prerequisite to junior standing in the Department of Music, is the ability to play such music as the accompaniments in the Teacher's Manuals of the *Music Hour Series* and the *Progressive Series*, four-part hymns and folk songs, and contrapuntal compositions equivalent to *First Lessons in Bach* edited by Walter Carroll. In special cases this requirement may be reduced for students with corresponding proficiency on other approved instruments.

104A-104B. Form and Analysis. (2-2) Yr. Prerequisite: course 35A-35B. Analysis of homophonic and contrapuntal forms.	Mr. Schoenberg
105A-105B. Composition. (2-2) Yr. Prerequisite: course 14A-14B, 104A-104B. In 1936-37, 104A-104B and 105A-105B may be taken concurrently. Senior standing. Vocal and instrumental composition in the smaller forms.	Mr. Schoenberg
*108A-108B. Advanced Voice. (2-2) Yr. Prerequisite: course 7A-7B.	Mr. Williams
109A-109B. Conducting. (1-1) Yr. Prerequisite: courses 1A-1B, 35A-35B. The theory and practice of conducting choral and orchestral organizations.	Mr. Coop
110A-110B. String Ensemble. (1-1) Yr. Prerequisite: permission of the instructor.	Mr. Allen
111A-111B. Advanced History and Appreciation. (2-2) Yr. Prerequisite: junior standing.	Mr. Coop
112A-112B. Music Education. (3-3) Yr. Prerequisite: junior standing. Organization and administration of music in elementary and secondary schools.	Miss Wright

\* Restricted to major students in music.

**114A-114B. Instrumentation. (2-2) Yr.****Mr. Coop**

Prerequisite: course 35A-35B, and junior standing.

The theoretical study of the instruments of the orchestra, the reading of orchestral scores, and an introduction to orchestration. The writing of orchestral scores.

**116A-116B. Piano, Interpretation. (1-1) Yr.****Mr. Coop**

Prerequisite: permission of the instructor.

**118A-B-C-D. A Cappella Choir. (2 units each semester.)****Mr. Coop**

Prerequisite: open to all students by permission of the instructor.

The study and practice of the best choral and a cappella music for public performance. Lectures on voice, ensemble singing, and the aesthetics of choral music; with emphasis on the polyphonic music of the classical period.

**119A-119B. Woodwind Ensemble. (1-1) Yr.****Mr. Allen**

Prerequisite: permission of the instructor.

**120A-120B. Brass Ensemble. (1-1) Yr.****Mr. Allen**

Prerequisite: permission of the instructor.

This course duplicates 119A-119B given prior to September, 1936.

**122A-122B. Double Counterpoint, Canon, and Fugue. (2-2) Yr.****Mr. Schoenberg**

Prerequisite: course 14A-14B.

**PROFESSIONAL COURSES****360A. Elementary Music Education. (2) I, II.****Mrs. Dill**

Prerequisite: sophomore standing.

A course in music education designed to prepare the general elementary teachers to teach music under supervision. Required of all candidates for the general elementary credential.

**360B. Elementary Music Education. (2) I, II.****Miss Lossing**

Prerequisite: sophomore standing.

A course in music education for the general elementary teacher. The emphasis is upon music in the integrated program. Required of all candidates for the general elementary credential.

# PHILOSOPHY

ERNEST C. MOORE, Ph.D., LL.D., Professor of Philosophy and Education.

CHARLES H. RIEBER, Ph.D., LL.D., Professor of Philosophy, Emeritus.

JOHN ELOF BOODIN, Ph.D., Professor of Philosophy.

DONALD A. PIATT, Ph.D., Professor of Philosophy.

HUGH MILLER, Ph.D., Associate Professor of Philosophy.

DONALD C. WILLIAMS, Ph.D., Assistant Professor of Philosophy.

ISABEL CREED, Ph.D., Instructor in Philosophy.

KATE GORDON, Ph.D., Professor of Psychology.

The department offers upper division courses of two types:

(1) Courses dealing with the principles of wide fields of study and showing the interrelations of the special studies pursued in other departments. This type includes courses 104A-104B, 112, 121, 146, 150, 151, 152, 153, 164, 173. These are open to students of junior standing who, in the judgment of the instructors are adequately prepared by fundamental work in this or other departments. Such courses should be chosen with reference to the student's major interest.

(2) Courses devoted to more special studies in the history, problems, and theories of philosophy, and intended primarily for the student majoring in this subject. This type includes courses 102, 115, 116, 117, 119, 122, 123, 124, 141, 161.

*Letters and Science List.*—All undergraduate courses in this department are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

*Preparation for the Major.*—Twelve units of lower division courses in philosophy, including course 3A-3B.

*The Major.*—Twenty-four units in upper division courses, not more than six of which may be taken in allied courses in other departments with the approval of the departmental adviser. Not later than the beginning of the senior year, the student must submit for approval to the department a statement of the courses which he expects to offer in fulfillment of major requirements for graduation.

## LOWER DIVISION COURSES

All lower division courses are introductory and carry no prerequisite.

1A-1B. Logic. (3-3) Yr.

Mr. Williams, Miss Creed

1A. Deductive logic. Division, definition, the forms and transformations of judgments, the syllogism.

1B. Inductive logic. The presuppositions, methods, and limits of inductive sciences.

2A-2B. Introduction to Philosophy. (3-3) Yr.

Mr. Piatt

Elementary survey of the general problems of philosophy and of the fundamental types of philosophy.

- 3A-3B. History of Philosophy. (3-3) Yr.** Mr. Moore, Mr. Miller, Miss Creed  
An introductory course, tracing the thought of the major philosophers of the ancient and modern world.
- 40. Problems of Ethics and Religion. (2) I.** Mr. Williams  
An introductory study of moral principles, their application, and their relation to religious belief.
- 41. Problems of Metaphysics and Knowledge. (2) II.** Miss Creed  
An introduction to the problems of metaphysics and to central issues in theories of knowledge.

## UPPER DIVISION COURSES

When prerequisites are not stated, see the explanation of types of courses on p. 187.

- \*102. Philosophy of John Dewey. (2) I.** Mr. Moore  
Prerequisite: six units of credit in philosophy.
- 104A-104B. Ethics. (3-3) Yr.** Mr. Piatt  
104A. Consideration of the meaning of morality, and a study of representative ethical theories.  
104B. Application of ethical theory and method formulated in the first semester to current social problems.
- 112. Philosophy of Religion. (3) I.** Mr. Boodin  
A study of the nature and methods of religious knowledge. The problem of how religious truth may be known; its field and extent.
- 115. Kant. (2) II.** ———  
Prerequisite: course 122 or 123.  
Reading of the *Critique of Pure Reason*, together with explanatory and critical comments on Kant's main position in the fields of religion and ethics.
- \*116. Plato. (2) I.** Mr. Boodin  
Prerequisite: course 3A-3B.  
The philosophy of Plato will be considered, with special attention to his idealism.
- 117. Aristotle. (2) II.** Mr. Boodin  
Prerequisite: course 3A-3B.  
Aristotle's philosophy and its significance for present thought.
- \*119. Modern Idealism. (2) I.** Mr. Miller  
Prerequisite: course 3A-3B.  
The historical antecedents and development of post-Kantian idealism.
- 121. Social and Political Philosophy. (3) I.** Mr. Miller  
A study of the sources and development of our social-political institutions.
- 122. British Empiricism. (2) I.** Miss Creed  
Prerequisite: course 3A-3B.  
An examination of the philosophies of Locke, Berkeley, and Hume.
- 123. Continental Rationalism. (3) II.** Miss Creed  
Prerequisite: course 3A-3B.  
The rise of modern science, and the philosophies of Descartes, Spinoza, and Leibniz.

\* Not offered, 1986-87.

**124. Nineteenth Century Philosophy. (3) II.**

Mr. Miller

Prerequisite: course 3A-3B.

A survey of those movements of nineteenth century thought which are of importance for the thought of today.

**136A-136B. Esthetics. (3-3) Yr.**

Miss Gordon

A study of the appreciation of beauty and of standards of excellence in various arts. The first semester deals with a study of the concepts of aesthetics as developed in Hume, Kant, Hegel, Schiller, Croce, and others. In the second semester concrete forms of imaginative expression are studied.

**141A-141B. Present Tendencies of Thought. (2-2) Yr.**

Mr. Moore

Prerequisite: course 3A-3B.

A study of contemporary movements in philosophy.

**\*146. Philosophy of Literature. (3) II.**

Comparison between philosophical and literary expressions of typical problems of philosophy.

**150. Philosophy of Science. (2) I.**

Mr. Piatt

An historical enquiry into the philosophical bearing of the fundamental concepts and methods of the sciences.

**151. Philosophy of Nature. (3) II.**

Mr. Miller

An interpretation of evolution and of man's place in the universe.

**152. Metaphysics. (3) II.**

Mr. Boodin

An examination of the chief types of theory of reality and an attempt at an idealistic synthesis.

**\*153. Fundamental Concepts of Biology. (2) II.**

Mr. Miller

An examination into the theoretical foundations of biological, psychological, and sociological science.

**161. Epistemology. (3) I.**

Mr. Williams

Prerequisite: course 3A-3B.

The analysis of mind and knowledge, with reference to present psychological problems and to the methods of the sciences.

**\*164. General Logic. (3).**

Mr. Williams

A study of the system of formal logic, deductive and inductive, with especial attention to newer developments in logical theory.

**173. The Social Mind. (2) I.**

Mr. Boodin

The evolution and characteristics of the social mind.

**199A-199B. Selected Problems in Philosophy. (2-2) Yr.**

The Staff (Mr. Williams in charge)

GRADUATE COURSES

**204. Theory of Value. (3) II.**

Mr. Williams

**214. Logical Theory. (3) I.**

Mr. Miller

**251A-251B. Seminar: Concepts of Cosmology. (3-3) Yr.**

Mr. Boodin, Mr. Piatt

**\*252A-252B. Seminar: Concepts of Metaphysics. (3-3) Yr.**

**\*261A-261B. Seminar: Concepts of Epistemology. (3-3) Yr.**

\* Not offered, 1986-87.

**PHYSICAL EDUCATION FOR MEN**

- WILLIAM H. SPAULDING, A.B., Director of Physical Education for Men.  
 FREDERICK W. COZENS, Ph.D., Professor of Physical Education and Associate Director of Physical Education for Men.  
 PAUL FRAMPTON, M.A., Associate Supervisor of Physical Education for Men.  
 FRED H. OSTER, B.S., Assistant Supervisor of Physical Education for Men.  
 CECIL B. HOLLINGSWORTH, Ed.B., Associate in Physical Education for Men.  
 DONALD K. PARK, A.B., Associate in Physical Education for Men.  
 WILBUR C. JOHNS, Ed.B., Associate in Physical Education for Men.  
 NORMAN D. DUNCAN, Ed.B., Associate in Physical Education for Men.  
 HARRY TROTTER, Assistant in Physical Education for Men.  
 PIERCE H. WORKS, A.B., Assistant in Physical Education for Men.  
 SILAS GIBBS, Ed.B., Assistant in Physical Education for Men.  
 JAMES G. SCHAEFFER, A.B., Assistant in Physical Education for Men.  
 ———, Assistant in Fencing.

- DONALD MACKINNON, M.D., Physician for Men.  
 WILLIAM J. NORRIS, M.D., Consultant, Student Health Service.  
 LEWIS GUNTHER, M.D., Consultant, Student Health Service.

Physical Education 3 is prescribed for all first-year and second-year undergraduate male students who are under twenty-four years of age. A student claiming exemption because of age will present to the Registrar a petition on the prescribed form for such exemption. A student whose health requires either exemption or special assignment will report directly to the Medical Examiner. Pending action on his petition, the student will enroll in and regularly attend the required course in physical education.

*Medical Examination.*—(a) Students entering the University for the first time and (b) reëntering students must pass a medical examination upon admission. All students are given an examination each year. The examiner may exempt the student from required military training; he may assign the student to an individual gymnastics section of Physical Education 3.

**THE TEACHERS COLLEGE**

*Preparation for the Major.*—High school chemistry or Chemistry 2A or Zoölogy 1A; Physiology 1; Biology 1 (if Zoölogy 1A is not taken); Zoölogy 35; Physical Education 1, 3 (2 units), 5.

*The Major, leading to the Special Secondary Credentials in Physical Education.*—Courses †120, 131, 140, 149, 156A–156B, 182, †190, †192A–192B.

*The Minor in Education.*—Courses 154, 155A–155B; Education 103, 170; Directed Teaching, six to ten units.

† Courses so marked are listed under the Department of Physical Education for Women.

## THE COLLEGE OF LETTERS AND SCIENCE\*

*Letters and Science List.*—Courses 1 and 3 are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

## LOWER DIVISION COURSES

1. **Hygiene and Sanitation.** (1) I, II. Th. 8. Mr. MacKinnon
- †3. **Prescribed Physical Education for Freshmen and Sophomores.** (½) I, II.  
Mr. Cozens and the Staff
- Baseball, basket-ball, boxing, cricket, fencing, American football, golf, gymnastics, handball, soccer, swimming, tennis, track, water-polo, wrestling, individual gymnastics. Classes meet twice weekly. Section assignments are made by the department after students have been classified according to their performance in the "General Athletic Ability Test" given by the staff to all entering men during the first week of each semester.
- Physical Education 3 may be elected by students in the junior and senior years.
5. **First Aid and Bandaging.** (2) II. Mr. Park
- The care of common accidents and emergencies on the playground and athletic field.
20. **The Fundamentals of Scouting.** (2) I. Mr. Frampton
- Need of organizations for youth; history and growth of the Boy Scouts of America; the Boy Scout Program; organization of a troop and techniques of troop management; fundamentals involved in troop activities.
40. **The Technique of Teaching Swimming and Life Saving.** (2) II.  
Mr. Park, Mr. —
- Preparation for and conduct of the Red Cross Life Saving Test and the Red Cross Life Saving Examiner's Test; advanced techniques in teaching swimming.

## UPPER DIVISION COURSES

131. **Administration of Physical Education.** (3) II. Mr. Cozens
- The scope of the field of physical education and its relation to modern education theory. Details of the organization of physical education activities, organization and classification of children, planning of school programs, arrangement and construction of equipment and the principles which govern these.
140. **Physical Education Tests and Measurements.** (2) II. Mr. Cozens
- Anthropometric measurements, cardiovascular and physiological ratings, physical efficiency, and motor ability tests. Common tests used in physical education; statistical method applied to physical education measurement.

\* The University of California at Los Angeles does not offer a major in physical education in the College of Letters and Science. In the College of Letters and Science at Berkeley a combination major of Physical Education and Hygiene may be taken. Students planning to become candidates for the degree of Bachelor of Arts at Berkeley, offering this major, are referred to the publications of the departments at Berkeley.

† For full statement of the requirement of this course refer to page 87.



149. **Kinesiology.** (3) I. M W F, 8.

Mr. Frampton

Prerequisite: Zoölogy 35.

154. **The Technique of Teaching Elementary School Activities.** (2) I.

Mr. Frampton

The technique of teaching activities in the elementary school leading up to games of higher organization.

155A-155B. **The Technique of Teaching Gymnastic Activities.** (2-2) Yr.

Mr. Cozens, Mr. Hollingsworth

Prerequisite: gymnastics, and boxing or wrestling.

Tactics, free exercises, apparatus, gymnastic dancing, and gymnastic games.

\*156A-156B. **The Technique of Teaching Athletic Activities.** (2-2) Yr.

Mr. Spaulding, Mr. Cozens, Mr. Johns, and Mr. Schaeffer

Prerequisite: football, track, basket-ball and baseball.

156A. Track, rugby, and basket-ball. 156B. Football, baseball, and soccer.

182. **Corrective Physical Education.** (3) II.

Mr. Johns

Prerequisite: course 149.

The application of massage and exercise to the treatment of orthopedic and remedial conditions. Two clinic hours per week to be arranged in addition to lecture and demonstration periods.

#### GRADUATE COURSE

250A-250B. **Seminar in Physical Education.** (3-3) Yr.

Mr. Cozens

The meaning, methods and techniques of research procedure as applied to physical education; a critical review of selected studies, literature, practices and procedures in the field; application of this training to the independent solution of a problem. Admission on consultation with the instructor.

#### COURSES OFFERED IN THE

##### DEPARTMENT OF PHYSICAL EDUCATION FOR WOMEN

120. **Principles of Physical Education.** (2) II.

Miss Atkinson

190. **Physiology of Exercise.** (3) I.

Mrs. Johnson

192A-192B. **Administration of Health Education.** (3-3) Yr.

Miss Harshberger, Mrs. Johnson

199. **Problems in Physical Education.** (2) II. Mrs. Johnson, Mr. Cozens

\* Not offered, 1936-37.

## PHYSICAL EDUCATION FOR WOMEN

**RUTH V. ATKINSON, M.A.**, Assistant Professor and Director of Physical Education for Women.

**LUCILLE R. GRUNEWALD, M.A.**, Assistant Director of Physical Education for Women.

**GEORGIA B. JOHNSON, Ph.D.**, Instructor in Physical Education for Women.

**HAZEL J. CUBBERLEY, B.S.**, Associate Supervisor of Physical Education for Women.

**MARTHA B. DEANE, B.S.**, Associate Supervisor of Physical Education for Women.

**EDITH R. HARSHBERGER, M.A.**, Assistant Supervisor of Physical Education for Women.

**ORSIE THOMPSON**, Assistant Supervisor of Physical Education for Women.

**ETHEL S. BRUCE**, Associate in Physical Education for Women.

**EDITH I. HYDE, M.A.**, Associate in Physical Education for Women.

**BERNECE H. HOOPER, M.A.**, Associate in Physical Education for Women.

**MARION S. MATTERN, M.A.**, Associate in Physical Education for Women.

**MARJORY G. ALLEN, Ed.B.**, Assistant in Physical Education for Women.

**JOSEPHINE E. KETCIK, Ed.B.**, Assistant in Physical Education for Women.

**LILLIAN R. TITCOMB, M.D.**, Physician for Women.

Physical Education 4 is prescribed for all first-year and second-year undergraduate women students who are under twenty-four years of age. A student claiming exemption because of age will present to the Registrar a petition on the prescribed form for such exemption. A student whose health requires either exemption or special assignment will report directly to the Medical Examiner. Pending action on her petition, the student will enroll in and regularly attend the required course in physical education.

*Medical Examination.*—New students and reëntering students must pass a medical examination upon admission. All students are given an examination each year. The medical examiner may assign students to individual physical education.

## THE TEACHERS COLLEGE

*Preparation for the Major.*—Courses 30A–30B, 32A–32B, 33A–33B, 35, 42A–42B, 43A–43B, and Chemistry 2A–2B or 1A, Biology 1, Zoölogy 35, Physiology 1, Home Economics 32.

*The Major, leading to the Special Secondary Credential in Physical Education.*—Courses 120, 149, 150, 180A–180B, 181A–181B, 182, 183, 190, 192A–192B.

*The Minor in Education.*—Education 103, 170, Directed Teaching, six to ten units, Physical Education 121A–121B, 121C–121D.

<sup>1</sup> In residence first semester only, 1936–37.

## THE COLLEGE OF LETTERS AND SCIENCE\*

*Letters and Science List.*—Courses 2, 4, 44, 104, 114A–114B, and 180B are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

## LOWER DIVISION COURSES

**2. Hygiene.** (2) I, II. M F, 1.

Mrs. Titcomb

**†4. Prescribed Physical Education for Freshmen and Sophomores.** (†) I, II.  
Miss Atkinson and the Staff

Practice in dancing, team games, and individual sports. The following activities are offered: natural dancing, folk dancing, character dancing, swimming, tennis, lacrosse, badminton, archery, volley-ball, hockey, basketball, soccer. Students whose physical condition indicates the need of modified activity are assigned to individual physical education classes.

Classes meet twice weekly. Section assignments are made only by the department.

Course 4 may be elected for credit by students of junior and senior standing.

**30A–30B. Introduction to Physical Education.** (1–1) Yr.

Miss Atkinson, Miss Hyde

The scope of the profession of physical education. The relation of physical education and the fields of science, psychology, sociology, and education. The significance of physical education in the modern school program. The qualifications for a teacher in physical education.

Demonstration and practice in games for elementary schools and playgrounds. Class organization and methods of teaching archery. Fundamental theories underlying target shooting and practice in the technique of shooting.

**32A–32B. Folk Dancing and Folk Festivals.** (1–1) Yr.

Miss Hooper

Practice in folk dancing and a study of the folk festivals as to purpose, type, source of material, organization, and administration.

**33A–33B. Elementary Rhythms and Natural Dancing.** (1–1) Yr. Miss Deane

Practice in elementary natural dancing, including free rhythms, simple dance forms, improvisation and dance creation. Rhythm studies with percussion instruments.

**35. Music Analysis.** (1) I, II.

Miss Deane

A study of music structure in its relation to dance form. Use of percussion instruments as accompaniment for the dance.

**40. The Technique of Teaching Swimming and Life Saving.** (2) I, II.

Mrs. Mattern, Mr. Gordon

Preparation for and conduct of the Red Cross Life Saving Test and the Red Cross Life Saving Examiner's Test; advanced technique in teaching swimming.

\* The University of California at Los Angeles does not offer a major in physical education in the College of Letters and Science. A group major in physical education and hygiene is offered in the University at Berkeley. Students wishing to satisfy the requirements for this major are referred to the *General Catalogue* of the departments at Berkeley.

† For full statement of the requirement of this course refer to page 87.

**42A-42B. Theory and Practice in Tennis and Swimming. (1-1) Yr.**

Mrs. Mattern, Mrs. Bruce

Seasonal practice in tennis and swimming. Lectures and demonstrations.

**43A-43B. Athletics. (1-1) Yr.**

Prerequisite: course 30A-30B or the equivalent.

An intermediate course for the development of skills in the following team sports: field hockey, basket-ball, baseball; field ball, soccer and speed-ball; lacrosse, volley-ball.

**44. Principles of Health Education. (2) I, II.**

Miss Harshberger

A study of personal and community health problems. Reading, investigation, and reports on current practices, conferences, discussions.

**UPPER DIVISION COURSES****104. Club Activities and Campcraft. (2) I, II.**

Miss Hooper

Analysis of the problems of the leader in various types of national club organizations (Girl Scouts, Girl Reserve, Camp-Fire Girls), with discussion of educational values, objectives, and program.

Study of organization of the summer and holiday camp activities and program making.

**111A-111B. Physical Education in the Elementary School. (2-2) Yr.**

Mrs. Johnson, Miss Hooper, Miss Harshberger, Miss Anderson

Not open to students majoring in physical education.

Prerequisite: Education 100.

Organization of plays, games, and rhythmic activities. Health instruction as related to physical education.

**114A-114B. Pageantry. (1-1) Yr.**

Miss Hooper, Miss Deane

114A. A study of the folk festivals as to purpose, type, source of material, organization and administration. An original folk festival from each student.

114B. An analysis of modern pageant forms. Organization and administration. Dance recital production.

Course 114B may be taken without 114A.

**120. Principles of Physical Education. (2) II.**

Miss Atkinson

History of physical education. The purposes, scope, and ideals of physical education. Objectives of physical education as related to the program of general education. General principles of teaching applicable to all activities.

**121A-121B. Principles of Teaching Athletics. (2-2) Yr.**

Prerequisite: courses 30A-30B, 42A-42B and 43A-43B, or the equivalent.

Analysis of problems in teaching athletics activities including fundamental techniques, game forms and advanced team play with special reference to their use in seasonal, weekly, and daily lesson planning. Advanced practice is offered in all team activities with emphasis on the interpretation of rules and the technique of officiating.

Field work in officiating (in the city schools and recreation centers) is required.

**121c-121d. Principles of Teaching Dancing. (2-2) Yr.** Miss Deane  
Prerequisite: course 35 and satisfactory completion of lower division courses in dancing.

A survey of the rhythm program from kindergarten to the university, including problem analysis, selection and organization of material, and method of presentation in natural dancing. Practice in intermediate natural dancing.

**149. Kinesiology. (3) I.** Miss Grunewald

Prerequisite: Zoölogy 35.

A study of the joint and muscular mechanism of movements.

**150. Principles of Teaching Gymnastics. (2) II.** Miss Grunewald

**180A-180B. Administration of Physical Education and Community Recreation. (2-2) Yr.** Miss Atkinson, Miss Hooper

Prerequisite: senior standing.

**180A. Administration of Physical Education.**—Administrative policies of the physical education department in schools and colleges; equipment, appointment and supervision of staff; teaching load; organization and administration of activities; classification of pupils by tests and examination; grading; general office organization and administration.

**180B. Administration of Community Play and Recreation.**—Designed to meet the needs of workers in playgrounds, apart from the schools. Discussion for workers in industrial plants and social service institutions.

**181A-181B. Organization and Management of Physical Education Activities. (2-2) Yr.** Miss Deane, ———

Prerequisite: courses 120, 121A-121B.

**181A.** A study of athletic programs in schools and colleges, including the analysis and selection of activities; measurement of achievement; evaluation of social and physical values of team games; selection and care of athletic equipment and construction and upkeep of fields. The organization and management of playdays, meets, and tournaments with actual experience in conducting the fall playday for the Los Angeles County Elementary Schools.

**181B.** A study of the public performances in the school program—its purpose, types, sources of material, development, organization, and presentation. The use of the dance, music, lighting, costuming, etc.

**182. Corrective Physical Education. (2) II.** Miss Grunewald

Prerequisite: course 149.

Study of body mechanics and of the causes and treatment of faulty antero-posterior and lateral deviations and foot and leg conditions with special emphasis on the individual program adaptations and corrective procedures.

**183. Massage and Therapeutic Exercise. (3) I.** Miss Grunewald

Prerequisite: course 182.

Study of massage and therapeutic exercise applied in the treatment of disturbances of the cardio-vascular, nervous, muscular, and digestive systems.

**190. Physiology of Exercise. (3) I.**

Mrs. Johnson

Prerequisite: Physiology 1.

A study of the effects of physical education activity on the human organism. The physiological basis for program construction and the adaptation of activities.

**192A-192B. Administration of Health Education. (3-3) Yr.**

Prerequisite: course 190.

Miss Harshberger, Mrs. Johnson

**192A. Health Instruction.**—This course deals with the educational and physiological basis for teaching health and the application of these principles to the practical problems in the elementary and secondary schools.

**192B. Health Protection.**—A discussion of the child conservation movement. Physiological diagnosis of normal and pathological conditions with the procedure in securing the control or correction of these conditions.

**199. Problems in Physical Education. (2) II.**

Mrs. Johnson

Prerequisite: senior standing and the consent of the instructor.

Reading, investigation, and reports on current problems in physical education. Conferences, discussions.

**COURSE OFFERED IN THE  
DEPARTMENT OF PHYSICAL EDUCATION FOR MEN**

**140. Tests and Measurements in Physical Education. (2) II. Mr. Cozens**

## PHYSICS

SAMUEL J. BARNETT, Ph.D., Professor of Physics.

VERN O. KNUDSEN, Ph.D., Professor of Physics and Dean of Graduate Study.

JOHN MEAD ADAMS, Ph.D., Associate Professor of Physics.

LAURENCE E. DODD, Ph.D., Associate Professor of Physics.

HIRAM W. EDWARDS, Ph.D., Associate Professor of Physics.

JOSEPH W. ELLIS, Ph.D., Associate Professor of Physics.

JOSEPH KAPLAN, Ph.D., Associate Professor of Physics.

E. LEE KINSEY, Ph.D., Associate Professor of Physics.

ARTHUR H. WARNER, Ph.D., Assistant Professor of Physics.

LEO P. DELSASSO, A.B., Associate in Physics.

*Letters and Science List.*—All undergraduate courses in physics are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

*Preparation for the Major.*—Required: Physics 1A, 1B, 1C, 1D, or their equivalents (in meritorious cases Physics 2A–2B may be accepted); Chemistry 1A–1B; Mathematics C, 3A, 3B, 4A, or their equivalents. Recommended: a reading knowledge of German and French.

*The Major.*—Eleven units of upper division physics, consisting of 105, 107A, 108B, and 110A; and thirteen units chosen from other upper division courses in physics, Mathematics 119, 122A–122B, 124, 125, Chemistry 110, and Astronomy 117A–117B, 199A–199B. At least nine of these latter thirteen units shall be courses in the Department of Physics.

*Laboratory Fees.*—Courses 1A, 1B, 1C, 1D, 2A, 2B, \$5; 1AD, 1BC, \$10; 108A, \$6; 107A, 107B, 108B, 113C, 114C, \$12. The student will, in addition, be held responsible for all apparatus lost or broken.

## LOWER DIVISION COURSES

Prerequisite for 1A, 1B, 1C, 1D: either (1) the high school course in physics, or (2) three years of high school mathematics, including trigonometry, and the high school course in chemistry. Prerequisite for course 2A–2B: (1) three years of high school mathematics, or (2) two years of high school mathematics and college algebra. Prerequisites for course 4A–4B are elementary algebra and plane geometry.

Physics 1A, 1B, 1C, and 1D constitute a two-year sequence in general physics which is required of, or recommended for, major students in physics and astronomy and of students in pre-engineering, pre-mining, and pre-chemistry. Physics 1A and 1B are required of students in architecture, and Physics 1A and either 1B, 1C or 1D are required of major students in chemistry. Other students may elect any part of the course, but at least two parts are necessary to meet the laboratory requirement for the Junior Certificate.

Students who have credit for courses 2A–2B or 4A–4B may receive additional credit of not more than one and one-half units for each of courses 1A and 1B, and not more than two units for each of courses 1C and 1D. In general, not

<sup>1</sup> In residence first semester only, 1936–37.

more than twelve units of credit will be given for any amount of lower division work. Credit in excess of twelve units will be given only in exceptional cases, when approved by the department.

**1A. General Physics: Mechanics of Solids. (3) I, II.**

Mr. Ellis, Mr. Dodd, Mr. Edwards, Mr. Kinsey, Mr. Delsasso  
Demonstration, W, 11; lecture and laboratory, four hours.  
Fee, \$5.

**1B. General Physics: Mechanics of Liquids, and Heat. (3) II.**

Mr. Dodd, Mr. Ellis, Mr. Delsasso  
Demonstration, M, 11; lecture and laboratory, four hours.  
Fee, \$5.

**1C. General Physics: Electricity and Magnetism. (3) I.**

Mr. Warner, Mr. Kinsey, Mr. Delsasso  
Prerequisite: course 1A or the equivalent. Fee, \$5.  
Lectures, Tu Th, 9; laboratory, three hours.

**1D. General Physics: Light and Sound. (3) II.**

Mr. Ellis, Mr. Kinsey, Mr. Warner, Mr. Delsasso  
Lectures, Tu Th, 9; laboratory, three hours. Fee, \$5.

**\*1AD. General Physics: Mechanics of Solids and Fluids, Wave Motion, Sound, Light. (6) I.**

Mr. Adams  
Prerequisite: Mathematics 3B or the equivalent. Fee, \$10.  
Demonstration, one hour; lecture and laboratory, eight hours.

**\*1BC. General Physics: Heat, Electricity, Magnetism. (6) II.**

Mr. Adams  
Prerequisite: Physics 1AD, Mathematics 4A, or the equivalent. Fee, \$10.  
Demonstration, one hour; lecture and laboratory, eight hours.

**2A-2B. General Physics. (4-4) Yr.**

Mr. Edwards, Mr. Kaplan, Mr. Kinsey  
Demonstration, Th, 11; lecture, three hours; laboratory, two hours.  
Fee, \$5 per semester.

Mechanics, sound, heat, light, electricity. Prescribed for pre-medical students.

**4A-4B. General Physics. (3-3) Yr.**

Mr. Barnett

Lectures, M W F, 9.

Prerequisite: elementary algebra and plane geometry.

A descriptive course, without laboratory work, fully illustrated by experiments. Course 4B may be taken before 4A with permission of the instructor.

**UPPER DIVISION COURSES**

Prerequisite for all upper division courses: Physics 1A, 1B, 1C, 1D, or 2A-2B (in special cases, 4A-4B); Mathematics 3A-3B; or the equivalents.

**105. Analytic Mechanics. (3) I.**

Mr. Edwards

The statics and dynamics of particles and rigid bodies.

**107A. Electrical Measurements. (2) I.**

Mr. Warner, Mr. Delsasso

Prerequisite: course 1C. Fee, \$12.

Laboratory exercises in the measurement of direct current quantities, with explanatory lectures on electricity and magnetism.

\* Not to be offered after 1986-87.



- 107B. Electrical Measurements. (3) II.** Mr. Warner, Mr. Delsasso  
 Prerequisite: course 107A. Fee, \$12.  
 Laboratory exercises with alternating current circuits, and lectures on electric circuit theory, the propagation of electric waves, and thermionic vacuum tubes.
- 108A. Geometrical Optics. (3) I.** Mr. Dodd  
 Fee, \$6.  
 Lectures, demonstrations, and laboratory work on geometrical methods applied to the optics of mirrors, prisms, and lenses, and to their use in modern optical instruments.
- 108B. Physical Optics. (4) I.** Mr. Ellis, Mr. Kaplan  
 Fee, \$12.  
 Lectures, demonstrations, and laboratory work dealing with interference, diffraction, polarization, and their applications.
- 109. Modern Optical Instruments. (2) II.** Mr. Dodd  
 Prerequisite: course 108A.
- 110A-110B. Electricity and Magnetism. (2-3) Yr.** Mr. Barnett  
 The elementary mathematical theory, with a limited number of experimental demonstrations.
- 112. Heat. (3) I.** Mr. Adams  
 Thermodynamics, with applications to physical chemistry.
- 113. Introduction to Spectroscopy. (3) II.** Mr. Kinsey
- 113C. Spectroscopy Laboratory. (1) II.** Mr. Ellis  
 Fee, \$12.  
 Prerequisite or concurrent: course 113 or Astronomy 117B.
- 114. Mechanics of Wave Motion and Sound. (3) II.** Mr. Knudsen  
 Lectures and demonstrations on the fundamental theory of wave motion and sound.
- 114C. Mechanics of Wave Motion and Sound Laboratory. (1) II.** Mr. Knudsen, Mr. Delsasso  
 Prerequisite: courses 107B and 114 or consent of the instructor. Fee, \$12.
- 121. Atomic Physics. (3) II.** Mr. Adams  
 An introductory view of the properties and constituents of atoms, as disclosed by the advances of the past thirty-five years.  
 Lectures, with demonstrations, and readings.
- 199A-199B. Special Problems in Physics. (2-2) Yr.** Mr. Knudsen and the Staff

#### GRADUATE COURSES

Courses 210A-210B and 220A-220B are required of all candidates for the master's degree with major in physics.

**210A-210B. Electricity and Magnetism; Advanced Course. (3-3) Yr.****Mr. Barnett**

Electrostatics, electrodynamics, electron theory, magnetism, restricted theory of relativity, theory of radiation. Open to graduate students who have taken 110A-110B, and to other graduate students with the consent of the instructor.

**214. Acoustics. (3) I.****Mr. Knudsen**

Molecular phenomena associated with the dispersion and absorption of sound in gases, and recent developments in physical, physiological, and architectural acoustics.

**220A-220B. Introduction to Quantum Theory. (3-3) Yr.****Mr. Kinsey, Mr. Kaplan, Mr. Ellis**

Quantum theory introduced from the standpoint of advanced dynamics and statistical mechanics with selected applications.

**290A-290B. Advanced Study on Special Problems. (1-3; 1-3) Yr.****Mr. Knudsen in charge****COURSES IN OTHER DEPARTMENTS****Astronomy 117A-117B. Astrophysics and Stellar Astronomy. (3-3) Yr.****Mr. Kaplan****Astronomy 199A-199B. Sec. 2. Special Studies in Astrophysics. (2-2) Yr.****Mr. Kaplan**

## POLITICAL SCIENCE

- \*CHARLES G. HAINES, Ph.D., Professor of Political Science.  
 MALBONE W. GRAHAM, Ph.D., Professor of Political Science.  
 FRANK M. STEWART, Ph.D., Professor of Political Science.  
 \*CHARLES H. TITUS, Ph.D., Associate Professor of Political Science.  
 J. A. C. GRANT, Ph.D., Associate Professor of Political Science.  
 \*ORDEAN ROCKEY, B.Litt., Assistant Professor of Political Science.  
 H. ARTHUR STEINER, Ph.D., Assistant Professor of Political Science.  
 ERIC ARMOUR BEECROFT, Ph.D., Assistant Professor of Political Science.  
 THOMAS I. COOK, B.S., Assistant Professor of Political Science.  
 WINSTON W. CROUCH, Ph.D., Instructor in Political Science.  
 RUSSELL H. FITZGIBBON, Ph.D., Assistant Professor of Political Science.

*Letters and Science List.*—All undergraduate courses in political science are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

*Preparation for the Major.*—Course 3A-3B, or its equivalent, and one of the following: courses 10, 31A-31B, 34, Economics 1A-1B, Geography 1A-1B, History 4A-4B, History 5A-5B, or History 8A-8B.

Students intending to select political science as a major subject are advised to take one course in political science throughout the year in each of the freshman and sophomore years.

*The Major.*—Twenty-four units in upper division courses, not more than six of which may be taken in courses approved by the department in history, economics, philosophy, psychology, or geography. The work must be divided among the different fields of political science in accordance with the requirements of the department. A copy of the regulations may be secured from the departmental adviser.

## LOWER DIVISION COURSES

**3A-3B. American Government.** (3-3) Beginning each semester.

Mr. Steiner, Mr. Beecroft, Mr. Cook, Mr. Crouch

3A. A study of principles and problems in relation to the organization and functions of the American system of government.

3B. A survey of the organization and functions of the national government with special attention to the features and the principles of the Federal Constitution. Some features of the organization of state and local governments will be briefly considered.

Students who have credit for American Institutions 101 will receive only two units for Political Science 3A.

**10. Elementary Law.** (3) I, II.

Prerequisite: sophomore standing.

Elementary principles of the common law, as modified by statutes and judicial decisions. Special reference to the definition, nature, and classification of law.

\* On leave, 1936-37.

\* In residence second semester only, 1936-37.

**31A-31B. Introduction to European Governments. (3-3) Yr.**

Mr. Steiner, Mr. Beecroft, Mr. Cook, Mr. Crouch

Prerequisite: sophomore standing and course 3A-3B.

A comparative study of European governments; constitutional development; political institutions; political parties and elections; contemporary politics.

**34. American State and Local Government. (3) I, II.**

Mr. Crouch

Prerequisite: sophomore standing and course 3A-3B.

Development of state constitutions. The legislative, executive, and judicial departments in state government; popular methods of control; and relation between the state and local rural government, with special reference to California.

**UPPER DIVISION COURSES**

Prerequisites for all courses: Political Science 3A-3B, or its equivalent, and one of the following: Political Science 10, Political Science 31A-31B, Political Science 34, Economics 1A-1B, Geography 1A-1B, History 4A-4B, History 5A-5B, or History 8A-8B.

**110. Principles of Political Science. (3) I, II.**

Mr. Cook

A survey of fundamental political concepts, including the legal and theoretic bases of the modern state, the various forms of government, and an analysis of the functions of government.

**112. Public Opinion. (2) II.**

Mr. Cook

A study of the nature and the means of formation of public opinion. Public opinion as a factor in popular government and as a control device in the modern state with special reference to current conditions in American democracy.

**113A-113B. American Political Theories. (2-2) Yr.**

Mr. Cook

A comparative study of the characteristic types of American political theories of the past, together with a consideration of recent tendencies in American political thought.

**\*117. Jurisprudence. (3) II.**

Mr. Haines

Prerequisite: junior standing and the consent of the instructor.

Development of law and legal systems; comparison of methods and procedure in making and enforcing law in Roman and common law systems; consideration of fundamental legal concepts; contributions and influence of modern schools of legal philosophy in relation to law and government.

**118. The Nature of the State. (3) I, II.**

Mr. Titus, Mr. Beecroft

Prerequisite: permission of the instructor.

The nature of the modern state and its differences from the state of the eighteenth and nineteenth centuries. Both monistic and pluralistic approaches are included in this study.

**125. Foreign Relations of the United States. (3) I.**

Mr. Graham

A survey of the factors and forces entering into the formation and carrying out of American foreign policy, with special emphasis on contemporary problems.

\* Not offered, 1936-37.

**127. International Relations. (8) I, II.**

Mr. Graham, Mr. Steiner

A general survey of the institutions and agencies of international government with major stress on outstanding issues in the diplomacy of the post-war period.

**133. Introduction to International Law. (3) II.**

Mr. Steiner

A critical analysis of the general principles of the law of nations as demonstrated in the decisions of international and municipal tribunals and in the practices of nations.

**136. Problems of the Pacific Area. (3) II.**

Mr. Steiner

Expansion of European, American, and Japanese interests in the Pacific. Clash of national policies and resultant problems. Political and unofficial efforts toward international understanding and cooperation.

**\*138. International Relations of the Far East. (3) I.**

A survey of the relations of China and Japan with the western world and with each other, with an analysis of their conflicting interests.

**141. Political Parties and Practical Politics. (2) II.**

Mr. Titus

An analysis of the organization, functions, and activities of political parties; a study of pressure groups and defensive mechanisms to offset political programs; and an introduction to the technique of playing practical politics.

**\*142. Elections. (2) II.**

Mr. Titus

An analysis of political behavior and activities pertaining to elections.

**143. Legislatures and Legislation. (2) II.**

Mr. Grant

This course duplicates 165 given prior to September, 1936.

The functions of legislatures. The organization and procedure of typical legislative bodies; the problems and principles of law making; the legislative functions of the courts and of the administration.

**153. The Government of the British Empire. (2) I, II.**

Mr. Beecroft

The constitutional and political relations of the imperial and Dominion governments; the governments of India, the crown colonies, the protectorates and the mandated territories.

**154. The Governments of Central Europe. (3) I.**

Mr. Graham

An intensive study of the breakdown of the Austro-Hungarian Empire and the constitutional reorganization of the Danubian Succession States, with special attention to contemporary and political issues, parties, elections, and foreign relations.

**155. The Governments of Eastern Europe. (8) II.**

Mr. Graham

An intensive study of the breakdown of the Russian Empire and the constitutional reorganization of the Soviet Union and the Baltic States, with special attention to contemporary political issues, parties, elections, and foreign relations.

**156. Administrative Law. (3) I.**

Mr. Grant

The rights, duties, and liabilities of public officers; relief against administrative action; extraordinary legal remedies; jurisdiction, conclusiveness, and judicial control; legal principles and tendencies in the development of public administration.

\* Not offered, 1936-37.

157A-157B. Constitutional Law. (4-4) Yr.

Mr. Grant

Prerequisite: senior standing or the permission of the instructor.

General principles of constitutional law, federal and state; relations and powers of the federal government and the states; limitations on the federal government and the protection accorded to individual rights under the American constitutional system.

158. Government and Business. (3) II.

Mr. Grant

An intensive study of the commerce and police powers, with particular emphasis upon the administrative and judicial powers of state and federal authorities.

162. Municipal Government. (3) I, II.

Mr. Stewart, Mr. Crouch

A comparative study of the modern municipality in the United States and the principal countries of Europe; history and growth of cities; relation of city to the state; legal aspects of city government; parties and electoral problems; types of municipal organization, mayor and council, commission, and city manager; problems of metropolitan areas.

163. Municipal Administration. (3) II.

Mr. Crouch

Administrative organization; personnel; finance; city planning and zoning; charities, recreation, education; water supply; streets and parks, police, courts, correction; health, housing, fire, traffic, and control of utilities.

181. Principles of Public Administration. (3) I.

Mr. Stewart

Development of public administration and its relation to other branches of government; the process of centralization; the process of integration; reorganization of administration; budgets; purchasing; problems of personnel; and types of control of the administration.

182. Lectures in Public Administration. (1) II.

Mr. Stewart

A special series of lectures offered by members of the department and public officials on various contemporary problems of public administration, with special reference to the metropolitan community.

183. Administrative Functions. (3) II.

Mr. Stewart

Activities of the national, state, and local governments are studied. Certain of the following problems will be analyzed: highway administration; state and regional planning; public welfare; police administration; and selected topics in national administration.

199A-199B. Special Problems in Political Science. (2-2) Yr.

Mr. Graham in charge

Prerequisite: credit for six units of upper division courses in political science, and the special requirements necessary for the field selected for special study. Permission to register for this course is required.

\*Section 1. Problems in Public Law.

Section 2. Problems in International Relations.

Section 3. Problems in Political Theory.

Section 4. Problems in Municipal Government.

Section 5. Problems in Comparative Government.

Section 6. Problems in Politics. II.

Mr. Steiner

Mr. Cook

Mr. Crouch

Mr. Beecroft

Mr. Titus

\* Not offered, 1986-87.

## GRADUATE COURSES

- 252A-252B. Seminar in Public Law.** (2-2) Yr. Mr. Grant  
Prerequisites: course 157A-157B, or any two of the following: 117, 156, 158.
- 253A-253B. Seminar in International Relations.** (2-2) Yr. Mr. Graham  
Prerequisites: courses 125, and 127 or 133; or 136 and 138.
- 254A-254B. Seminar in Public Administration.** (2-2) Yr. Mr. Stewart  
Prerequisites: courses 181 and 183; or 162 and 163; or 156 and 158.
- †259A-259B. Seminar in Political and Electoral Problems.** (2-2) Yr.  
Mr. Titus  
Prerequisite: course 141 and one of the following courses: 142, 143, 153, 154, 155.
- 275A-275B. Special Study and Research.** (2-4; 2-4) Yr.  
Mr. Graham, Mr. Stewart, Mr. Titus, Mr. Grant

## AMERICAN INSTITUTIONS

- 101. American Institutions.** (2) I, II. Mr. Titus, Mr. Grant, Mr. Steiner  
The fundamental nature of the American constitutional system and of the ideals upon which it is based.

This course, or the Examination in American Institutions (see page 39), is required of all students during the junior or senior year with the following exceptions:

- (1) Students who complete Political Science 3A-3B;
- (2) Political science majors;
- (3) History majors who complete History 8A-8B;
- (4) History majors or minors (Teachers College) who complete History

171A-171B.

American Institutions 101 may not be applied toward the political science major.

Not open to students who have credit for Political Science 3A-3B. A student who has credit for 3A only may take course 101, but will receive therefor only one unit. A student who has credit for course 101 will receive only two units for course 3A.

† Offered second semester only, 1936-37.

## PSYCHOLOGY

KNIGHT DUNLAP, Ph. D., Professor of Psychology.

KATE GORDON, Ph.D., Professor of Psychology.

FRANKLIN FEARING, Ph.D., Professor of Psychology.

GRACE M. FERNALD, Ph.D., Associate Professor of Psychology.

S. CAROLYN FISHER, Ph.D., Assistant Professor of Psychology.

ELLEN B. SULLIVAN, Ph.D., Assistant Professor of Psychology.

\*LAWRENCE GAHAGAN, Ph.D., Assistant Professor of Psychology.

JOSEPH A. GENGEREELLI, Ph.D., Assistant Professor of Psychology.

FRANK C. DAVIS, Ph.D., Assistant Professor of Psychology.

HOWARD C. GILHOUSEN, Ph.D., Assistant Professor of Psychology.

JOHN D. LAYMAN, Ph.D., Instructor in Psychology.

RALPH L. BEALS, Ph.D., Instructor in Anthropology.

*Letters and Science List.*—All undergraduate courses in psychology except 119, and all undergraduate courses in anthropology, are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

*Preparation for the Major.*—Required: a year laboratory course in one of the following natural sciences: zoölogy, physiology, chemistry, physics. Recommended: French, German, and Economics 1A-1B or 30A-30B.

*The Major.*—Required: courses 106A, 107A, and twelve other units in upper division courses in psychology. The remaining six units may be chosen from upper division courses in psychology, or from the following, subject to the approval of the department: any upper division courses in philosophy, anthropology, zoölogy, physics; Education 120, 123A-123B; Economics 186, 188; Business Administration 153.

*Laboratory Fees.*—Courses 106A, 106B, 107A, 107B, \$3; 150, \$5.

## LOWER DIVISION COURSES

1A-1B. **General Psychology.** (3-3) Beginning each semester.

Three lectures weekly.

Miss Gordon, Mr. Gilhousen

An introduction to facts and problems of psychology.

Not open to students who have credit for course 3A-3B.

3A-3B. **Introductory Psychology, Intensive Course.** (3-3) Yr. Mr. Davis

Prerequisite: sophomore standing and Zoölogy 1A or Physiology 1.

Not open to students who have credit for course 1A-1B.

## UPPER DIVISION COURSES

Psychology 1A-1B, or Psychology 3A-3B, is prerequisite to all upper division courses.

\* Absent on leave, 1936-37.



- 106A-106B. Experimental Psychology. (3-3) Yr.** **Mr. Davis**  
 One hour lecture, four hours laboratory; outside reading.  
 106A, I, II; 106B, II. Fee, \$3 per semester.  
 The methods and typical results in the experimental investigation of movement, habit, perception, association, etc.
- 107A-107B. Mental Measurement and the Use of Statistics. (3-3)**  
 Beginning each semester. **Miss Sullivan**  
 Fee, \$3 per semester.  
 107A. Statistical methods and their use in relation to psychological problems, including illustrations and problems from the field of educational and experimental psychology and group mental tests.  
 107B. A study of the standard intelligence tests and their applications. Two lectures and three hours of clinical work in the use of various tests.
- 108. Physiological Psychology. (3) I.** \_\_\_\_\_  
 The physiological correlates of mental conditions, with special reference to the sensory, motor, and association processes of the cerebrum.
- 110. Experimental Educational Psychology. (3) I, II.**  
**Mr. Gengerelli, Mr. Layman**  
 Discussion of topics pertaining to educational procedures.  
 Lecture, two hours; laboratory, three hours; outside reading.
- 112. Child Psychology. (3) I, II.** **Miss Fernald**  
 The psychology of the child, with special reference to mental development.
- \*119. Psychology of Special School Subjects. (3) I, II.** **Miss Fernald**  
 Analysis of the psychological problems involved in learning to write, read, solve problems in mathematics, and grasp the meaning of other school subjects.
- 124A. The History of Psychology, Ancient Period. (2) I.** **Mr. Dunlap**  
 The psychological notions from which modern psychology has developed will be traced from their earliest evidences, as integral features of developing culture.
- 124B. The History of Psychology, Modern Period. (2) I, II.**  
**Mr. Gengerelli**  
 The development of the problems, hypotheses, research methods, and applications of psychology will be presented in relation to the growth of the natural sciences and general culture.
- 125. Psychology of Religion. (2) II.** **Mr. Dunlap**  
 The importance of religion in personal and social life, and its relation to cultural development will be considered with due regard to historical and geographical details. Beliefs will be considered only in respect to their psychological conditions and effects.
- 132. Contemporary Psychology. (2) I, II.** **Mr. Gahagan**  
 Prerequisite: six units in upper division psychology.  
 A study of present day psychology in theory, backgrounds, and results.
- 133. Advanced General Psychology. (2) I, II.** **Miss Fisher**  
 Prerequisite: six units in upper division psychology.  
 Criticism of the major concepts of psychology, such as attention, memory, will. Theories and systems of psychology.

\* Not offered, 1936-37.

**145A-145B. Social Psychology. (2-2) Yr.**

Miss Fisher

The behavior of men in groups, the emotional and intellectual conditions of associated living.

**150A. Animal Psychology. (3) I.**

Mr. Gilhausen

Psychology of the higher animal forms; experimental methods and results; relation to human psychology. Lectures and demonstrations.

**150B. Experiments in Animal Psychology. (3) II.**

Mr. Gilhausen

Prerequisite: course 150A.

One hour lecture and six hours laboratory.

**166A-166B. Clinical Psychology. (2-2) Yr.**

Miss Fernald

166A. Two hours of lecture and demonstration.

A study of the problems of the typical child, including discussion of mental and physical deficiencies, abnormalities, and emotional instability.

166B. Prerequisite: courses 107A, 107B, 166A.

Special emphasis is placed on the methods by which children may be developed to a maximum of efficiency.

One hour lecture, three hours clinical work.

**168. Abnormal Psychology. (3) II.**

Mr. Dunlap

Prerequisite: six units of upper division psychology, including course 108.

The study of mental deviations, disorders of attention, memory, and emotional life.

**199. Special Problems in Psychology. (3) I, II.**

— and the Staff

Prerequisite: courses 106A, 107A, and six other units in upper division psychology. Special permission to register in this course is required.

GRADUATE COURSES

**251A-251B. Seminar in Clinical Psychology. (3-3) Yr.**

Miss Fernald in charge

**255A-255B. Seminar in Social Psychology. (3-3) Yr.**

Mr. Dunlap in charge

**273A-273B. Psychological Research. (3-3) Yr.**

Miss Gordon in charge

ANTHROPOLOGY†

LOWER DIVISION COURSES

**1A. General Anthropology. (3) I.**

Mr. Beals

Origin, antiquity, and races of man; physical anthropology; race problems.

**1B. General Anthropology. (3) II.**

Mr. Beals

Origin and growth of civilization. Problems in invention, material culture, social institutions, religion, language. May be taken without course 1A.

† The University of California at Los Angeles does not offer a major in anthropology. Students wishing to satisfy the requirements for a major are referred to the *General Catalogue* of the Departments at Berkeley.

## UPPER DIVISION COURSES

Upper division standing is prerequisite to all upper division courses.

**103. Culture History. (3) I.****Mr. Beals**

Problems and methods of culture history illustrated by the early civilizations of Europe, Asia, Africa, and Oceania.

**104. Civilizations of Mexico. (3) II.****Mr. Beals**

Ancient civilizations and modern peoples; archeology, art, architecture, mode of life, social institutions, and religion, with special emphasis on theories and problems of culture development.

**105. The American Indian. (3) I.****Mr. Beals**

A survey of the Indians of North and South America: origins, languages, civilizations, and history.

**125. Primitive Society. (3) II.****Mr. Beals**

A survey of the social institutions of the simpler peoples of the world: marriage and the family, division of labor, totems and clans, social stratification, economic organizations, political institutions, etc.

## SPANISH

\*CÉSAR BARJA, Doctor en Derecho, Professor of Spanish.

LAURENCE DEANE BAILIFF, Ph.D., Associate Professor of Spanish.

MANUEL PEDRO GONZÁLEZ, Ph.D., Associate Professor of Spanish.

ERNEST H. TEMPLIN, Ph.D., Associate Professor of Spanish.

ANNA KRAUSE, Ph.D., Assistant Professor of Spanish.

MARION ALBERT ZEITLIN, Ph.D., Assistant Professor of Spanish.

HERMENEGILDO CORBATÓ, Ph.D., Assistant Professor of Spanish.

MARIA L. DE LOWTHER, M.A., Associate in Spanish.

SYLVIA N. RYAN, M.A., Associate in Spanish.

FRANCISCO MONTAU, A.B., Associate in Spanish.

CONSUELO PASTOR, A.B., Associate in Spanish.

*Letters and Science List.*—All undergraduate courses in Spanish are included in the Letters and Science List of Courses. For regulations governing this list, see page 61.

*Preparation for the Major.*—(1) Courses A, B, C, D, and 5A-5B or 5AB or the equivalent, to be tested by examination. (2) Students who wish to make Spanish their major subject must have maintained at least an average grade of C in the college courses in Spanish taken prior to obtaining the Junior Certificate. (3) A minimum of two years of high school Latin or French, or Latin A and B, or English 36A-36B, or History 8A-8B. This requirement must be completed before entering upon the senior year. (4) Only students who pronounce Spanish correctly and read it fluently will be admitted to upper division courses. Students transferring from other institutions may be tested by oral examinations. (5) English 1A-1B.

*The Major.*—Required: twenty-four units of upper division courses, including 102A-102B and 116A-116B. The remaining units may include not more than four units of upper division work in French or Latin, or may be completed from courses 101, 104, 108, 109, 110, and 115.

NOTE.—Students who have not completed course 5A-5B or 5AB in the lower division must take 101A-101B.

Students who fail to maintain at least an average grade of C in the Spanish courses taken in the upper division will, upon approval of the Dean of the College of Letters and Science, be excluded from the major in Spanish.

The department recommends as a supplementary choice among the free electives: (1) history of the country or countries most intimately connected with the major; (2) additional study in Latin and English literature; (3) French, German, and Greek language and literature; (4) the history of philosophy.

Two years of high school Latin, or the equivalent, are prerequisite to candidacy for the master's degree in Spanish.

\* On leave, 1936-37.

## LOWER DIVISION COURSES

The prerequisites for the various lower division courses are listed under these courses. Students whose high school record seems to warrant it may by examination establish their right to take a more advanced course upon recommendation of the instructor.

- A. Elementary Spanish.** (5) I, II. Miss Ryan in charge  
I, M Tu W Th F, 8, 9, 10, 11, 12, 2; II, M Tu W Th F, 8, 9, 10, 11.  
This course corresponds to the first two years of high school Spanish.
- B. Elementary Spanish.** (5) I, II. Miss Ryan in charge  
M Tu W Th F, 8, 9, 10, 11, 12.  
Prerequisite: course A or two years of high school Spanish or Spanish SA in a summer session with satisfactory grade.
- C. Intermediate Spanish.** (3) I, II. Miss Ryan in charge  
M W F, 8, 11, 12, 2.  
Prerequisite: course B or three years of high school Spanish.
- D. Intermediate Spanish.** (3) I, II. Miss Ryan in charge  
M W F, 8, 9, 10, 12.  
Prerequisite: course C or four years of high school Spanish.
- OD. Intermediate Spanish.** (5) I, II. Miss Ryan  
M Tu W Th F, 12.  
Prerequisite: course B or three years of high school Spanish.
- 5A-5B. Advanced Spanish.** (3-3) Yr. Miss Krause, Mrs. Lowther  
M W F, 9, 11.  
For lower division students who have had course D or the equivalent. Designed especially for freshmen and sophomores who propose to make Spanish their major subject.
- 5AB. Advanced Spanish.** (5) II. Miss Ryan  
M Tu W Th F, 10.  
Prerequisite: same as for course 5A-5B.

**\*19. Dramatic Interpretation in Spanish.** (2) I.

The study and presentation of a masterpiece of Spanish dramatic literature. Only those students will be eligible for registration in this course who shall have done, without credit, certain preliminary work required by the department during the preceding semester. The work of the course will end with the production and this production shall constitute the examination.

This course may be taken only twice for credit.

## UPPER DIVISION COURSES

Prerequisite: sixteen units of lower division Spanish or the equivalent (except for course 140A-140B).

Major students who enter the upper division without course 5A-5B or 5AB must take 101A-101B.

*Junior Courses:* Courses 101A-101B and 102A-102B.

*Junior and Senior Courses:* Courses 104A-104B, 108A-108B, and 109A-109B.

*Restricted Senior Courses:* Courses 110A-110B, 115A-115B, and 116A-116B.

*Unrestricted Course:* Course 140A-140B.

\* Not offered, 1936-37; probably offered, 1937-38.

- 101A-101B. **Oral and Written Composition.** (3-3) Yr.  
M W F, 8, 10, 12. Mr. Corbató, Miss Krause, Mr. Templin
- 102A-102B. **Survey of Spanish Literature to 1900.** (3-3) Yr.  
M W F, 9, 11, 2. Mr. Zeitlin, Miss Krause  
Required of major students in Spanish.
- 104A-104B. **Survey of Spanish American Literature.** (3-3) Yr.  
M W F, 10. Mr. González  
A study of the principal authors of Spanish America.  
Lectures and reading.
- 108A-108B. **Spanish Literature from 1850-1898.** (2-2) Yr. Mr. Bailiff  
Tu Th, 10.  
A study of Spanish Realism in the second half of the nineteenth century.
- \*109A-109B. **Spanish Literature from 1700-1850.** (2-2) Yr. Mr. Bailiff  
Tu Th, 9.  
A study of the Neo-classic and Romantic movements.
- 110A-110B. **Contemporary Literature.** (2-2) Yr. Mr. Bailiff  
Tu Th, 10.  
Reading and discussion of contemporary writers.
- 115A-115B. **Readings in Classical Literature.** (2-2) Yr. Mr. Zeitlin  
Tu Th, 11.  
This course duplicates courses 105A-105B, 105C-105D given prior to September, 1936.  
Students planning to take graduate work in Spanish are expected to take this course or offer an equivalent.
- 116A-116B. **Advanced Composition.** (2-2) Yr. Mr. Bailiff, Mr. Corbató  
Tu Th, 10, 12  
Required of Spanish majors.
- 140A-140B. **Spanish Civilization.** (2-2) Yr. Mr. Corbató  
Tu Th, 11.  
Prerequisite: junior standing.  
A study of the growth and development of Spanish culture in the various fields. Lectures are in English, reading in Spanish or English.

## GRADUATE COURSES†

- 204A-204B. **Spanish American Literature.** (2-2) Yr. Mr. González
- 205A-205B. **Prose Masterpieces of the Sixteenth and Seventeenth Centuries.** (2-2) Yr. Mr. Templin
- 209A-209B. **The Drama of the Golden Age.** (2-2) Yr. Mr. Templin
- ‡210A-210B. **Contemporary Literature.** (2-2) Yr. Mr. Barja
- 212A-212B. **Historical Grammar and Old Spanish Readings.** (2-2) Yr. Mr. Zeitlin

\* Not offered, 1936-37; probably offered, 1937-38.

† All candidates for the degree of Master of Arts must offer at least two years of high school Latin, or the equivalent.

‡ Not offered, 1936-37.

**SUBJECT A: ENGLISH COMPOSITION**

FRANK HERMANN REINSCH, Ph.D., Associate Professor of German, Chairman,  
Committee on Subject A.

---

THOMAS E. THOMPSON, A.B., Associate in Subject A.

SELENA P. INGRAM, M.A., Associate in Subject A.

MARGARET BROWN RINGNALDA, M.A., Associate in Subject A.

**Subject A. No credit. I, II.**

The Staff

Fee, \$10.

Three hours weekly for twelve weeks. Although this course yields no credit, it displaces two units on the student's program. Every student who does not pass the examination in Subject A is required to take, in the semester immediately following his failure, the course in Subject A. Sections are limited to thirty students. For further details, see page 37.

Training in correct writing, including drill in sentence and paragraph construction, diction, punctuation, grammar, and spelling. Weekly compositions and written tests on the text.

---

<sup>1</sup> In residence first semester only, 1936-37.

**TRAINING DEPARTMENT**

**STAFF IN THE UNIVERSITY OF CALIFORNIA AT LOS ANGELES  
TRAINING DEPARTMENT**

**CHARLES WILKIN WADDELL, Ph.D.,** Professor of Education and Director of the Training Department.

**ETHEL I. SALISBURY, M.A.,** Associate Professor of Elementary Education and Supervisor of Training.

**CORINNE A. SEEDS, M.A.,** Assistant Professor of Elementary Education and Principal of the Training School.

**JESSE A. BOND, M.A.,** Lecturer in Education and Associate Director of Training.

**BARBARA GREENWOOD,** Supervisor of Nursery School Training.

**LULU M. STEDMAN, Ed.B.,** Supervisor of Special Education.

**HELEN B. KELLER, Ed.B.,** Supervisor of Training, Elementary.

**BERTHA E. WELLS, Ed.B.,** Supervisor of Training, Elementary.

**NATALIE WHITE, M.A.,** Supervisor of Training, Art.

**HELEN CHUTE DILL, M.A.,** Supervisor of Training, Music.

**LAVERNA L. LOSSING, M.A.,** Supervisor of Training, Music.

**DIANA W. ANDERSON, M.A.,** Supervisor of Training, Physical Education.

**ELIZABETH BRUENE, M.A.,** School Counselor.

**EMMA JANE ROBINSON,** Training Teacher, Sixth Grade.

**HELEN F. BOUTON, M.A.,** Training Teacher, Fifth Grade.

**BESSIE HOYT PERSELS, M.A.,** Training Teacher, Fourth Grade.

**GERTRUDE C. MALONEY, Ed.B.,** Training Teacher, Third Grade.

**EDITH HOPE RINGER,** Training Teacher, Second Grade.

**CLAYTON BURROW, M.S.,** Training Teacher, First Grade.

**JANE BERNHARDT, M.A.,** Training Teacher, Kindergarten.

**THELMA PIERCE, Ed.B.,** Assistant Training Teacher, Nursery School.

**VIRGINIA TOWNER, Ed.B.,** Assistant Training Teacher, Kindergarten.

**ELEANOR STRAND, Ed.B.,** Assistant Training Teacher, Nursery School.

*Departmental Supervisors*

**HELEN M. HOWELL, Ed.B.,** Associate in Fine Arts and Supervisor of Training, Art.

**CLARA BARTRAM HUMPHREYS, M.A.,** Associate in Fine Arts.

**EVA M. ALLEN,** Associate in Commercial Practice.

**ESTELLA B. PLOUGH,** Associate in Commercial Practice.

**LEILA M. DOMAN, Ph.D.,** Instructor in Home Economics.

**FOSS R. BROCKWAY,** Associate in Mechanic Arts.

**EDITH R. HARSHBERGER, M.A.,** Assistant Supervisor of Physical Education for Women.

**PAUL FRAMPTON, M.A.,** Associate Supervisor of Physical Education for Men.



## STAFF IN SAWTELLE BOULEVARD SCHOOL

*Supervisors*

NORA STERRY, M.A., Principal.

HELEN B. KELLER, Ed.B.

ETHEL I. SALISBURY, M.A.

BERTHA E. WELLS, Ed.B.

*Demonstration Teachers*

—— —, Kindergarten.

CALLIE A. GREGG, First Grade.

HELEN HAND ZILLGITT, Second Grade.

MILDRED FRAZEE, Ed.B., Third Grade.

MARY LINDSEY, M.A., Fourth Grade.

MABEL ELLA SWEET, M.A., Fifth Grade.

—— —, Sixth Grade.

*Training Teachers*

GENEVIEVE ANDERSON, Kindergarten.

ELEANOR BARR WHEELER, A.B., Little B1.

ELSA ANSHUTZ, B.S., First Grade.

—— —, First Grade.

RUTH HILLERBY, B.S. in Ed., First Grade.

JOSEPHINE O'HAGAN, B.S. in Ed., Second Grade.

ALICE HILL ARMSTRONG, Ed.B., Second Grade.

ESTELLA THOMPSON, Second Grade.

ALMA LOUISE EGERER, Third Grade.

GERTRUDE ROE MARTIN, B.S. in Ed., Third Grade.

—— —, Fourth Grade.

EUNICE COLLETTE KLECKER, Ed.B., Fourth Grade.

GERTRUDE ALLISON, Ed.B., Fourth and Fifth Grades.

SIBYL HOUDYSHELL WHITWORTH, Ed.B., Fifth Grade.

EVELYN KIDWELL, A.B., Sixth Grade.

HELEN BARBER, Ed.B., Sixth Grade.

RUTH BAUGH MYERS, Ed.B., Sixth Grade.

*Staff in Junior and Senior High Schools*

RALPH D. WADSWORTH, M.A., Principal, University High School.  
 HELEN M. DARSIE, M.A., Vice-Principal, University High School.  
 CECIL P. LYON, M.A., Vice-Principal, University High School.  
 PAUL E. GUSTAFSON, M.A., Principal, Emerson Junior High School.  
 CARRIE M. BROADBENT, Vice-Principal, Emerson Junior High School.  
 LUZEBNE W. CRANDALL, M.A., Supervisor of Training, Secondary.  
 CECILIA B. IRVINE, M.A., Supervisor of Training, Secondary.  
 DOROTHY C. MERIGOLD, Ph.D., Supervisor of Training, Secondary.  
 ATTILIO BISSIRI, M.A., Supervisor of Training, Secondary.

The remaining secondary school staff consists of about one hundred public school teachers carefully chosen for their ability as teachers and as supervisors by the University supervisory staff and approved for such service by the public school authorities. Each ordinarily assumes responsibility for the training of not more than one to three student teachers at any one time. The personnel varies from semester to semester as the needs of the University require.

---

COURSES OF INSTRUCTION

KINDERGARTEN-PRIMARY, GENERAL ELEMENTARY

390. Introduction to Elementary Teaching. (4) I, II.

Mr. Waddell, Miss Seeds

Prerequisite: at least a C average at the time of enrollment.

An intensive study of the principles of teaching made effective by assigned readings, observation, participation, analysis of teaching problems, and preparation of units of work.

This course precedes by one semester all teaching in kindergarten-primary and general elementary grades. All students in these fields must enroll for this course not later than the first half of the senior year. At least half of those of junior high rank must also be enrolled during the second half of each year to insure availability of assignments.

## SUPERVISED TEACHING†

## KINDERGARTEN-PRIMARY, GENERAL ELEMENTARY, SPECIAL SECONDARY

## Prerequisites:

Senior standing.

Satisfactory scholarship.†

Education courses as specified by the respective departments.

Approval by the University physician before each assignment.

## Courses:\*

K190A-K190B.	Kindergarten-Primary. (4-4)
E190A-E190B.	General Elementary. (4-4)
J191A-J191B.	General Junior High. (4-4)
A190.	Art, Elementary. (3)
A191.	Art, Junior High. (3)
A192.	Art, Secondary. (4)
C192A-C192B.	Commerce, Secondary. (4-4)
H191A-H191B.	Home Economics, Junior High. (2-2)
H192A-H192B.	Home Economics, Secondary. (2-2)
MA191.	Mechanic Arts, Junior High. (3)
MA192A-MA192B	Mechanic Arts, Secondary. (3-3)
M190A-M190B.	Music, Elementary. (3-3)
M192A-M192B.	Music, Secondary. (3-3)
P190A-P190B.	Physical Education, Elementary. (3-3)
P191.	Physical Education, Junior High. (3)
P192A-P192B.	Physical Education, Secondary. (3-3)
Am. 195.	Americanization Teaching. (1-6)
**(-) 195.	Elective. (1 to 4)

† All candidates for supervised teaching must make formal application at the office of the Director of Training Department about the middle of the semester preceding that in which such teaching is to be done.

For dates of application without late fee, see the *University Calendar and Schedule of Courses*.

\* All courses offered each semester.

\*\* For students seeking a second type of credential after having completed the requirements for one. To be taken normally without degree credit.

† C average for all work at the University of California at Los Angeles; a C average for all courses in education; and a C average for all work in the major (when this is other than education).

GENERAL SECONDARY\*

**320A. Introduction to Secondary Teaching.** (2) I, II. Mr. Bond  
Prerequisite: graduate standing; Education 170, and two of the following: Education 103, 112, 120, 123A-123B, Psychology 110.

An intensive study of the principles of teaching in the secondary school, made effective through observation of high school classes. This course is prerequisite to 320B and 324 and is so conducted as to prepare for and lead to definite placement for actual supervised teaching (320B or 324).

**320B. Supervised Teaching, General Secondary.** (4) I, II.

Prerequisite: course 320A.

Mr. Waddell, Mr. Bond

Supervised teaching in a secondary school. This course is accompanied by a required conference each week with the supervisor of general secondary teaching. Hours for teaching by individual arrangement. Conference, F, 3.

**323. Practicum in Supervised Teaching.** (2) I, II. Mr. Waddell, Mr. Bond

Prerequisite: courses 320A and 320B or equivalent; or public school experience and approval of the instructors.

A short course in secondary teaching designed primarily for candidates who have had several years of public school experience or the equivalent, or who have completed supervised teaching requirements for some other type of teaching credential.

The candidate will ordinarily teach ten weeks and attend one conference a week. Assignments will be so made as to supplement the candidate's previous training or experience. Special demonstration and discussion groups will be assigned.

**324. Supervised Teaching, Junior College.** (4) I, II. Mr. Waddell, Mr. Bond

Prerequisite: course 320A, Education 179 (or 170), and one other required course in education.

Restricted to candidates for the junior college credential alone who are teaching classes in the University. Enrollment only after consultation with the instructors in charge of the course.

Teaching in the lower division, observation in near-by junior colleges, reports and conferences.

THE TRAINING SCHOOLS

Supervised teaching is provided for in (1) the University Elementary School, comprising a nursery school, kindergarten, and the elementary grades; (2) Sawtelle Boulevard Elementary School of Los Angeles City; (3) the University High School and the Emerson Junior High School of Los Angeles City; (4) other high schools of Los Angeles, Santa Monica and Beverly Hills, as requirements demand.

The work is organized and administered by the Director of the Training Department and a corps of supervisors and training teachers, chosen in every case by the University authorities.

ZOOLOGY—See page 169.

\* Approval of the University physician is required before assignment to teaching courses.

# INDEX

- Abnormal psychology, 209
- Absence, leave of, 48
- Academic warning, 42
- A cappella choir, 186
- Accounting, 118, 120
- Accredited schools, admission from, 22
- Acoustics, 201
- Administration of the University, 15
- Administrative officers, 11
- Admission—to freshman standing, 21
  - to advanced standing, 28
  - to graduate status, 81
  - of special students, 29
  - from foreign countries, 81
- Adolescence, 184
- Adult education, 185
- Advanced standing, 28
- Advertising, 121
- Aeschylus, 129
- Aesthetics, 111, 189
- Agricultural engineering, 73
- Agriculture—courses, 106
  - curriculum, 94
  - College of, 12, 18, 94
- Algae, 167
- Algebra, 174, 175, 176
- Algebraic equations, 175
- American government, 202
- American history, 157
- American Indian, 210
- American institutions, 89, 206
- American literature, 189
- Analytic geometry, 174, 176
- Analytic mechanics, 176, 199
- Anatomy, 170, 172
- Ancient history, 157
- Angiosperms, 167
- Animal Husbandry, Kellogg Institute of, 18
- Animal psychology, 209
- Announcement of courses, 105
- Anthropological Museum, 12
- Anthropology, 209
- Applied electricity, 179
- Appointment Secretary, 53
- Appreciation of art, 111
- Archery, 194
- Architectural drawing, 178
- Architecture, 80
  - School of, 12
- Argumentation, 141
- Aristophanes, 128
- Aristotle, 188
- Arithmetic, 175
- Art, 110
- Art education, 118
- Art teaching credential, 91
- Asia, 147
- Associated Students, 54
- Astronomy, 115
- Astrophysics, 116
- Athletics, 191, 194
- Atomic physics, 200
- Auditing, 121
- Authority of instructors, 89
- Automotive laboratory, 178, 180
- Bachelor of Arts degree, 59
- Bachelor of Education degree, 86
- Bachelor of Science degree, 84, 94
- Bacteriology, 165
- Band, 185
- Banking, 119
- Biological chemistry, 125
- Biology, 172
- Board and lodging, 51, 52
- Bookbinding, 112
- Book illustration, 112
- Botany, 166
- Bryophytes, 167
- Bureau of International Relations, 12
- Bureau of Occupations, 52
- Bureau of Public Administration, 12
- Business administration—College of, 18, 82
- Business law, 118
  - Course in, 117
- Business cycles, 181
- Calculus, 174, 175, 176
- Calendar, 7
- California Daily Bruin*, 84, 54
- California geography, 147
- California geology, 151
- California history, 158
- California Museum of Vertebrate Zoölogy, 12
- California School of Fine Arts, 13
- Campcraft, 195
- Censure, 48
- Ceramics, 112
- Chaucer, 189
- Chemistry—College of, 12
  - courses, 128
  - major, 63
  - pre-chemistry curriculum, 70
- Child development, 184
- Child psychology, 208
- Child Welfare, Institute of, 12
- Choral, 184
- Cicero, 127
- Citriculture, 108
- Citrus Experiment Station, 18
- Civil engineering—courses, 176
  - pre-civil engineering curriculum, 72
- Civil War, 158

- Clark Memorial Library, 13, 44  
 Classical languages, 126  
 Classification of courses, 105  
 Clay modeling, 112  
 Climatology, 145, 146  
 Clinical psychology, 209  
 Clothing, 161  
 College Entrance Examination Board, 28  
 Colleges and departments of the University, 12  
 Commerce—College of, 12  
     courses, 122  
     teaching credential in, 31  
 Commercial education, 122  
 Commercial illustration, 118  
 Commercial law, 118  
 Comparative anatomy, 170  
 Complex variable, 176  
 Composition, 188, 185  
 Comprehensive examinations, 60, 100  
 Concerts, 54  
 Conditions, removal of, 41  
 Conducting, 185  
 Constitution, American, 39, 201  
 Constitutional law, 205  
 Constitution requirement, 39  
 Cookery, 162  
 Corporation finance, 119  
 Corrective physical education, 192, 196  
 Correspondence instruction, 20  
 Cosmology, 189  
 Cost accounting, 121  
 Costume, 111, 114, 163  
 Counterpoint, 184, 186  
 Crafts, 111  
 Credentials, teaching, 44, 86, 91  
 Crime and delinquency, 132  
 Crystallography, 152  
 Curriculum, 134, 186  
 Cytology, 167, 171  
  
*Daily Bruin*, 34, 54  
 Dancing, 194  
 Dante, 164  
 Debating, 141  
 Deficiencies, admission, 24  
 Degrees, regulations concerning, 44  
 Dentistry—College of, 13  
     pre-dental curriculum, 70  
 Departmental majors, 63  
 Departments of the University, 12  
 Deposits, 45  
 Descriptive geometry, 178  
 Design, 110  
 Dewey, John, 188  
 Diesel motors, 180  
 Dietetics, 161  
 Differential calculus, 174, 175  
 Differential equations, 175, 176  
 Differential geometry, 176  
  
 Discipline, 43  
 Dismissal, honorable, 43  
 Dismissal for poor scholarship, 42  
 Dissertation, 102  
 Doctor's degree, 101  
 Dormitory, 51  
 Drama, English, 139  
 Dramatic interpretation, 141, 212  
 Drawing, freehand, 111  
 Drawing, mechanical, 177, 178, 180  
  
 Economic botany, 167  
 Economic geography, 146  
 Economic geology, 150  
 Economics, 68, 130  
 Education—courses, 138  
     School of, 12  
     (See Teachers College)  
 Educational measurement, 134  
 Educational psychology, 208  
 Elections, 204  
 Electrical engineering, 73, 179  
 Electric apparatus, 179  
 Electricity and magnetism, 199  
 Elementary teaching credential, 91  
 Embryology, 170  
 Employment, 52  
 Endocrinology, 171  
 Engineering—College of, 12  
     pre-engineering curricula, 72, 73  
 Engineering, civil, 176  
 Engineering, mechanical, 177  
 Engineering, drawing, 177  
 English—courses, 137  
     examination in, for foreigners, 31  
     (see Subject A)  
 English history, 157, 158  
 Entomology, 106  
 Epistemology, 189  
 Ethics, 188  
 Euripides, 128  
 European geography, 147  
 European history, 157, 159  
 Examinations—comprehensive, 60, 100  
     condition, 41  
     entrance, 23  
     for credit, 40  
     medical, 33  
     piano test, 37  
     regulations concerning, 39  
     special, 41  
 Expenses of students, 51, 52  
 Experimental Biology, Institute of, 12  
 Experimental psychology, 208  
 Expulsion, 43  
 Extension Division, 12, 20  
  
 Failures and conditions, 41  
 Family relationships, 163  
 Far East history, 159

- Feek, 45
- Fielding, 140
- Finance, 119
- Finance, mathematics of, 174
- First aid, 191
- Folk dancing, 194
- Food, 161, 162
- Food chemistry, 124
- Foreign language—
  - credit in, for foreign students, 31
  - for junior certificate, Letters and Science, 57, 58
  - for junior certificate, Business Administration, 83
  - for junior certificate, Teachers College, 86
  - for higher degrees, 100, 101
- Foreign relations, 203
- Foreign Schools, admission from, 31
- Foreign trade, 132
- Forestry, 94, 167
- Freehand drawing, 111
- French, 142
- French civilization, 144
- Fruit production, 108
- Furniture, 111
- General secondary teaching credential, 91
- Genetics, 170
- Geography, 145
- Geology, 149
- Geometry, 174, 175, 176
- Geometrical optics, 200
- Geophysics, 151
- German, 153
- German civilization, 155
- Goethe, 155
- Gothic, 155
- Government, 202
- Government of the University, 15
- Grade points, 40
- Grades of scholarship, 40
- Graduate School of Tropical Agriculture, 13
- Graduate study, 31, 98
- Great personalities, 157
- Grecian history, 157
- Greek, 128
- Greek drama, 141
- Gymnasium facilities, 38
- Gymnasium teaching, 192, 194
- Gymnastics, 191, 194
- High school electives, 30
- High school program, 22
- Historiography, 159
- History, 156
- History of art, 112
- History of astronomy, 116
- History of education, 134, 135
- History of mathematics, 175
- History of music, 184
- History of philosophy, 188
- History of psychology, 208
- History of the University, 14
- Home economics—courses, 160
- credentials in, 91
- Home economics education, 163
- Homer, 128
- Honorable dismissal, 43
- Honors, 69, 85, 91, 97
- Hooper Foundation for Medical Research, 13
- House furnishing, 113
- Household administration, 161
- Household science, 65, 160
- House planning, 113
- Human physiology, 172
- Hygiene, 191, 194
- Idealism, 188
- Illustration, 113
- Incidental fee, 45
- Indian, American, 210
- Industrial arts education, 180
- Industrial arts teaching credential, 91
- Industrial management, 119
- Infantry training, 182, 183
- Inorganic chemistry, 124, 125
- Institute for Social Science Research, 13
- Institute of Child Welfare, 12
- Institute of Experimental Biology, 12
- Institute of Social Sciences, 12
- Instrumentation, 185
- Insurance, 120
- Integral calculus, 174, 176
- Interior decoration, 113, 114
- International finance, 119, 132
- International law, 204
- International relations, 204
- Invertebrate paleontology, 152
- Invertebrate zoology, 171
- Investments, 119
- Irrigation, 107
- Italian, 164
- Journalism, 81
- Junior certificate—College of Business Administration, 83
- College of Letters and Science, 57
- Teachers College, 87
- honorable mention with, 69, 91, 97,
- Junior college, 135, 136

- Junior college teaching credential, 98  
 Junior high school teaching credential, 91  
 Jurisprudence—courses, 202, 208  
     School of, 12  
  
 Kant, 188  
 Kellogg Institute of Animal Husbandry, 18  
 Kindergarten-primary teaching credential, 91  
 Kindergarten teaching, 184  
 Kinesiology, 192, 196  
  
 Laboratory fees, 47  
 Labor economics, 181  
 Landscape, 112  
 Languages—credit in, for foreign students, 81  
     for admission, 22  
     for junior certificate, Letters and Science, 57, 58  
     for junior certificate—Business Administration, 88  
     for junior certificate, Teachers College, 87  
     requirements for master's degree, 100  
     requirements for doctor's degree, 101  
 Late registration, 38  
 Latin, 126  
 Latin America, 147  
 La Verne Noyes scholarship, 48  
 Law—courses, 202  
     Hastings, College of the, 18  
     pre-legal curriculum, 78  
 Least squares, 116  
 Leave of absence, 48  
 Lectures, 54  
 Legislatures, 204  
 Letters and Science, College of, 12, 18, 56  
 Letters and Science list of courses, 61  
 Librarianship—curriculum, 80  
     School of, 12  
 Library, 44  
 Lick Astronomical Department, 18  
 Life-class, 118  
 Life Sciences, 165  
 Light, 199  
 Literature, English, 188  
 Living accommodations, 51, 52  
 Loans, 50  
 Lockers, 88  
 Logic, 187  
 Los Angeles Medical Department, 18  
 Lower division, 57, 88, 87  
 Lucretius, 127  
  
 Machine drawing, 178  
 Major subjects—Letters and Science, 60, 62  
  
 Business Administration, 84  
 Teachers College, 92  
     graduate study, 98, 101  
 Marketing, 121  
 Marlowe, 140  
 Master's degrees, 98  
 Materials of construction, 176, 178  
 Mathematics, 178  
 Mathematics for admission, 22  
 Mathematics, business, 174  
 Mathematics, teaching of, 176  
 Matriculation examinations, 28, 25  
 Measurement, educational, 184  
 Mechanical drawing, 177, 178  
 Mechanical engineering—courses, 177  
     pre-mechanical curriculum, 78  
 Mechanic arts, 177  
 Mechanic arts teaching credential, 91  
 Mechanics, analytic, 176, 199  
 Medical examinations, 88  
 Medical facilities, 88  
 Medical technicians, 68  
 Medicine—Medical School, 12, 13  
     pre-medical curriculum, 74  
 Medieval Latin, 127  
 Metabolism, 162  
 Metal craft, 118  
 Metaphysics, 188  
 Microbiology, 166  
 Micropaleontology, 152  
 Microtechnique, 167, 170  
 Middle ages, 157  
 Military science and tactics—courses, 181  
     requirement, 87  
 Milton, 189  
 Mineralogy, 152  
 Mining—College of, 12  
     pre-mining curriculum, 78  
 Minors—Teachers College, 89  
     for credentials, 92, 98  
 Mira Hershey Hall, 51  
 Mira Hershey Hall scholarship, 49  
 Money and banking, 181, 182  
 Municipal government, 205  
 Museum of Paleontology, 12  
 Music—courses, 184  
     examination for kindergarten students, 87  
     teaching credential in, 91  
 Music analysis, 185, 194  
 Music appreciation, 184  
 Music education, 185, 186  
 Musical events, 54  
 Mycology, 167  
  
 Natural dancing, 194  
 New Testament, 128, 129  
 Non-resident students, tuition fee, 45  
 Novel, 189  
 Numbers, theory of, 175



- Nursery School, 184
- Nursing curricula, 78
- Nursing education, 81
- Nutrition, 161
- Occupations, Bureau of, 52
- Odyssey, 128
- Officers of administration, 11
- Optics, 200
- Optometry, 79
- Orchestra, 184
- Organic chemistry, 124, 125
- Organization of the University, 14
- Oriental art, 118
- Ovid, 126, 127
- Pacific Coast history, 157
- Pageantry, 195
- Painting, 111, 112
- Paleontology, 152, 172
- Paragenesis of minerals, 152
- Parasitology, 171
- Penmanship, 122
- Personnel management, 120
- Petroleum geology, 151
- Petrology, 150
- Pharmacy—College of, 12, 18
  - curriculum, 80
- Philology, 127, 129
- Philosophy, 187
- Physical chemistry, 125
- Physical education—requirements, 87
  - credentials in, 91
- Physical education for men, 190
- Physical education for women, 198
- Physical geology, 149
- Physics, 198
- Physiography, 149, 150
- Physiology, 172
- Phytopathology, 168
- Piano, 185, 186
- Piano test, 87
- Plane surveying, 176
- Plant cytology, 167
- Plant ecology, 168
- Plant nutrition, 107
- Plant pathology, 107
- Plant physiology, 167
- Plant science curriculum, 94
- Plato, 128, 129, 188
- Playground administration, 196
- Poetry, 189
- Political geography, 147
- Political parties, 203, 204
- Political science, 202
- Political statistics, 204
- Pomology, 108
- Pope, 189
- Population and race relations, 182
- Pottery, 112
- Practice teaching, 219
- Pre-agricultural engineering curriculum, 78
  - Pre-chemistry curriculum, 70
  - Pre-civil engineering curriculum, 72
  - Pre-dental curriculum, 70
  - Pre-electrical engineering curriculum, 78
  - Pre-legal curriculum, 78
  - Pre-mechanical engineering curriculum, 78
  - Pre-medical curriculum, 74
  - Pre-mining curriculum, 77
- Preparation for University curricula, 28
- Primitive society, 210
- Printing, 178
- Private study, 40
- Prizes, 50
- Probation, 42
- Projective geometry, 175
- Psychology, 207
- Pteridophytes, 167
- Public administration, 205
- Public finance, 181
- Public health, 80
- Public health nursing, 80
- Public speaking, 140
- Public utilities, 181
- Quantitative analysis, 124
- Quantum theory, 201
- Real estate, 119
- Refund of fees, 47
- Regents, 9
- Regional geography, 148
- Registration, 88
- Reinstatement, 48
- Religion, 188, 208
- Religious Center, 58
- Removal of admission deficiencies, 24
- Renaissance, 157
- Residence requirements, 45, 60, 62, 88, 94, 98, 101, 108
- Retail store management, 121
- Rome, 157
- Rural education, 185
- Russia, 158
- Sales management, 121
- Sanitation, 168, 191
- Scholarship—grades of, 40
  - minimum requirements, 42
- Scholarships, 48
- School administration, 185
- Sciences—required in Letters and Science, 58
  - required in Business Administration, 88
  - required in Teachers College, 87
- Scouting, 191

- Scripps Institution of Oceanography, 18  
 Secondary education, 185, 186  
 Secondary teaching credentials, 86, 91  
 Self-support of students, 52  
 Shakespeare, 189, 140  
 Sheet metal, 179  
 Shop work, 178, 179, 180  
 Shorthand, 122  
 Site of the campus, 18  
 Social foundations of education, 184  
 Social institutions, 180, 182  
 Social problems, 180  
 Social psychology, 209  
 Social Science Research, Institute for, 18  
 Social Sciences, Institute of, 12  
 Social service, 81  
 Social studies, 159  
 Sociology, 68, 182, 163  
 Soils, 107  
 Solfeggio, 184  
 Sophocles, 129  
 Sound, 199  
*Southern Campus*, 55  
 Spanish, 211  
 Spanish civilization, 213  
 Spanish literature, 218  
 Special examinations, 41  
 Special secondary teaching credentials, 91  
 Special students, 29  
 Spectroscopy, 200  
 Spenser, 140  
 Stage craft, 111, 118  
 Statistics, 120, 176, 208  
 Status of students, 22  
 Storage batteries, 178  
 Structural geology, 149, 151  
 Study-list limits, 85  
 Subject A, 27, 86, 214  
 Subtropical horticulture, 94, 108  
 Summer Sessions, 19  
 Supervision, 186  
 Surplus matriculation credit, 27  
 Survey of curricula, 19  
 Surveying, 176  
 Surveying camps, 12, 13, 176  
 Suspension, 43  
 Swimming, 191, 194  
  
 Teachers College, 13, 86  
 Teaching credentials, 44, 86, 91  
 Teaching experience, credit for, 27  
  
 Teaching practice, 219  
 Tennis, 191, 194  
 Test construction, 184  
 Textiles, 112, 162  
 Theatre, 111, 118  
 Therapeutic gymnastics, 196  
 Thermodynamics, 125  
 Theses, 99, 102  
 Thucydides, 129  
 Tractors, 180  
 Training department, 215  
 Transportation, 181  
 Trigonometry, 174  
 Trust problems, 181  
 Tuition for non-residents of California, 45  
 Typing, 122  
 Typography, 111  
  
 Unclassified students, 82  
 United States history, 158, 159  
 Units of work and credit, 85  
 University Farm, 18  
 University of California Press, 12  
 University Religious Center, 53  
 Upper division, 59, 84, 88  
  
 Vaccination requirement, 38  
 Vector analysis, 175  
 Vergil, 126, 127  
 Vertebrate embryology, 170  
 Vertebrate paleontology, 172  
 Vertebrate zoology, 170, 171  
 Vocational arts credential, 86  
 Vocational education, 185  
 Voice, 184  
 Voltaire, 144  
  
 Warning, 42, 43  
 Wave motion, 199, 200  
 Weather and climate, 145  
 Weaving, 112  
 Westward movement, 158  
 Woodwind, 185, 186  
 Woodwork, 178, 179  
 World literature, 188  
  
 Year-courses for junior certificate, 58, 87  
 Y. W. C. A., 54  
  
 Zoology, 169

## **ADMINISTRATIVE BULLETINS—(Continued)**

- The University of California—An Introduction to the Berkeley Campus:**  
An illustrated circular of information.
  - The Prospectus of the College of Agriculture.** General information concerning the College of Agriculture at Berkeley, Davis, Los Angeles, and elsewhere; its organization, requirements for admission, degrees, etc.
  - The Announcement of the Division of Forestry.**
  - The Announcement of the Farmers' Short Courses.**
  - The Announcement of the Nondegree Curriculum at the Branch of the College of Agriculture, Davis.**
  - The Annual Report of the College of Agriculture and the Agricultural Experiment Station.**
  - The Bulletins and Circulars of the Agricultural Experiment Station.**
  - The Annual Commencement Program** containing the list of degrees conferred (at Berkeley), scholarships, prizes, and other honors.
  - The Announcement of the College of Commerce.**
  - The Announcement of the School of Education.**
  - The Announcement of the Graduate Division.**
  - The Announcement of the School of Jurisprudence.**
  - The Announcement of the School of Librarianship.**
  - The Announcement of the Curriculum in Optometry.**
  - The Announcement of the Curriculum in Social Service.**
  - The Catalogue of Officers and Students, Section I (Berkeley Departments).**  
Published in September and February. Price, 60 cents.
  - The President's Annual Report.**
  - The Annual Register.** Price, \$1.00.
  - The Announcement of the Summer Sessions, Berkeley.**
- 

### **Bulletins Referring Primarily to Schools and Colleges of the University in San Francisco**

- The Announcement of the College of Dentistry.**
- The Announcement of the Medical School.**
- The Announcement of the Curricula in Nursing.**
- The Announcement of the College of Pharmacy.**
- The Announcement of the Hastings College of the Law.**
- The Circular of the California School of Fine Arts.**