# Los Angeles State College of Applied Arts and Sciences 

## A THREE-CAMPUS COLLEGE, 1956-57



SAN FERNANDO VALLEY CAMPUS
Nordhoff Street and Lindley Avenue, Northridge

VERMONT CAMPUS 855 North Vermont Avenue

LOS ANGELES STATE COLLEGE
CAMPUS
San Bernardino Freeway and Eastern Avenue

## READ CAREFULLY

I. The Los Angeles State College of Applied Arts and Sciences will offer courses on three campuses during 1956-57. The distribution of majors and minors among the three campuses (see next page) will determine the "home" campus of each student.
II. The complete secondary sequence in professional Education will be offered at the Los Angeles State College and Vermont campuses only, for the academic year 1956-57.
III. Courses to meet General Education requirements will be offered on all three campuses.
IV. Students may elect courses on a campus other than their "home" (major or minor) campus, provided such courses are not offered on their "home" campus.
V. Students should consult the Schedule of Classes for the precise courses offered on each of the three campuses each semester.

## DISTRIBUTION OF THE COLLEGE PROGRAM BETWEEN THE THREE CAMPUSES FOR THE ACADEMIC YEAR, 1956-57

| Department | Los Angeles State College, Ramona Campus | Vermont Campus | San Fernando Valley Campus ${ }^{1}$ |
| :---: | :---: | :---: | :---: |
| Art | Major and minor |  | Minor |
| Audiology | 兂 | Major | -- |
| Biological Science | -- | Major | -- |
| Botany _- Business |  | Major |  |
| Business Education | Major and minor | -- | Major |
| Economics | Major |  |  |
| Elementary Education | Major |  | Major |
| Elementary Administration | -- | Major ${ }^{2}$ | -- |
| Elementary Supervision | . | Major ${ }^{2}$ | -. |
| Elementary Teaching | -- | Major ${ }^{2}$ | -- |
| Engineering English | Major and minor | Major Minor | Major and minor |
| French. | Minor |  | Major and minor |
| Geography | Major | -. | -. |
| Government | Major |  | -- |
| Guidance |  | Major ${ }^{\text {? }}$ |  |
| Health Education | Minor | Major ${ }^{2}$ and minor | Minor |
| History | Major |  | -- |
| Home Economics |  | Major and minor | -- |
| Industrial Arts |  | Major and minor | -- |
| Journalism-.-........-. | Major |  | Major |
| Language Arts. | Major and minor | Minor |  |
| Life and General Science | Minor | Major and minor | Minor |
| Mathematics | -- | Major and minor | Minor |
| Microbiology |  | Major |  |
| Music | Major and minor |  | Minor |
| Nursing. | -.- | Major |  |
| Physical Education | -- | Major and minor | Minor |
| Physical Science .....-..... |  | Major |  |
| Physical and General Science |  | Major and Minor | Minor |
| Psychology -- | Major |  | -- |
| Police Science | -- | Major | -- |
| Recreation Education. | - | Major | -- |
| Secondary Administration | -- | Major ${ }^{2}$ | -- |
| Secondary Supervision |  | Major ${ }^{2}$ | -- |
| Secondary Teaching |  | Major ${ }^{2}$ | -- |
| Social Science | Major |  |  |
| Social Studies | Major and minor | Minor | Major and minor |
| Sociology | Major | -- | -- |
| Spanish. | Major and minor | - |  |
| Special Education | Major | - |  |
| Speech-Drama | Major and minor |  | Minor |
| Zoology | --- | Major | -- |

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## BULLETIN

of the

## los IIGBLES STATE COLLBGB OF APPLIED IRTS AID SCIETCESS

## CIRCULAR OF INFORMATION

AND
ANNOUNCEMENT OF COURSES

FALL AND SPRING SEMESTERS<br>1956-57

Address All Inquiries to:
855 North Vermont Avenue
LOS ANGELES 29, CALIFORNIA

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## COLLEGE CALENDAR

## FALL SEMESTER 1956-57

August 17, 1956 $\qquad$ Deadline for applications for all entering students not in attendance as matriculated students during spring, 1956. In order to assure admission, applicants should file at the earliest possible date with the Admissions Office. This office cannot guarantee the processing of applications and transcripts filed after this date.

September 17-21 Advisement and registration week. Students should consult the class schedule for details, dates, and deadlines regarding registration.

September 24 Instruction begins.
October $12 \ldots$ Deadline for applications for graduation in January, 1957.
November $2 \ldots$ Last day to withdraw from class without risk of " F " grade.
November $9 \quad$ Deadline for filing for directed teaching for Spring, 1957.
November 12 Veterans' Day (legal holiday). No classes in session.
November $15 \ldots$ Optional examination to meet American government and history graduation requirements.
November 29, 30, Dec. 1 , incl. Thanksgiving holidays.

December 3 Deadline for applications for graduation in June or Summer, 1957.
December 19, 1956January 1, 1957, incl... Christmas holidays.

January 2, 1957 ._._Classes resume.
January $11 \quad$ Last day to withdraw from classes.
January 24-30, incl. Semester examinations.
February 1 Fall semester ends.

## SPRING SEMESTER 1957

January $4,1957 \quad$ Deadline for applications for all entering students not in attendance as matriculated students during fall, 1956. In order to assure admission, applicants should file at the earliest possible date with the Admissions Office. This office cannot guarantee the processing of applications and transcripts after this date.

February 4-8, incl._Advisement and registration week. Students should consult the class schedule for details, dates, and deadlines regarding registration.

February 11 Instruction begins.

| February 12 | Lincoln's Birthday (legal holiday). No classes in session. |
| :---: | :---: |
| February 28 | Final deadline for applications for graduation in June or Summer, 1957. |
| February 22 | Washington's Birthday (legal holiday). No classes in session. |
| March 22 | Last day to withdraw from class without risk of "F" grade. |
| April 11 | Optional examination to meet American government and history graduation requirements. |
| April 15-20 | Easter Vacation. |
| April 1 | Deadline for filing for directed teaching for fall, 1957. |
| May 24 | Last day to withdraw from classes. |
| May 30 | Memorial Day (legal holiday). No classes in session. |
| June 10-14, in | Semester examinations. |
| June 15 | Spring semester ends. |

## ADMINISTRATION

## CALIFORNIA STATE DEPARTMENT OF EDUCATION

Roy E. Simpson $\qquad$ Superintendent of Public Instruction and State Director of Education
J. Burton Vasche $\qquad$ Associate Superintendent of Public Instruction; Chief, Division of State Colleges and Teacher Education
Joel A. Burkman Assistant Division Chief, State Colleges and Teacher Education

## STATE BOARD OF EDUCATION

Term expires January 15th
William L. Blair, President, Star-News Building, 525 E. Colorado St., Pasadena 1 ..... 1956
Byron H. Atkinson, University of California, Los Angeles 24 ..... 1957
Mrs. Mable Kinney, 3726 Grayburn, Los Angeles ..... 1958
William M. Bucknam, Ceres, Stanislaus ..... 1959
Thomas J. Mellon, 390 First St., San Francisco 5 ..... 1958
James Mussatti, 1341 University Ave., Palo Alto ..... 1958
Max J. Osslo, 227 E St., San Diego 1 ..... 1957
Wilber D. Simons, 2339 Cliff Dr., Redding ..... 1956
Mrs. Margaret H. Strong, 672 Mirada Ave., Stanford ..... 1956
William G. Werner, Alameda Times Star, Alameda ..... 1959Roy E. Simpson, Secretary and Executive OfficerMrs. Leora W. Keaster, Assistant to the Secretary
LOS ANGELES STATE COLLEGE ADVISORY BOARD

The advisory board of the college consists of seven members, all of whom are residents of Los Angeles County and three of whom are members of the City Board of Education in Los Angeles. The members are:

Term expires September 30th
E. McClelland Stuart, Chairman, 6300 Hollywood Blvd, Hollywood 13 ..... 1959
Leonard K. Firestone, 2525 Firestone Blvd., Los Angeles 54 ..... 1956
Harry H. Hillman, 450 N. Grand Ave., Los Angeles 12 ..... 1957
Mrs. Valley Knudsen, 3034 Edgewick Rd., Glendale ..... 1958
William G. Paul, 618 S. Spring St., Los Angeles 14 ..... 1957
Mrs. Edith K. Stafford, 450 N. Grand Ave., Los Angeles 12 ..... 1959

## COLLEGE ADMINISTRATION

PRESIDENT
President
Administrative Assistant to the President
Dean of Applied Arts and Sciences
Howard S. McDonald

Dean of Building, Planning, and Construction Willis M Kenealy

Coordinator of Business and Industrial Education Asael C. Lambert Homer D. Fetty

## INSTRUCTION

Dean of Instruction-Los Angeles State College Campus and Vermont Campus
Dean Albert D. Graves Aso of Instruction-San Fernando Valley Campus Delmar T. Oviatt
Associate Dean of Instruction-Graduate Studies Raymond A. Rydell

Associate Dean of Instruction-Curriculum William G. Leary
Assistant Dean of Instruction-Extended Day Program Alfred E. Ehrhardt
Assistant Dean of Instruction
John Salmond

## EDUCATIONAL SERVICES

Dean of Educational Services and Summer Session John A. Morton
College Librarian Beverley Caverhill

Audio-Visual Coordinator
Adam E. Diehl

## STUDENT PERSONNEL SERVICES

| Dean of Student Personnel | Morton J. Renshaw |
| :--- | ---: |
| Admissions Officer | Robert J. Williams |
| Registrar | Ray F. Marsh |
| Associate Dean of Counseling and Guidance | Eugenia C. Loder |
| Associate Dean of Student Activities | Floyd R. Eastwood |
| Placement Officer | Don D. Prosser |
| Teacher Placement | Carita Conner |
| Health Officer | Hyman Simmonds |
| Veterans Coordinator | Edwin Johnson |
|  |  |

BUSINESS MANAGEMENT
Business Manager
Comptroller
Warner K. Masters
Graduate Manager Jack C. Heppe

Bookstore and Food Services William Lerz

Chief of Maintenance Robert Deem
miet of Maintenance
BUSINESS AND ECONOMICS DIVISION, Chairman Floyd R. Simpson
Accounting, Department Head Donald L. Raun
Business Education and Secretarial, Adviser ..... Jessie C. Gustafson
Economics and Statistics, Department Head ..... Leonard G. Mathy
Frank J. Hill
Management, Marketing, Labor Relations, Department Head Rodney F. Luther
EDUCATION DIVISION, Chairman

$\qquad$
Rudolph SandoElementary Education, Department HeadRoderick G. Langston
Elementary Student Teaching, Coordinator Ruth Samson
Secondary Education, Department Head John Dahl
Secondary Student Teaching, Coordinators. ..... Fred G. Rhodes,
School Administration and Supervision, Coordinator Roy B. Tozier
Special Education, Coordinator ..... Francis E. Lord
FINE ARTS DIVISION, Chairman

$\qquad$
William E. Daywalt
Art, Department Head ..... D. Keith Manion
Music, Department Head Keith D. Snyder
HEALTH AND SAFETY, PHYSICAL EDUCATION, RECREATION, AND ATHLETICS DIVISION, Chairman Ferron C. Losee
Athletics, Coordinator ..... Ferron C. Losee
Health and Safety, Department Head ..... Saxon C. Elliot
Physical Education, Men, Department Head ..... Albert R. Wise
Physical Education, Women, Department Head ..... Beverly Yerrington
Recreation, Department HeadGeorge W. Willott
LANGUAGE ARTS DIVISION, ChairmanEnglish, Acting Department Head
Foreign Language, Adviser. Florence M. BonhardJournalism, AdviserPaul T. Scott
Speech and Drama, Department Head ..... James J. Stansell
NATURAL SCIENCES DIVISION, Chairman Stewart A. Johnston
Biological Science, Department Head ..... Dean A. Anderson
Mathematics, Adviser Samuel E. Urner
Physical Science, Acting Department Head Stewart A. Johnston
SOCIAL SCIENCES DIVISION, Chairman Edward T. Price, Jr.Anthropology, AdviserDorothy L. Luhrs
Geography, Department Head Robert Durrenberger
Government, Department Head ..... Elliott Guild
History, Department Head Robert C. CatrenPhilosophy, Adviser

-     -                         James B. WilsonPsychology, Department HeadHoward E. Wilkening
    
Social Studies, Adviser

$r \quad \square$
Joseph B. FordSociology, Department HeadKarl M. Wallace
TECHNICAL SCIENCES DIVISION, Chairman ..... Willis M. Kenealy
Audiology, Department Head ..... A. Helen Kennedy
Engineering, Department HeadHome Economics, Department HeadBertha Gregory
Industrial Arts, Department Head Claude E. Nihart
Nursing, Department Head ..... Rebecea Bosworth
Police Science, Department Head William R. Barker

## LIST OF FACULTY-1956-1957

Howard S. McDonald (1949) President
B.S., 1921, Utah State Agricultural College; M.A., 1925, Ed.D., 1949, University of California.

Georgia S. Adams (1956) Assistant Professor of Education A.B., 1933, B.S., 1935, Ph.D., 1941, University of Southern California.

Leonard L. Adams (1951)
Lecturer in Physical Education B.S., 1942, Drake University.

Laird B. Allison (1956) Lecturer in Business Administration B.S., 1956, University of Southern California.

Roger M. Altenberg (1954)
Instructor in Drama A.B., 1945, University of Southern California; M.A., 1948, Western Reserve University.

Daniel A. Amneus (1950) Assistant Professor of English B.A., 1941, University of California; M.S., 1947, Ph.D., 1953, University of Southern California.
Dean A. Anderson (1950) $\qquad$ Professor of Microbiology
B.S., 1929, Brigham Young University; M.S., 1930, Ph.D., 1932, Iowa State College.

Keith P. Anderson (1954) Assistant Catalog Librarian B.A., 1950, Pomona College; M.A., 1951, Claremont Graduate School; M.S.L.S., 1954, University of Southern California.
Anthony J. Andreoli (1955) $\qquad$ Assistant Professor of Microbiology A.B., 1950, Ph.D., 1955, University of Southern California.

Esther Andreas (1956) $\qquad$ Assistant Professor of Music
B.A., 1931, University of California.

Dorothy Armstrong (1951) Supervising Catalog Librarian B.J., 1926, University of Missouri; B.A.L.S., 1941, University of Oklahoma.

Thomas D. Bair (1956) Assistant Professor of Zoology A.B., 1946, DePauw University; M.A., 1947, Indiana University; Ph.D., 1951, University of Illinois.
Mary A. Bany (1955)
Assistant Professor of Education B.S., 1942, University of Oregon; M.A., 1953, Los Angeles State College.

William R. Barker (1950) $\qquad$ Head of Police Science Department A.B., 1922, Harvard University; LL.B., 1930, Ph.D., 1937, University of Southern California.

Francis H. Baxter (1950) Associate Professor of Music B.M., 1935, University of Wichita; M.M., 1940, Northwestern University.

Walter Beaver (1956) Assistant Professor of Speech B.A., 1949, University of California at Santa Barbara; M.S., 1951, University of California at Los Angeles.
J. Ross Beckstead (1951) Lecturer in Music B.M., 1939, University of Wyoming; M.F.A., 1951, University of Utah.

Eugene Benedetti (1950) Professor of Education B.A., 1935, University of California at Los Angeles; M.S., 1942, Ed.D., 1950, University of Southern California.
Raymond E. Bernberg (1950) $\qquad$ Assistant Professor of Psychology B.A., 1948, M.A., 1949, Ph.D., 1950, University of California at Los Angeles.

David B. Bidna (1955) Assistant Professor of Education A.B., 1942, University of California at Los Angeles; M.S., 1955, University of Southern California.
A. LeRoy Bishop (1950) $\qquad$ Professor of Education B.S., 1935, Utah State Agricultural College, M.S.
Ed.D., 1946, Colorado State College of Education.

Thompson Black, Jr. (1950) $\qquad$ Associate Professor of Government B.S., 1933, United States Naval Academy; M.A., 1949, Ph.D., 1954, University of California at Los Angeles.

Walter L. Blackledge (1951) $\qquad$ Assistant Professor of Business Administration B.S., 1943, St. Ambrose College; M.A., 1946, J.D., 1947, Ph.D., 1951, University of Iowa; member of the Illinois and Iowa State Bar.
Hugh S. Bonar, Jr. (1954) $\qquad$ Assistant Professor of History B.A., 1947, M.A., 1948, Ph.D., 1952, University of Wisconsin.

Florence M. Bonhard (1949) Associate Professor of Foreign Language B.A., 1921, Stanford University; M.A., 1927, Columbia University; Ph.D., 1946, University of Southern California.
Aldo J. Bonura (1956)
Assistant in Education B.S., 1952, Loyola University.

Irvin Borders (1951) Lecturer in Business Administration and Journalism B.J., 1925, University of Missouri; M.A., 1952, Los Angeles State College.

Rebecca C. Bosworth (1949)
Head of Nursing Department B.S., 1931, University of California at Los Angeles; R.N. (California), M.S., 1936, University of Southern California.
Elizabeth H. Brady (1955)
Assistant Professor of Education B.A., 1941, Carleton College; M.A., 1945, University of Chicago.

William H. Bright (1950) $\qquad$ Administrative Assistant to the President B.A., 1949, Los Angeles State College; M.B.A., 1950, University of California at Los Angeles.

Martha L. Brockman (1951)
Associate Professor of Education B.A., 1938, Eastern Washington College of Education; M.A., 1944, Ed.D., 1953, Teachers College, Columbia University.
Gerald W. Brown (1954)
Assistant Professor of Education B.S., 1939, University of Nebraska; M.A., 1951, University of California; Ed.D., 1954, Stanford University.
John C. Bushman (1953) Associate Professor of English B.A., 1936, M.A., 1937, Ph.D., 1943, University of Illinois.

Harley Randall Butler (1954)
Assistant Acquisitions Librarian A.B., 1950, M.A., 1952, B.L.S., 1954, University of California.

Charles N. Butt (1955) Assistant Professor of Education B.S., 1928, M.A., 1936, University of Washington.

William G. Byron (1954) $\qquad$ Assistant Professor of Geography B.A., 1943, M.A., 1948, University of California at Los Angeles; Ph.D., 1954, Syracuse University.
Frances Cake (1950) $\qquad$ Professor of Physical Education B.A., 1930, University of Richmond; M.S., 1941, Wellesley College; Ph.D., 1949, University of Southern California.
Robert A. Canny (1954) $\qquad$ Supervising Acquisitions Librarian B.A., 1937, Colorado State College of Education; B.S. in L.S., 1938, University of Denver.

Robert S. Catheart (1955) $\qquad$ Assistant Professor of Speech A.B., 1944, M.A., 1947, University of Redlands; Ph.D., 1953, Northwestern University.

Robert C. Catren (1950)
Professor of History B.A., 1938, M.A., 1942, Ph.D., 1951, University of Southern California.

Beverley S. Caverhill (1950)
College Librarian B.A., 1935, M.A., 1938, University of Oregon; Graduate Certificate in Librarianship, 1942, University of California.
Virginia P. Chamberlain (1953)
Assistant Professor of Home Economics B.A., 1929, University of Utah; M.A., 1932, Columbia University.

Laura C. Chase (1955) $\qquad$ Instructor in Speech A.B., 1946, M.A., 1952, Occidental College.

Milton C. Cheresh (1954)
Assistant Professor of Education B.A., 1948, M.A., 1949, Wayne University.

Russell L. Chrysler (1950) $\qquad$ Professor of Business Administration B.B.A., 1932, M.B.A., 1937, University of Minnesota; Ph.D., 1953, Northwestern University.

Stephen C. Clark (1955) $\qquad$ Assistant Professor of Psychology B.A., 1941, M.A., 1945, University of Washington; Ph.D., 1949, Yale University.

Bernard Codner (1955) $\qquad$ Assistant Professor of Business Administration B.S.S., 1949, City College of New York; M.S., 1950, Columbia University.

Carita K. Conner (1952)
Teacher Placement Secretary
B.A., 1931, University of Nebraska.

Grant O. Cook (1948) $\qquad$ Associate Professor of Music B.A., 1937, University of Utah; M.A., 1941, Ed.D., 1944, Columbia University.

John P. Cornish (1954) Assistant Professor of Art B.F.A., 1939, M.A., 1940, Wayne University.

John R. Cox (1955) Assistant Professor of Business Administration B.S., 1947, Indiana University; M.B.A., 1948, University of Chicago; Certified Public Accountant, 1951, California.
Leslie Cromwell (1953) $\qquad$ Assistant Professor of Engineering B.Sc.Tech., A.M.C.T., 1943, University of Manchester, England; M.S., 1951, University of California at Los Angeles; Registered Professional Electrical Engineer, State of California.
Morton J. Cronin (1955)

## Assistant Professor of English

 B.A., 1944, M.A., 1945, Wayne University; Ph.D., 1953, University of Minnesota.Jack B. Cullen (1955) Assistant Professor of Language Arts B.S., 1941, M.A., 1950, Ph.D., 1955, Ohio State University.

John A. Dahl (1955) Associate Professor of Education B.A., 1944, San Jose State College; M.A., 1950, Ed.D., 1952, Stanford University.

Maurice Dance (1950) Associate Professor of Economics B.A., 1947, University of Washington; M.S., 1949, Ph.D., 1953, University of Wisconsin.
J. T. Daniel (1954) $\qquad$ Instructor in Speech B.A., 1942, Santa Barbara State College; M.A., 1946, Denver University.

William E. Daywalt (1949) $\qquad$ Professor in Art B.E., 1940, M.A., 1944, Ed.D., 1949, University of California at Los Angeles.

Louis C. DeArmond (1950) Assistant Professor of History B.A., 1940, M.A., 1947, Ph.D., 1950, University of California.

Cameron Scott Deeds (1951) Assistant Professor of Physical Education B.S., 1949, Brigham Young University; M.S., 1951, University of Southern California.

Ted DeLay (1955) $\qquad$ Assistant Professor of Drama B.A., 1939, Carnegie Institute of Technology; M.A., 1946, Ph.D., 1951, University of Southern California.
Solomon Diamond (1949)
Professor of Psychology
B.S., 1927, New York University; M.A., 1928, Ph.D., 1936, Columbia University.

Francis E. Diaz (1956) Assistant Professor of Education B.A., 1946, M.A., 1955, University of California at Los Angeles.

Isabel W. Dible (1953) Assistant Professor of Education A.B., 1932, San Jose State College; M.A., 1953, University of California at Los Angeles.

Adam E. Diehl (1955) Professor of Education and Coordinator of Audio-Visual Education A.B., 1927, University of California at Los Angeles; M.B.A., 1930, University of Southern California; Sc.D., 1950, Los Angeles College of Optometry.
Harold T. Diehl (1950) Associate Professor of Sociology B.A., 1933, M.A., 1935, University of Missouri; Ph.D., 1950, University of Southern California.
Robert Douglass (1951) $\qquad$ Associate Professor of Speech B.A., 1946, M.A., 1947, University of Redlands; Ph.D., 1951, University of Southern California.
Robert W. Durrenberger (1950) $\qquad$ Assistant Professor of Geography B.S., 1940 , Moorhead State Teachers College; B.S., 1941, California Institute of Technology; M.S., 1949, University of Wisconsin; Ph.D., 1955, University of California at Los Angeles.

Floyd R. Eastwood (1948) Associate Dean of Student Activities B.P.E., 1922, Springfield College; M.A., 1924, Clark University; Ph.D., 1936, New York University.
Louis W. Eggers, Jr. (1955)
Instructor in Engineering B.A., 1949, University of Virginia; M.S., 1954, University of Southern California.

Alfred Ehrhardt (1950) Assistant Dean of Instruction-Extended Day Program B.A., 1930, College of the Holy Cross; M.S.Ed., 1948, Ed.D., 1950, University of Southern California.

Saxon C. Elliot (1950) $\qquad$ Lecturer in Physical Education B.S., 1934, M.S., 1949, University of Southern California.
J. Henry Ennen (1954) Assistant Professor of Physical Education B.A., 1953, University of California at Los Angeles; M.A., 1955, Los Angeles State College.

William R. Eshelman (1951) $\qquad$ Assistant Librarian B.A., 1943, Chapman College; M.A., 1950, University of California at Los Angeles; B.L.S., 1951, University of California.
Homer D. Fetty (1951) Coordinator of Business and Industrial Education B.A., 1935, University of Califormia at Los Angeles; M.S., 1939, Ed.D., 1951, University of Southern California.
Seymour Fiekowsky (1955)
Assistant Professor of Economics B.A., 1942, Wayne University; M.A., 1948, Harvard University.

Anita H. Fisher (1956) $\qquad$ Instructor in Physical Education B.A., 1954, Los Angeles State College.

Howard A. Fleming (1949) $\qquad$ Associate Professor of History B.A., 1947, Ph.D., 1952, University of California at Los Angeles.

Louis F. Foley (1954) $\qquad$ Lecturer in Education B.S., 1910, Ohio Wesleyan University.

Robert J. Forbes (1956) $\qquad$ Assistant Professor of Education B.A., 1940, University of California at Los Angeles; M.A., 1948, Ph.D., 1955, Claremont Graduate School.
Joseph B. Ford (1950) $\qquad$ Associate Professor of Sociology B.A., 1937, University of California at Los Angeles; M.A., 1941, University of Southern California; M.A., 1947, Harvard University; Ph.D., 1951, University of California.
George N. Francis (1949) Associate Professor of Business Administration B.A., 1941, B.S., 1942, M.S., M.Ed., 1953, University of Southern California; Certified Public Accountant, 1948, California.
Betty J. Frisz (1955) $\qquad$ Circulation Librarian B.S., 1950, M.S.L.S., 1952, University of Southern California.

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B.A., 1936, Maryville College; B.D., 1939, Garrett Biblical Institute; M.A., 1942, Ph.D., 1944, University of Southern California.
Mabel M. Wilson (1950)
Assistant Professor of Education B.A., 1919, Columbia College, Chicago; B.S., 1936, M.S., 1951, Ed.M., 1954, University of Southern California.
Clifton C. Winn (1950) $\qquad$ Professor of Education B.A., 1927, Pomona College; M.A., 1929, Ph.D., 1931, Harvard University.

Frances Wirth (1954) $\qquad$ Assistant Professor of Art B.S., 1944, Central Missouri State College; M.A., 1953, Univeristy of California at Los Angeles; advanced study, Chouinard Art Institute, Jepson Art School.
Albert R. Wise (1950) $\qquad$ Associate Professor of Physical Education B.S., 1947, M.A., 1948, Ohio State University; Ed.D., 1952, University of Southern Califormia.

Beverly Yerrington (1953) $\qquad$ Assistant Professor of Physical Education B.S., 1939, M.S., 1941, University of Utah.

Melvin L. Zack (1954) $\qquad$ Assistant Professor of Music B.M., 1943, B.M.E., 1948, M.M.E., 1949, Ph.D., 1953, University of Kansas; additional study at Juilliard Institute of Musical Art.
Gabriel A. Zimmerman (1955)
Assistant Professor of Philosophy B.S., 1947, M.A., 1949, St. Louis University; Ph.D., 1955, University of Virginia.

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$\mathrm{D}_{\mathrm{r}}$. Victor Goodhill, Senior Otolaryngologist, Children's Hospital, Los Angeles.
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Dr. Howard P. House, Chairman, Department of Otolaryngology, U.S.C. School of Medicine.
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Dr. Douglass E. Wheeler, Field Representative for Research on Effects of Industrial Noise, American Academy of Ophthalmology and Otolaryngology.

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Mr. George L. Campbell, Plumbers' Local No. 78.
Mr. C. L. Freeman, Associated Plumbing Contractors of Los Angeles.
Mr. G. E. Morris, Superintendent and Manager, Los Angeles Department of Building and Safety.
Mr. Jack F. Parker, Chairman, Western Plumbing Officials Association, Educational Program.
Mr. Hubert Reeves, Co-Publisher, Western Plumbing and Heating Journal.
Mr. R. A. Samuelson, Los Angeles Department of Water and Power.
Mr. Charles L. Senn, Engineer-Director, Bureau of Sanitation, Los Angeles City Health Department.
Mr. P. R. Shea, General Staff Supervisor, Appliance and Dealer Promotion, Southern California Gas Company.
Mr. Stephen I. Smoot, Chief of Plumbing Division, Los Angeles Department of Building and Safety.
Mr. George M. Uhl, M.D., Los Angeles City Health Officer.
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Mr. Carroll W. Parcher, Publisher, Glendale News-Press.

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Mr. H. Woodrow Linton, Chief Methods Engineer, North American Aviation.
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Miss Maxine Atteberry, Director, Nursing Service, College of Medical Evangelists.
Sister Austin, Director of Nursing, St. Vincent's College of Nursing.
Mrs. Constance Baker, Director, California Hospital School of Nursing.
Miss Mildred Brown, Director, School of Nursing, Los Angeles County General
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Miss Nina Bethea Craft, Director, Nursing Education and Nursing Services, Los
Angeles County General Hospital.
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Miss Freda E. Gooding, Hollywood Presbyterian Hospital.
Mrs. Lulu K. Wolfe Hassenplug, Dean, School of Nursing, U. C. L. A.
Miss Velma Kish, Presbyterian Hospital, Los Angeles.
Miss Eunice Lamona, Los Angeles City Board of Education.
Miss Mary McQuillen, Los Angeles County Health Department.
Miss Elizabeth Miller, School of Nursing, St. Vincent's College of Nursing.
Mrs. Kathryn J. Nelson, Dean, School of Nursing, College of Medical Evangelists.
$M$
Miss Zella Nicholas, Superintendent of Nurses, California Lutheran Hospital.
Miss Marjorie Quigley, Executive Secretary, District No. 5, California State Nurses Association.
Miss Delores Schemmel, Director of Nursing, Huntington Memorial Hospital.
Mrs. Jean Smith, Bishop Johnson College of Nursing.
$M$ iss
Miss Eva A. Stockonis, School of Nursing, Queen of the Angels Hospital.
Miss Lillian Vosloh, Director, School of Nursing, Pasadena City College.

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The Honorable Eugene W. Biscailuz, Sheriff, Los Angeles, California.
$M_{r}$. C. R. Eggers, Chief of Police, Glendale, California.
$M_{r}$. Ci
Mr. Clarence H. Morris, Chief of Police, Pasadena, California.
$\mathrm{M}_{\mathrm{M}}$. William H. Parker, Chief of Police, Los Angeles, California.
Mr. Richard Simon, Deputy Chief of Police, Los Angeles, California.
Mr. William E. South, Chief Special Agent, Southern California Edison Company,
Los Angeles.

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Mr. Gordon Holmquist, Vice President, Cole-Holmquist, Inc.; Chairman, Printing Industry Association Training Committee.
Mr. Ewart Johnson, Coordinator of Printing Department, Los Angeles Technical Junior College.

## RECREATION EDUCATION ADVISORY COMMITTEE

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Mr. Carson Conrad, Chief, Bureau of Health Education, Physical Education, and Recreation, State of California, Department of Education.
Mr. William Frederickson, Superintendent of Recreation and Parks Department, City of Los Angeles.
Mr. B. Paul Gruendyke, Director of Community Services, County of Los Angeles.
Mr. Art Howser, Manager, Studio Club, Twentieth Century Fox, Inc.
Mr. Lawrence E. Houston, Director, Physical Education, Safety and Youth Services Branch, City of Los Angeles Board of Education.
Mr. K. L. Kellough, Recreation Director, North American Aviation, Inc.
Mr. E. L. McKenzie, Assistant Regional Director, Boys Clubs of America.
Mr. Maurice Ostomel, Assistant Executive Secretary, Welfare Planning Council, Los Angeles Region.

## GENERAL INFORMATION

## LOCATION OF THE COLLEGE

Los Angeles State College, with an enrollment of approximately 9,000 Students, occupies three different campuses all within the city limits of Los Angeles. The "Ramona Campus" is situated in East Los Angeles just off the San Bernardino Freeway at Eastern Avenue. The "Vermont Campus" is at 855 North Vermont Avenue near the geographical center of Metropolitan Los Angeles. The "Valley Campus" is situated at Nordhoff and Lindley Avenues, Northridge, in the San Fernando Valley.

Students are referred to the first two pages of this Bulletin for information concerning the distribution of the college programs among the three campuses.

## ORGANIZATION OF THE COLLEGE

The Los Angeles State College was created by legislative act in 1947. A new legislative act reconstituted the college in 1949, naming it the Los Angeles State College of Applied Arts and Sciences.

The college presently offers upper division and graduate programs only. The Los Angeles City College, a junior college situated on the Vermont Campus, offers a lower division program. Though separate institutions, the two schools cooperate closely in the use of plant and facilities and are administered by the same president. The contractual relationships between the State Department of Education and the Los Angeles City Board of Education broadens the resources of both colleges and permits the registration of freshman and sophomore students in a junior college program directly correlated with the upper division program of a state college.

## AIMS AND FUNCTIONS

The college is established to serve the needs of the community. Its primary functions include the preparation of teachers, the training of students in the applied arts and sciences to serve business and industry, the offering of a general and liberal education for responsible citizenship, and the preparation of students for advanced professional study.

## ACCREDITATION

Los Angeles State College of Applied Arts and Sciences is accredited by the Western College Association and the California State Department of Education.

## EXTENDED DAY PROGRAM

The extended day program is that part of the regular course offerings scheduled for the late afternoon, evening, and Saturday morning. The purpose of the extended day program is to provide mature persons with
opportunities to do college-level work leading to advancement in business, education, or other professional fields. Credits earned in the extended day program may be applied toward the completion of degree or credential requirements, or the classes may be taken for cultural and intellectual improvement.

The courses offered in the extended day program are given on the same basis as the day classes, using the same facilities and textbooks, and meeting the same requirements as the day classes. In the majority of these classes the instructor is a member of the regular day faculty.

In many areas the graduation requirements may be completed by courses offered in the extended day program. However, certain classes required for teaching credentials are offered only in the day program. Students who plan to complete degree or credential requirements exclusively in the extended day program, therefore, should plan their programs in consultation with an adviser in their major field.

## Admission

For information regarding admission to the Extended Day Program, see page 37.

## Credit

All courses offered in the extended day program are accepted toward graduation, credentials, or certificates unless otherwise indicated.

## SUMMER SESSION

The college offers a six-week summer session after the close of the spring semester. Work may be taken toward the bachelor of arts, bachelor of science, master of arts, or master of science degrees, and all teaching credentials. Day and evening classes are scheduled. It is not necessary to file an application for admission to the summer session unless the student is working toward a degree or credential.

Many special features are included in the summer session that are not scheduled during the regular school year. These include workshops and seminars for teachers and for other occupational groups. An extensive program of recreational activities is arranged for summer session students. A tuition fee of $\$ 8.50$ per unit (subject to change) is charged. For details, write to the Director of Summer Session, Los Angeles State College, 855 North Vermont Avenue, Los Angeles 29, California.

## EXTENSION SERVICE

The extension service is that part of the instructional program which provides off-campus classes in response to the expressed needs of organizations and groups within Los Angeles and nearby counties. The aim of the extension service is to meet more adequately the needs of the community by providing opportunities for the professional, cultural, and vocational betterment of individuals who cannot take college work in residence.

Extension courses are planned for those wishing to earn college credit and may, under certain conditions, be applied toward a degree or cre-
dential. Standard courses may be modified or special courses may be designed to meet the specific needs of the group. Courses may be started at any time and usually meet once a week for 16 weeks. A minimum of 20 students is required to establish an extension course.
Persons desiring detailed information regarding the organization of an extension course or current extension offerings should address inquiries to Dean of Educational Services on the Vermont campus.

## WORK-STUDY PROGRAM

The work-study plan combines classroom instruction with practical experience in business firms and industrial plants.
This plan is advantageous to the student in that it enables him to:

1. Apply the principles he is studying.
2. Learn to work with others through firsthand experience.
3. Develop a sense of responsibility in doing productive work.
4. Test his vocational choice before graduation.
5. Qualify for advanced positions upon graduation.

Private employers in the Los Angeles metropolitan area have enthusiastically endorsed this plan, and provisions have been made to use a number of college students on a part-time basis as a part of their college program.
Under this plan, participating students earn one unit of credit, as a rule, for each eight hours of work per week per semester. The maximum number of units that may be earned in a four-year course and applied toward the bachelor's degree is 16 . Of these, a maximum of eight units may be earned in the upper division with not more than four units in any one academic year.

To qualify for participation in the work-study program the student must have a grade average of " C " or better and be recommended by faculty members and a former employer in the field of his proposed work-study. Applications for participation in the business and industry phases of the program should be filed in the office of the Work-Study Coordinator prior to registration.
All work-study experience must be related to the student's major and must be supervised by the Work-Study Coordinator and an academic department. The student must register in the regular manner to receive credit for work-study and must meet certain requirements including attendance at class meetings and preparation of student reports.

## INTERNSHIPS IN PUBLIC SERVICE

This program of cooperative education combines classroom instruction with practical experience in government agencies and quasi-public enterprises. The regulations governing the operation of this program are similar to those of the work-study program, with the following variations:

1. Applicants for participation must be in senior standing.
2. Maximum number of units that may be earned and applied toward the bachelor's degree is eight.
3. In some instances a student must pass a qualifying civil service examination for admission to the internship.
4. Interested students should discuss opportunity and qualification details with the Coordinator of Training for Government Service.

## PROVISION FOR VETERANS

The Los Angeles State College of Applied Arts and Sciences is approved for the training of veterans under Public Laws 346, 16, 550 and 894. The State of California has made provision for educational assistance to qualified veterans who were residents of California at the time of entering service.

## COLLEGE LIBRARY

The State College Library occupies separate buildings on both the Ramona and Vermont campuses and expects to move into a temporary building on the San Fernando campus in August, 1956.

The library at the Ramona campus houses the major share of the book collection and reference, circulation, and periodical services for all the pertinent curricula. At the Vermont campus the library has five buildings, adjacent to North Heliotrope Drive, which provide circulation, reference, and periodical services and house the acquisitions and cataloging activities for the three campuses.

The libraries on both campuses are open Mondays through Thursdays from 8 a.m. to 9.50 p.m.; Fridays, from 8 a.m. to 5 p.m.; Saturdays, from 9 a.m. to 1 p.m. Students are actively assisted in the use of library facilities by a staff of 19 librarians, 15 library assistants, and more that 25 part-time student assistants.

The book collection includes more than 60,000 volumes, including 12,000 bound volumes of periodicals selected particularly for the needs of upper division and graduate students. Among the 1,000 periodicals and newspapers and the 46 indexing services received currently are the more significant federal and California state publications. The reference collection includes 5,000 volumes and files of 3,000 pamphlets. Early volumes of periodicals, the New York Times, and several reference set ${ }^{5}$ are available on microcards and microfilm. At the Ramona campus are located the juvenile collection of 4,000 volumes, the textbook collection, California state textbooks, and the curriculum file.

Books and facilities of the three libraries are available to all student ${ }^{5}$ of the college. Daily messenger service is provided between the campuses so that books are readily interchanged as needed.

The State College Library is supplemented by the unusual library resources of the Los Angeles metropolitan area, including the 90,000 volumes of the Los Angeles City College Library on the Vermont campus. Among the libraries available to students are two large university libraries, the Los Angeles Public Library and several other public libraries, and the world-famous collections of the Clark and Huntington Libraries. Books are also obtained on interlibrary loan from the Califor nia State Library.

## PERSONNEL SERVICES

The student personnel services of Los Angeles State College are centered in the Admissions and Registrar's Office, the Counseling Center, the Student Activities Office, the Placement Office, and the Health Service. The student personnel program is under the general direction of the Office of the Dean of Student Personnel with administrative officers in charge of each department. Staff members from each department are available to students on all three campuses of the college.

## ADMISSIONS AND REGISTRAR'S OFFICE

All applications for admission to the three campuses of the college are processed in the central Admission and Registrar's Office on the Vermont campus, 855 North Vermont Avenue, Los Angeles 29. Students should direct inquiries regarding admissions policies to this central office. Staff members from the Admissions and Registrar's Office are available on each campus for routine transactions.

## COUNSELING CENTER

## Counseling

The college seeks to give individual attention to the needs of students. Services of a professionally trained staff are available to any student who wishes help with educational, vocational, and personal problems.

## Testing

The Testing Bureau provides a complete testing service for students. All new day students participate in an entrance testing program immediately prior to each registration period. The results of these tests are used primarily for counseling purposes; they will not negatively affect the admissions status of a student who has qualified for admission on the basis of his previous academic record. However, the test results are used by the various academic departments as a factor in determining a student's eligibility for admission to the teacher training program.
Students who wish supplementary testing not given in the entrance testing program are invited to call upon the Test Officer for assistance. ${ }^{\text {Foreign Student Affairs }}$
A foreign students' adviser is available in the Counseling Center to assist foreign students who are in this country for the primary purpose of study. Their status as students is complicated by certain conditions established by federal law, by certain specific regulations and requirements of the college, and by certain provisos laid down by their particular governments. The student must comply with the various regulations to continue his studies in this country.

## Veterans Affairs

The Counseling Center maintains an office of Veterans' Affairs. Any veteran with questions relating to benefits, the completion of forms, courses of study, or related problems should consult with the Veterans' Affairs Officer.

## STUDENT' ACTIVITIES

Student Government
The Executive Council of the Associated Student Body is a policy forming organization for campus activities and organizations. The Cabinet of Commissioners represents the functional arm of the association, and is concerned with athletics, rallies, elections, interest clubs, activity calendar, publications, public relations, student finance, and cultural relations. Finances and business management are handled by a graduate manager and a finance committee.

All regular day students have the rights and privileges of membership in the Associated Student Body and its organizations. Women and men students who are members of the Associated Student Body are eligible for membership in the respective Associated Women Students or Associated Men Students organizations.

All students taking their entire program in late afternoon or evening classes are members of the Extended Day Student Body. Their policy forming organization is the Extended Day Student Council. The council is responsible for the planning of monthly social, educational, and cultural events.

## Student Organizations

Students may elect membership in many of the special interests groups, such as the Scholarship Society, Language Arts Society, California Student Teachers' Association, etc. These, and other organizations, are chartered and coordinated by the Inter-Club Council.

The four social fraternities and three sororities are regulated by the Interfraternity and Panhellenic councils. Fraternity and sorority handbooks are available at registration and in the Student Activities Office.

## Student Publications

The College Times is the day student's newspaper published weekly by the Associated Students. The Night Times is the student newspaper published monthly for Extended Day students. The college yearbook is called the Pitchfork. Statement is a student literary publication which appears each year. The Student Handbook, put out by the Associated Students, serves as a source of information on student functions and student affairs and includes a detailed description of the nature and objectives of the various organizations.

## Scholarships

Scholarships are administered by the Loan and Scholarship Committee and are awarded on the basis of (1) need, (2) scholarship, (3) co $\mathrm{co}^{-}$ curricular participation, and (4) future potential. Additional information may be obtained at the Office of the Associate Dean of Student Activities.

Alpha Theta Pi Alumnae Scholarship: $\$ 30$ awarded to a matriculated woman student who has completed one semester at LASC with a grade point average of at least 1.5 .
Al Hull Alumni Memorial Scholarship: $\$ 25$ offered for a man or woman physical education, health, or recreation major, granted annually in the spring of each year.
Anonymous Memorial Scholarship: Two scholarships of $\$ 25$ per semester. Senior or graduate students, preferably majoring in language or literature, are eligible to apply.
Blue Key Scholarship: $\$ 25$ per year. High junior, senior, or graduate male students are eligible to apply.
Campus Book Store Scholarship: $\$ 25$ per semester. Funds for this scholarship are taken from the Campus Book Store Scholarship Sinking Fund. All men and women students are eligible to apply.
Chester R. Milham Scholarship: A $\$ 100$ scholarship offered to a man or woman evening division student. The following items will be considered in awarding this scholarship: (1) at least a 1.5 grade point average, (2) need, (3) potential, (4) campus activities, (5) students must have accumulated 17 points at State College and must be carrying at least 6 units in evening division courses at time of application.
College Book Company of California Scholarship: One $\$ 25$ scholarship offered to men or women each semester. Funds for this scholarship are taken from the College Book Company of California Scholarship Sinking Fund. A minimum grade point average of 2.0 is required. In addition, the individual should be a student in the Division of Business and Economics.
C. S. E. A. Highway Chapter No. 101 Scholarship: A $\$ 300$ scholarship offered to a student in good academic standing, preferably an engineering major.
George Burleigh Scholarship: \$25 per semester. Funds for this scholarship are taken from the Burleigh Book Store Scholarship Sinking Fund. All men and women students are eligible to apply.
Industrial Plumbing Engineering Scholarship: Offered by the Association of Plumb-
ing Contractors of California. $\$ 1,000$ per year offered to male students who are
in their sophomore year at a junior college or in their junior or senior year at Los Angeles State College.
Institute of International Education: Fellowships for graduate study abroad in 1957-58 are offered through this agency. Detailed eligibility requirements and application information may be obtained in the Office of the Associate Dean of Student Activities.
Joseph W. Stanley Associated Student Memorial Scholarship: $\$ 25$ per semester. All men and women students who have been outstanding in student activities are eligible to apply.
Journalism Scholarship: $\$ 25$ offered annually by the Western Society of Business Publications to a male or female student majoring in journalism. The award will be based on the following criteria: (1) scholastic average of at least 1.5 , (2) activity on school publications, and (3) promise of future potentiality in the field of journalism.
Los Angeles State College Faculty Wives Scholarship: $\$ 25$ offered each year to a senior or graduate woman student.
Los Angeles State College Semiannual Essay Contest: Cash prizes are awarded annually to the winners of an essay contest sponsored by Mr. George Burleigh and conducted by the Division of Language Arts.
Omega Alpha Delta Helen N. Fox Scholarship: A scholarship covering tuition costs for the summer session offered to a woman student enrolling in summer session. The applicant must have been registered at Los Angeles State College for the preceding year with a total of six units, must be employed full time and have a grade point average of 2.0 .

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Phi Epsilon Kappa Scholarship: One $\$ 30$ scholarship awarded annually in the spring semester to a male student majoring in health, physical education, or recreation. The student must be a junior college transfer recommended by his physical education department chairman.
Phi Mu Alpha Scholarship: Two $\$ 25$ scholarships offered annually to outstanding male musicians in their sophomore year at a junior college who plan to attend Los Angeles State College majoring in music.
Recreation Directors' Association Scholarship: Two $\$ 50$ scholarships offered by the Recreation Directors' Association of Los Angeles. Awards are made yearly to one man and one woman student, majoring in recreation.
Sigma Alpha Iota: One $\$ 30$ scholarship offered to junior, senior, or graduate women students who are members of the sorority and have a 2.0 grade point average in their major.
Scholarship Society Scholarship: $\$ 25$ offered each semester to a member of the Scholarship Society having an academic average of 2.2 or better.
Special Education
Fellowships: Five graduate fellowships of $\$ 1,000$ each are being offered through the California Congress of Parents and Teachers, Incorporated, in the following fields of special education: Physically handicapped, cerebral palsied, deaf-hard of hearing, speech defective, blind-partially sighted, mentally retarded. Further information may be obtained from the Associate Dean of Student Activities. Scholarships: Eight $\$ 100$ scholarships offered by the California Congress of Parents and Teachers, Incorporated. To be eligible students must be taking six or more units in courses leading to credentials for teaching the physically handicapped, cerebral palsied, deaf-hard of hearing, speech defective, blind-partially sighted, mentally retarded.
Teacher Elementary Education Scholarships of the California Congress of Parents and Teachers: Six $\$ 200$ scholarships offered per year to elementary education majors.
Teacher Secondary Education Scholarships of the California Congress of Parents and Teachers: Six $\$ 200$ scholarships offered per year to secondary education majors who are fifth year students.

## Loans

A limited number of short term loans is available from (1) Associated Student Loan Fund, (2) Faculty Loan Fund for Students. Applications for these loans should be made to the chairman of the Loan and Scholarship Committee in the Office of the Associate Dean of Student Activities.

Other loan funds include:
Opti-Mrs. Loan Fund for Women Student Teachers: $\$ 75$ per semester available to women enrolled in directed teaching, to be paid following graduation.
College Book Co. of California Loan Fund: Moneys are made available for bools and supplies to the limit of $\$ 25$ per semester. Moneys loaned are to be paid back before the end of each semester to the Loan and Scholarship Committee, the accumulated funds to be available for a future scholarship.
Campus Book Store Loan Fund: Moneys are made available for books and supplies to the limit of $\$ 25$ per semester. Moneys loaned are to be paid back before the end of each semester to the Loan and Scholarship Committee, the accumulated funds to be available for a future scholarship.

## Living Accommodations

There are no dormitories on any of the campuses. Addresses of suit able living accommodations may be obtained through the office of the Associate Dean of Student Activities.

## HEALTH SERVICES

The Health Service has facilities for medical examination of students who are registered at the college. Examinations are required of all teacher training candidates. The medical service staff is available to students for first aid treatment and for counseling of students with health problems.

## ASSOCIATED CLINICS

The Associated Clinics of the college are situated on the Main Campus (San Bernardino Freeway and Eastern Avenue). They are designed as the center for the supervised clinical practice required for special education teaching credentials. The major emphasis at present is on speech, hearing, and reading. The clinics are well equipped for diagnostic and remedial services in these areas. These services are available to oncampus students who require them.

## ATHLETICS

The intercollegiate athletic program at Los Angeles State College is considered a phase of the physical education program. Participation is open to any full-time undergraduate student in good scholastic standing.

Los Angeles State College has the opportunity to participate in regional and national competition through its membership in the National Collegiate Athletic Association and the National Association of Intercollegiate Athletics. Every effort is made to send athletes and teams to participate in such competition when they have achieved outstanding records.
The college fields teams in 13 intercollegiate sports: football, basketball, track and field, baseball, swimming, water polo, cross country, Wrestling, gymnastics, tennis, golf, fencing, and bowling. The coaches of the various sports are faculty members in the Division of Health, Physical Education, Recreation, and Athletics.

## PLACEMENT OFFICE

The Placement Office assists students to obtain both part-time and full-time employment.
The staff of the Placement Office works cooperatively with all departments of the college to establish a working relationship with business, industry, and the professions. Special placement services are maintained for graduates and graduating seniors. A separate office is also maintained to assist students in obtaining part-time work to help defray expenses while attending college.

Complete records of the achievements, experience, and personal qualifications of candidates are kept on permanent file in the Placement Office and confidential copies of these records are made available to employers upon request.
The work-study program combines classroom instruction with practical experience in business and industry. It is described on page 29.

## SCHEDULE OF FEES

The regular fees of the college are given below. The fees for auditors are the same as for those receiving credit for a course.
REGISTRATION FEES(Payable at time of registration)
Each student enrolled for less than 4 units
Materials and service ..... $\$ 9.00$
Student activity ..... $\$ 14.00$
Each student enrolled from 4 to not over 6 units Materials and service ..... 15.00
Student activity ..... 20.00
Each student enrolled for over 6 units Materials and service ..... 20.00
Student activity ..... 9.00 ..... 29.00
Nonresident tuition (in addition to above fees)
90.00
90.00
15 units or more
15 units or more ..... 6.00
Less than 15 units, per unit
OTHER FEES OR CHARGES(Payable when service is rendered)
Extension, per unit ..... $\$ 7.50$
Late registration ..... 2.00 ..... 2.00
Change of program ..... 1.00 ..... 1.00
Transcript of records (after first copy)
Transcript of records (after first copy) ..... 3.00
Diploma fee, for graduating seniors
Diploma fee, for graduating seniors
Library books or materials overdue, damaged or lost (consult the library forschedule of fees)
Music lessons (for private instruction) ..... 1.00 to ..... 4.00
Failure to meet administratively required appointment or time limit ..... 2.00
Replacement of laboratory equipment lost or broken ..... Cost

## REFUND REGULATIONS

Written application for refund of fees must be made to the College Business Office, within time limits prescribed by the State Administrative Code. Application forms and information concerning refunds are available at the Business Office. Early application is important since delay may reduce the amount of the refund received.

## VETERANS REFUNDS

Veterans, except those under Public Law 550, receiving a letter of eligibility from the state or federal veterans authorities are entitled to a full refund of registration fees if eligibility commences from the first day of instruction. If eligibility commences after the first day of instruction a prorata refund will be made.

## ADMISSIONS PROCEDURE

## APPLICATION FOR ADMISSION

New Students: Students wishing admission to Los Angeles State College must file applications with the Admissions Office, 855 N. Vermont Avenue, Los Angeles, on the form provided for that purpose. The application form will be mailed to prospective applicants upon request. The application should be filed by August 17, 1956, for the fall semester, and January 4,1957 , for the spring semester. The college reserves the right to refuse to accept applications filed after these dates.
Returning Students: Students planning to return to Los Angeles State College after an absence of one or more semesters must file applications for readmission, in accordance with the procedure indicated above for new students.
Nonmatriculated Students: Adult students wishing to enroll in late afternoon, evening, or Saturday classes in the extended day program may register as "nonmatriculated students" without filing advance applications or transcripts of previous college credit. It is expected, however, that the student has the qualification to pursue course work at the upper division level. Students under disqualification from Los Angeles State College or any other college may not register as nonmatriculated students. Nonmatriculated students are limited to 6 units maximum and may not register in day classes without advance authorization by the Admissions Office.

## TRANSCRIPTS REQUIRED

A student seeking regular admission to the college must arrange to have official transcripts of all previous college work sent to the Admissions Office from all colleges in which the student has previously registered. An applicant may not disregard any part of his college attendance when applying for admission. A transcript is not considered official unless it is received by the Admissions Office direct from the institution which issues it. The applicant should make arrangements for the sending of transcripts as early as possible. The Admissions Office cannot guarantee the processing of transcripts received after the published deadline. All transcripts become the property of this college and cannot be released to the student nor can copies of them be provided. These regulations and procedures apply to all applicants, including students seeking admission to late afternoon and evening classes offered in the extended day program, except as indicated below:
Applicants who wish to enroll for limited programs of six units or less in late afternoon, evening, or Saturday morning classes, and who do not intend to work for degrees or credentials issued by the college, need not file application or transcripts with the Admissions Office. Students admitted through this procedure are classified as nonmatriculated students and are not regarded as degree or credential candidates.

## ADMISSIONS POLICIES

Admissions standards at Los Angeles State College are in accordance with policies stated in the California Administrative Code, Title 5, Education, which provides uniform admission regulations for all California State Colleges. Since Los Angeles State College does not offer the first two years of college work, only those sections of the Code referring to students seeking admission with at least 54 units of transfer credit from accredited junior colleges, colleges, or universities are applicable. The scholarship requirements as stated in the following paragraphs are in accordance with those Code provisions which are applicable to Los Angeles State College.

## ADMISSION TO UNDERGRADUATE STATUS

Los Angeles State College does not offer course work at the freshman and sophomore level. In order to qualify for admission as an undergraduate student, an applicant must have completed a minimum of 54 units of acceptable academic work at accredited institutions of collegiate level. The student must have earned at least a "C" average in all college work undertaken and have been in good standing at colleges previously attended. While no specific course pattern is required for admission, students attending other institutions in preparation for transfer to Los Angeles State College should select courses to satisfy General Education requirements (see pages 45-46) and preparatory courses as required in the proposed major field. A student not meeting the above requirements may be admitted on probation if, in the judgment of the college officials, such action is warranted.

## ADMISSION WITH GRADUATE STATUS

This college recognizes a four-year bachelor's degree earned at an accredited college or university as meeting the requirements for graduate status, provided the pattern of course work is substantially similar to that required for the Bachelor's Degree at Los Angeles State College. Graduate status does not constitute admission to candidacy for the master's degree, which may be granted only upon meeting the requirements described on pages 48-51.

## ADMISSION TO TEACHING CREDENTIAL PROGRAMS

Admission to the college as a regular student does not constitute admission to the teaching credential program. Students who intend to work toward credentials must make application to the Education Division during their first semester of attendance, following the procedure outlined in the section of this catalog dealing with that subject. See pages 106-108.

## ADMISSION OF STUDENTS FROM FOREIGN COUNTRIES

International students seeking admission to the United States on the basis of acceptance by this college must make use of a special application form available from the Admissions Office. Applications will be mailed to prospective students upon request. This application calls for verification of the student's ability to read, speak, and write English, as well as other data necessary to provide a basis for determining the applicant's eligibility. A student seeking admission to the United States should familiarize himself with all pertinent governmental regulations of his home country and the United States.

Credits earned in institutions abroad are evaluated by the Admissions Officer with the cooperation and assistance of the United States Office of Education. Since such evaluations generally require an exchange of correspondence, the applicant is cautioned to apply at least six months in advance of the date when he hopes to begin his studies in this country.

A student from abroad will be admitted only if the college is assured that his needs can be adequately met by the program and curriculum of this college.

The college makes a special effort to assist in the international student's orientation to the American culture and system of education. The course, Social Science 100 , is specifically designed for that purpose and is recommended to every international student admitted to the college.

## CANCELLATION OF ADMISSION

A student who is admitted to the college for a given semester but who does not register at the specified time will have his admission canceled. If he applies later he must meet the current rules for admission. All transcripts on file will be retained by the Admissions Office and may be used for admission at a later date. However, the student must file a new application form if and when he again seeks admission.

## EVALUATION OF TRANSFER CREDIT

The Admissions Office will evaluate previous college work in terms of its relationship to the requirements of Los Angeles State College. All new students will be issued a "Credit Summary" which serves as a basis for determining specific remaining requirements for the student's specific objective. Once issued to the student, the evaluation becomes valid as long as the student matriculates at the date specified, pursues the objective specified, and remains in continuous attendance. The student will not be held to additional graduation requirements unless such requirements become mandatory as a result of changes in the California Administrative Code or the California Education Code.
In view of the foregoing regulations the student is cautioned to notify the Admissions Office immediately if he changes the objective specified in his evaluation. Permission to deviate from the requirements listed on the evaluation must be obtained by petition on the form provided for that purpose. This form is available at the Registrar's Office.

While graduation requirements for a given student remain contractual as indicated above, the student is held responsible for complying with all changes in regulations and procedures which may appear in subse quent catalogs.

Due to the large volume of transfer students, the Admissions Office does not find it possible to provide the Credit Summary to all new students before registration. However, each new student will receive every assistance in planning his first semester's program, pending receipt of the Credit Summary.

## CREDIT FOR MILITARY SERVICE

The college allows undergraduate credit for service in the various branches of the United States armed forces in accordance with the rec ommendations of the American Council on Education. In order to apply for such credit, the student must file with the Admissions Office a photo static copy of his honorable discharge. This should be done at the time application for admission is made.

## CREDIT FOR EXTENSION AND CORRESPONDENCE COURSES

The maximum amount of credit through correspondence courses and extension courses which may be allowed toward the bachelor's degree is 24 units, not more than 12 of which may be transferred from another college or university. Extension course credit does not apply toward the minimum residence requirement at Los Angeles State College.

## JUNIOR COLLEGE CREDIT

No unit credit will be allowed for course work taken at a junior college after the student has earned 64 units of junior college or college credit. No upper division credit can be allowed for courses taken in a junios college. No credit may be allowed for professional education courses taken in a junior college.

## CLASSIFICATION OF STUDENT'S

Matriculated
A student who has been formally admitted to the college on the basis of complete transcripts on file in the Admissions Office.
Nonmatriculated A student who has not been formally admitted by the Admissions Office. Nonmatriculated student ${ }^{\text {t }}$ are limited to six units per semester in late after noon, evening, and Saturday classes. They may not enroll in day classes without approval of the Admissions Office.

## GENERAL REGULATIONS

## REGISTRATION PROCEDURE

At the time of registration, every student is required to file with the Registrar a study list including all the courses in which the student is registered.
The filing of a study list by the student and its acceptance by the college is evidence of an obligation on the part of the student to perform the designated work to the best of his ability. Withdrawal from, or neglect of, any course entered on the study list, or a change of program, including a change of section of the same course, without the formal permission of the Registrar, makes the student liable for a grade of " F " in the course.
A student may not receive credit in any courses in which he is not officially registered.

## Late Registration

Students who have been cleared by the Admissions Office but who are unable to register during the regular registration period may register late only with the approval of the Registrar. Late registrants will find themselves severely handicapped in arranging their programs and must pay a two-dollar (\$2) late registration fee. The last day to register late each semester will be announced in the class schedule.

## Study Load

Matriculated undergraduate students may register for 16 or fewer units per semester without special permission. By petition to the Registrar the student may carry 17 units if the grade point average for the previous semester was 1.5 , and 18 units if the average was 2.0 . Eighteen units are the maximum. The study-load limit may be increased by one unit in activity courses provided the 18 -unit maximum is not exceeded. No new students may enroll for more than 16 units. Graduate students who are candidates for the master's degree may earn a maximum of 16 units per semester on their program.

## Selective Service Regulation

In order to qualify for a deferment or postponement of military service under selective service procedures, a student must be registered for 15 or more units and must remain in continuous attendance during regular sessions. The college serves as a reporting agency only, and any decisions affecting the student's selective service status will be made by the local board. Certification of registration and attendance to the selective service boards is sent only upon the student's request.

## Auditors

A properly qualified student may apply for admission to attend classes as an auditor. The student must meet the regular college entrance requirements and must pay the same fees as other students. An auditor may not change his registration to obtain credit after the last date to add courses to the study list.

## Registration in Los Angeles City College Courses

In certain cases Los Angeles State College matriculated students may be permitted to carry Los Angeles City College classes as part of their study lists. This may be done only upon application to the State College Registrar's Office. Requirements for permission to cross-register include a 1.0 grade average, prior approval of the State College Division Chairman concerned, approval of the City College instructor, and final verification by the State College Registrar. A student may not carry more units in City College classes than in State College classes. Details regarding procedure will be available at registration time. Nonmatriculated students who wish to take city college classes must register separately.

## Dual Registration

A student may not be registered in Los Angeles State College and also in another institution simultaneously without prior permission of the Registrar.

Registration in Graduate Courses
An, undergraduate student is not permitted to enroll in graduate level courses those numbered (200-299) except under provisions outlined in the Graduate Bulletin. Graduate courses carry no credit toward a bachelor's degree.

## CHANGE OF PROGRAM

## Addition of Courses

Any addition including a change of sections of the same course must be processed on the official change-of-program form obtained at the Registrar's Office. Such changes may be made only during the dates indicated in the Class Schedule.

Withdrawal From Courses
If a student officially withdraws from a course during the first six (6) weeks of a semester, a grade of " $W$ " will be recorded. If he withdraws during the sixth to the fourteenth week either a "WP" or a "WF" will be recorded, depending on whether or not he has the approval of the instructor and is doing at least "C" level work at the time of official withdrawal. No withdrawal is permitted after the fourteenth week.

## AT'TENDANCE REGULATIONS

The effect of absence from class upon the student's grade is at the discretion of the individual faculty member. In courses involving lectures and direct student participation, absence will undoubtedly affect the student's grade. The student is responsible to the instructor to make up work missed because of unavoidable absence.

## SCHOLARSHIP POLICIES

## Grading System

The marking system is as follows. The letters $\mathrm{A}, \mathrm{B}, \mathrm{C}$, and D indicate passing grades: A, excellent; B, above average; C, average; D, below average; Cr. denotes credit, no letter grade assigned. Failure is indicated by F. WF means "withdrew failing." This mark is assigned a student who is below average at the time he is allowed to withdraw from a course. WP ("withdrew passing") is assigned if a student is doing average work or better at the time of official withdrawal.

If a student is unable to complete all of the semester's work, but has "itisfactorily finished all except the final four weeks, he may receive an "incomplete," (recorded "I"). An "I" grade must be cleared within the succeeding year. Otherwise it remains an incomplete grade on the student's record and gives no unit credit. Requirements for clearance are to be specified by the instructor concerned.

The scholarship average is obtained by dividing the total number of grade points by the total number of units for which the student registered. Grade points are assigned as follows:

Grade A receives 4 points per unit of the course taken.
Grade B receives 3 points per unit of the course taken.
Grade C receives 2 points per unit of the course taken.
Grade D receives 1 point per unit of the course taken.
Grade F or WF receives 0 points per unit of the course taken.
Grade WP is not figured in the grade point average.
Grade CR is not figured in the grade point average.
Note: The above grade-point system becomes effective September 1, 1956. Previously a grade of A has given 3 grade points per unit; B, 2 grade points; C, 1 grade point; D and $\mathrm{F}, 0$ grade points.
For students entering Los Angeles State College after September, 1956, the scholarship averages for work done in other colleges will be determined according to the new grade point system.
Unit of Credit
Except for activity-type courses, a semester unit of credit represents 50 minutes of classwork per week during an 18 -week semester.

## Course Numbering System

Courses numbered 99 or less are lower division; 100 to 199 are upper division; and 200 or above are graduate level.

## Repeated Courses

Students may repeat courses in which a grade of D, F, or I was previously received. However, effective September, 1956, both the original grade and the grade earned as a result of the subsequent repeat of the course will be figured in the calculation of the student's grade point average. No additional credit towards semester unit requirements will be allowed for repeat of course in which the initial grade was "D."

## Probation

Any student whose scholarship record shows a grade point average of less than "C" (1.0) for all work attempted at Los Angeles State College will be placed on probation.

Any student who makes less than a "C" average at Los Angeles State College for two consecutive semesters will be placed on probation even though the over-all average at Los Angeles State College is above a "C."

Probationary status will be continued until the student has removed the grade point deficits or is disqualified in accordance with the regulations under the paragraph, "Disqualification."

Disqualification
Any student who earns less than a "C" average in a semester while on probationary status will be disqualified. Disqualified students may apply for readmission only after one full semester has elapsed subsequent to the date of disqualification.

## Examinations

Final examinations are required in all courses. No final examination shall be given to individual students before the regular scheduled time. Any student who finds it impossible to take a final examination on the date scheduled must make arrangements in advance with the instructor to have an "incomplete" grade reported and must then follow the regulations concerning make-up of "incomplete" grades. No exception will be made to this rule without the written approval of the instructor, the Division Chairman, and the Dean of Instruction.

## Honorable Dismissal

In order to qualify for an honorable dismissal, the student must be in good standing at the time of his termination of attendance at the college He must be free from financial obligations to the college and from disciplinary action. Academic disqualification does not constitute dishonorable dismissal.

## TRANSCRIPTS

Upon request to the Registrar each student will be provided with one official copy of his college record, without charge. A charge of $\$ 1$ will be made for each additional transcript requested by the student. No transcript will be supplied for college work taken in other institutions.

## DEGREE REQUIREMENTS

## BACHELOR'S DEGREE CURRICULA

The Los Angeles State College offers three types of bachelor's degree: bachelor of arts (B.A.), bachelor of science (B.S.), and bachelor of vocational education (B.V.E.).
Bachelor of Arts Degree. The bachelor of arts degree is offered with majors in: Art; Biological Science; Botany; Business Education; Economics; Education (Elementary Education, Kindergarten-Primary Education, Junior High School Education, and Special Education-Deaf); English; Geography; Government (with options in General Government, Government Service, International Relations, and Pre-Law); History; Homemaking; Home Economics in Business; Industrial Arts; Journalism; Language Arts; Life Science and General Science; Mathematics; Microbiology; Music; Physical Education; Physical Science; Physical Science and General Science; Psychology (with options in Counseling, Industrial Psychology, and General Psychology); Social Science; Social Studies; Sociology (with options in General Sociology and Social Welfare); Spanish; Speech and Drama; Speech Therapy; Zoology.
Bachelor of Science Degree. The bachelor of science degree is offered with majors in: Audiology; Business Administration (with options in Accounting; Business Arts; Executive Secretarial; Finance; Administrative, Industrial, or Small Business Management; Labor Relations and Personnel; Marketing and Merchandising; Special Business; and Transportation and Foreign Trade); Engineering; Medical Technology; Nursing; Police Science and Administration; Recreation Education.
Bachelor of Vocational Education Degree. The bachelor of vocational education degree is offered for those vocational teachers recommended by the California State Board of Examiners for Vocational Teachers. Vocational teachers interested in details regarding this program should see the Chairman of the Division of Technical Science, Los Angeles State College.

## GENERAL REQUIREMENTS FOR BACHELOR'S DEGREE

## General Education Requirement

General education is nonspecialized education taken by all students, regardless of the type of bachelor's degree or the major field selected. The purposes are the broadening of the cultural background of the student and the strengthening of competencies needed by him to participate effectively in a democratic society. Each candidate must satisfy either through courses accepted by the Admissions Office upon transfer or through specifically designated courses at Los Angeles State College the following pattern of requirements.
The list of state college courses acceptable for general education credit is published every semester in the Schedule of Classes.

A minimum of 45 units distributed in the following pattern is required.

1. An understanding of the cultural background of our society, the principles and forms of American democracy, and the political, social, and economic structures of other societies in the world. These requirements are to be fulfilled through the following distribution in the:
SOCIAL SCIENCES ( $\mathrm{a}, \mathrm{b}$, and c below) $\qquad$ 9 units minimum
a. A course or courses involving American history and government, the Constitution, American institutions and ideals, and California state and local government.
b. A course or courses involving the study of world history and cultures or European history and culture.
c. A course or courses involving the study of man in his environment (such as courses in cultural anthropology, cultural geography, economics, sociology, and similar fields).
2. An understanding, appreciation, and knowledge of living things and the life processes and of the nonliving material world. These objectives are to be fulfilled by courses in: NATURAL SCIENCE (to include at least a two or three unit course in each of the following.
a. An appropriate course or courses in the biological sciences.
b. An appropriate course or courses in the physical sciences.
3. Facility in reading, writing, speaking, and listening to be fulfilled by courses in:
ORAL AND WRITTEN EXPRESSION 6 units minimum
The above must include at least one course, of two or three units, in written composition and a two or three unit course in the fundamentals of public speaking.
4. Experience in the arts to be fulfilled by courses in the FINE OR PRACTICAL ARTS 3 units minimum
5. An understanding of the values and value systems of man to be fulfilled by appropriate courses in either LITERATURE, PHILOSOPHY, OR BOTH FIELDS 6 units minimum
6. A study of the behavior of man to be fulfilled by a course or courses in:
GENERAL PSYCHOLOGY
3 units minimum
7. Participation in a program of health instruction to be fulfilled by a course including instruction in fire prevention, narcotics, alcohol, drugs and safety:
HEALTH EDUCATION
2 units minimum
8. Participation in a program of physical education to be fulfilled by courses in:
PHYSICAL EDUCATION ACTIVITIES 2 units minimum
9. ADDITIONAL COURSES IN GENERAL EDUCATION_ 5 units minimum Additional courses in general education in one or more of the above areas or in other fields of general education which are of particular interest to the student and which may be distributed among courses in family life education, mathematics, and foreign language.

## Major Department Requirements

Each student must complete the requirements outlined by the department of his selected major field. Requirements for the various departmental majors are listed in the appropriate sections of this bulletin.

## Total Unit Requirement

The bachelor of arts and the bachelor of vocational education degrees require completion of 124 units. The bachelor of science degree requires 124-132 units, depending upon the major field selected. At least 40 units must be in courses carrying upper division credit.

## Scholarship Requirement

The student must earn at least a 2.0 grade point average in all college work attempted, all work at Los Angeles State College, and all upper division course work in his major field. Students who complete 56 units at Los Angeles State College with a grade point average of 3.40 are eligible for graduation "with honors." Those who earn a grade point average of 3.60 or better are eligible for graduation "with high honors."

## Residence Requirement

The last 24 units used to satisfy degree requirements must be completed at Los Angeles State College. In addition, the student must have been in attendance as a matriculated student for a minimum of two semesters of 18 weeks each. For the latter part of this requirement, Los Angeles State College summer sessions count on a week-by-week basis. Extension courses at Los Angeles State College may not apply on the residence requirement.

## U. S. History and Constitution Requirement

The requirements set by California law of (1) American history, (2) United States Constitution, and (3) California state and local government must be met by all graduates. This includes demonstrating competence in the Constitution of the United States, in American history, including the study of American institutions and ideals, and the principles of state and local government established under the Constitution of this State. The requirements may be met by optional examinations, or by completing successfully one course from each of the following groups:

1. American History: History $172,173,174,175,177,178,179,181$.
2. United States Constitution: Government 101, 105, 157, History 179.
3. California State and Local Government: Government 101, 103, 104.

The United States Constitution requirement must be met by all students seeking teaching credentials.
Transfer students who have already met these requirements shall not be required to take further courses or examinations therein.
The optional examinations for both American history and United States Constitution will be held on November 15, 1956, and April 11, 1957. Information on the above requirements may be obtained from the Office of Admissions or from the Social Sciences Division, American Institutions Committee.

Students will be eligible to take the optional examinations under the following conditions:

1. All graduate students at Los Angeles State College will be eligible, provided they meet requirement (3) below.
2. Undergraduates will be eligible to qualify by examination only when their program upon admission does not allow sufficient units to complete the necessary courses without undue hardship.
3. Students must be currently enrolled in Los Angeles State College.
4. Students must not have already failed this optional examination.
5. Application must be made to the American Institutions Committee at least three weeks prior to date of examination.
Exceptions to the above must be approved by the Committee on American Institutions.

Faculty Approval
All candidates for graduation must be approved by the faculty at a formal meeting called by the president for that purpose.

## Application for Graduation

A formal application should be filed with the Registrar's Office early in the semester preceding the semester in which the student plans to complete requirements for the degree. This will enable the student to secure a statement of remaining requirements in time to assure proper selection of courses for the final semester.

## THE MASTER OF ARTS DEGREE

The purpose of the master of arts degree is to improve the candidate's professional competence in educational service and to develop his ability for continued self-directed study in the field of his professional service.

The master of arts degree is offered with fields of concentration in: Art, Biological Science, Economics, Elementary School Administration, Elementary School Curriculum and Supervision, Elementary School Teaching, English, Geography, Government, Guidance, Health and Safety Education, History, Language Arts, Music, Physical Education, Psychology, Secondary School Administration, Secondary School Curriculum and Supervision, Secondary School Teaching, Social Science, Sociology, Special Education.

## Minimum Requirements for the Master of Arts Degree

1. An appropriate baccalaureate degree from an accredited institution.
2. The holding of a valid regular day school credential for California, other than an emergency or a provisional credential.
Note: This second requirement may be waived for (a) students who because of citizenship in a foreign country are ineligible for a California credential but who are teachers and are preparing to teach in a foreign country; (b) teachers with a minimum of one year of teaching experience who hold a license to teach in another state; (c) applicants preparing to teach in institutions not requiring teaching credentials (provided that a minimum of 12 semester units in professional education be included in the graduate year).
3. A grade point average of 3.0 in the field of concentration, in the courses submitted to fulfill requirements for the M.A. degree, and separately in all work beyond the B.A. taken at Los Angeles State College.
4. Thirty semester hours of approved courses taken within the seven years immediately preceding the date when all requirements for the degree are completed. (Time may be extended for students who pass a comprehensive examination.)
5. A minimum of 10 units in strictly graduate (" 200 ") courses.
6. Completion of a field of concentration of 15 units, including not less than six units in strictly graduate courses, as prescribed by a division of the college authorized to offer a graduate program.
7. Completion of six units outside the field of concentration.
8. Student must enroll in and complete at least nine units of his degree program after formal admission to candidacy.
9. Completion at Los Angeles State College of the last 24 units used to satisfy degree requirements.
10. Passing of a comprehensive examination and/or completion of a project in the field of concentration as prescribed by the appropriate division of the college.
11. No more than six units total credit for acceptable (a) transferred work, (b) extension courses, (c) student teaching, (d) activity courses, (e) work-study, or any combination of these may be used in the degree program.
12. Conformance with specific requirements for the degree program in the chosen field of concentration.

## THE MASTER OF SCIENCE DEGREE

The master of science degree is offered in business.
The general purpose of the master of science degree is to increase the candidate's competence through advanced occupational training in applied fields. The program in business seeks to provide those skills and abilities required for employment at junior management and supervisory levels. Options are offered, according to the specific objective of the candidate, in: Accounting, Finance, Management, Marketing, and Business Economics.

## Minimum Requirements for the Master of Science Degree

1. An appropriate baccalaureate degree from an accredited institution.
2. A grade point average of 3.0 in the courses submitted to fulfill requirements for the M.S. degree, and separately in all work beyond the B.A. degree taken at Los Angeles State College.
3. Thirty semester hours of approved courses taken within the seven years immediately preceding the date when all requirements for the degree are completed. (Time may be extended for students who pass a comprehensive examination.)
4. If the candidate is without experience in the occupational field, six units of approved work-study (in addition to the standard 30) are required.
5. A minimum of 10 units in strictly graduate (" 200 ") courses.
6. Completion of a field of concentration of 15 units, including not less than six units in strictly graduate courses, as prescribed by the appropriate division of the college.
7. Student must enroll in and complete at least nine units of his degree program after formal admission to candidacy.
8. Completion at Los Angeles State College of the last 24 units used to satisfy degree requirements.
9. Passing of a comprehensive examination and/or completion of a project as prescribed by the appropriate division of the college.
10. No more than six units total credit for acceptable (a) transferred work, (b) extension courses, (c) activity courses, or a combination of these may be used in the degree program.
11. Conformance with specific requirements for the degree program in the chosen field of concentration.

## CANDIDACY FOR MASTER'S DEGREES

The following is a summary only. Consult the Graduate Bulletin for specific rules, regulations, and procedures for graduate study.

1. Early in his first semester of graduate residence, each student who intends to work toward a master's degree must:
a. Apply to the Admissions Office for admission to graduate standing,
b. Take the required entrance examinations at the College Testing Center,
c. Confer with the adviser assigned by his division chairman to make out the program leading to a graduate degree, and
d. Request written recommendations on forms prescribed by the college.
2. Later that semester, the Graduate Study Committee will approve, defer, or reject the student as a formal candidate on the bases of his academic record, personal qualifications, health, and professional promise. Particularly, each student must, to be approved:
a. Have an undergraduate grade point average of at least 1.75 in upper division work; or complete in residence 12 units of the pro posed degree program, including at least 6 units in the field of concentration, with a grade point average of 3.0 or better.
b. Have completed all prerequisites to his degree program and be enrolled in courses in his field of concentration.

## COURSES NOT ACCEPTABLE IN MASTERS' PROGRAMS

Anthropology 104
Biological Science 100
Business 100A, 103, 104, 106, 108A
Economics 101
Education 100
*Drama 196
Geography 101
Geology 101
Government 101
Health and Safety Education 121, 154
*Journalism 196

Language Arts 100 AB
*Music 115, 135, 146, 147, 155
Microbiology 100AB
Nature Study 118
*Physical Education 121, and all courses numbered below 111
Physical Science 100
Psychology 100
Social Science 100
Sociology 102, 104

All courses numbered "198," and activity courses (asterisked), are not acceptable, except in specific cases which have been approved by petition, as described in the Graduate Bulletin.

## ANTHROPOLOGY

## (In the Division of Social Sciences)

Staff: Luhrs, Byron, Ford, Nishi.
The courses in anthropology are designed for students interested in the range of social behavior found in human cultures.

## COURSES OF INSTRUCTION

(No major is offered)
Prerequisites: General anthropology or consent of instructor.

## 101 Culture Areas of the World (3) Fall

Survey of principal culture types and their distribution in the world; discussion of ethnological problems.

## 104 Cultural Anthropology (3) Fall, Spring

Studies in the development of human traditions. The nature of culture, and its relationship to human physical types, to environment, and to individual differences. Comparative analysis of family structure and kinship systems; economic, political, and religious concepts and organizations. The ways of cultural change. Not open to students who have completed an introductory course in cultural anthropology.

## 105 Culture and Personality (3) Fall, Spring

The relationship between individual personality development and the cultural milieu. Recent work in the coordination of psychodynamics and the social sciences. Special attention to studies of child training and culture patterns in several non-Western cultures.

## 106 Indians of North America (3) Spring

Problems and methods in investigating the history of North American peoples before European discovery. Prehistoric culture areas; their relationship with Indians of historic and present times.

## 107 Indians of California and the Southwest (3) Fall, Spring

Origins, modes of subsistence, social organization, and geographic and historical relationships. The European conquest and the present condition of the several tribes.

## 108 Middle America (3) Spring

The Indian civilizations of Mexico, Central America, and the West Indies and the folk cultures of the peoples who currently occupy these areas.

## 138 Peoples of Africa (3) Fall (Offered 1955-56)

The aboriginal cultures and contemporary conditions of Negroid Africa. Prehistoric times, relations with Europe and Asia, and the effects of colonization upon the native population.

## 147 Peoples of the Pacific (3) Spring

The aboriginal civilizations of Malaysia and the Pacific islands before and during modern European contact.

## 199 Independent Study (1-3) Fall, Spring

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

## ART <br> (In the Division of Fine Arts)

Staff: Manion (Department Head), Cornish, Daywalt, Fuller, Hoffman, Kasza, Little, Roysher, Silverman, Sudlow, Takeshita, Tramel, Wirth.

## BACHELOR'S DEGREE CURRICULA

## Major in Art

1. Applied Arts. Opportunity is provided for commercial artists, commercial designers, industrial designers, illustrators, craftsmen in the various art fields, and others who wish to qualify themselves for professional competence in art. This plan may be combined with the teaching major to provide both professional competence and the teaching credential.
2. Fine Arts. A complete program in design, painting, and illustrating is provided which will prepare the student for professional work in these fields. This plan and/or the other plans may be combined so that the student achieves technical competence in his field and also has a teaching credential.
3. General Cultural Pursuits. The Art Department has many offer ings which will provide both art majors and other majors of the college with the cultural subjects which distinguish a liberal arts college. It is possible to major in this field by concentrating on such subjects as Art History.

| Lower Division |  |
| :--- | :--- |
| Basic Courses: | 2 units |
| Survey of Art History | 2 units |
| Perspective or Rendering | 2 units |
| Crafts or Ceramics. | 2 units |
| Art Structure or Design | 2 units |
| Lettering | 10 units |
|  |  |
| Upper Division | 6 units |
| Select from the following |  |
| Art 101AB-Art in Modern Life (3) |  |
| Art 111AB-Art History (3) | 8 units |
| Art 12AB-Art History (3) |  |
| Select from the following |  |
| Art 104AB-Advanced Painting (3) |  |
| Art 134AB-Landscape Painting (3) |  |
| Art 164AB-Life Composition (2) |  |

Select from the following ..... 2 units
Art 102AB-Introduction to Craft Materials (2)Art 114AB-Furniture Design and Construction (3)
Art $117 \mathrm{AB}-$ Ceramics ..... (2)
Art 120-Crafts for Elementary School ..... (2)
Art 122 AB -Advanced Ceramics (2)
Art 127 AB -Advanced Crafts (3)
Art $147 \mathrm{AB}-$ Textiles and Weaving (2
Art 176AB-Metalsmithing ..... (2)
Art $177 \mathrm{AB}-$-Metalsmithing ..... (2)
Art $178 \mathrm{AB}-$-Metalsmithing (2)
Select from the following ..... 6 units
Art 103 AB -Three-dimensional Design (2Art 116-Theatre Design (2)
Art $133 \mathrm{AB}-$-Advertising Design ..... (2)
Art 143 AB -Interior Design (2)
Art 175-Costume Design (2)
Art 179AB-Art Display and Portfolio (2
Art 190A-Industrial Graphics (2)
Electives in Art ..... 8 units
Special Secondary Teaching Major for B.A. Degree
See also pages 113-114 for professional education requirements.
A complete schedule of courses is offered giving art teachers the necessary background to equip them to teach the various phases of art. Besides the general secondary credential, which is offered with a major in the art field, art majors may obtain a special secondary credential in art which qualifies them for art teaching and art supervision at all levels.
${ }^{L_{0 \text { wer Division }}}$
Basic Courses:

| Survey orses: Art History | 2 units <br> Perspective or Rendering |
| :--- | :--- |
| Crafts or Ceramics | 2 units |
| Art Structure or Design | 2 units |
| Lettering | 2 unis |
|  | 2 units |
| Tpper Division | 10 units |

Art 100-Art for Elementary School 2 units
Select from the following $\quad 6$ units
Art 101AB-Art in Modern Life (3)
Art 111 AB -Art History (3)
Art 112 AB -Art History ..... 8 units
Art 104 AB -Advanced Painting (3)
Art 134 AB -Landscape Painting (3)
Art 164 AB -Life Composition (2)
Select from the following ..... 2 units
Art 102 AB -Introduction to Craft Materials (2)
Art 114 AB -Furniture Design and Construction (3)
Art 117 AB -Ceramics (2)

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Upper Division-Continued
    Art 120-Crafts for Elementary School (2)
    Art \(122 \mathrm{AB}-\) Advanced Ceramics (2)
    Art 127 AB -Advanced Crafts (3)
    Art \(147 \mathrm{AB}-\) Textiles and Weaving (2)
    Art \(176 \mathrm{AB}-\) Metalsmithing (2)
    Art \(177 \mathrm{AB}-\) Metalsmithing (2)
    Art 178AB-Metalsmithing (2)
    Select from the following 6
    Art 103 AB -Three-dimensional Design (2)
    Art 116-Theatre Design (2)
    Art 133 AB -Advertising Design (2)
    Art 143 AB -Interior Design (2)
    Art 175-Costume Design (2)
    Art 179AB-Art Display and Portfolio (2)
    Art 190A-Industrial Graphics (2)
Electives in Art
                                6 units
                                    30 units
```


## General Seoondary Teaching Major

The general secondary teaching major in art is the same as the major for the special secondary credential. See also pages 112-113 for profes sional education requirements. A teaching minor in a different teaching field and a graduate year including additional professional education are required for the general secondary credential.

## General Secondary Teaching Minor

## Lower Division

Lower division program is the same as that for the major.

| Upper Division |  |
| :--- | :--- |
| Art 100-Art for Elementary School | 2 units |
| Select from the following | 2 units |
| Art 102 AB -Introduction to Craft Materials (2) |  |
| Art 120 -Crafts for Elementary School (2) | 2 units |
| Art 103 AB -Three-dimensional Design | 4 units |
| Select from the following |  |
| Art 104 AB -Advanced Painting (3) |  |
| Art $134 \mathrm{AB}-$ Landscape Painting (3) | -10 |
| Art 164 AB -Life Composition (2) |  |

## MASTER OF ARTS DEGREE

The purpose of the master of arts degree with an art major is to improve the candidate's professional competence in educational service and to develop his ability for continued self-directed study in the field of his professional service.

1. Prerequisites
a. Graduate standing.
b. 24 units of art or consent of Fine Arts Division.
2. Area of specialization
a. Seminar in area ..... 3 unitsb. Graduate and undergraduate courses in major selected with approvalof graduate adviser9 units
c. Art 299-Graduate Project. ..... 3 units
3. Outside the field of art ..... 6 units
4. Electives ..... 9 units
5. Additional graduate courses to fill out " 200 " requirement:
Art 204-Seminar in Painting (3)
Art 227-Industrial Application of Crafts (3)
Art 231-Seminar in Art History (3)Act 233-Seminar in Design (3)

## COURSES OF INSTRUCTION

## 100 Art for the Elementary School (2) Fall, Spring

Basic skills and understandings that enable the primary and elementary teacher to provide art experiences for children. Work with finger painting, water color painting, calcimine painting, map making, manuscript writing, mural painting, figure drawing, chalk drawing, and other media. Laboratory and accompanying lectures.

## 101A-B Art in Modern Life (3-3) AB-Fall, Spring

The arts in relationship to contemporary living. An appreciation and understanding of what the arts are contributing to the environment, their influences upon personalities and their part in our democratic culture.

## 102A-B Introduction to Craft Materials (2-2) AB-Fall, Spring

Prerequisite: Design or equivalent. Laboratory and accompanying lectures to provide experiences in designing and constructing objects of clay, paper, wire, wood, metal, fabrics, paints, and plastics.

## 103 A-B Three-dimensional Design (2-2) AB-Fall, Spring

Prerequisite: Design or equivalent. Individual and group experiences in three-dimensional expression. In the first semester emphasis upon designing and making of objects which demonstrate the use of fine design in the immediate environment of each student. In the second semester emphasis upon designing for industry.
104A-B Advanced Painting (3-3) AB-Fall, Spring
Prerequisites: Two semesters each in painting and design or equivalent. Emphasizes individual growth, planning, and fine craftsmanship. Related research in painting laboratory. Field trips as needed.

## ${ }^{110}$ Art Appreciation for Teachers (2) Fall, Spring

Evaluation of the cultural expressions of this community in terms of the art expressions of other areas and times. Extensive use made of slides, colored reproductions, field trips to local museums, contemporary buildings and world famous private art collections. Field trips to be arranged.

## 111A-B Art History (3-3) A-Fall; B-Spring

First semester deals with the art of the ancient world from the earliest beginnings to the time of Christ. Second semester deals with Romanh Early Christian, Medieval, and Renaissance art.

## 112A-B Art History (3-3) A-Fall, B-Spring

First semester deals with Baroque art in Europe during the severt teenth and eighteenth centuries. Second semester discusses art during the nineteenth century in Europe and America and its development into the art of modern times.

## 113A Introduction to Industrial Arts Design (2) Fall, Spring

Prerequisite: Design or equivalent. Basic skills and appreciation in design leading to the development of worthwhile student projects in industrial arts. Lectures, field trips and laboratory. Students design and originate industrial arts projects which are carried to conclusion during the laboratory period. Work with the materials of industry.

## 114 Furniture Design and Construction (3) Fall, Spring

Appreciation of good functional furniture design and experiences in designing and constructing furniture. Methods of teaching furniture design and construction. Lectures, field trips and study of outstanding examples of good furniture design. Recommended for industrial arts teachers.

## 116 Theater Design (2) Spring

Prerequisites: Two semesters of design. Visual relationships involved in both play and dance production. Designing and making models, con structing and painting stage scenery.

## 117A-B Ceramics (2-2) AB-Fall, Spring

Prerequisite: One semester of design. Development of the basic skills necessary to the planning, building, firing, and glazing of pottery.

## 120 Crafts for Elementary School (2) Fall, Spring

Basic skills and understandings that enable the primary and element tary teacher to provide crafts experiences to children. Evaluation of educational value of crafts. Work with clay, leather, bookbinding weaving, block printing, paper enrichment, and other craft materials and processes. Laboratory with accompanying lectures.

## 122A-B Advanced Ceramics (2-2) AB-Fall, Spring

Prerequisites: Art 102, Art 117A-B, Art 120, or consent of instructo Throwing, plaster casting, pouring, glazing, and stacking the kiln for bisque and glaze firing. Lectures and discussions on clay bodies, glaze composition, methods of decoration, and the design of ceramic form ${ }^{5}$

126 Construction for Elementary Schools (2) Fall, Spring
Experiences that meet the needs and interests of children. Laboratory and accompanying lectures in which construction projects are developed. Experience in making materials used in dramatic play to enrich the social studies. Work with wood and other materials. Development of skills with hand tools used in wood construction.
127A-B Crafts (Advanced) (3-3) Year course
Prerequisites: Two semesters in design. Provides the student with a high degree of technical skill in the execution of projects using craft materials and original designs. Completing of the designs into finished craft products of professional quality. Leather, wood, various papers, metals, and other media used according to the demands of the individual project.

## 130 Crafts in the Junior High School (2) Fall, Spring

Basic skills and understandings which enable the junior high school teacher to provide worthwhile craft experiences in keeping with the growth and development characteristics of the junior high school student. Work in clay, leather, bookbinding, weaving, block printing, paper enrichment and other craft materials and processes. Laboratory with accompanying lectures.

## ${ }^{131}$ A-B Oriental Art (3-3) Year Course

The ancient graphic and plastic arts of China, Japan, India and Persia. Evaluation of their contribution to the art expression of the present day.

## 132A-B Design for Industry (2-2) AB-Fall, Spring

Prerequisite: One semester in design. Materials, tools, processes and functional design used in making industrial products.
133A-B Advertising Design (2-2) AB-Fall, Spring
Prerequisites: Two semesters in design, one semester in drawing. The elements of visual expression and design related to the technical, psycho$l_{\mathrm{g}}^{\mathrm{g}} \mathrm{cal}$, and social aspects of advertising.
134A-B Landscape Painting (3-3) AB-Fall, Spring
Prerequisite: Drawing or one semester of representative drawing. Development of water color technique through interpreting landscape scenes.
140A-B Clay Modeling (2-2) AB-Fall, Spring
Experiences in using clay as an expressive medium. Modeling small
objects, slab and coil methods of pottery making, methods of decoration, including slip, glazes, and textural effects.
141 A-B History of Costume and Furniture (2-2) Year course
Costume and furniture from earliest times to the present day in rela-
tion to the functional, technological, and social aspects of each period.

## 143 Interior Design (2)

Prerequisites: Two semesters of design, one semester of drawing. The elements of visual expression and design related to contemporary concepts of interior work and living space needs.

## 144A-B Still Life Painting (2) AB-Fall, Spring

Prerequisites: Two semesters in design. Development of technique of rendering through interpreting still life. First semester: water color. Second semester: oil.

## 147 Textiles and Weaving (2)

Prerequisite: One semester of design or consent of instructor. Loom and frame weaving, reading and writing of pattern drafts, design of printed fabrics including the use of silk screens, linoleum block prints, stencils and dyes.

## 150 Art Experiences for Exceptional Children (2) Fall, Spring

Art experiences in painting, crafts, and other media for the exceptional child. Special emphasis on those experiences which meet the needs of retarded or handicapped children. Work with paint, clay, leather, block printing, murals, and bookbinding. Laboratory with accompany ing lectures.

## 162 Arts and Crafts in Recreation (2) Fall, Spring

A working knowledge of basic crafts and familiarity with others. The tools, materials, and program possibilities in arts and crafts for recreation.

## 164A-B Life Composition (2-2) AB-Fall, Spring

Prerequisite: One semester of drawing or design. Encouragement for the student to grow in self-expression. Use of the human figure in com position. Life compositions utilizing various media and techniques.

## 175 Costume Design (2) Fall

No prerequisite. The skills necessary to design costumes for stage street, and other occasions. Projects designed by individual student ${ }^{\text {th }}$ and carried out in a manner used by industry. Designing on paper and with materials through the use of half-size and full-size mannequins. Emphasis on functional design as applied to industrial materials.

## 176A-B Metalsmithing-Forging (2) AB-Fall, Spring

Beginning and advanced techniques of forging metal; forming of flat ware, decorative sections, handles, and special applications.

## 177A-B Metalsmithing-Jewelry (2-2) AB-Fall, Spring

Prerequisite: Art 176A-B, or approval of instructor. Manufacture and design of jewelry; basic bending, forming, and soldering techniques stone setting.

## 178A-B Metalsmithing-Raising (2-2) AB-Fall, Spring

Prerequisite: Art 176A-B, or consent of instructor. Beginning and adVanced hollowware techniques; sheet metal and stretch processes; spouts, handles, bodies, and box forms; hinging.
179A-B Art Display and Portfolio (2-2) A-Spring; B-Fall
Prerequisite: Consent of instructor. Preparation and organization of the student's art work in portfolio form for presentation to prospective employer. The techniques, methods, and media of display. Laboratory, field trips, and accompanying lectures. Of especial value to art majors who wish to enter the teaching field.

## 190A Commercial Graphics (2) Spring

Prerequisite: Art structure, drawing or equivalent. Basic technical illustration methods for the presentation of service instructions, production methods, and sales promotion visual material. Emphasis upon mechanical drawing and interpretation of three-dimensional exploded drawings in pencil, pen and ink, and Ben Day shading. Actual production of handbooks, assembly job folders, and brochures. Combined laboratory and lectures.
${ }^{191}$ A Catalog Illustration (2) Fall
Prerequisite: One semester of design or one semester of drawing or the consent of instructor. Methods of illustrating catalogs for the visual identification of parts and assemblies. Techniques for drawings as used in air service and manufacturing manuals and catalogs. Drawing, rendering, and lay-out for industrial catalogs. Laboratory with accompanying lectures.
198 Field Assignment and Reports (1-2) Fall, Spring
Prerequisite: Active, approved employment under the work-study plan. Analysis and reports of the student's performance; regular group meetings.

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

## GRADUATE COURSES

[^1]
## 227 Seminar in Crafts (3) Fall

Prerequisites: Two semesters in design, one in crafts; demonstrated ability to carry on independent work of graduate quality. Students create and execute original designs in craft materials. The design and construction of articles in leather, wood, various papers, metals, and other media according to the demands of the individual project.

## 231 History of Art Seminar (3) Spring

Prerequisites: Eight semester hours of art appreciation and/or art history; ability to work independently; consent of instructor. Advanced studies in the history of art.

## 233 Seminar in Design (3) Fall

Prerequisites: Six semester hours in the field of design; consent of instructor. Student must show graduate competence in design projects and research.

## 299 Graduate Project (3) Fall, Spring

Prerequisites: Eight units in the field of design, art history, drawing, crafts, or other field of the student's major interest, and consent of the adviser. Student-originated and adviser-approved project in art or art education showing ability to organize and master an area of art skills of information.

# AUDIOLOGY <br> (In the Division of Technical Sciences) <br> Staff: Kennedy. Part-time: Douglass, Younger. 

## BACHELOR'S DEGREE CURRICULUM

## Major in Audiology

The audiology major is planned to develop an understanding of the various aspects of the field of hearing as it relates to medical clinic and industrial practice.
The clinical audiology pattern places primary emphasis on measurement of hearing and methods and devices for compensation of hearing loss, including auditory training, speech reading, speech correction, and the fitting and maintenance of hearing aids.
The technical audiology pattern is planned to develop an understanding of hearing with special emphasis on the technical phases of equipment design and maintenance relating to all aspects of audiology. Consideration may also be given to problems of noise measurement and abatement. (Students interested in these problems should consult with the audiology adviser.)
A total of 128 units is required for graduation with a major in audiology. The major for the B.S. degree in audiology may be based upon a lower division program in electronics and/or physics. Because of the varying occupational opportunities in this field, however, the major may also be related to and based upon lower division concentrations in psychology, speech, life science, nursing.

\footnotetext{
Lower Division
Twelve units of lower division work in one of the areas mentioned above may be accepted as part of the major with the approval of the department head.

Elect from the following to complete 36 units:
Audiology 198-Field Assignment and Reports ..... -2 unio
Audiology 199-Special Studies ..... $1-4$ unit
Health and Safety Education 153-Principles of Community Health ..... unite
Physics 110-Modern Physics. ..... uniti
Psychology 108-Mental Hygiene ..... univ
Psychology 114-Experimental Psychology ..... unitis
Psychology 116-Physiological Psychology ..... uniti
Psychology 120A-Elementary Statistical Methods ..... unib
Psychology 130-Psychology of Personality ..... univ
Psychology 160-Counseling and Interviewing ..... units
Speech 131-American Phonetics ..... unit
Speech 135-Advanced Speech Therapy ..... unilis
Technical Audiology Pattern
Elect from the following to complete 36 units:

| Audiology 151-Audiometric Clinic | 1-5 unib |
| :---: | :---: |
| Audiology 152-Audiology Clinic | 1-5 univ |
| Audiology 198-Field Assignment and Reports | 1-2 unib |
| Audiology 199-Special Studies | 1-4 univ |
| Engineering 100A-Electric Circuits | univ |
| Engineering 107-Basic Electronics | 2 unip |
| Engineering 110A-Electric Circuits Laboratory | 1 unit |
| Engineering 110C-Basic Electronics Laboratory | 1 unit |
| Engineering 131-Electric Communication | 3 unip |
| Engineering 135-Electronics | 2 unip |
| Engineering 140-Electronics Laboratory | 1 unit |
| Physics 110-Modern Physics | 3 uni ${ }^{16}$ |
| Physics 111-Electrical Measurements | 3 univ |
| Physics 112-Basic Physical Electronics | 3 un |

## COURSES OF INSTRUCTION

## 99 Audiology Therapy (1) Fall, Spring

Prerequisite: Consent of instructor. Practical individualized assistance for students who have hearing difficulties. Designed for students who may or may not use hearing aids but will benefit from speech reading and/or auditory training.

## 100 Audiology (3) Fall, Spring

Designed to develop a concept of hearing and understanding of the problems of the aural deviate. Includes the basic principles of sound, the physiology of the ear, and the concepts of normal language develop' ment. Problems of noise and audio technology.

## 110 Audiometry (3) Fall, Spring

Prerequisite: Audiology 100 or consent of instructor. Designed to meet the requirements of the school audiometrist certificate. Instruction and practice in the administration of hearing tests with major emphas ${ }^{\text {ib }}$ on the use of the frequency audiometer, the making of audiograms and reports. Consideration of California state laws and procedures relativg to the identification of the aural deviate and to the establishment ${ }^{0}$ clinics.

Prerequisite: Audiology 100 and Audiology 110 or consent of instructor. Instruction and practice in advanced audiometric techniques, including bone conduction, masking, balance, malingering, and recruitment tests; procedures for determining the speech threshold using spondee tests; auditory discrimination using PB lists and calculating social adequacy index from these tests. Emphasis on the theory upon which the test procedure is based.

## 130 Auditory Training and Hearing Aids (3) Fall

Prerequisite: Audiology 100 (may be taken concurrently). Principles and methods of training residual hearing; use of amplifying devices; demonstration and practice; preparation of materials appropriate for different groups.
140 Hearing Aid Fitting, Adjustment, and Repair (3) Spring
Prerequisites: Audiology 100 and consent of instructor. Basic understanding of types of aural deviation and instrument adjustments for power output, gain, and frequency. Some practice provided in the adjustment of instruments and making of ear mold impressions.

## 151 Audiometric Clinic (1-5) Fall, Spring

Prerequisites: Audiology 100, Audiology 110, and Audiology 111. Provides advanced students with practical experience in advanced audiometric procedures.

## 152 Audiology Clinic (1-5) Fall, Spring

Prerequisites: Audiology 100, 120, 130. Provides advanced students with practical experience in the use of amplifying equipment and supplemental educational therapy.

## 198 Field Assignment and Reports (1-2) Fall, Spring

Prerequisite: Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular meetings with instructor.

## 199 Independent Study (1-3) Fall, Spring

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

## 200 Seminar in Audiology (3)

Prerequisites: Audiology 100 and consent of instructor. Emphasis on concepts of language developments and communication. Problems of the aural deviate and factors which affect audibility. Recent developments in all aspects of audiology.

## BIOLOGICAL SCIENCES

(In the Division of Natural Sciences)
Staff: Anderson (Department Head), Andreoli, Bair, Griesel, Harris, Harvey, Reardon, Ross, Sacher, Tamblyn, Welsh. Part-time: Highby, Lyon, Rothrock, Senn.

## BACHELOR'S DEGREE CURRICULA

## Major in Botany

The major program in botany is designed to provide the student with a broad understanding of basic plant science. Such a training will qualify a student for (a) graduate study in the field of botany; (b) certain types of federal employment; (c) work in the state civil service system, particularly with the state park service, the state forestry service, and the state agricultural inspection service; (d) employment in private industry, such as in plant nurseries and various aspects of horticulture; (e) positions as research technicians in various university projects.

## Lower Division

General Botany
General Chemistry $\quad 5$ units
Organic Chemistry (lecture) 3 units
General Zoology _ 4-5 units
Electives chosen from the following fields ._. 7-11 units
Botany, Chemistry, Geology, Mathematics, Microbiology, Physics, Zoology.* A minimum of 28 units should be taken in the lower division.

## Upper Division

Biological Science 110-Genetics 2 units
Botany 103-Plant Classification 3 units
Botany 110-Plant Physiology 4 units
Botany electives chosen from the following 11 units
Botany 108-Plant Ecology (3)
Botany 109-Plant Geography (3)
Botany 115-Morphology of Vascular Plants (3)
Botany 116-Morphology of Nonvascular Plants (3)
Botany 120-Plant Anatomy (4)
Botany 190A-B-Seminar (1-1)
Botany 199-Independent Study (1-3)
Electives chosen from the following fields
Biological Science (other than Biological Science 100), Chemistry, Geology, Mathematics, Microbiology, Physics, and Zoology.

[^2]
## Major in Microbiology

The major program in microbiology is designed to provide adequate basic training in microbiology and related fields, such as chemistry. It will qualify a student for (a) graduate study in the field; (b) various types of federal employment; (c) work in the state civil service system, particularly as a public health bacteriologist; (d) industrial microbiological work in such divergent fields as the pharmaceutical industry, brewing, industrial fermentations and the dairy industry; (e) entrance into medical and dental school (by selecting a small number of additional elective courses); (f) work as a hospital bacteriologist; (g) positions as research technicians in various university research projects.

| Lower Division* |  |
| :--- | :--- |
| General Microbiology or Bacteriology | $4-5$ units |
| General Botany or Zoology | $4-5$ units |
| General Chemistry . (lecture) | 10 units |
| Organic Chemistry |  |
| Chemistry (Quantitative Analysis) | 3 units |
| Physics . | 3 units |
| Upper Division | 4 units |
| Microbiology 103A-B-Medical Bacteriology |  |
| Microbiology 105-Viruses | 5 units |
| Microbiology 121-Serology | 2 units |
| Microbiology 128-Microbial Physiology | 3 units |
| Chemistry 108A-B-Biochemistry | 2 units |
| Electives chosen from the following courses | 4 units |
| Microbiology 122-Hematology (3) | 8 units |
| Microbiology 123-Parasitology (3) |  |
| Microbiology 127-Medical Mycology (2) |  |

## Major in Zoology

The major program in zoology is designed to provide a broad training in animal biology. Graduation with such a major in zoology qualifies a student for (a) graduate study in the field; (b) entrance into medical and dental schools (if additional work in chemistry and physics is elected); (c) employment in federal and state civil service, particularly in fish and game work and in park service; (d) employment in certain types of industrial laboratories such as the pharmaceutical houses; (e) positions as technicians in university research projects; (f) natural history museum work.

[^3]
## Lower Division

| General Botany | $4-5$ units |
| :--- | ---: | ---: |
| General Chemistry | 5 units |
| Organic Chemistry | 3 units |
| General Zoology | $5-8$ units |
| Electives chosen from the following fields | $7-11$ units |
| Botany, Chemistry, Geology, Mathematics, Microbiology, Physics, Zo- |  |
| ology. A minimum of 28 units should be taken in the lower di- |  |
| vision. |  |
| Upper Division | 2 units |
| Biological Science 110-Genetics | 4 units |
| Zoology 105-Embryology |  |
| Zoology 106-Comparative Anatomy | 4 units |
| Zoology 132-Invertebrate Zoology | 4 units |
| Zoology electives chosen from the following | 4 units |
| Zoology 107A-B-Mammalogy (2-2) |  |
| Zoology 123A-B-Birds of California (2-2) |  |
| Zoology 128-Arthropod Vectors (3) |  |
| Zoology 129-Marine Zoology (3) |  |
| Zoology 130-Principles of Animal Ecology (3) |  |
| Zoology 131-Cold-blooded Vertebrates (3) |  |
| Zoology 133-Animal Histology (4) |  |
| Zoology 134-Evolution (2) |  |
| Zoology 190A-B-Seminar |  |
| Zoology 199-Independent Study (1-3) |  |
| Electives chosen from the following fields. |  |
| Biological Science (other than Biological Science 100), Botany, Chem- |  |
| istry, Geology, Mathematics, Microbiology, and Physics. |  |

## Major in Biological Science

The biological science major is designed primarily for students who desire a broad training in the biological sciences rather than the more highly specialized programs required for majors in botany, microbiol ogy, or zoology.

## Lower Division

General Botany
General Chemistry
General Microbiology *
General Zoology
Electives chosen from the following fields
Chemistry, Geology, Mathematics, Physiology, Physics. A minimum of
25 units should be taken in the lower division.

## Upper Division

Biological Science 110-Genetics $\quad 2$ units
Electives chosen from the following botany courses $\quad 6-7$ units
Botany 103-Plant Classification (3)
Botany 108-Plant Ecology (3)
Botany 109-Plant Geography (3)
Botany 110-Plant Physiology (4)
Botany 115-Morphology of Vascular Plants (3)
Botany 116-Morphology of Nonvascular Plants (3)
Botany 120-Plant Anatomy (4)

[^4]
## Major in Medical Technology

The following program has been approved for training of medical laboratory technicians by the California state agencies involved in certification. A total of 128 units is required for graduation with a major in medical technology.

On completion of this major and a six-month internship a student will be eligible to take the examination to become a registered medical technician. This will lead to employment in hospitals, public health laboratories and certain private, state and federal research laboratories.

## Lower Division

| General microbiology or general bacteriology | $4-5$ units |
| :--- | ---: |
| General chemistry | 10 units |
| Quantitative analysis (chemistry) | 3 units |
| Organic chemistry | 3 units |
| Physics | $4-8$ units |
| General zoology | $4-5$ units |

## Upper Division

Micro. 103A-B-Medical Bacteriology - 5 units
Micro. 105-Viruses $\quad 2$ units
Micro. 121-Serology — - — — - $\quad 3$ units
Micro. 122-Hematology $\longrightarrow 3$ units
$\begin{array}{ll}\text { Micro. 123-Parasitology } \\ \text { Micro. 125-Introduction to Pathology } \ldots \longrightarrow & 3 \text { units } \\ 2 \text { units }\end{array}$
$\begin{array}{ll}\text { Micro. 125-Introduction to Pathology ............... } & 2 \text { units } \\ \text { Micro. 127-Medical Mycology } & 2 \text { units }\end{array}$
Chemistry $108 \mathrm{~A}-\mathrm{B}$-Biochemistry $\quad 4 \quad 4$ units
Chemistry 111 A-B-Clinical Biochemistry ——_- 4 units
Zoology 126-Histological Methods - $\quad 3$ units
Micro. 190A-B-Seminar $\quad 2$ units

## General Secondary Teaching Major in Life Science and General Science

See also pages 112-113 for professional education requirements. A teaching minor in a different teaching field is also required.

## Lower Division

General Botany _ 4-5 units
General Chemistry 5 units
General Microbiology * $\quad 4$ units
General Physics $\longrightarrow$ 3-5 units
Physiology 3 units

Electives chosen from the following fields to total 25 units: Chemistry, Geology, Mathematics, Physics.

Upper Division
Biological Science 110-Genetics _._._._._. 2 units
Botany 103-Plant Classification 3 units

Electives chosen from the following botany courses 3-4 units
Botany 108-Plant Ecology (3)
Botany 109-Plant Geography (3)
Botany 110-Plant Physiology (4)
Botany 115-Morphology of Vascular Plants (3)
Botany 116-Morphology of Nonvascular Plants (3)
Botany 120-Plant Anatomy (4)
Electives chosen from the following zoology courses 3-4 units
Zoology 106-Comparative Anatomy (4)
Zoology 128-Arthropod Vectors (3)
Zoology 132-Invertebrate Zoology (4)
Zoology 133-Animal Histology (4)
Electives chosen from the following zoology courses 3-4 units
Zoology 107 A-B-Mammalogy (2-2)
Zoology 123 A-B-Birds of California (2-2)
Zoology 130-Animal Ecology (3)
Zoology 131-Cold-blooded Vertebrates (3)
Electives chosen from the following courses 3 units
Nature Study 125-Science Materials (3)
Conservation 141-Conservation of Wildlife (3)
Conservation 171--Conservation Problems and Practices (3)
Electives chosen from approved courses in biological science or physical science

1-4 units
A minimum of 24 units should be taken in the upper division.
Note: One unit of credit from Natural Science 101, 102 or 103 (post summer session courses) and 2 units from Zoology 143, 144, 145, or 146 (extension courses) may be applied to the 1-4 unit elective requirement above.

## General Secondary Teaching Minor in Life Science and General Science

See also pages 112-113 for professional education requirements. A teaching major in a different teaching field is also required.
$\begin{array}{ll}\text { Basic courses selected from the following: anatomy, botany, } \\ \text { biology, microbiology, physiology, and zoology } & 6-10 \text { units } \\ \text { Basic course in chemistry, physics or geology } & 4-5 \text { units } \\ \text { Nature Study } 120-\text { Nature in California } & 3 \text { units } \\ \text { Electives to be selected with the approval of the adviser } & 2-7 \text { units } \\ & \end{array}$

[^5]Note: Biological Science 100, Botany 111, Conservation 161, Nature Study 118, Physical Science 100, are not to be included in the above minor. At least 6 units of the minor must be in upper division courses.

## MASTER OF ARTS DEGREE

1. Prerequisite: An acceptable major or minor in the biological sciences.
2. Area of Specialization
Biological Science 200AB-Graduate Seminar 2 units
Biological Science 201AB-Concepts and Theories 2 units
Biological Science 202-Field and Ecological Biology -_ 2 units
Biological Science 203-Selected Topics in Cellular Physiology - 2 units
Biological Science 299-Graduate Project ——_ 3 units
Approved courses in biological sciences or allied fields $\quad 4$ units
3. Comprehensive oral or written examination in the field of biological sciences
4. Approved courses outside the area of biological science 6 units
5. Electives ... 9 units

## COURSES OF INSTRUCTION

## BIOLOGICAL SCIENCE

Biological Science 100 is a general education course. Remaining courses are designed for majors or minors in Biological Science and in Life Science and General Science.

## ${ }^{100}$ Survey of Biological Science (3) Fall, Spring

An understanding, appreciation, and knowledge of living things and the life processes. Not open to majors or students with previous courses in general botany, biology, or zoology.

## ${ }^{110}$ Genetics (2) Spring

Prequisites: General zoology, general botany, or equivalent. Principles of the genetics of animals and plants emphasizing the mechanisms of inheritance and the practical applications.

## 126 Histological Methods (3) Fall

Prerequisite: General zoology, general botany, or the equivalent. Practical experience in preparing and staining various types of tissue sections. Lecture one hour; laboratory six hours.
${ }^{200 A}$-B Graduate Seminar (1-1) Fall, Spring
Prerequisite: Major or minor in biological science or equivalent. Graduate seminar in biological sciences. Review of current literature in the biological sciences to afford an acquaintance with present developments.
${ }^{201}$ A-B Biological Concepts and Theories (1-1) Fall, Spring
Prerequisite: Major or minor in biological science or equivalent. An historical tracing of man's changing relationship to and concepts of nature considers development of scientific methods together with practical and philosophical outcomes.

## 202 Field and Ecological Biology (2) Spring

Prerequisite: Major or minor in biological science or equivalent. Designed primarily for teachers or field naturalists. Includes field techniques, exploring, biological collecting, and familiarization with ecolog' ical associations. Lecture one hour; laboratory three hours.

## 203 Selected Topics in Cellular Physiology (2) Fall

Prerequisite: Graduate status with major in biological science of equivalent. Physiological and cytological problems in plants and animals stressing photosynthesis, respiration, digestion, food storage, water re lationships, etc., and the relation of structural features of cytoplasm to cell function. Lecture one hour; laboratory three hours.

## 299 Graduate Project (3) Fall, Spring

## BOTANY

## 103 Plant Classification (3) Spring

Prerequisite: General botany. The classification of flowering plants. Information about the local native and cultivated plants of special value to the teacher of biology and nature study. Lecture one hour; laboratory six hours.

## 108 Plant Ecology (3) Spring

Prerequisite: Botany 103 or equivalent. The plant in relation to its environment. Local conditions stressed; a major part of the work is done afield. Gives teachers and others a clear picture of the flora of the region. Lecture one hour; laboratory six hours.

## 109 Plant Geography (3) Fall

Prerequisite: One previous course in biological sciences. The flor ${ }^{95}$ of the world with emphasis on the principles and problems of their de velopment. Local flora and conditions will be stressed.

## 110 Plant Physiology (4) Fall

Prerequisite: General botany or equivalent. The functions of plants: the acquisition of raw materials and energy, manufacture of food and other substances, water relations, respiration, and growth. Lecture two hours; laboratory six hours.

## 111 Economic Plants (3) Fall, Spring

A study of the economic plants of the world with particular emphasis on local conditions.

## 115 Morphology of Vascular Plants (3) Fall

Prerequisite: General botany. Comparative morphology and repro duction of ferns, fern allies, and seed plants. Lecture one hour; labord tory six hours.

## 116 Morphology of Nonvascular Plants (3) Spring

Prerequisite: General botany. Life histories, structure, and evolutionary relationships of the principal orders of algae, fungi, and mosses. Lecture one hour; laboratory six hours.

## 120 Plant Anatomy (4) Fall (Offered 1956-57)

Prerequisite: General botany. The microscopic structure of representative common plants with special consideration given to the development and differentiation of plant tissues. Lecture two hours; laboratory six hours.

## 190A-B Seminar (1-1) Fall, Spring

Prerequisites: Senior standing and consent of the instructor. Reviews of current literature in various fields of botany. Recommended for all seniors majoring in biological science (botany).

## 198 Field Assignment and Reports (1-2) Fall, Spring

Prerequisite: Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular group meetings.

## 199 Independent Study (1-3) Fall, Spring

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

## MICROBIOLOGY

${ }^{100 \mathrm{~A}}$ Principles of Microbiology (3) Fall, Spring
Prerequisite: College chemistry or consent of instructor. Nature and characteristics of bacteria, yeasts, molds, and viruses; their practical importance to mankind. Not open to students who have had lower division general microbiology.
${ }^{100 \mathrm{~B}}$ Microbiology Laboratory (1) Fall, Spring
A laboratory course to accompany Microbiology 100A. Laboratory three hours.
${ }^{103}$ A Medical Bacteriology (3) Fall, Spring
Prerequisite: General microbiology or Microbiology 100A-B. Bacteriology, immunology, and transmission of the infectious diseases of man and animals.
103B Medical Bacteriology Laboratory (2) Fall, Spring
Taken concurrently with Microbiology 103A. Laboratory diagnosis of bacterial diseases. Laboratory six hours.

## 105 Viruses (2) Fall, Spring

Prerequisite: General microbiology or Microbiology 100A-B. Consideration of the virus and rickettsial diseases of man and animals. Lecture two hours and demonstrations.

## 121 Serology (3) Spring

Prerequisite: Microbiology 103A-B. Fundamental principles of immunology and serology; laboratory experience in producing antigens and antisera and in performing the important, commonly used serological tests. Lecture one hour; laboratory six hours.

## 122 Hematology (3) Fall, Spring

Prerequisite: General zoology or course in physiology. Basic principles of hematology; experience in making complete blood counts, hemoglobin determinations, typing and cross-matching, and other related procedures. Lecture one hour; laboratory six hours.

## 123 Parasitology (3) Fall, Spring

Prerequisite: General zoology or the equivalent. Parasitic protozoa and helminths of man with emphasis on classification and identification. Life cycles of some representative forms. Lecture two hours; laboratory three hours.

## 125 Introduction to Pathology (2) Fall, Spring

Prerequisite: General zoology or physiology and anatomy. The principles of general pathology, stressing the dependence of all disease conditions on these basic principles. Primarily for laboratory technicians but of value to pre-medical, pre-dental, pre-veterinarian and pre-pharmacy students.

## 127 Medical Mycology (2) Fall, Spring

Prerequisite: General microbiology or Microbiology 100A-B. An introduction to the pathogenic fungi commonly responsible for the mycotic infections of man. Lecture one hour; laboratory three hours.

## 128 Microbial Physiology (2) Spring

Prerequisites: General microbiology, organic chemistry. The physio logical activities of microorganisms including nutritional requirements, growth, effect of physical environment, metabolic changes in organic and inorganic compounds, biochemical genetics, practical applications.

## 190A-B Seminar (1-1) Fall, Spring

Prerequisite: Senior standing and consent of instructor. Reviews of current literature in various fields of microbiology. Required for all seniors majoring in biological science (laboratory technicians).

## 198 Field Assignment and Reports (1-2) Fall, Spring

Prerequisite: Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular group meetings.

## 199 Independent Study (1-3) Fall, Spring

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. A project is selected in conference with the sponsor at the time of registration and progress meetings are held regularly thereafter until the end of the semester.

## NATURE STUDY

118 Everyday Nature (3) Fall
Nature in everyday life, at school, in the home, and in urban environments. Biological and physical principles expressed in seasonal changes, climate, soil, and life habitats involving both domestic and wild plants and animals. Lecture two hours; laboratory three hours; field trips to be arranged.

## 120 Nature in California (3) Spring

Prerequisite: Course in biological science or Nature Study 118. Scientific acquaintance with birds, mammals, and native vegetation; major asSociations gained by laboratory study and wide-ranging field trips through Southern California. Lecture two hours; laboratory three hours, field trips to be arranged.
125 Science Materials (3) Spring
The collection, preservation, manufacture, exhibit, and use of science materials, including the maintenance of living things. Lecture two hours; laboratory three hours.

## 130 Regional Excursions (1-4) Fall, Spring

Extended field excursions during vacation periods to various regions such as deserts, mountains, seashores of the United States, Canada and Mexico for the study of the natural history of these regions. No prerequisites. Enrollment by permission of instructors only.

## 145 Marine and Shore Life (3) Fall

Observation and study of life along bays, shores, and pools. Maintenance of small tanks of live specimens in the laboratory. Preparation and display of specimens. Lecture one hour; laboratory six hours, including Saturday.

## PUBLIC HEALTH

Public Health 112 and 120 recommended electives for Biological Science and Medical Technology majors.
103 Biological Foundations of Sanitation (3) Fall
Principles of life sciences including bacteriology, parasitology, and entomology relevant to control of environmental sanitation.

## 105 Physical Principles of Sanitation (3) Spring

Techniques in general sanitation covering construction and maintenance of water facilities, filters, sewage disposal, heating, ventilation lighting, plumbing, and housing.

## 107 Environmental Sanitation Control (3) Fall

Prerequisites: Public Health 103 and Public Health 105 or consent of instructor. A study of waste disposal, insect, rodent, and nuisance control, control of food, and housing sanitation.

## 109 Principles of Sanitary Inspection (3) Spring

Prerequisite: Public Health 107 or consent of instructor. Objectives and special techniques in food sanitation covering milk, meat, markets, restaurants, and processing plants.

## 112 Community Control of Communicable Diseases (3) Fall

Prerequisites: Public Health 103 and Public Health 105 or consent of instructor. The epidemiology, modes of transmission, and community control of communicable diseases, including tuberculosis and the vene real infections.

## 115 Public Health Administration (3) Spring

Prerequisites: Public Health 103 and Public Health 105 or consent of instructor. A study of agencies dealing with sanitation. Organization of health departments, office procedures, laws and legal regulations, and public relations.

## 120 Sanitary Bacteriology (4) Spring

Prerequisites: General microbiology or Public Health 103 and Public Health 105 or consent of instructor. Sanitary and laboratory applications of microbiology considering particularly water-borne diseases, water testing and treatment, sewage disposal, milk testing, food testing, restaurant and air sanitation. Lecture three hours; laboratory three hours.

## ZOOLOGY

## 105 Mammalian Embryology (4) Fall

Prerequisite: One year of general zoology or equivalent. A survey of the development of the mammal from egg to foetus with laboratory studies of chick and pig embryos. Histogenesis and organogenesis, and physiology of the reproductive tract. Lecture two hours; laboratory sis hours.

## 106 Comparative Anatomy (4) Spring

Prerequisite: One year of general zoology or equivalent. The evolu tion of vertebrate structure and organ systems including chief environs mental adaptations. Laboratory is limited to the comparative morphol ogy of vertebrate types, emphasizing mammalian anatomy. Lecture two hours; laboratory six hours.

107A-B* Mammalogy (2-2) Fall, Spring
Prerequisite: General zoology or equivalent. Natural history, identification and classification of mammals together with field techniques. Emphasis on the mammals of the western states. Lecture one hour; laboratory or field work three hours.

## $123 \mathrm{~A}-\mathrm{B}^{*}$ Birds of California (2-2) Fall, Spring

Acquaintance with Pacific Coast and desert birds by specimens, lecture, and field study. Classification, structure, habits, field recognition, and ecology. Spring section: includes nesting and bird songs. Fall section: migration and distribution. A year of field work with birds. Lecture one hour; laboratory or field work three hours.
128 Arthropod Vectors (3) Spring
Prerequisite: General zoology or the equivalent. The role of arthropods, especially the insect, as transmitters of human animal diseases. Stresses classification, structure, life histories, and practical applications. Lecture two hours; laboratory three hours.
129 Marine Zoology (3) Fall
Prerequisite: General zoology or equivalent. A study of the sea as a life environment. Field and laboratory familiarization with local marine animals and their habitats. Lecture two hours; laboratory two hours plus field trips.

## 130 Principles of Animal Ecology (3) Fall

Prerequisites: General zoology or equivalent. A consideration of living animals in relation to their physical, chemical, and biological environments. Selected topics in the field of modern ecology. Lecture three hours; and field trips as arranged.

## 131 Cold-blooded Vertebrates (3) Spring

Prerequisite: General zoology or equivalent. The biology, classification, and ecology of California fishes, amphibians, and reptiles. Lecture two hours; laboratory or field trips three hours.

## 132 Invertebrate Zoology (4) Spring

Prerequisites: General zoology or the equivalent. Characteristics and natural history of the invertebrates. The major groups of animals without backbones arranged in an evolutionary order from single-celled animals to primitive chordates. Emphasizes forms characteristically found in this region. Lecture two hours; laboratory six hours.

## 133 Animal Histology (4) Spring

Prerequisites: General zoology. The microscopic characteristics of tissues and organs. Mammalian tissue will be emphasized; amphibian tissue used when its simplicity will aid in understanding. Lecture two hours; laboratory six hours.

[^6]
## 134 Evolution (2) Fall

Prerequisites: Year of biology or zoology or the equivalent. Organic evolution, with critical discussion of possible mechanisms involved.

## 190A-B Seminar (1-1) Fall, Spring

Prerequisite: Senior standing or consent of instructor. Reviews of current literature and concepts in the various fields of zoology. Recommended for all seniors in the biological sciences (zoology).
198 Field Assignment and Reports (1-2) Fall, Spring
Prerequisite: Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular group meetings.

## 199 Independent Study (1-3) Fall, Spring

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

[^7]
## BUSINESS ADMINISTRATION

## (In the Division of Business and Economics)

Staff: Simpson (Division Chairman), Allison, Blackledge, Borders, Bright, Chrysler, Codner, Cox, Dance, Fiekowsky, Francis, Green, Gustafson, Hansen, Hill, Hoyt, Luther, Mathy, Murphy, Norby, Raun, Tuohino, Voris. Part-time: Brenner, Goodfellow, Hathcock, McNulty, Mullin, Norrbom, Pearson, Quilliam, Rubin, Tipton, and Weisman.

## BACHELOR'S DEGREE CURRICULA

Three baccalaureate majors in business are offered:
(1) Business Administration (B.S. degree)
(2) Printing-Management (B.S. degree)
(3) Business-Education (B.A. degree)

See page 45 for additional graduate requirements for B.S. degree.
I. business administration

All business-administration majors must take a common core of lower and upper division courses. In addition, each student must select one of the following options: accounting, business-arts, executive secretarial, finance, administrative, industrial or small business management, labor relations, marketing and merchandising, special business, and transportation and foreign trade.

```
Lower Division Pre-major Requirements \(\dagger\)
    Principles of Accounting - 6 units
    Principles of Economics \(\quad 3\) units
    Business Law (Contracts and Sales) \(\quad 3\) units
    Mathematics of Finance \(\ddagger \ldots \ldots . .\).
    (Economic Geography, and a second semester of Principles of Eco-
        nomics are recommended.)
Upper Division Core Requirements
    a. To be completed in the junior year:
        Business 100 B -Managerial Accounting (3) or
        Business \(102 \$\)-Intermediate Accounting (4)
        Business 106 -Production Management (3)
        Business 109-Applied Business Statistics (4)
        Economics 103-Money, Credit and Banking (3)
    \(\dagger\) Credit for Lower Division Terminal Courses in Business: Unit credit for course work carrying a
    business number taken in lower division will be granted toward any major foundation in business
    under the following conditions:
1. A maximum of 18 units (including two semesters of accounting and 3 units of business law in the lower division requirements) will be allowed, with the approval of the instructor in that field, if a grade of " C " or higher was received.
2. In no case will more than 6 units or two semesters of course credit be allowed in any one field (i.e., accounting, finance, management, marketing or industrial relations.)
3. Unit credit so secured in no way reduces the number of upper division units to be taken in the Division of Business and Economics.
\# This course should be taken in the Mathematics Department. If taken in some other department, Ausiness 91 should be taken at State College.
Accounting and Finance majors take Business 102, Intermediate Accounting.
```

b. To be completed in the junior or senior year:

Business 103-Business Finance (3)
Business 104-Principles of Marketing (3)
Business 108B-Business Law (3)
Business 131-Business Cycles and Forecasting (3)
Economics 110-Economics of the Business Firm (3)
c. All business majors are required to take a proficiency test in the use of business machines not later than the end of the second semester in residence. This requirement can be met by taking Business 112 (Business Machines), or by passing the machine-skill test given in Business 109 (Applied Business Statistics), or by passing an examination after the skill has been acquired in the laboratory during free hours with the assistance of the laboratory instructor-

## Option 1-Accounting

Develops the technical and professional competency necessary for the prospective accountant, public accountant, or certified public accountant in business or government, or for one who intends to become a teacher of accounting.
Advisers: Cox, Francis S. Hansen, Murphy, Raun, Tuohino.
Core requirements (to include a "C" grade or better in Business 102). See page 79

## Training for Certified Public Accountant Examinations

Students of accounting who have 12 units of upper division accounting training may qualify to pursue a series of courses which provide training for the C. P. A. examinations. Those interested in this work should consult with the head of the accounting department or write to the Division of Business and Economics for a special informational folder.

## Option 2-Administrative Management

Develops skill in administrative and supervisory techniques which is required of managers, supervisors, and similar administrative officers in the fields of industry, finance, government, labor, etc.

Advisers: Allison, Blackledge, Luther, Voris.
Core requirements. See page 79 28 units
Business 160 -Case Studies in Business Management 3 units
Business 161-Executive Control _ 3 units
Business 171-Supervision: Principles and Problems 3 units
Business 173-Personnel Management $\quad 3$ units

Select two courses from the following:
Business 113-Office Organization and Management (3)
Business 135-Financial Management (3)
Business 143 -Sales Management (3)
Business 144 -Retail Store Management (3)
Business 148--Public Relations Methods for Business (3)
Business 154-Traffic Management (3)
Business 168 -Small Business Management (3)
Business 172-Labor Relations and Collective Bargaining (3)

## Option 3-Business-Arts

To meet the needs of firms which desire to have business graduates with less specialization. It may also be used by students who do not wish to over specialize at the undergraduate level. It couples the basic business sequence with liberal arts courses.
Advisers: Hoyt, Norby.

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Core requirements. See page 79 28 units
```

English 106A-Pre-professional Writing
Speech 110-Advanced Public Speaking or
Speech 111-Persuasive Speaking 3-2 units
Government 157-Constitutional Law - $\quad 3$ units
History 175-Economic History of the United States 3 units
Economics 100 -Economics of Industry 3 units
Select one course from the following fields
3 units

English
Philosophy
Geography
History
Psychology
Sociology

Note: None of the above courses may be applied against general education requirements of the college.

## Option 4-Executive Secretarial

Trains secretaries who can assume positions of responsibility and assistance to business executives.
Advisers: Green, Gustafson.
Typing skill of 50 words a minute and shorthand skill of 90 words a minute are prerequisites to begin this major.

| Core requirements. See page 79 _ 28 units |  |
| :---: | :---: |
| ${ }^{\text {Business }}$ 101-Business Correspondence | 3 units |
| Business 110-Secretarial Techniques and Methods | 3 units |
| Business 111-Applied Secretarial Practice | 3 units |
| Business 112-Business Machines | 2 units |
| Business 113-Office Organization and Management | 3 units |
| Select one course from the following: |  |
| Business 171-Supervision: Principles and Problems (3) |  |
| Business 173-Personnel Management (3) |  |
| (Selected electives in psychology are recommended |  |

## Option 5-Finance

Prepares the student to enter business as a trained worker in the finance department, or as a specialist in banking, insurance, and investments, or as a research analyst or budget specialist.
Advisers: Hill, Cox.


## Option 7-Labor Relations and Personnel

Develops skill in human relations that is required of managers, super visors, conciliators, and similar officials in industry, finance, education. government or labor unions.

Advisers: Dance, Norby.

Core requirements. See page 79
28 units
Economics 102-Labor Economics . 3 units
Business 160-Case Studies in Business Management _-. 3 units
Business 172-Labor Relations and Collective Bargaining ......... 3 unitb
Business 173-Personnel Management ...................................................... unit
Economics 120-Labor Legislation ... 3 unit
Select one course from the following:
Business 166 -Industrial Accident Control (3)
Business 169-Applications of Industrial Management (3)
Business 171-Supervision: Principles and Problems (3)
(Electives in industrial psychology are recommended)

## Option 8-Marketing and Mercbandising

Prepares student for work in the merchandising or sales department of manufacturing, wholesaling, or retailing establishments.
Advisers: Chrysler, Codner, Luther.
Core requirements. See page 79 28 units
Business 130 -Credits and Collections. ..... 3 units
Business 140 -Principles of Advertising ..... 3 units
Business 142 -Salesmanship ..... 3 units
Business 149-Marketing Research Problems
Select two courses from the following:
Business 143-Sales Management (3)
Business 144-Retail Store Man
Business 145-Wholesaling (3)

## Option 9-Small Business Management

Prepares the student for the ownership and/or management of a small business in industry, finance, retailing, wholesaling, etc. Stresses the various functions which must be coordinated in a small business.

```
    Advisers: Allison, Blackledge.
Core requirements. See page 79 \(\quad 28\) units
Business 113-Office Organization and Management 3 units
Business \(130-\) Credits and Collections 3 units
Business 142 -Salesmanship \(\longrightarrow 3\) units
R
Business 168 -Small Business Management 3 units
Business 168 -Small Business Principles and Problems
Business 171 -Supervision: Prine
3 units
3 units
Select one course from the following:
    Business 144-Retail Store Management (3)
    Business 148-Public Relations Methods for Business (3)
    Business 155-Motor Transportation Practice (3)
    Business 161-Executive Control and Administration (3)
    Business 173-Personnel Management (3)
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## Option 10-Special Business

A flexible program designed for students with special and unique needs not covered by the other options. Permission to take this option must be secured from the chairman of the division.
Adviser: Simpson.
Core requirements. See page 79
28 units
18 units in business, economics and relevant fields to be worked out in
conference with the division chairman and appropriate faculty mem-
bers, depending upon the unique and special objectives of the student.

## Option 11-Transportation and Foreign Trade

This program prepares a student for positions in either transportation or in foreign trade establishments.

[^8]
## II. PRINTING MANAGEMENT

The major presented below has been prepared to give the student an extensive training in the skills of a particular major industry, as well 25 a grasp of the principles and techniques of business management. The curriculum has been developed through close consultation with the graphic arts industry.
The lower division portion of the program is primarily concerned with the acquisition of skills and techniques of the printing industry. The upper division portion is primarily concerned with the busines management phases. In addition every student meets the general educx tion requirements of the college.

## Adviser: Vons

## Lower Division Requirements

Consult Division of Business and Economics Chairman for required work in printing and related subjects.

## Upper Division Requirements

A. Accounting and Finance Courses

Business 100A-Accounting Concepts Survey - 5 unit
Select one course from the following: - $\quad 3$ units
Business $100 \mathrm{~B}-$ Managerial Accounting
Business 103-Business Finance
B. Management Courses

Business 106-Production Management - $\quad 3$ unit
Business 179-Printing Plant Management _ _ on . 3 units
Select one course from the following:- 3 units
Business 113-Office Organization and Management
Business 160-Problems of Production Management
Business 168-Small Business Management
Business 171-Supervision: Principles and Problems
C. Marketing Courses

Select one from the following: 3 unis
Business 104-Principles of Marketing
Business 130-Credits and Collections Business 142-Salesmanship
D. Related Business and Economics Courses

Business 108B-Business Law
Economics 102-Labor Economics $\quad 3$ units
Select two courses from the following: - 6 unit
Business 109-Applied Business Statistics
Economics 103-Money, Credit and Banking
Economics 110-Economics of the Business Firm
E. Graphic Arts Courses

Business 178A-Typographical Layout and Design . 3 units
Business 178B-Typographical Layout and Design ——_ 3 units
Business 178C-Printing Estimating … 3 unith
F. Work-study Elective

Business 198-Field Assignment and Reports 2-6 units

## III. BUSINESS EDUCAT'ION

Ordinarily business education is offered as a teaching major. Studen ${ }^{\text {ts }}$ wishing to qualify for a bachelor's degree in this field should follow the requirements listed below for the special secondary teaching major.

## Special Secondary Teaching Major in Business Education

The special secondary credential in business education authorizes the holder to teach in elementary and secondary schools subjects basic to business and commerce, and in addition, the fields of concentration named in the credential. See also pages 113-114 for professional education requirements.
Advisers: Green, Gustafson.
A. Six months of practical experience or 1,000 clock hours in a business occupation.
B. The scope and function of business education.

Education 171-Principles of Business Education (3). All students in business education take this introductory course previous to directed teaching in business education.
C. Teaching methods in business education:*

1. Education $193 \mathrm{Bb}-$ Methods of Teaching Bookkeeping (2); or
2. Education 193Bs-Methods of Teaching Secretarial Subjects (2); and
3. Education 193Bt-Methods of Teaching Typewriting (2).
D. Applicants for the special secondary credential complete two 3 -unit assignments in directed teaching in business education in secondary schools.
E. Twenty-five semester hours of work in subjects basic to business and commerce which must include at least one course from each of the following fields:
4. Principles of economics or elements of economics taken in the lower division; Economics 100, Economics of Industry (3); Economics 101, Introduction to Economic Analysis (3); or Economics 110, Economics of the Business Firm (3).
5. Beginning typing taken in lower division.
6. Principles or elements of accounting taken in lower division, or Business 100A.
7. Business law or commercial law taken in lower division; or Business 108A, Business Law (3).
8. Business 106, Production Management (3).
9. Elementary mathematics of accounting and finance or commercial algebra taken in the lower division; or Business 101, Business Correspondence (3).
10. Economic geography taken in the lower division; Geography 141, World Resources (3); Economics 190, Current Economics Problems (3).
11. Business 104, Principles of Marketing (3); Business 142, Salesmanship (3); or Business 144, Retail Store Management (3).
F. Twenty semester hours of work in at least two of the following fields, one of which must be accounting or secretarial training (no less than eight semester hours in each field):

## Accounting Field

Business $100 \mathrm{~B}-$-Managerial Accounting (3) or
Business $102-$ Intermediate Accounting (4)
Business 112-Business Machines (2)
Electives from:
Business 120 -Advanced Accounting (4)
Business $121 \mathrm{~A}-\mathrm{Fe}$ ederal Tax Accounting (3)
Business 122 -Industrial and Cost Accounting (4)
Business 123 -Specialized Cost Accounting (3)
Business 124-Auditing (4)

[^9]
## Secretarial Training Field

Business 110-Secretarial Techniques and Procedures (3)

- Business 111-Applied Secretarial Practice (3)

Business 112-Business Machines (2)

## Merchandising Field

Business 104-Principles of Marketing (3)
Electives from:
Business 140-Principles of Advertising (3)
Business 142-Salesmanship (3)
Business 143-Sales Management (3)
Business 144-Retail Store Management (3)
(Note: If Business 104, 142, or 144 were taken as basic subjects under requirement "E. 8 " above, other courses in this area must be substituted.)

## Business Management Field

Business 103-Business Finance (3)
Business 108B-Business Law (3)
Business 109-Applied Business Statistics (4)
Business 113-Office Organization and Management (3)
Business 138A-Insurance Principles (3)
Business 139-Real Estate Principles (3)
Business 150-Foreign Trade Practices (3)
Business 153-Principles of Transportation (3)
Business 160-Case Studies in Business Management (3)
Business 168 -Small Business Management (3)
Business 172-Labor Relations and Collective Bargaining (3)
Business 173-Personnel Management (3)
Business 180-Law of Finance (3)
Business 182-Preventive Law (3)

## General Secondary Teaching Major in Business Education

The requirements for the general secondary teaching major in business education are the same as those for the special secondary credential in this field with the exception that a minor and a graduate year are included. See also pages 112-113 for professional education requirements. In addition to a course in methods in the minor, a minimum of one course in methods in business education, Education 193Bb, 193Bs, or 193 Bt , is required, and it must be taken PRIOR to directed teaching in the field. The applicant completes one three-unit directed teaching assignment in the major in business education and one in the minor.

## General Secondary Teaching Minor in Business Education

See also pages 112-113 for professional education requirements. A general secondary teaching minor must be accompanied by a major in a different teaching field. The minor consists of 20 units of work in business administration and secretarial subjects; 12 of these units must be in upper division, including six units in the same subject field, i.e., accounting, secretarial training, merchandising, or business management. A college course in typewriting or demonstration of adequate skill by examination is required.

[^10]

## MASTER OF SCIENCE DEGREE

Prerequisite for pursuing the master's degree: An undergraduate degree in business administration or economics from an accredited college ${ }^{\text {or }}$ university.

1. Core courses:
(a) Business 200a

Administrative Practices and Human Relations- -3 units.
(b) Business 200b

Economic Analysis and Business Operations-3 units.
(c) Business 200 c

Quantitative Approach to Managerial Decisions-3 units.
2. Graduate Project. Business 299.3 units.

Additional work selected in conference with the graduate adviser to meet the ${ }^{\text {occupational objectives of the student in the field of accounting, finance, man- }}$ agement, marketing, or business economics. 18 units. At least one of these electives must be a course open only to graduate students.

## COURSES OF INSTRUCTION

## LOWER DIVISION

$\mathrm{B}_{\text {usiness } 1}$ Beginning Typewriting (2) Fall, Spring
Introductory course. Emphasis on correct typewriting technique; Instruction and practice in speed and accuracy; problem typing; business etters. Five class meetings per week.

Business 2 Advanced Typewriting (2) Fall, Spring
Prerequisite: Business 1 or equivalent. Advanced course. Development of improvement in techniques, speed, and accuracy. Practice in letter writing, tabulating, manuscript typing, business forms, and office reports. Five class meetings per week.

## Business 3 Beginning Shorthand (3) Fall, Spring

Introductory course with emphasis on the basic principles of Gregg shorthand and the ability to apply these principles to an extensive shorthand vocabulary. Reading and writing practice in shorthand. Five class meetings per week.
Business 4 Advanced Shorthand and Stenography (3) Fall, Spring
Prerequisite: Business 3 or equivalent. Advanced course with emphasis on speed and accuracy in reading and writing Gregg shorthand; transcription training. Review of theory; enlargement of shorthand vocabularies; development of skill in producing mailable typed transcripts, including business letters and articles. Five class meetings per week.

## Business 91 Applied Business Problems (3) Fall, Spring

Prerequisite: Mathematics 15 or passing grade in mathematics proficiency examination. Important and frequently met problems of business and their solution through applied mathematical and accounting techniques. Problem areas include finance, accounting, marketing, statistics, industrial management, income tax, and similar topics.

## UPPER DIVISION

## 100A Accounting Concepts Survey (5) Fall, Spring

Prerequisite: Consent of major adviser. Not open to those who completed one year of principles of accounting with a grade of "C" or better. Concepts essential to an understanding of the nature, organization, functioning, interpretation and utilization of accounting data.

## 100B Managerial Accounting (3) Fall, Spring

Prerequisite: One year of accounting or Business 100A. An applied course in accounting for nonaccounting majors. Emphasis on the use of accounting information in the management of business, the application of accounting techniques to business operation and control, accounting for personal use, and practical accounting solutions to frequent and important business problems.

## 101 Business Correspondence (3) Fall, Spring

Prerequisite: Typewriting or consent of the instructor. Training in composition of business letters; modern trends in business correspondence; problems of management which arise in connection with correspondence; evaluation of letters from representative firms. Practice in dictation and writing of various forms of modern business letters.

## 102 Intermediate Accounting (4) Fall, Spring

Prerequisite: One year of accounting or Business 100A. Accounting theory, practice, and problems. Topics include balance sheets, income statements and other financial statements, working papers, valuation of assets, reserves, correction of statements, and application of funds.

## 103 Business Finance (3) Fall, Spring

Alternative forms for organizing a business; financial principles, and practices involved in such organizations; administration and dissolution of private business corporations; financial promotions, types of securities, expansion, consolidation, and aspects of reorganization. Sources and uses of financial information.

## 104 Principles of Marketing (3) Fall, Spring

The organization and principal operating aspects of our system for distributing goods and services. Retail and wholesale distribution channels, consumer buying characteristics, pricing, marketing of industrial products, and cooperative marketing of agricultural products. Sources and uses of marketing information.

## ${ }^{106}$ Production Management (3) Fall, Spring

The essentials of industrial organization and management. Primary departmentation; problems of supervision; authority and accountability; span of control; relationship of staff to line. Techniques of factory management, including plant layout, stores, tool, equipment and quality control; simplification and standardization. Sources and use of management information.

## ${ }^{108}$ A Business Law (3) Fall, Spring

Law contract and sales. Business and legal aspects of rights, duties and obligations of contracting parties and of vendor and vendee; formation of contracts and essential elements thereof; performance and breach; methods of enforcement of rights and obligations thereunder; property and securities.
${ }^{1} 0_{8 \mathrm{~B}}$ Business Law (3) Fall, Spring
Prerequisite: Business 108A, or consent of instructor. Agency, copartnership, corporations, and credit instruments; rights, duties and obliga${ }^{\text {tions }}$ arising out of relationship and business aspects thereof. Formation, ${ }^{0}$ Peration, and termination of such relationships; law of commercial Paper; bankruptcy; insolvency. (Formerly called Commercial Law.)

Prequisite: Business 91 or consent of adviser. Statistical methods most used by business. Graphic and tabular presentation of data; variation; sampling theory with applications to marketing and industrial problems; lusiness index numbers; time series analysis; trend, seasonal and business cycles, forecasting; simple correlation; basic operation of electric rotary calculators. Five class hours per week.

## EXECUTIVE SECRETARIAL

## 110 Secretarial Techniques and Procedures (3) Spring

Modern business office procedures, communication problems, office techniques; filing and indexing systems, duplicating machines, and effective handling of correspondence. Four class meetings per week.

## 111 Applied Secretarial Practice (3) Fall

Prerequisites: Typing skill of 50 words per minute and shorthand skill of 80 words per minute. Stenographic office problems; development of skill in transcription; principles underlying the editing of letters and reports. Emphasis upon skill, knowledge, requirements, and stand ards for efficient secretarial procedures. Four class meetings per week

## 112 Business Machines (2) Fall, Spring

The uses of several types of office machines, including 10-key and full-keyboard adding machines and key-driven, rotary, and printing calculators. The class is conducted on a rotation plan and meets four hours a week. (Can be used to meet the business machines proficiency requirement.)

## 113 Office Organization and Management (3) Fall, Spring

Prerequisite: Business 106 or equivalent. Office organization, manage ment, and functions; methods used in selecting and training office per sonnel; office layout and work flow; selection and care of equipment and supplies; simplification of systems and procedures; forms design and control. Case studies and field trips.

## ACCOUNTING

## 120 Advanced Accounting (4) Fall, Spring

Prerequisite: Business 102 or consent of instructor. Advanced ac counting problems and theory. Topics include: ventures, insurance, statement of affairs, receivership, branch accounts, banks and stock brokerage accounting, foreign exchange, estate accounting, budgets. public accounts, and analysis of financial statements.

## 121A-B Federal Tax Accounting (3-3) A-Fall; B-Spring

Prerequisite: Three semesters of accounting. The statutes, regulations administrative rulings, and court decisions relative to income and income taxes. The current federal and state revenue acts affecting individuals. partnerships, and corporations. Comparative methods of tax research and bibliography. Preparation for tax returns.

## 122 Industrial and Cost Accounting (4) Spring

Prerequisite: One year of accounting or Business 100A. Manufactur ${ }^{\circ}$ ing accounting, theory and problems, records, and financial statements; elements of cost; elements of process, specific or job-order, and standard cost accounting. Special emphasis on managerial use of cost data.

## 123 Specialized Cost Accounting (3) Fall

Prerequisite: Business 122. Theory and problems of the major types of cost systems in general use, analysis of expenses and costs with emphasis on factory and manufacturing accounting, budgets, estimated costs, joint and by-product costs; inventory records and control, material costs, labor costs, overhead accumulation, allocation and distribution; cost reports and control, cost accounting system critiques, development of standards, analysis of gross profit variations, applications to cost cases.

## 124 Auditing (4) Spring

Prerequisite: Business 120 or consent of instructor. Principles, techniques and procedures in auditing. Topics include: ethics, fraud, audit working papers, programs, verifying of balance sheet and profit and loss statements, audit reports, and the application of audit theory and practice to the records and documents of a typical corporation.

## 125 Corporation Accounting (2) Spring

Prerequisite: Business 120 or consent of instructor. Theory and problems, The California Corporation Code. Incorporation requirements affecting accounting procedure, corporate reports, mergers, amalgamations and consolidations, holding companies; principles underlying and Preparation of consolidated balance sheets and income statements. CPA examination problems relative to corporations.

## 126 CPA Law Problems and Cases (2) Spring

Prerequisites: Senior or graduate status and consent of instructor. Survey of all points of law covered by CPA examinations. Topics include: principles of law and cases on contracts, corporations, property, negotiable instruments, partnerships, agency, bailments, insurance, sales, guaranty and suretyship, and receiverships.
127 Municipal and Governmental Accounting (3) Fall
Prerequisite: Business 120 or consent of instructor. Accounting theory and problems of governmental and institutional units. Topics include: budgeting, tax levies, appropriations, accounting for revenues, expenditures of various funds, their financial statements, and special auditing or accounting problems.

## 128 CPA Auditing and Theory (2) Fall

Prerequisites: 21 units of accounting and consent of instructor. Survey and review of principles, practice, questions and problems in auditing and theory of accounts; practice and review of actual CPA examination questions.
${ }^{129}$ A-B Advanced CPA Problems (2-2) A-Fall B-Spring
Prerequisites: 21 units of accounting and consent of instructor. Intensive survey of techniques of accounting problems of CPA examination caliber, covering prior CPA examinations in accounting practice.

## FINANCE, REAL ESTATE AND INSURANCE

## 130 Credits and Collections (3) Fall

Nature and role of credit; management of the credit function; investigation and analysis of credit risks; management of the collection function; credit and collection control.

## 131 Business Cycles and Forecasting (3) Fall, Spring

Prerequisites: Business 109, Economics 103. Analysis of variations in business activity and the national income. Survey of theories advanced to account for these variations; analysis of proposals for reducing flucttations.

Credit may not be secured for both Business 131 and Economics 135 .

## 132 Investments (3) Fall

Prerequisite: Business 103. Principles of investment, a survey of cor porate securities, basic risks of investment, the investment program of the individual, other investment policies or programs, the principles of investment analysis and how to select bonds and common stock.

## 134 Budgeting (3) Spring

Prerequisite: Business 102. Modern practices and techniques involved in the formulation, enactment, and administration of the budget; relation of budget practices to accounting and scientific management in busines and government; preparing the budget; sources for estimates; relation of performance to estimates; analysis and reports for budgetary control.

## 135 Financial Management (3) Spring

Prerequisite: Economics 103 and Business 103. Banking from the standpoint of both bankers and businessmen; functioning of bank credit and banking institutions; the Federal Reserve system and its relationship to business; public regulation and supervision of banking and credit; case problems in financial management based on recent experiences of busi ness; current developments.

## 137 Investment Analysis (3) Fall

Prerequisite: Business 132 or consent of instructor. Fundamentals of investment practice; analysis of financial statements; selection of fixed income securities; valuation of common stocks; stockholders and mart agement; security analysis in action.

## 138A Insurance Principles (3) Fall

Insurance as an economic and business institution. A survey of fire, marine, casualty, and life insurance for those interested as potential cort sumers or as a career.

## 138B Life Insurance (3) Spring (Offered 1956-57)

Prerequisites: Consent of instructor. The economic and personal sig nificance of life insurance; types of policies, contracts, premium deter mination, and reserves; insurance as an investment; and group life, health and accident insurance.

138C Property and Casualty Insurance (3) Spring (Offered 1957-58)
Types of protection available to cover risks to property and ocean and inland marine; robbery, theft, and various types of damages.
139A Real Estate Principles (3) Spring
Nature of real property; factors affecting real property; values and income; government regulation of real estate practices.
139B Real Estate Practice (3) Fall
Prerequisite: Business 139A or consent of instructor. Procedures, methods, standards, and ethics of the real estate business; emphasis upon the function of the broker and real estate selling.
See also Economics 133, Public Finance.

## MARKETING AND TRADE

140 Principles of Advertising (3) Fall
Prerequisites: Business 104 or consent of instructor. What advertising is and what it is used for; its marketing and economic functions; advertising media, copy, layout, research. Printing and production processes; the organization of advertising departments and advertising agencies.
141 Advanced Advertising (3) Spring (Offered 1956-57)
Prerequisite: Business 140 or consent of instructor. Preparation of advertisements for newspapers, magazines, and other printed media; effective advertising appeals, basic elements of good advertising for business concerns, headlines, slogans, etc. Importance of layouts, production and advertising budgets.

## 142 Salesmanship (3) Fall

Prerequisite: Business 104 or consent of instructor. The development and practical application of sales techniques in selected fields. The work of the salesman, including customer relationships, home office relationships, the evaluation of sales opportunities, and the development of the sales canvass. Includes lectures, discussions, demonstrations, and oral participation in sales presentations.
143 Sales Management (3) Spring
Prerequisites: Business 104, Business 106 and previous or concurrent registration in Business 142. Activities and organization of the sales department. Methods employed by sales managers in selecting, training, and supervising salesmen; selling methods, materials, and campaigns; distribution channels and territories; pricing, budgets, controls, and sales research. Lectures, cases, discussions, guest speakers, and exhibits.

## 144 Retail Store Management (3) Fall

Prerequisites: Business 106 and Business 142. Retailing methods from the standpoint of the owner and manager. Buying, planned stocks, inventory control, markup, accounting for stock control, pricing, style merchandising, and advertising. Emphasis on problems of general mant agement including departmentation, personnel control, supervisory training, store layout and store location.

## 145 Wholesaling (3) Fall

Prerequisite: Business 142 or consent of instructor. Economic aspects of wholesaling, its growth and trends, especially since World War II, wholesaling functions in fields of agriculture, consumers goods, industrial goods, etc. The status of wholesaling in domestic and foreign trade; techniques and methods of order handling, warehousing, and stock control, credit management, wholesaling cooperatives, and governmental regulations. Wholesale customer relationships.

## 148 Public Relations Methods for Business (3) Spring (Offered 1957-58)

Prerequisite: Business 104. Public relations policies and techniques for business enterprises; development of good relationships with customer, employee, stockholder, government, and general public as a profitable investment; importance of honesty and fairness in all public dealings; the place of research, advertising, sales promotion and publicity in public relations programs; uses of specific media.

## 149 Marketing Research Problems (3) Spring

Prerequisite: Business 109 and prior or concurrent registration for Business 143. Practical sales and research problems with field investigations and reports covering application of the scientific method to the solution of sales problems. Problem analysis, collection of information from field observation, surveys, sales records, and secondary sources; the analysis and interpretation of data, and the preparation of reports.

## 150 Foreign Trade Practices (3) Spring (Offered 1956-57)

Techniques of foreign trade; exchange of goods; declarations; quotations; packing; shipping.

## 153 Principles of Transportation (3) Fall (Offered 1956-57)

The economic significance of rail, bus, truck, air, and inland waterway transportation. Problems of rate structures, regulation and finance of the transportation systems. Special emphasis on rail transport.

## 154 Traffic Management (3) Fall (Offered 1957-58)

Prerequisite: Business 153. Principles and practices of industrial traffic management including organization and operation of the traffic department, shipping documents, rate analysis and rate adjustment procedure, routing, tracing, expediting tariff supervision claims and claim prevention, procedure before regulatory commissions, traffic management and foreign trade, and traffic research.

155 Motor Transportation Practices (3) Spring (Offered 1956-57)
Prerequisite: Business 153 or consent of instructor. An intensive survey of motor carrier practices. Emphasis on both inter- and intra-city motor transportation problems, including the packaging of goods for shipment and warehousing.
See also Economics 106, Principles of International Trade.

## INDUSTRIAL MANAGEMENT

## 160 Case Studies in Business Management (3) Fall

Prerequisite: Business 106 or equivalent. Detailed case studies of the techniques of factory management, factory organization, departmentation and its criteria. Problems of middle supervisory levels; authority and accountability; relationships of staff to line. Concepts of production planning. (Formerly called Problems of Production Management.)

## 161 Executive Control and Administration (3) Spring

Prerequisites: Business 106 and 160. Use of the case method to acquaint the student with major executive responsibilities and problems in various industries. The diagnosis of current problems and the formulation of sound administrative policies and practices, requiring a consideration of sales, production, finance, and personnel factors.

## 162 Industrial Equipment and Processes (3) Fall

Prerequisite: Business 106 or consent of instructor. The physical aspects of industry, as distinguished from the organizational and managerial aspects. Characteristics of general purpose machine tools and other industrial machinery; processes such as casting, forging, heat treating and welding. Characteristics of important materials of manufacture; the relation of equipment and operation to product. Background in physics and chemistry helpful, but not required.
163 Motion and Time Study (3) Spring
Prerequisites: Business 109, Business 106, and Business 160. Motion economy and elements of quantitative scientific management. Operation analysis, flow process charts, the division of activity into its normal elements. Time study procedures from raw data to final rating. Standardization, rating, and delay and fatigue influences; introduction to methods-time measurement. Written reports of time and motion economy analysis.
164 Production and Material Control (3) Spring
Prerequisites: Business 106 and Business 160 or equivalent. Production planning and budgeting; development of the production control system, including product development, materials control, plant and equipment analysis, production standards and methods, personnel and supervision; control of production quantity and quality, measurement of production efficiency.

## 165 Industrial Purchasing (3) Fall (Offered 1957-58)

Prerequisites: Business 106 and Business 108A. Problems of purchasing raw materials, fabricated parts, standard supplies, machinery and industrial equipment. Quality control of purchases, industrial specifications and inspection. Analysis of economic purchase lots; quantitative determination of minimum lots; order points, competitive quotations and purchase contracts. Purchasing procedure, purchasing follow-up, purchase record control. Government purchasing procedures.

## 166 Industrial Accident Control (3) Fall (Offered 1957-58)

Prerequisites: Business 106 and Business 162 or equivalent. Theory and practice of the workmen's compensation laws of the State of California. The derivation and application of safety orders of the State of California relating to industrial operations. Demonstration, illustration, and use of industrial safety devices, with presentations from the viewpoint of the safety engineer. Audio-visual material on industrial injuries.

## 167 Quality Control (3) Fall

Control of quality of manufactured products by statistical methods. Control charts for variables, fraction defective, defects per unit. Acceptance sampling; single, double, and multiple sampling methods; sampling tables.

## 168 Small Business Management (3) Spring

Prerequisite: Majority of core courses completed or consent of instructor. The application of management principles to the small enterprise. Use of case method to study location, records, purchasing, labor relations, organization, control, unit expansion, financial problems and cause of failure, relation to the economy, and taxation. Emphasis on practical aspects of operation by examination of specific cases.

## 169 Applications of Industrial Management (3) Fall, Spring

Prerequisite: Business 106. Enrollment to be concurrent with Business 160 or consent of instructor. Detailed analysis, by field survey and conference methods, of selected manufacturing plants. Preparation of analytical reports emphasizing problems of production and their relationship to finance and marketing. The interdependence of all parts of the organization and the need for unified management thinking.

## LABOR RELATIONS AND PERSONNEL

## 171 Supervision: Principles and Problems (3) Fall, Spring

Prerequisite: Business 160 or consent of instructor. Supervisory methods and techniques of management; employer-employee relationships. The selection and maintenance of the working force and adjustment of the worker to the job. Problems of upgrading and supervisory training. Supervisory aspects of grievance procedure, conference and committee techniques.

## 172 Labor Relations and Collective Bargaining (3) Spring

Relations between employers and employees as the latter are represented by organized labor. Collective bargaining as it relates to recognition, wages, hours, working conditions, grievance procedure, seniority, health and safety, etc., and the impact of the law upon these.

## 173 Personnel Management (3) Spring

Prerequisites: Economics 102 and Business 106, or consent of instructor. Principles, methods, and procedures related to the effective utilization of human resources in organizations. Historical development and objectives of personnel management, individual differences, labor budgeting, job analyses, recruitment, selection, placement, training, wage, and salary administration, hours of work and employee health.

See also Economics 120, Labor Legislation.

## PRINTING MANAGEMENT

## 178A Typographic Layout and Design (3) Fall

Prerequisite: A course in typography or consent of instructor. Basic principles of design applied to the products of the printer. Drawing thumbnail sketches and rough and finished layouts in the solution of copy-fitting problems, the selection of type and paper, and the selection of various processes for the reproduction of the finished project.

## 178B Typographic Layout and Design (3) Spring

Prerequisite: Business 178A. A continuation of Business 178 A with stress upon the layout and design of complete projects. Use of working dummies to illustrate the problems of printing production. The basic elements of book design.
178C Printing Estimating (3) Fall (Offered 1956-57)
Prerequisite: All basic graphic arts courses or consent of instructor. Elements of estimating all classes of printing involving type composition, press work, binding, paper, photoengravings; cost-finding problems.
179 Printing Plant Management (3) Spring (Offered 1956-57)
Prerequisite: All basic graphic arts courses or consent of instructor. Organization and management of all departments in the printing plant, including the application of industrial management factors to the various departments. Inspection trips to study production methods and organization of local printing plants.

## LAW AND GOVERNMENT REGULATION

## 180 Law of Finance (3) Spring

Legal aspects of credit and security transactions. Various security devices and the function they perform. Bills, notes, and checks; suretyship and guaranty, liens, pledges, chattel mortgages, conditional sales, trust receipts, warehousing, real estate mortgages and trust deeds. Rights and obligations of debtors and creditors as reflected by bankruptcy and insolvency laws, etc.

## 181 Law of Real Estate and Property (3) Fall

Principles of property ownership and management in their business aspects. Special reference to the law of California as it applies to community property, conveyancing, deeds, trust deeds, mortgages, leases, etc.

## 182 Preventive Law (3) Fall (Offered 1956-57)

The legal affairs of the individual and the businessman from the point of view of detecting and preventing or minimizing risks; avoidance of litigation; warning signs of legal complications. Open to students in all departments of the college.

## 185 Business and Government (3) Fall

Prerequisite: Business 106 or consent of instructor. Significant point ${ }^{5}$ of contact between business and government; the necessity for thor oughly understanding everyday relationships with public authority; analysis of antitrust laws, fair trade laws, and unfair trade practices

See also Economics 105, Economics of Price Regulation.

## GENERAL BUSINESS

## 192A Accounting Reports (2) Fall

Prerequisite: Successful completion of 18 units of accounting and consent of instructor. Required coverage, scope, form, proper language in writing accountants' reports. The use of notes, organization of factual data, presentation of objective data, the types of certificates and qualifi cations. Study of published current annual reports, prospectus, and spectr men audit reports and of the recommendations of the American Institute of Accountants.

## 192B Accounting Systems (2) Fall

Prerequisite: Successful completion of 18 units of accounting and consent of instructor. The techniques involved in the coordination design, installation, and control of accounting systems. Special emphas ${ }^{515}$ on the study of existing systems, and the analysis of a business organiza tion to determine its particular requirements for a system. Installation of a system in local industry under instructor supervision is required of each student.

## 196 Advanced Business and Economic Statistics (3) Spring

Prerequisite: Business 109 or Business 167. Analysis of variance; multiple and partial correlation; recent advances in time-series analysis. Techniques of sample survey construction: stratification, multi-stage sampling, optimum allocation of resources. Estimates of various population characteristics from such samples.
198 Field Assignment and Reports (1-2) Fall, Spring
Prerequisite: Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular group meetings.

## 199 Independent Study (1-3) Fall, Spring

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

## GRADUATE COURSES

200a Administrative Practices and Human Relations (3)
Prerequisite: Business 106 or Business 160. Case studies of human relations problems confronting business administrators. Concepts which can be used to solve the problems confronting the individual in leading people or participating in group actions.
200b Economic Analysis and Business Operations (3)
Prerequisite: Economics 110. Provision for utilizing the tools, concepts, and factual data of the economist in specific problems of business 0perations. Application of principles, analytical tools, and sources of economic information to practical business situations by means of the case method.
${ }^{200}$ c Quantitative Approach to Managerial Decisions (3)
Prerequisite: Business 100A and 109. Business 100 B recommended. Use of quantitative information provided from accounting and statistical sources in arriving at solutions to complex business problems. Construction and application of controls over financial, manufacturing, and distributive activities. Quantitative method applied to problems of alternative choices of investment. Emphasis on recognition and definition of problem, where and how to get information, and how to organize, synthesize, and interpret information.

## 202 Accounting Theory and Analysis (5)

Prerequisite: Bachelor's degree in accounting. A review of, and research in, advanced phases of accounting as applied to modern business practice, and a consideration of current development in accounting theory and techniques.

## 203 Financial Analysis and Problems (5)

Prerequisite: Bachelor's degree based on a major in finance, or equivalent. Conditions causing various financial problems with special emphasis upon the analysis and practices involved in their solution. Current problems in finance; critical reviews of the analysis of, and solutions to, financial problems prepared by members of the class.

## 204 Contemporary Marketing Problems (5)

Prerequisites: Business $144,145,149$. An advanced case approach to marketing problems. Analysis of influences on the consumer, marketing structures, distribution channels, brand and price policies, sales programs, and sales executive problems. Emphasis on the development of competence in adjusting marketing policies to changes in the general economic climate.

## 206 Contemporary Management Problems (5)

Prerequisites: Business 106, 160, 161, 171 or equivalent, and basic courses in economics, business law, accounting, finance and marketing An advanced survey of the policy and operational problems of industrial organization. Analysis of case material and current management prob lems, contributed by industrial executives. Includes meetings with representatives of industrial establishments.

## 299 Graduate Project (3)

Directed studies to be worked out with the graduate adviser in business.

## ECONOMICS

## (In the Division of Business and Economics)

Staff: Mathy (Department Head), Bright, Dance, Hill, Fiekowsky, Norby, Simpson. Part-time: Tipton.

## BACHELOR'S DEGREE CURRICULUM

## Major in Economics

Prepares students for a B.A. degree in economics to qualify for positions in business and government. Specific areas include: finance, transportation, international trade, banking, agriculture, conservation of resources, communications and interstate commerce. A major in economics also provides foundations for teaching at the collegiate level and for entrance into a graduate school of business or a law school.

| Lower Division | 3 units |
| :--- | :--- |
| Principles of Economics | 3 units |
| Principles of Accounting- |  |
| (Courses in economic geography, history, government, and mathematics |  |
| are recommended.) | 3 units |
| Upper Division $\dagger$ | 3 units |
| Economics 102-Labor Economics | 4 units |
| Economics 103 $\ddagger-$ Money, Credit and Banking | 3 units |
| Business 109-Statistical Methods | 3 units |
| Economics 110-Economics of the Business Firm | 3 units |
| Economics 111-National Income Analysis | 3 units |
| Business 103-Business Finance | 3 units |
| Economics 133-Public Finance | 3 units |
| Economics 135-Economic Fluctuations | 3 units |
| Social Science 150-Scientific Method and Applied Logic |  |

The following courses carrying Business Administration numbers may be elected by Economics majors: Business 153 -Principles of Transportation; Business 172-Labor Relations and Collective Bargaining; Business ${ }^{185}$-Business and Government.

## MASTER OF ARTS DEGREE

Prerequisite: An undergraduate major in economics, in an accredited college, or sufficient undergraduate courses to provide a foundation for advanced work. Applicants should consult an adviser in economics to determine if any deficiencies exist before entering the graduate program.

[^11]1. Social Science 250A ..... 3 units
2. Approved graduate " 200 " courses in the field of economics ..... 9 units
3. Approved courses in the field of economics, to include Economics 299, Graduate Project* ..... 6 units
4. Comprehensive oral and written examinations in the field of economics5. Approved courses outside the area of economics6 units
5. Electives ..... 6 units

## COURSES OF INSTRUCTION

All courses below, except Economics 100 and 101, have a principles of economics course (or Economics 101) as a minimum prerequisite.

## 100 Economics of Industry (3) Spring (Offered 1957-58)

Descriptive survey of manufacturing methods, costs, and marketing aspects of leading American industries. Reading, lectures, field trips and other audio-visual aids.

## 101 Introduction to Economic Analysis (3) Fall, Spring

Basic economic tools, concepts and interrelationships. Emphasis on the private enterprise system, the national income, and the business firm.

## 102 Labor Economics (3) Fall, Spring

Use of labor resources in the economic system; employment, wage rates, the development of unions and collective bargaining; labor legis lation.

## 103 Money, Credit and Banking (3) Fall, Spring

The nature of money, how it is supplied to the economic system development and functions of banks; the relationship between money, credit, and the general price level.

## 105 Economics of Price Regulation (3) Spring (Offered 1956-57)

Prerequisite: At least one course in economics numbered above 100 The legal and economic basis for governmental regulation of prices and quality of product of privately owned businesses. Emphasis on such int dustries as electricity, gas, telephone, and urban transportation.

## 106 Principles of International Trade (3) Fall

Economic bases and mechanisms of international commercial relations government policies on tariffs, exchange controls, subsidies.

## 110 Economics of the Business Firm (3) Fall, Spring

Prerequisite: Principles of Economics or Economics 101. The oper2? tion of a price system in a free enterprise economy. Special emphasis upon the economic factors governing and influencing manageria decisions.

[^12]
## 111 National Income Analysis (3) Fall

Prerequisite: Economics 103. Determinants of national income, the operation of the economy as a whole as it relates to employment and the utilization of resources. Policies directed toward a high level of employment.

## 112 Development of Economic Thought (3) Spring

The evolution of ideas which man has developed over the years to analyze and deal with economic problems.

## 120 Labor Legislation (3) Fall

Development of common law decisions on the legal status of trade unions and their activities. Consideration of federal and state laws and their administration in social security, protective labor legislation, and labor relations legislation, with emphasis upon their economic implications.

## 130 Monetary Management (3) Spring (Offered 1957-58)

Prerequisite: Economics 103. An advanced approach to the functioning of the money system. Emphasis upon the policies of the U. S. Treasury, the federal reserve banks, and other factors influencing and determining the flow of funds.

## 133 Public Finance (3) Fall

Prerequisite: Economics 103 recommended. A survey of the expenditures of governments, the methods of securing funds, and the impact of these activities upon the economic functions of society.

## 135 Economic Fluctuations (3) Fall, Spring

Prerequisite: Economics 103. Analysis of variations in business activity and the national income; survey of various theories advanced to account for these variations; analysis of proposals for reducing fluctuations.

Credit may not be secured for both Economics 135 and Business 131.
171 Economic History of the United States (3) Spring (See History 175)
Historical survey of American economic development to the present, particularly industrialization and national legislation in the fields of industry and commerce.

## 172 Economic History of Europe (3) Fall (See History 148)

Examination of the economic development of Europe in modern times, with special attention to the industrial revolution and its effects.
180 Comparative Economic Systems (3) Fall
Problems with which all societies must deal in the economic aspects of life. A comparative survey of different systems which man has proposed or which are now in operation to deal with economic problems.

## 190 Current Economic Problems (3) Spring

Prerequisite: At least one course in Economics numbered above 100. An analysis of significant problems of the day such as agricultural price supports, the international dollar shortage, the industrial and labor monopoly situation, economic problems created by a defense program or total war, and events of economic significance which arise during the semester.

198 Field Assignment and Reports (1-2) Fall, Spring
Prerequisite: Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular group meetings.

## 199 Independent Study (1-3) Fall, Spring

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

## GRADUATE COURSES

## 210 Advanced Economics of the Firm (5) Fall

Prerequisite: Economics 110, 111 or equivalent. The scope and method of economic analysis. Principal emphasis on the role of the firm in an enterprise economy, with special reference to demand and cost analysis, pricing, managerial policies, market structures, and dynamic influences.

## 211 Contemporary Economic Theory (5) Spring

Prerequisites: Economics 110 and 111. An examination of the determinants of national income, the causes of fluctuation in national income and the influence of money and government fiscal policy upon economic stability. Recent developments in economic theory.

## 299 Graduate Project (3)

An independent paper to be developed under the direction of the head of the Department of Economics and other members of the graduate faculty.

## EDUCATION

Staff: Sando (Division Chairman), Bany, Benedetti, Bidna, Bishop, Brady, Brockman, Brown, Butt, Cheresh, Dahl, Diaz, Dible, Foley, Forbes, Gellermann, Gilmoore, Gowan, Hanson, Hatcher, Henry, Hone, Horner, Jeffers, Johnson, Klingbeil, Kudrna, Langston, Lodge, Lorbeer, Lord, McIntire, Miles, Montgomery, Mortensen, Neale, Nelson, Palmer, Pearce, Peckham, Preston, Reinstein, Rhodes, Roche, Roth, Ruhberg, Samson, Scheffskey, Schubert, Schwartz, Shepherd, Sistrom, Smallenburg, Smith, Sparks, Stewart, Strobel, Tonge, Tozier, Van Winkle, Wagstaff, Wandt, Williamson, E. Wilson, M. Wilson, Winn.

## ORGANIZATION

The curriculum of the Division of Education is organized around four areas:
(1) Elementary Education (Department Head, Langston)
(2) Secondary Education (Department Head, Dahl)
(3) Special Education (Coordinator, Lord)
(4) Administration and Supervision (Coordinator, Tozier)

## ADVISEMENT

Personal advisement is available to any student seeking a degree or a credential in teacher education. At his first registration each student should consult an adviser in the field in which he intends to work. He may continue to work with this adviser or seek another as he becomes ${ }^{\text {acquainted }}$ with the staff. Full responsibility for meeting all requirements set forth in the catalog will remain with each student.

As early as possible each student should request an evaluation which will list the requirements for the credential and/or the degree sought. Any student seeking more than one credential must have an evaluation for each credential. Application for evaluations is made at the Office of Admissions, Administration Building. The evaluation will serve as a guide for the student and the adviser in planning a complete program. Any deviation from this official evaluation should be approved through petitions signed by the department head. Equivalents from any other college transferred to Los Angeles State College to meet specific education course requirements must be of upper division standing and taken within the past 20 years.

## CREDENTIALS

Los Angeles State College is accredited by the State Board of Education to recommend qualified students for the following credentials:

1. Elementary Education
a. General Elementary Credential, see page 109.
b. Kindergarten-Primary Credential, see page 110.
2. Secondary Education
a. Junior High School Credentials, see page 112.
b. General Secondary Credential, see page 112.
c. Special Secondary Credential, see page 113.

Art, see page 55 and page 113.
Business Education, see page 85 and page 113.
Industrial Arts, see page 113 and page 183.
Limited Part-time in Industrial Arts, see page 113 and page 183.
Music, see page 113 and page 199.
Nursing Education, see page 113 and page 209.
Physical Education, see page 113 and page 213.
3. Special Education
a. Deaf and Severely Hard of Hearing-Special Secondary Credential, see page 117.
b. Mentally Retarded-Special Secondary Credential, see page 116.
c. Speech Correction and Lip Reading-Special Secondary Credential, see page 115.
4. Administration and Supervision
a. Elementary Administration Credential, see page 119.
b. Elementary Supervision Credential, see page 119.
c. Secondary Administration Credential, see page 120.
d. Secondary Supervision Credential, see page 120.
e. Special Subject Supervision Credential, see page 120.
5. School Service Credentials*
a. Child Welfare and Supervision of Attendance Credential, see page 123.
b. Psychologist (School) Credential, see page 123.
c. Psychometrist (School) Credential, see page 123.

Los Angeles State College offers courses which may qualify a graduate to receive the following credentials upon direct application to the State Department of Education:

Homemaking, see pages 112 and 178.
Visually Handicapped-Special Secondary Credential, see page 116.
Orthopedically Handicapped-Special Secondary Credential, see page 116.
Health and Development Credential-School Audiometrist, see page 123.
Health and Development Credential-School Nurse, see page 123.

## ADMISSION TO TEACHER EDUCATION

Admission to Los Angeles State College does not automatically entitle a student to become a candidate for a credential. The standards for admission will vary depending upon the field which the candidate wishes to enter. Candidates working for credentials in administration and supervision or in special education should consult the advisers in each case.

A candidate working for a regular teaching credential should enroll in Education 100 during his first semester at Los Angeles State College. Through this course he will complete the following tests required for admission to teacher education.

1. Writing proficiency test.
2. Speech test.
3. Fundamentals test (included with entrance test).
4. Health examination, including chest X-ray.
5. Personality tests.
[^13]In addition, he must demonstrate evidence of:

1. Scholarship. A grade point average of 2.25 is expected of elementary credential candidates and of 2.5 for secondary credential candidates. Grades in all education courses must be "C" or better.
2. Academic and Cultural Preparation. Competency is required in all subjects and skills commonly taught in the public school. Elementary credential candidates are urged to include at least 3 units in both art and music in their lower division program. Some skill in playing the piano is recommended for all elementary credential candidates and is required of all kindergarten-primary credential candidates.
3. Personal Fitness. The student must demonstrate personal qualifications in keeping with professional standards. Attention will be directed to general appearance, poise, dress, vitality, temperament, integrity, and general social attitude. Evaluation of personal qualifications may require rating by instructors at Los Angeles State College and possibly an interview by a selected committee.

## DIRECTED TEACHING

Directed teaching is one of the most important aspects of the program of teacher education at Los Angeles State College. Admission to this Phase of the teacher education program is one of the crucial points in the selection of future teachers. For that reason the Los Angeles State College has developed a careful screening and selection program through Which all students who wish to do directed teaching must pass.
A Directed Teaching Committee has the responsibility of passing on all applications for directed teaching. To be assigned to directed teaching the candidate must meet the following criteria:

1. A satisfactory record on the health examination. Each student must be examined at the college health center.
2. An over-all grade-point average of 2.25 for the elementary credential and a 2.5 for the secondary credential and all special education credentials.
3. A grade of " C " or better in all education courses. Any education course with a grade below "C" must be repeated (or an approved substitute course taken).
4. Completion of Education 100-including satisfactory scores on the fundamentals examination, the writing proficiency test, and the speech test. Education 100 should be taken the first semester at Los Angeles State College.
5. Completion of a minimum of 12 units of work in Los Angeles State College.
6. Completion of the course prerequisites for Education 150, Education 151, Education 350, or Education 351 as listed in the course descriptions.
7. All secondary directed teaching candidates must be approved by the divisions representing their teaching major and minor.
8. Demonstration of suitable aptitude and fitness for teaching and for adjustment to public school conditions. This factor may be determined by tests, interviews, and other studies evaluated by committee action.
9. Evidence of personality and character traits in keeping with the standards of the profession. Specific attention shall be directed to physical appearance, poise, dress, vitality, social attitude, cooperativeness, temperament, and integrity.
If a student meets all the criteria listed above, he will be approved by the committee.
Ordinarily, all candidates for the kindergarten-primary, general ele mentary, junior high school, and the special secondary credentials will do their directed teaching in the last semester of their senior year. All candidates for the general secondary credential will do their directed teaching in their graduate year. Candidates for the special education credentials will usually do their directed teaching in the graduate year, but outstanding students may be permitted to do directed teaching in the last semester of the senior year. Directed teaching assignments are made in the elementary and secondary schools of Los Angeles City and Los Angeles County. Application for directed teaching must be filed a semester ahead of the actual assignment. Students are responsible for observ ing the deadline for filing. Because of the amount of time and work required of students in directed teaching, they are encouraged to restrict their enrollment to no more than 12 units in the semester in which they carry 6 or more units of directed teaching. Heavy out-of-school worls loads are strongly discouraged.

## Provisional Credential Renewal

Los Angeles State College is prepared to cooperate with students seeking renewal of provisional credentials. A letter of recommendation to the State Department of Education will be written for the student only if the following conditions have been fulfilled:

1. The applicant must be a regularly admitted student.
2. The applicant must have completed Education 100 successfully.
3. The applicant must have completed the semester unit requirement ${ }^{16}$ established by the State Department of Education, at least six unitb of which must have been completed at Los Angeles State College
All requirements set forth by the State Department of Education for the renewal of provisional credentials are the sole responsibility of the candidate. Students are advised to matriculate immediately upon receip ${ }^{\text {b }}$ of the first provisional credential and seek advisement from the admis sions office and the head of the appropriate department.

## ELEMENTARY EDUCATION

Students planning to obtain a general elementary credential or a kindergarten-primary credential will ordinarily be granted the bachelor of arts degree with a major in education at the same time they complete the requirements for the credential.

Candidates who have two or more years of successful teaching experience may waive Education 150 provided they take 8 semester units of elective education courses. Letters verifying successful teaching experience should be signed by a principal, supervisor, or superintendent and forwarded to the Admissions Office.

Graduate students in kindergarten-primary or elementary education who intend to do directed teaching at Los Angeles State College will be required to complete at least 7 units in the composite minor including at least one course in three of the following four areas: art, music, language arts, and physical education.

The final selection of courses from the composite minor should be made after consultation with the education adviser. By proper planning a graduate student can earn a kindergarten-primary or a general elementary credential in two semesters.

## BACHELOR'S DEGREE CURRICULA

## General Elementary Credential (Major and Composite Minor)

$\mathrm{L}_{\text {ower Division }}$
No professional courses in education taken at a junior college will be accepted. It is recommended that lower division work include at least one course in both music and art.

## $U_{\text {pper Division }}$

Education 100-Introduction to Credential Programs
Education 112-Principles, Curriculum and Methods in Elementary Edu-
Education 113-Psychological and Sociological Foundations of Education 5 units
Education 149-The Teacher in the School and Community $\quad 3$ units
Education 150AB-Directed Teaching - 8 units
$\mathrm{C}_{0 \text { mposite }}$ Minor: This program should be selected with the adviser.

1. Art-Select from the following 4 units

Art 100-Art for Elementary School (2)
Art 120-Crafts for Elementary School (2)
Art 126-Construction for Elementary Schools (2)
2. Music $\qquad$ 4 units
Music 103 AB -Music for Children (2-2) "A" must be taken before "B."
3. Language Arts-Select from the following ..... 3 units
English 128-Interpreting Children's Literature (3)Speech 163A-Speech and Dramatic Activities in Elementary School(3)
Speech 163B-Speech Problems in the Classroom (3)
4. Social Studies-Select from the following ..... 3 units
Geography 101-Survey of the Modern World (3) (recommended) Geography 131-Geography of California (3) History 181-The Westward Movement and the West (3) History 188-California (3)
5. Physical Education-Select from the following ..... 3 units
P.E. 120-Physical Education in Elementary Schools (3) (recom- mended)H. \& S.Ed. 150-School Health Education (3)
6. Natural Science-Select from the following ..... 3 units

* Physical Science 100-Survey of Physical Science (3)
*Biological Science 100-Survey of Biological Science (3) Nature Study 118-Everyday Nature (3) Nature Study 120 -Nature in California (3)
Kindergarten-Primary Credential (Major and Composite Minor)
Lower Division
No professional courses in education taken at a junior college will be acceptedIt is recommended that lower division work include at least one course in musicand art. Some skill at piano playing will be required.
Upper Division
Education 100-Introduction to Credential Programs ..... 1 unit
Education 105 AB -Kindergarten-Primary Education ..... 4 units
Education 112-Principles, Curriculum and Methods in Elementary Edu- cation ..... 8 units
Education 113-Psychological and Sociological Foundations of Education ..... 5 units Education 149-The Teacher in the School and Community ..... 3 units ..... 8 units
Composite Minor: This program should be selected with the adviser.

1. Art-Select from the following ..... 4 units
Art 100-Art for Elementary School (2)
Art 120-Crafts for Elementary School (2)
Art 126-Construction for Elementary School (2)
2. Music ..... 4 units
Music 103 AB -Music for Children (2-2)
3. Language Arts-Select from the following ..... 3 units
English 128-Interpreting Children's Literature (3)
Speech 163A-Speech and Dramatic Activities in Elementary Schools (3)
Speech 134-Introduction to Speech Therapy (3)
4. Social Studies-Select from the following ..... 3 units
Geography 101-Survey of the Modern World (3) (recommended) Geography 131-Geography of California (3)
History 181-The Westward Movement and the West (3) History 188-California (3)
[^14]
# 5. Physical Education-Select from the following <br> P.E. 120-Physical Education in Elementary Schools (3) (recommended) 

H. \& S.Ed. 150-School Health Education (3)
6. Natural Science-Three units selected from 3 units
*Biological Science 100 -Survey of Biological Science (3)

* Physical Science 100-Survey of Physical Science (3)

Nature Study 118-Everyday Nature (3)
Nature Study 120-Nature in California (3)

* Check course description for eligibility to enroll.


## SECONDARY EDUCATION

Before any candidate is assigned to directed teaching in secondary education he must have approval from the division chairman in the teaching major, the division chairman in the teaching minor, and the Department Head in Secondary Education. Each candidate should be certain he has an evaluation outlining all requirements for the credential. Advisement should be secured from both subject field advisers and an education adviser.

## Junior High School Credential

By careful planning the candidate may earn the junior high school credential as part of a four-year college program.

The requirements listed below must be met by all students at Los Angeles State College who expect recommendation for the junior high school credential.

1. Completion of a bachelor's degree with a grade point average of at least 2.5 .
2. Completion of the United States Constitution requirement either through course or examination.
3. Completion of two teaching minors in subject fields commonly taught in the junior high school. In each case approval of the teaching minors must be obtained from the chairman of the division concerned.
4. Completion of the education major listed below:

| Education 100-Introduction to Credential Programs | 1 unit |  |
| :--- | :--- | :--- |
| Education 113-Psychological and Sociological Foundations of |  |  |
|  | Education | 5 units |
| Education 114-Core Course in Secondary Education | 5 units |  |
| Education 130-Fundamentals of Counseling and Guidance | 2 units |  |
| Education 147-Audio-Visual Instruction | 2 units |  |
| Education 193-Methods in first teaching field | 2 units |  |
| Methods in second teaching field |  | 2 units |
| Education 132AB-Problems in Secondary Teaching | 3 units |  |
| Education 151-Directed Teaching | 6 units |  |

## General Secondary Credential

The general secondary credential is a five-year program requiring at least 30 units beyond the bachelor's degree.
A student working for a general secondary credential should earn a degree with a teaching major and a teaching minor. A student who has a major in a field not commonly taught in high school may use two teaching minors from the approved list. In addition the candidate must meet the professional education requirements outlined below:

1. Completion of a bachelor's degree from an accredited college or university with a grade point average of at least 2.5 including a program of general education as follows:
a. 40 units of general education * with a minimum of 6 semester units in each of the following four areas:
(1) Science and mathematics;
(2) The practical arts and the fine arts such as art, music, physical education, and health;
(3) Social studies;
(4) The communicative arts such as languages, literature and speech.
2. Completion of the United States Constitution requirement, either through course or examination.
3. Completion of a minimum of 30 units of upper division and graduate courses after receipt of the bachelor's degree, including at least 6 units in subject fields commonly taught in junior and senior high school.
4. Completion of an approved teaching major and of an approved teaching minor. Approval of the teaching major and the teaching minor must be obtained in each case from the chairman of the division concerned. Majors and minors in the teaching fields shall be selected from the subject fields listed below:

[^15]Life Science and General Science, see page 69.
Mathematics, see page 196.
Music, see page 200.
Physical Education, see page 214.
Physical Science and General Science, see page 220.
Social Studies, see page 240.
Speech and Drama, see page 251.
5. Completion of the following courses in education: (Not necessary to complete prior to bachelor's degree. See adviser.)

| Education 100-Introduction to Credential Programs |  |  |
| :--- | :--- | :--- |
| Education 113-Psychological and Sociological Foundations of |  |  |
|  |  |  |
|  |  |  |
| Education | 5 units |  |
| Education 114-Core Course in Secondary Education | 5 units |  |
| Education 147-Audio-Visual Instruction | 2 units |  |
| Education 193-Merhods in Major teaching field | 2 units |  |
| Methods in Minor teaching field |  | 2 units |
| Education 130-Fundamentals of Counseling and Guidance | 2 units |  |
| Education 132AB-Problems in Secondary Teaching | 3 units |  |
| Education 350-Directed Teaching | 6 units |  |

## Special Secondary Credential

The special secondary credential in subject fields is ordinarily earned during a four-year program. It requires no work beyond the bachelor's

[^16]degree. No minor is required. The requirements including approved subject fields for teaching majors are outlined below:

1. Completion of a bachelor's degree from an accredited college or university with a grade point average of at least 2.5 including a program of general education as follows:
a. Limited part time industrial arts and nursing education require no general education.
b. Art, industrial arts, and music require 16 semester hours of general education.
c. Business education, physical education, and homemaking require 40 semester hours of general education.
2. Completion of the United States Constitution requirement, either through course or examination.
3. Completion of an approved teaching major from one of the following fields:

Art, see page 55 .
Business Education, see page 85. Homemaking, see page 178. Industrial Arts, see page 183.

Limited Part-time Credential in Industrial Arts Education, see page 183 . Music, see page 199.
Nursing Education, see page 209.
Physical Education, see page 213.

Approval of the teaching major must be obtained from the chairman of the division concerned. No minor is required.
4. Completion of the following courses * in education:

| Education 100-Introduction to Credential Programs | 1 unit |  |
| :--- | :--- | :--- |
| Education 113-Psychological and Sociological Foundations of |  |  |
|  | Education | 5 units |
| Education 114-Core Course in Secondary Education | 5 units |  |
| Education 193-Methods in Major Teaching Field | 2 units |  |
| Education 147-Audio-Visual Instruction | 2 units |  |
| Education 132AB-Problems in Secondary Teaching | 3 units |  |
| Education 151-Directed Teaching | 6 units |  |

[^17]
## SPECIAL EDUCATION

Curricula in special education are designed to prepare teachers for Service to California's exceptional children; that is, children who deviate sufficiently from the physically and mentally normal to require special instruction or special services. Expanding programs in the State require approximately 800 new teachers each year.
All applicants for credentials to teach exceptional children must possess a valid regular teaching document of the kindergarten-primary, general elementary, junior high school, or general secondary type, except that an applicant for a credential to teach, in special day classes, exceptional children who are deaf or hard of hearing may substitute for the valid regular teaching document an acceptable bachelor's degree and 10 semester hours of acceptable professional work in education required for a regular general teaching credential.
Special education credentials are entitled "special secondary" since they require a basic or foundation credential. All special education credentials permit service at both elementary and high school levels. Students who do not hold a regular credential may complete the requirements for both the regular and special education credential concurrently. To avoid programing problems, students are advised to consult the coordinator of special education early in their program.

The credentials outlined here are based upon the code requirements as revised in September, 1955. Students who started on a credential program prior to this date have two years to complete the old requirements.

## Speech Correction and Lipreading

This credential is issued to teachers who have completed the requirements for a valid elementary or secondary credential. Students who wish to earn the two credentials concurrently are urged to consult a special education adviser as early as possible.
${ }^{\text {P}} \mathrm{P}_{\text {Sy ducation 100-Introduction to Credential Programs }}$ 100 unit
Psychology 188-Psychology and Education of Exceptional Children .-- $\quad 3$ units
Speech 134-Introduction to Speech Therapy - 3 units
Speech 131-American Phonetics $\quad 3$ units
Speech 135-Advanced Therapy $\quad 3$ units
Education 196A-Hearing and Its Measurement $\quad 3$ units
Education 196B-Aural Rehabilitation 3 units
Education 120-Speech Reading 3 units
Speech 136AB-Clinical Practice in Speech and Hearing, or
Speech 236AB-Advanced Clinical Practice in Speech and Hearing 2-2 units
Education 351-Directed Teaching 4 units
*ducation 100 is not required of students who have regular valid California public school
teaching credentials.

## Visually Handicapped

This credential is issued to teachers who have completed the requirements for a valid elementary or secondary credential. Students who wish to earn the two credentials concurrently are urged to consult a special education adviser as early as possible. Upon completion of the required courses, the student may secure his credential upon direct application to the State Department of Education.

| *Education 100-Introduction to Credential Programs | 1 unit |
| :--- | :--- |
| Education 188-Psychology and Education of Exceptional Children | 3 units |
| Speech 134-Introduction to Speech Therapy | 3 units |
| Education 164-Introduction to Vision | 3 units |
| Education 162-Braille | 3 units |
| Education 167V-Education of Children with Impaired Vision | 3 units |
| Education 349V-Observation of Visually Handicapped | 1 unit |
| Education 351 V -Directed Teaching | 4 units |
| Skill in typing by touch system is required. |  |
| Electives to complete 24 units. |  |

## Orthopedically Handicapped

This credential is issued to teachers who have completed the requirements for a valid elementary or secondary credential. Students who wish to earn the two credentials concurrently are urged to consult a special education adviser as early as possible. Upon completion of the required courses, the student may secure his credential upon direct application to the State Department of Education.


## Mentally Retarded

*Education 100-Introduction to Credential Programs 1 unit
3 units
3 units
3 units
2 uints
3 units
1 unit
4 units
Education 188-Psychology and Education of Exceptional Children 3 units
Speech 134-Introduction to Speech Therapy - 3 units
Psychology 106-Mental Deficiency
Art 150-Art Experiences for Exceptional Children
Education 167 MR -Methods of Teaching Mentally Retarded
Education 349MR-Observation of Mentally Retarded
Education 351 MR -Directed Teaching $\qquad$
Electives to complete 24 units.
Applicants preparing to teach severely retarded children should include the following preparation which may be completed as electives or as partial substitution for the above requirements: psychology and education of brain-injured children with an overview of clinical types

[^18]of mental deficiency; music and rhythms for severely mentally retarded; kindergarten and primary methods; field work with severely mentally retarded children; and parent counseling.

## Deaf and Severely Hard of Hearing

A credential to teach deaf children may be earned in two ways: (1) as a second credential for teachers holding a regular credential, (2) as ${ }^{\text {a }}$ a part of a baccalaureate program which includes the special education requirements and 10 hours of professional education. The requirements for each of these options are outlined below.

## Option 1-For Applicants Who Possess a Regular Credential

| Education 160A-B-Language for the Deaf | $3-3$ units |
| :--- | ---: |
| Education 161A-B-Speech for the Deaf | $3-3$ units |
| Education 168A-Teaching Elementary School Subjects to Deaf | 2 units |
| Education 196A-Hearing and Its Measurement | 3 units |
| Education 196B-Aural Rehabilitation | 3 units |
| Education 120-Speech Reading | 3 units |
| Education 351D-Directed Teaching | 6 units |

## Option 2-A Baccalaureate Major in the Education of the Deaf Including Credential Requirements

An applicant for the credential to teach deaf and severely hard of hearing in special day classes may substitute for the regular general teaching credential an acceptable bachelor's degree and 10 semester hours of acceptable professional work in education required for a regular general teaching credential. These 10 hours should be selected with the consent of your adviser. The following major leads to a bachelor's degree and a credential to teach the deaf.

## Lower Division

No professional courses in education taken at a junior college will be accepted.

## Upper Division

All courses listed under Option 1
Selected education courses required for regular teaching credential (10 units)

## Other Programs in Special Education

## Gifted Children

The State has not outlined special credential requirements for teachers of gifted children. Students who are interested are advised to consult the coordinator of special education for suggested courses.

[^19]
## ADMINISTRATION AND SUPERVISION

Students enrolling in courses in administration and supervision should indicate as early as possible the credentials for which they are working. No person will be considered a candidate for a credential until an evaluation has been requested by the student and has been processed by the college. Students who enroll only for the purpose of accumulating elective credit for salary schedule advancement need not comply with the evaluation requirement. Prospective credential candidates should contact the Coordinator of Administration and Supervision respecting admission to candidacy and advisement. An adviser will be chosen to help in the selection and sequence of courses.
Field Work. The courses in field work, Education 265 AB and Edur cation 266 AB , are full-year courses carrying two units of credit each semester. Field work students must enroll in the fall semester for the A section, and in the spring for the B section.
Prerequisites. Education 265 or Education 266 may be taken only after the student has met the following criteria:

1. Three years of successful teaching experience must be verified by letter from the principal, supervisor, or superintendent.
2. Personal qualifications indicating probability of successful administrative or supervisory work must be verified by a principal, sulpervisor, or superintendent. The recommendation from a practicing administrator or supervisor will be required of all candidates prior to assignment in field work.
3. The student, to be approved for field work, must have been regularly admitted to the college as a graduate student.
4. Twelve units of work in the credential sequence, including Education 260, Education 270 or Education 276, Education 263 or Education 264, must be completed before field work is undertaken. At least six of these units must be in residence at Los Angeles State College.
5. The applicant should have at least one year's teaching experience in the school in which he is to do field work.

## Enrollment

Students enrolling for field work must make application for field work to the Coordinator of Administration and Supervision. Applications must be filed in the office of the coordinator on or before July 15 of the school year in which field work is to be done.
Applications for field work are reviewed by a committee on the basis of personal and professional qualifications of applicants. Students are admitted to field work only on the approval of this committee.

The committee reserves the privilege of modifying the above requirements in exceptional cases. Any modification occurs only through ${ }^{\text {a }}$ a petition by a student for consideration as an exceptional case. Petitions for modification of requirements should be submitted to the coordinator of the department.

## Elementary Administration Credential

The requirements listed below must be met by all students who expect recommendation for the elementary school administration credential.

1. Possession of a valid general elementary school credential.
2. Three years of successful teaching experience in elementary schools.
3. Thirty semester hours of upper division or graduate work in addition to the holding of the general elementary credential.
4. Education 109 and Education 130 or their equivalent.
5. Completion of the following courses:

Education 260-Principles and Practices of Curriculum Development 3 units
Education 263-Supervision of Instruction and Curriculum in Elementary Schools

2 units
Education 265AB-Field Work in Elementary School Administration and Supervision Administration of the Elementary

4 units
"Education 270-Organization and Administration of the Elementary School

3 units
Education 272-School Law in California 2 units
Education 273-School Finance and Business Management 3 units
Education 279-The Planning, Operation, and Financing of School
Building Programs
Electives selected with the adviser 11 units
(Students studying for an administration or supervision credential should consult requirements for the Master of Arts degree in these areas. Both programs can be carried on at the same time. See page 124.)

## Elementary Supervision Credential

The requirements listed below must be met by all students in Los Angeles State College who expect recommendation for the elementary school supervision credential.

1. Possession of a valid general elementary school credential.
2. Two years of successful teaching experience in the elementary schools.
3. Twenty-four semester hours of upper division or graduate work in addition to the holding of the general elementary credential.
4. Completion of the following courses:

Education 109-Tests, Measurements and Evaluation 2 units
Education 130-Fundamentals of Counseling and Guidance . 2 units
Education 260-Principles and Practices of Curriculum Development 3 units
Education 263-Supervision of Instruction and Curriculum in Ele-
mentary Schools
Education 265 AB -Field Work in Elementary School Administra-
tion and Supervision 4 units
Education 270-Organization and Administration of the Elementary 3 units
Electives selected with adviser 8 units

[^20]
## Secondary Administration Credential

The requirements listed below must be met by all students in Los Angeles State College who expect recommendation for the secondary school administration credential.

1. Possession of a valid general secondary credential.
2. Three years of successful teaching experience.
3. Twenty-two semester hours of graduate work in addition to fulfilling requirements for the general secondary credential.
4. Education 109 and Education 130 or their equivalent.
5. Completion of the following courses:

Education 260-Principles and Practices of Curriculum Development 3 units
Education 264-Supervision of Instruction and Curriculum in Sec-
ondary Schools
Education 266 AB -Field Work in Secondary School Administration
and Supervision 4 units
Education 272-School Law in California _—_ 2 units
Education 273-School Finance and Business Management $\quad 3$ units
*Education 276-Organization and Administration of the Secondary School

3 units
Education 279-The Planning, Operation, and Financing of School Building Programs

2 units
Electives selected with adviser 3 units

## Secondary Supervision Credential

The requirements listed below must be met by all students in Los Angeles State College who expect recommendation for the secondary school supervision credential.

1. Possession of a valid general secondary credential.
2. Two years of successful teaching experience.
3. Fifteen hours of graduate work in addition to fulfilling the requirements for the general secondary credential.
4. Completion of the following courses:

Education 109-Tests, Measurements and Evaluation $\qquad$ 2 units
Education 130-Fundamentals of Counseling and Guidance 2 units
Education 260-Principles and Practices of Curriculum Development 3 units
Education 264-Supervision of Instruction and Curriculum in Secondary Schools
Education 266AB-Field Work in Secondary School Administration and Supervision
Education 276-Organization and Administration of the Secondary School

## Special Subject Supervision Credential

The requirements listed below must be met by all students in Los Ar geles State College who expect recommendation for the special subject supervision credential.

1. Possession of a valid California teaching credential.
2. Two years of thoroughly successful teaching experience.
3. Completion of professional courses as follows:

Education 102-Growth and Development or Psychology 112-Child Psychology 2-3 unutib
Education 109-Tests, Measurements, and Evaluation

[^21]Education 207-History and Philosophy of Education
3 units
Education 263-Supervision of Instruction and Curriculum in Elementary Schools or
Education 264-Supervision of Instruction and Curriculum in Secondary Schools
Education 282-Vocational Guidance
3 units

## SCHOOL SERVICE CREDENTIALS

Los Angeles State College is authorized to recommend candidates to the State Department of Education for the following service credentials:
Child Welfare and Supervision of Attendance Credential
Psychometrist Credential
School Psychologist Credential
Effective September 15, 1956, the General Pupil Personnel Services Credential is replacing these credentials. Current holders, however, may have them renewed.
Interested prospective candidates for the new credential should consult the Division of Education for admission to candidacy and for selection of an adviser.

## General Pupil Personnel Services Credential

An applicant for the General Pupil Personnel Services Credential shall have completed a specified experience and training program, including the following requirements. The sequence of courses is listed as a guideline to students wishing to secure this credential. Upon completion of the required courses and experience the student may secure his credential upon direct application to the State Department of Education

1. A bachelor's degree from an accredited institution.
2. Two years of successful teaching experience, or one year of successful teaching experience and one year of supervised field experience in pupil personnel activities with school-age pupils, or two years of supervised field experiences in school social work, school psychometry, or school psychology of which at least onc year shall have been in a public school.
3. Completion of a minimum of 30 semester hours of post graduate work of uppes division or graduate level courses and at least one specialized area, and a super vised internship. (If the student has completed any of the following course $\mathrm{r}^{-}$ quirements in undergraduate status, other courses shall be selected in consultation with his adviser to meet the units required.)

## General Courses Required

Education 280-Techniques of Counseling or
Psychology 160-Counseling and Interviewing 3 units
Education 113-Psychological and Sociological Foundations of Education or
Psychology 108-Mental Hygiene
Sociology 170-Methods of Social Work

Education 186-Laws Relating to Children or
Sociology 159-Child Welfare
Education 233-Seminar in Pupil Personnel Services 3 units
4. Completion of courses in at least one of the following specialized areas.
a. Pupil Counseling
Education 282-Seminar in Guidance 3 units
Education 286AB-Field Work in Pupil Personnel Services
2-2 units
b. Child Welfare and Attendance

Sociology 175-In-service Training or
Education 286CD-Field Work in Pupil Personnel Services - 4 units
Education 185-Child Welfare and Attendance 3 units
c. School Social Work

Those students coming to Los Angeles State College with a master's degree in social work will be given special assistance in planning courses to satisfy the credential requirements.
d. School Psychometry

Psychology 127D-Psychological Testing (applied to the mentally and
physically atypical)
3 units
Psychology 120B-Statistical Methods in Psychology or
Sociology 164-Social Statistics 3 units
Education 210-Advanced Educational Psychology . 3 units
e. School Psychology

Psychology 127D-Psychological Testing (applied to the mentally and
physically atypical) 3 units
Psychology 120B-Statistical Methods in Psychology or
Sociology 164-Social Statistics
$\begin{array}{ll}\text { Education 210-Advanced Educational Psychology } & 3 \text { units } \\ 3 \text { units }\end{array}$
Psychology 227-Psychodiagnostic Testing 3 units
Psychology 228A-Methods of Appraising Personality 3 units
Psychology 260-Seminar in Counseling 3 units
Education 135-Diagnosis and Remedial Reading Procedures - $\quad 3$ units
Speech 134-Introduction to Speech Therapy 3 units
Psychology 272-Practicum in Counseling ..... 3 units

## Health and Development Credential-School Nurse and School Audiometrist

The requirements for this credential are currently (1956) undergoing extensive revision. Although this revised credential becomes effective September 15, 1956, the precise courses offered by the college to satisfy the requirements had not been finally decided on when this bulletin went to press.

Therefore, students wishing to secure this credential should check With the Head of the Nursing Department for the list of required courses. Upon completion of these required courses, the student may secure his credential by direct application to the State Department of Education.

## MASTER'S DEGREE CURRICULA IN EDUCATION

Graduate students may earn master's degrees in education with specialization in one of the following areas:

Elementary Teaching
Elementary School Administration
Elementary Curriculum and Supervision
Secondary Teaching
Secondary School Administration
Secondary Curriculum and Supervision
Guidance
Special Education

## ELEMENTARY TEACHING

1. Prerequisites:
a. Graduate standing.
b. A general elementary credential (any state).
c. One year of successful teaching experience prior to beginning course work in this program.
2. Area of specialization:

Select from the following_ 3 units
Education 207-History and Philosophy of Education (3) Education 225-Educational Sociology (3)
Select from the following
Education 211A-Mathematics in the Elementary School (2)
Education 211B-Social Studies in the Elementary School (2)
Education 211C-Reading in the Elementary School (2)
Education 211D-Language Arts in the Elementary School (2)
Education 211E-Science in the Elementary School (2)
Education 230-Advanced Study in Child Development $\quad 3$ units
Education 231-Seminar in Elementary Education $\quad 3$ units
$\begin{array}{ll}\text { Education 260-Principles and Practices of Curriculum Development } & 3 \text { units } \\ \text { Education 299AB *-Graduate Project } & 3 \text { units }\end{array}$
3. Outside the field of education

Select in consultation with adviser
6 units
4. Electives

Select in consultation with adviser

## ELEMENTARY SCHOOL ADMINISTRATION

1. Prerequisites:
a. Graduate standing.
b. General elementary teaching credential.
c. Three years of successful teaching experience.
d. Education 109, Education 130.

[^22]2. Area of specialization:
Education 207-History and Philosophy of Education or
Education 225-Educational Sociology ..... 3 units
Education 260-Principles and Practices of Curriculum Development ..... 3 units
Education 263-Supervision of Instruction and Curriculum in Elementary Schools ..... 2 units
Education 265 AB -Field Work in Elementary School Administra- tion and Supervision ..... 4 units
*Education 270-Organization and Administration of the Elementary School ..... 3 units
Education 272-School Law in California ..... 2 units
Education 273-School Finance and Business Management ..... 3 units
Education 279-Planning, Maintaining and Operating School Buildings ..... 2 units
Education 298-Seminar in Educational Administration or Education 299 AB -Graduate Project ..... 3 units
3. Outside the field of education
Select in consultation with adviser ..... 6 units
4. Comprehensive examination
ELEMENTARY SCHOOL CURRICULUM AND SUPERVISION

1. Prerequisites:
a. Graduate standing.
b. Valid regular day teaching credential.
c. Education 109, Education ..... 130.
d. Experience as required by the State for the elementary supervisioncredential.
2. Area of specialization:
Education 207-History and Philosophy of Education or Education 225-Educational Sociology ..... 3 units
Education 231-Seminar in Elementary Education ..... 3 units
Education 260-Principles and Practices of Curriculum Development ..... 3 units
Education 263-Supervision of Instruction and Curriculum in Ele- mentary Schools ..... 2 units
Education 265 AB -Field Work in Elementary School Administration and Supervision ..... 4 units
Education 270-Organization and Administration of the Elementary School ..... 2 units
Education 298-Seminar in School Administration and Supervision or Education 299AB-Graduate Project ..... 3 units
3. Outside the field of education
Select in consultation with adviser ..... 6 units
4. Electives 4 units5. Comprehensive examination
[^23]
## SECONDARY TEACHING

## 1. Prerequisites:

a. Accepted graduate status.
b. General secondary credential must be completed prior to or concurrently with the master of arts degree.
c. One year of successful teaching experience.
2. Area of specialization:
a. Foundations area: two or more courses from the following $\qquad$ 6 units
Education 207-History and Philosophy of Education (3)
Education 225-Educational Sociology (3)
Education 230-Advanced Child Growth and Development (3)
Education 260-Principles and Practices of Curriculum Development (3)
b. Curriculum and Methods area: three or more courses from the fol-
lowing units

Education 152-Developmental Reading in the Secondary School (2)
Education 247-Advanced Audio-Visual Methods (2)
Education 253-The Core Curriculum in Secondary Education (2)
Education 254-Problems of High School Students (2)
Education 256-Seminar for Beginning Teachers (2)
Education 269-Workshop for Training Teachers and Supervisors (2)
Education 175-Problems of the Junior High School (2)
c. Select one course from the following 3 units
Education 299AB-Graduate Project (3)
Education 232-Seminar in Secondary Education (3)
3. Outside the field of education to be selected in consultation with
adviser
4. Electives . 9 units
5. Comprehensive examination required of all candidates.

## SECONDARY TEACHING WITH SPECIALIZATION IN INDUSTRIAL ARTS

## 1. Prerequisites:

The M.A. candidate must satisfy the same prerequisites as those for the second ary teaching master's degree.
2. Area of Specialization:
a. Foundations: one course from the following
3 unit
Education 207-History and Philosophy of Education (3)
Education 225-Educational Sociology (3)
Education 230-Advanced Child Growth and Development (3)
b. Curriculum and Methods ._ 10-11 unib
(1) Education area

Education 152-Developmental Reading in the Secondary School (2)
Education 175-Problems of the Junior High School (2)
Education 282-Vocational Guidance (3)
(2) Industrial Arts area-required

Industrial Arts 205-Supervision and Organization of Industrial Arts Programs (3)
(3) Industrial Arts area-elective

Industrial Arts 204-Development, Use, and Evaluation of Instructional Aids in Industrial Arts (3)
Industrial Arts 206-Seminar in Teaching Problems in Industrial Arts (3)
c. Select one course from the following
Education 232-Seminar in Secondary Education (3)${ }^{3}$. Outside the field of education to be selected in consultation withadviser *
4. Electives + 7-8 units
5. Comprehensive examination required of all candidates.

## SECONDARY SCHOOL ADMINISTRATION

1. Prerequisites:
a. Graduate standing.
b. General secondary teaching credential.
c. Three years of successful teaching experience.
d. Education 109, Education 130.
2. Area of specialization:

Education 207-History and Philosophy of Education or
Education 225-Educational Sociology
3 units
Education 260-Principles and Practices of Curriculum Development 3 units
Education 264-Supervision of Instruction and Curriculum in Secondary Schools

2 units
Education 266 AB -Field Work in Secondary School Administration
and Supervision 4 units
Education 272-School Law in California $\quad 2$ units
Education 273-School Finance and Business Management 3 units
$\ddagger$ Education 276-Organization and Administration of the Secondary School

3 units
Education 279-Planning, Maintaining, and Operating School Buildings 2 units
Education 298-Seminar in School Administration and Supervision or
Education 299AB-Graduate Project
3 units
3. Outside the field of education

Select in consultation with adviser

## SECONDARY SCHOOL CURRICULUM AND SUPERVISION

 1. Prerequisites:a. Graduate standing.
b. Valid regular day teaching credential.
c. Education 109, Education 130.

[^24]d. Experience as required by the State Department of Education for the secondary supervision credential.
2. Area of specialization:
Education 207-History and Philosophy of Education or Education 225-Educational Sociology ..... 3 units
Education 232-Seminar in Secondary Education ..... 3 units
Education 260-Principles and Practices of Curriculum Development ..... 3 units
Education 264-Supervision of Instruction and Curriculum in Sec- ondary Schools ..... 2 units
Education 266AB-Field Work in Secondary School Administration and Supervision ..... 4 unis
Education 276-Organization and Administration of the Secondary School ..... 3 units
Education 299AB-Graduate Project or
Education 298-Seminar in School Administration and Supervision ..... 3 units
3. Outside the field of education
Select in consultation with adviser ..... 6 units
4. Electives ..... 7 units5. Comprehensive examination.

## GUIDANCE

## 1. Prerequisites:

a. Graduate standing.
b. Valid regular day teaching credential for public school service.
c. Education 130.
d. Approval of the Guidance Committee of the Division of Education. A minimum number of 15 units is required after the student has received approval from the committee.
2. Area of specialization:
Education $280-$ Techniques of Counseling or Education 280-Techniques of Counseling or
Psychology 160-Counseling and Interviewing
Psychology 127AB-Psychological Testing6 units
Education 233-Seminar in Pupil Personnel Services ..... 3 units
Education 286AB-Field Work in Pupil Personnel Services. ..... 4 units

* Education 299AB-Graduate Project ..... 3 units

3. Outside the field of education Select in consultation with adviser ..... 6 unis
4. Electives5 unit

Note: In the selection of additional courses for Items 3 and 4 attention is called to the requir ments for the General Pupil Personnel Services credential. It is recommended that all couts selections be made only in consultation with an adviser.

## SPECIAL EDUCATION

1. Prerequisites
a. Graduate standing.
b. Oral conference prior to acceptance for candidacy.
2. Completion of requirements for California credential in special education in arel of candidate's choice.

[^25]3. Required courses
a. Basic Core
Education 188-Psychology and Education of Exceptional 8-11 units
$\quad$ Child (or equivalent) (3)
Education 234-Seminar in Special Education (3)
Education 288-Problems and practices in Special Education (2)
Selected graduate course $\dagger$ (3)
b. Select, in consultation with adviser, appropriate offerings from the following

Selected courses in area of specialization; graduate seminar in area of specialization; field work.
4. Outside the field of education 6 units
(Courses must be not only outside the Division of Education but also not required on the credential in the candidate's area of specialization.)
5. Electives to complete 30 hours
6. Final comprehensive examination.

## COURSES OF INSTRUCTION

Prerequisite: Upper division standing for all education courses.

## 99 Reading Development on the College Level (1) Fall, Spring

Designed to aid the college student who needs to increase his facility with reading. Specific course of study and requirements depend upon diagnosis of causative factors and needs. Admission generally based upon the survey test results, and/or the instructor's approval. (Formerly Education 156.)

## 100 Introduction to Credential Programs (1) Fall, Spring

Required of all students qualifying for a teaching credential. Fulfills state requirements for selection of students entering teacher credential curricula.

## 101 Observation and Participation (1) Fall, Spring

For transfer and extended day students only. Duplicates work taken in Education 112 in public school observation and participation in selected elementary school classrooms. Students should allow a half day, preferably in the morning, to permit travel to and from the school and two hours in the classroom. The class will meet one hour weekly at the college for group discussion.

## 102 Growth and Development (2) Fall, Spring

Prerequisite: General psychology or consent of instructor. Study of the child from 6 to 18 with emphasis on physical, motor, social, intellectual, and emotional growth and development and inter-relatedness of these factors. Observation of children in their work and play. Credit may not be secured for both Education 102 and Psychology 112.

[^26]
## 105A-B Kindergarten-Primary Education (2-2) Fall, Spring

Prerequisites: Education 112 and 113. The principles, curriculum, methods, materials, and special problems of the kindergarten and first three grades. For those who intend to specialize at the kindergarten and lower grade level. Required for the kindergarten-primary credential.

## 106 Principles of Elementary Education (2) Fall, Spring

An overview of the objectives, procedures, operations, and trends of the modern elementary school and its functions as a social agency in the community.

## 109 Tests, Measurements and Evaluation (2) Fall, Spring

The construction and use of teacher-made objective examinations; selection and interpretation of standardized tests; elementary statistical techniques; practical approaches to evaluation of the outcomes of instruction.

## 110 Educational Psychology (3) Fall, Spring

Application of psychological research and theory to the educative process. Major attention devoted to the problems of learning, individual differences, child capacities, and behavior as they are revealed in the school environment.

## 111 Instruction in Teaching in the Elementary Schools

Prerequisite: Education 113. The four courses below are provided for transfer students and extended day students only. They duplicate part of the work in Education 112 and credit will not be given for both $11^{1}$ and 112. They fulfill the methods requirements for the statutory elementary school subjects. Students are urged to take Education 112 rather than 111 except in cases of hardship where it is impossible to talse elementary methods in the unified course.

111A Instruction in the Teaching of Mathematics in Elementary' Schools (1) Fall, Spring

111B Instruction in the Teaching of Social Studies in Elementary Schools (1) Fall, Spring

111C Instruction in the Teaching of Language Arts in Elementary Schools (2) Fall, Spring

111D Instruction in the Teaching of Science in Elementary Schools (1) Fall, Spring

## 112 Principles, Curriculum and Methods in the Elementary School (8) Fall, Spring

Prerequisite: Education 113. A laboratory course covering the prin ciples, curriculum, methods, and materials of elementary school instruc tion. Emphasizes modern methods of teaching the elementary scho subjects required by the laws of California; includes audio-visul methods. Students observe and participate in selected elementary sch $10^{0}$
classrooms. Required of all candidates for the general elementary credential. (Includes material covered in Education 101, 106, 111ABCD, and 147).

## 113 Psychological and Sociological Foundations of Education (5)

 Fall, SpringAspects of public school instruction are discussed in view of research and studies in psychology and sociology. Organized around two main areas: (1) problems arising from the developmental characteristics of students, including school readiness, native capacities, maturation, individual differences, emotional growth, social adjustment, and mental hygiene; (2) problems arising from the teaching-learning process including motivation, study habits, educational measurements, critical thinking, transfer of training, home and community influences. The mental health and hygiene of the school child will be stressed throughout. Observation of children both in and out of schools.
Education 113 is equivalent to Education 102, Education 110, and Psychology 108.

## 114 Core Course in Secondary Education (5) Fall, Spring

Principles of secondary education in the United States. Philosophy and growth of the secondary school. The functions of the secondary schools in modern society; organization, curriculum, evaluation, and general teaching materials and practices for the secondary schools. Observation of junior and senior high schools.
120 Speech Reading (3) Fall, Spring
Prerequisite: consent of instructor. Principles and methods of teaching speech reading. Discussion of vocabulary development material and Preparation of source collections for various groups.
123 Survey of Physical Defects (3) Fall
The physical defects commonly found among orthopedically handicapped children. Emphasis upon helping teachers understand these disabilities and implications for education and treatment.
130 Fundamentals of Counseling and Guidance (2) Fall, Spring
Prerequisite: Education 113 or equivalent. Provides teachers, supervisors, and administrators a general orientation to those factors involved in better understanding of individual students and in the administration of the student personnel program.

## 132A-B Problems in Secondary Teaching (1-2) Fall, Spring

Prerequisites: The same as those for directed teaching. To be taken concurrently with directed teaching. Classroom problems arising in connection with student teaching, and over-all problems which arise as ${ }^{\text {a }}$ part of a teacher's total school responsibility.

## 135 Diagnosis and Remedial Reading Procedures (3) Fall, Spring

The causes and nature of reading difficulties and the procedures for diagnosis and remedial treatment.

## 147 Audio-Visual Instruction-Methods and Techniques (2) Fall, Spring

Theories and methods of visual instruction; experience in the utilization of audio-visual aids. Instruction in various projection and recording techniques. (Formerly called Audio-Visual Methods.)

## 149 The Teacher in the School and Community (3) Fall, Spring

To be taken concurrently with Education 150AB. Provides experiences in home-school-community relationships; the school community and its resources; parent-teacher meetings and conferences; effective practices in human relations; legal, ethical, and professional responsibilities of the teacher; the school curriculum in action. Taught by the school principal and the college supervisor of the elementary school in which the student teacher is doing his directed teaching. Required for the elementary and kindergarten-primary credentials.

## 150A-B Directed Teaching in the Elementary Schools (4-4) Fall, Spring

Directed teaching for the kindergarten-primary and elementary credentials. Prerequisites for elementary or kindergarten-primary majors: Education 112 and 113. The composite minor must also be near com pletion before directed teaching is attempted:

See detailed section on directed teaching for further prerequisites.

## 151 Directed Teaching for Junior High School and Special Secondary (3-3) Fall, Spring

Directed teaching for the Junior High School credential and the Spe cial Secondary in subject fields. Ordinarily taken in the last semester of the senior year. All education courses required for the credential must be taken prior to, or concurrent with, directed teaching.

## 152 Developmental Reading in the Secondary School (2) Fall, Spring

Prerequisite: Possession of a general secondary or junior high schoo credential, or consent of the instructor. The techniques and procedures for improving and extending the reading habits, skills, and interests of all secondary students.

160A-B Language for the Deaf (3-3) Fall, Spring
Prerequisite: consent of instructor. Principles and methods of lant guage development with deaf children. Acquisition of language through daily activities; development of materials to be used in the variow language areas. (Formerly 2-2 units.)

## 161A-B Speech for the Deaf (3-3) Fall, Spring

Prerequisite: consent of instructor. Principles and methods of eliciting meaningful speech from deaf children using tactile-kinesthetic, auditory, and visual senses. (Formerly 2-2 units.)

## 162 Braille (3) Fall

Designed for teachers, with emphasis on both actual practice in reading and writing Braille, and methods and techniques involved in teaching the same. Includes preparation of graded materials.

## 164 Introduction to Vision (3) Fall

Anatomy, physiology and hygiene of eye; common visual defects found among children; principles of vision screening and problems of adjustment to visual handicaps.

## 166 Vision Testing (3). Not offered 1956-57

167 V Education of Children With Visual Handicaps (3) Spring
Problems of instruction of visually handicapped children: special methods in Braille and sight conservation, curriculum adjustments, classroom problems including social adjustment and recreation.
167MR Methods of Teaching Mentally Retarded (3) Fall, Spring
Recommended prerequisite: Psychology 106. Principles and methods of organizing classes and developing curricula for the mentally retarded child. Practice in developing materials for various levels.
167 C Methods of Teaching of Crippled Children (3)
Problems in adjusting the work of the school to the needs of crippled children.
168A Teaching Elementary School Subjects to the Deaf (2) Fall
Prerequisites: (One course in language for the deaf). Problems and techniques of adjusting elementary school curriculum to the needs of deaf children.
168B Teaching Reading to the Deaf (2) Fall
Prerequisite: (One course in language for the deaf). Techniques of teaching reading to deaf children.

## 169 Teaching Secondary Subjects to Deaf (2) Spring

The special problems of adjusting the secondary school curriculum to the needs of deaf children.

## 170 Principles and Curriculum in Secondary Education (2)

Secondary education in the United States. Basic principles, aims, and ${ }^{\text {scopep }}$ of modern school practices; student-teacher relationships; changing policies in secondary education and in secondary school curriculum.

## 171 Principles of Business Education (3) Fall, Spring

The aims, scope, organization, administration, and teaching of business education in the secondary schools.

## 175 Problems in the Junior High School (2) Fall, Spring

Prerequisite: Possession of a junior high school credential, or consent of the instructor. The unique problems of the American junior high school. Designed for junior high school teachers and administrators. Students will work cooperatively to find solutions to their special problems.

## 176 Methods and Procedures in Teaching Adults (2) Fall, Spring

Effective methods of teaching adults, basic methods of adult education, relationship of subject matter and teaching methods. Lectures, demonstrations, and discussions. Required for the renewal of the special adult education credential.

## 177 Instructional Aids and Material (2) Spring

Selection and organization of materials appropriate for adult classes; training in the various devices used in audio-visual techniques; discussion of effective use of the teaching materials.

## 178 Organization, Administration and Supervision of Adult Education (2) Spring

Procedures for administration of classes and schools for adults; the use of community surveys, advisory councils, and other means of relating adult education to community needs.

## 180 Counseling and Guidance Procedures in Adult Schools (2) Spring

The nature of the problems of adult students; the counselor's place in adult education; practicum in counseling methods and techniques.

## 181 Curriculum Construction for Adult Classes (2) Fall

Selection and organization of subject matters for mature students; organization of concise teaching units; definition of educational goals; selection of supplementary and reference material.

## 183 History and Philosophy of Adult Education (2) Spring

Basic principles of adult education; social and philosophical signifir cance of adult education; history and description of the past and present movements in adult education.

## 184 School-Family Interpersonal Relations (4) Fall, Spring

Prerequisites: Substantial background in educational psychology, psy chology, or sociology. The dynamics of family, pupil-teacher, teacher parent, and pupil-pupil relationships, including the methods and $\mathrm{ma}^{2}$ terials of family counseling, group work, home visits, parent confer ${ }^{-}$ ences, and problems of home and school.

185 Child Welfare and Attendance (3) Fall, Spring
Attendance work, child accounting, home visitation methods, conference techniques, social case work, and agency relationships.
186 Laws Relating to Children (3) Fall, Spring
Educational and statutory regulations relating to children.
188 Psychology and Education of the Exceptional Child (3) Fall, Spring
The nature, degree, and incidence of conditions which differentiate a child from the normal pattern sensorially, neurologically, physically, mentally, or psychologically. The characteristics of the deviate child and suggested procedures for meeting his needs. California state laws in relation to the identification and education of the deviate. Special problems of counseling the handicapped. Credit may not be secured for both Education 188 and Psychology 104.
193 Methods and Materials in Secondary School Subjects (2) Fall, Spring
A series of professional courses intended for prospective secondary school teachers in indicated subject fields. Each course will include consideration of objectives, methods, materials, and problems involved in teaching in the particular field; observation in junior and senior high school. Each candidate for a secondary credential must complete the appropriate methods course in his major and minor. In general, the methods course should be taken prior to Education 350.
193A Methods of Teaching Art.
193Bb Methods of Teaching Bookkeeping and Business Education.
193Bs Methods of Teaching Secretarial Subjects.
193 Bt Methods of Teaching Typewriting.
193FL Methods of Teaching Foreign Language.
193HE Methods of Teaching Home Economics.
193H\&S Methods of Teaching Health and Safety Education.
193IA Methods of Teaching Industrial Arts.
193LA Methods of Teaching Language Arts.
193 Ma Methods of Teaching Mathematics.
193 Mu Methods of Teaching General Music.
193MuA Methods of Teaching Instrumental Music. Prerequisites: Music 105A, C, D, and E. (May be taken concurrently.)
193 MuB Methods of Teaching Choral Music. Prerequisites: Music 161.

193 MuC Methods of Teaching Elementary Music. Prerequisites: Music 105A, C, and 105D or E.
193N Methods of Teaching Nursing Education.
193PE Methods of Teaching Physical Education.
193Sc Methods of Teaching Science.
193SS Methods of Teaching Social Studies.

## 196A Hearing and Its Measurement (3)

The mechanics of hearing and the common causes of hearing loss. The use of pure tone and speech audiometry as aids in appraising hearing loss and planning remedial programs.

## 196B Aural Rehabilitation (3)

Prerequisite: Education 196A. Problems of the effective educational diagnosis of the needs of children with hearing loss and the use of amplification in remedial programs.

196C Practicum in Aural Rehabilitation (2) Fall, Spring
Problems of use of amplification in remedial programs for children with hearing losses. Characteristics of effective hearing aids; their selection and proper use.
198 Field Assignment and Reports (1-2) Fall, Spring
Prerequisite: Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular group meetings.

## 199 Independent Study (1-3) Fall, Spring

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

## GRADUATE COURSES

## 207 History and Philosophy of Education (3) Fall, Spring

Prerequisite: Graduate standing or consent of instructor. Historical development of education with special emphasis upon the growth of the modern American school system. Special attention to the various philosophies that promote and support education at each of its variots levels.

## 210 Advanced Educational Psychology (3) Fall, Spring

Prerequisite: Education 110 or 113 and graduate standing. Recent and outstanding contributions in research, practical experimentation, and theory which apply to the field of educational psychology.

## 211A Mathematics in the Elementary School (2) Fall

Prerequisite: Experience as an elementary school teacher. Analysis of published research on the teaching and learning of mathematics in the elementary school. Identification of basic principles of instruction in mathematics.

211B Social Studies in the Elementary School (2) Fall, Spring
Prerequisite: Experience as an elementary school teacher. Analysis of published research on the teaching and learning of social studies in the
elementary school. Identification of basic principles for teaching the social studies.

## 211C Reading in the Elementary School (2) Fall, Spring

Prerequisite: Experience as an elementary school teacher. Survey and analysis of published research on the teaching and learning of the reading process. Identification of basic principles for the teaching of reading as verified by research findings.

## 211D Language Arts in the Elementary School (2) Spring

Prerequisite: Experience as an elementary school teacher. Survey and analysis of published research on the teaching of the language arts (except reading) in the elementary school. Identification of basic principles for the teaching of the language arts in the elementary school.

## 211E Science in the Elementary School (2) Fall, Spring

Prerequisite: Experience as an elementary school teacher. Analysis of published research in science teaching at the elementary school level. Identification of basic principles for the organization of instruction in science.

## 225 Educational Sociology (3) Fall, Spring

An application of the insights of the social sciences, especially sociology, to the problems of today's culture-centered school. Areas include: the individual in the group, social classes, the family, the community, politics, school economics, social psychology, and social philosophies.

## 230 Advanced Study in Child Development (3) Fall, Spring

Prerequisites: Education 102, Education 113 or equivalent and at least one year's teaching experience. Recent and outstanding contributions in research, practical experimentation, or theory which have important bearing upon the problems of human development; the significance of the developmental approach to the education of children.
231 Seminar in Elementary Education* (3) Spring
Prerequisites: Education 112, Education 113. Survey of the major problems in elementary education. Indentification of persistent problems reported in the professional literature and recognized in professional experience; causes of and solutions for these problems. Emphasis on the application of the scientific method, on acquaintance with reliable sources of educational research, and on improvement in cooperative thinking.

## 232 Seminar in Secondary Education* (3) Fall, Spring

Identification of persistent problems in secondary education and survey of the literature relating to these problems; causes of and solutions for these problems. Emphasis on the application of the scientific method,

[^27]on acquaintance with reliable sources of educational research, and on improvement in cooperative thinking.

## 233 Seminar in Pupil Personnel Services (3) Fall, Spring

Prerequisites: Education 109, Education 130. A comprehensive study of pupil personnel services. The organization, administration, and evaluation of school services according to the needs and problems of the pupils.

## 234 Seminar in Special Education (3) Fall, Spring

Prerequisites: Education 188 or Psychology 104. Review of the scient tific investigations relating to the problems of adjustment to physical and mental handicaps. Candidates for the master's degree in special edurcation may take the comprehensive examination at the end of the semt inar.

## 235 Seminar in Mental Retardation (3) Spring

Prerequisite: Psychology 106. Particular attention is given to the learning and adjustment problems of retarded children. Review of studies and investigations. Individual projects and assignments.

## 236 Seminar in Hearing (3)

Technical problems of providing effective instruction for deaf and hard of hearing children. Emphasis on review of scientific studies, int vestigations; critical review of literature.

## 237 Seminar in Vision (3) (Not offered 1956-57)

## 247 Advanced Audio-Visual Techniques (2) Spring

Prerequisite: Education 147. Selection, preparation and utilization of audio-visual aids other than the motion picture. Planned primarily for the classroom teacher. Development of a unit of work using audio-visua aids.

## 253 The Core Curriculum in Junior and Senior High Schools (2) Fall, Spring

Prerequisite: Possession of a secondary credential or the consent of the instructor. Designed for teachers in integrated programs involving social studies and language arts. Emphasis on relating the needs of sec ondary school youth to appropriate course objectives, content, and teaching procedures. Sources and usages of newer teaching aids available. The development of core curriculum plans adaptable to differing levels of ability. Course content, grade placement, and skill development pro grams in relation to the total secondary curriculum. Trends in the cort program.

## 254 Problems of High School Students (2) Fall, Spring

Prerequisite: Possession of a secondary credential and secondary teaching experience. Designed for practicing junior and senior high
school teachers. The typical problem of dating, family relationships, financial planning, military service; special adolescent problems within classrooms as presented by individual teachers.
256 Seminar for Beginning Teachers (2) Fall
Restricted to teachers with less than four years experience. Problems that are met and reported by beginning teachers. Designed to help beginning teachers make a satisfactory start in the schools in which they begin their teaching.

## 260 Principles and Practices of Curriculum Development (3) Fall, Spring

Prerequisites: Basic methods courses in elementary and secondary training. Evaluation of curriculum practices, principles of curriculum development, and the structure of curricular materials. Critical examination of curricular trends in light of historical perspective, sociological change, and research in child growth.

## 263 Supervision of Instruction and Curriculum in Elementary Schools (2) Fall, Spring

Prerequisites: Education 260 and elementary teaching experience. Brief history of the rise and development of supervision; supervision as ${ }^{\text {a }}$ part of administration, types of supervisory organizations; principles of Supervision and practices which are effective in carrying out these principles.

> 264 Supervision of Instruction and Curriculum in Secondary Schools (2) Fall, Spring
> Prerequisites: Education 260 and secondary teaching experience. Principles and practices of supervision in public high schools.

## 265A-B Field Work in Elementary School Administration and Supervision (2-2) Year course

Prerequisite: Admission by application. Direct participation in the administrative, supervisory, and curricular aspects of elementary school administration. Provides students qualifying for elementary supervision and administration credentials with direct experiences and observations Comparable to internship in elementary school administration. Field Work extends over the entire school year with registration permissible only in the fall semester.

## 266A-B Field Work in Secondary School Administration and Supervision (2-2) Year course

Prerequisite: Admission by application. Direct participation in the administrative, supervisory, and curricular aspects of secondary school administration. Provides students qualifying for secondary supervision and administration credentials with direct experiences and observations comparable to internship in secondary school administration. Field work extends over the entire school year with registration permissible only in the fall semester.

## 269 Workshop for Training Teachers and Supervisors (2)

Prerequisite: Possession of a secondary credential; service or appointment to serve, as a master teacher, or supervision of student teachers. Designed to fill the special needs of training teachers responsible for the supervision of student teachers in off-campus schools. Examination of techniques necessary to an effective supervisory program for associate teachers.

## 270 Organization and Administration of the Elementary School <br> (3) Fall, Spring

Prerequisite: Graduate standing. Problems in federal, state, county, and district school organization; division of responsibility between school boards and administrators; principles and practices of staff organization and personal administration; special emphasis upon techniques and methods in the organization of the elementary school with attention given to issues and problems relative to instructional and noninstructional aspects of the elementary school program. (Formerly ${ }^{2}$ units.)

## 272 School Law in California (2) Fall, Spring

Prerequisite: Graduate standing. Legal aspects of federal, state, county and district school organization and administration; a consideration of the legal rights, duties, and responsibilities including tort liability of school agencies, certificated and classified employees, and pupils.

## 273 School Finance and Business Management (3) Fall, Spring

Prerequisite: Graduate standing. Analysis of fundamental principles and rules underlying public school finance, with particular emphasis on California, including the budgeting, accounting, and auditing of district revenue; the fundamentals of business management, embracing purchasing, warehousing, and supply administration. Responsibilities of various school officials and employees.

## 276 Organization and Administration of the Secondary School (3) Fall, Spring

Prerequisite: Graduate standing. Problems in federal, state, county, and district school organization; division of responsibility between school boards and administrators; principles and practices of staff or ganization and personnel administration; special emphasis upon principles, techniques, and organization of the secondary school with attention to pertinent issues and problems relative to instructional and noninstructional aspects of the secondary school program. (Formerly 2 units.)

## 277 Personnel Problems in School Administration (2)

Analysis of major administrative problems relative to employed personnel in the public school; the selection and placement of employees, conditions of service, teacher and employee tenure, retirement provisions, salary schedules, personnel records and reports, legal aspects of
personnel problems, professional ethics, teacher-certification, in-service training, and professional organizations.

## 278 School and Community (2)

For administrators and teachers. Analyzes characteristics of the community school; relationships between school and community; the school program in relation to community needs; use of community resources in school curriculum; influence of community organizations and institutions upon the school, e.g., P.T.A., press, radio, social service clubs, etc.

279 The Planning, Maintaining, and Operating of School Buildings (2) Fall, Spring

Prerequisites: Graduate standing, and completion of courses in curriculum administration, school organization, and administration. Education planning of school buildings, and the determination of the necessary and adequate plant facilities; selection and treatment of proper school sites; problems of accessibility; population factors; effects of transportation; financing building programs; place of architects, engineers, and builders.

## 280 Seminar in Techniques of Counseling (3) Fall, Spring

Prerequisite: Consent of instructor. An advanced course in counseling techniques intended primarily for candidates for the master's degree in guidance and prospective or actively engaged school or other counselors. Study of counseling problems and situations. Analysis of recorded interviews. Demonstrations and practice in counseling.
282 Seminar in Guidance (3) Fall, Spring
Prerequisite: Consent of instructor. For M.A. and Pupil Personnel Services Credential candidates. Intensive class discussion of case data, current research, sources of educational, vocational, and personal information, and community agencies needed in connection with problems encountered among age group to be served.
286 AB and 286 CD Field Work in Pupil Personnel Services (2-2) Year Course
Prerequisite: Admission by application. Supervised field training in an Organized program for those specializing in pupil personnel services at either elementary or secondary level: 286 AB for those specializing in guidance; 286 CD for those in welfare and attendance.

## 288 Problems and Practices in Special Education (2) Fall, Spring

For advanced students and administrators of special education programs. Problems of organization, administration, and supervision of vari${ }^{0}$ us types of special education programs. Evaluation of recent, proposed, and needed legislation. Review of current literature.

## 298 Seminar in School Administration and Supervision (3) Fall, Spring

Prerequisites: Completion of at least 20 semester hours of graduate work including all specific requirements for administration and supervision credentials; enrollment permissible only with the consent of instructor. Recommended for all candidates completing the master's program in school administration and supervision. Techniques of educational research involving the selection, definition, and presentation of a problem; the selection, summarization, and evaluation of materials appropriate to its solution; and the organization of bibliographical references.

## 299A-B Graduate Project (1-2) Fall, Spring

299A includes (1) an overview of methods of educational investigation and report, and (2) development by the student of a tentative proposal for the master's project. In 299A regular class meetings will be held. In 299B the actual project will be developed with the guidance of a faculty adviser. Students must complete 299A before taking 299B.

## 349 Observation in Special Education (1) Fall, Spring

Prerequisite: Appropriate base. Observation should be taken concurrently with a methods course. It must be taken before Education 351 unless waived by the Coordinator of Special Education.
349D Observation with the Deaf.
349HH Observation with the Hard-of-Hearing.
349MR Observation with the Mentally Retarded.
349S Observation in Speech Correction.
349 V Observation of Visually Handicapped

## 350 Directed Teaching for General Secondary (3-3) Fall, Spring

Prerequisites: The following courses must be taken prior to, or concurrently with, directed teaching: Education 113, 114, 130, 147, 193, and 132. See the detailed section on directed teaching for other prerequisites. Directed teaching is the culminating experience in the prospective teacher's professional training. Directed teaching is done under the daily supervision and guidance of a qualified training teacher regularly em ployed in secondary teaching. A designated member of the college staft also assists in general supervision and counseling. Both city and county schools cooperate in the directed teaching program.

## 351 Directed Teaching in Special Education (4-6) Fall, Spring

See detailed section on directed teaching for a description of the criteria for admission to directed teaching (pages 107 to 108). Directed teaching is the culminating experience in the professional training sequence. The experience is under the daily supervision and guidance of a qualified teacher working in special education. A member of the college staff assists in supervision and counseling. Both city and county schoo ${ }^{15}$ cooperate in the special education program.

## ENGINEERING <br> (In the Division of Technical Sciences)

Staff: Cromwell, Eggers, Plumtree, Storch. Part-time: Baer, Geselbracht, Hirsch, Johnson, Madick, Solomon, Wisda.
To meet the needs of industry for technically trained personnel, the Los Angeles State College offers a broad general engineering program leading to a B.S. in engineering.
The courses offered in the Engineering Department are designed primarily to prepare students for positions in production, construction, communication, management, and sales engineering.
Training is provided in the basic sciences and in engineering methods, processes, materials, machinery and structures. Classroom instruction is supplemented by practical engineering experience in the work-study program which is an integral part of the engineering curriculum.

## BACHELOR'S DEGREE CURRICULA

All students are required to take a common core of lower and upper division courses. Technical electives offered in the senior year permit choice of engineering subjects suited to the vocational objectives of the students.



## Physical Chemistry Modern Physics

Students planning to enter construction field are advised to take 6 units of Plane Surveying in lower division.
Students planning to enter plumbing industry are required to take apprentice training in the trade as supervised work-study experience.

## COURSES OF INSTRUCTION

## ${ }^{100 A}$ Electric Circuits (3) Fall, Spring

Prerequisites: Lower division physics and mathematics. Fundamental units and concepts; series and parallel circuits, and networks; balanced polyphase circuits; power and power factor; electrical instruments and measurements. Three hours lecture. (Formerly Engr. 100.)

## 100B Electric Machines (3) Spring

Prerequisite: Engr. 100A. D-C and A-C motor and generator construction, characteristics and applications; single-phase and three-phase transformers. Three hours lecture. (Formerly Engr. 104.)

## 101 Strength of Materials (3) Spring

Prerequisite: Engr. 102A. Stresses and deformations in tension, compression and shear; torsion; riveted joints; simple beams and theory of flexure; deflections of beams; columns. Three hours lecture. (Formerly Engr. 101A.)

## ${ }^{102 \mathrm{~A}}$ Engineering Mechanics (3) Fall, Spring

Prerequisites: Lower division physics and mathematics. Fundamental principles of statics; resolution and composition of forces; algebraic and graphic solutions; friction; center of gravity; moment of inertia. Three hours lecture.

## ${ }^{102 B}$ Engineering Mechanics (3) Spring

Prerequisite: Engr. 102A. Fundamental principles of kinetics; rectilinear and curvilinear motion; translation and rotation; work, power, impulse, momentum, and impact. Three hours lecture.

## ${ }^{1} 03$ Fluid Mechanics (3) Fall

Prerequisite: Engr. 102B. Properties of fluids compressible and incompressible; fluid statics; laminar and turbulent flow; flow in pipes and open channels; fluid measurements; impulse and momentum; pumps and turbines. Three hours lecture. (Formerly Engr. 103A.)

## ${ }^{105}$ A Thermodynamics (3) Fall, Spring

Prerequisites: Lower division physics and mathematics. Equation of state; energy equations; thermodynamic properties of substances; cycles; air compression; internal combustion engines. Three hours lecture. Formerly Engr. 105.)

## 105B Applied Thermodynamics (3) Spring

Prerequisite: Engr. 105. Application of thermodynamic principles; steam generators, engines and turbines; combustion; vapor cycles; refrigeration; mixtures of vapors and gases; heat transfer. Three hours lecture. (Formerly Engr. 106A.)

## 106 Heat Power Laboratory (1) Fall

Prerequisite: Engr. 105B. Calibration and use of instruments; heating value of fuels; flue gas analysis; steam generator, engine and turbine tests; internal combustion engine and air compressor tests. Three hours laboratory. (Formerly 106B.)

## 107 Basic Electronics (2) Fall

Prerequisite: Eng. 100. Introduction to electronic theory; vacuum and gas filled electronic tubes; elements of electronic circuits. Two hours lecture.

108 Strength of Materials Laboratory (1) Fall
Prerequisite: Engr. 101. Tests of materials of construction in tension, compression, bending and torsion. Determination of physical properties of wood, steel, concrete and other materials. Hardness tests. Three hours laboratory. (Formerly Engr. 101B.)

## 109 Fluid Mechanics Laboratory (1) Spring

Prerequisite: Engr. 103. Flow through orifices, nozzles, meters, and pipes and over weirs; water hammer; friction; pumps and turbines. Three hours laboratory. (Formerly Engr. 103B.)

## 110A Electric Circuits Laboratory (1) Fall, Spring

Prerequisite: Engr. 100A. (May be taken concurrently.) Experiments based on Engr. 100A. Three hours laboratory.
110B Electric Machines Laboratory (1) Spring
Prerequisite: Engr. 100B. (May be taken concurrently.) Experiments based on Engr. 100B. Three hours laboratory.

## 110C Basic Electronics Laboratory (1) Fall

Prerequisite: Engr. 107. (May be taken concurrently.) Experiments based on Engr. 107. Three hours laboratory.

## TECHNICAL ELECTIVES <br> Mechanical Engineering

113 Elements of Machine Design (4) Fall
Prerequisite: Engr. 101A. Theory of mechanisms; linkages; gears' cams; belts; chains. Application of principles of mechanics, properties of materials, and fabrication processes to the design of simple machine and structural elements. Three hours lecture; three hours computation.

## 116 Heating, Air Conditioning and Refrigeration (3) Spring

Prerequisite: Engr. 106AB. Psychrometric properties of air; human comfort; heat transfer; heat losses from buildings; heating equipment; ventilation; refrigeration; air conditioning; residential and industrial applications. Two hours lecture; three hours computation.

## 117 Machine Design (3) Spring

Prerequisite: Engr. 113. Continuation of Engr. 113 to include design of unit assemblies and machines with regard to suitability of materials, safety, lubrication, construction, etc. Two hours lecture; three hours computation.

## 120 Power Plants (3) Spring

Prerequisite: Engr. 106AB. Power plant equipment; steam generators, engines, turbines, condensers, and auxiliaries internal combustion engines and other prime movers; load curves; economic selection; cycles and heat balances; design procedure. Two hours lecture; three hours computation.

## Electrical Engineering

## 130 A-C Circuits and Applications (4) Fall

Prerequisite: Engr. 104. A-C networks and network theorems; Coupled circuits; nonsinusoidal waves; unbalanced polyphase circuits; power factor correction and economics; transmission line calculations; short circuit calculations; symmetrical components. Applications to the transmission, distribution, and utilization of electric power. Three hours lecture; three hours computation.

## 131 Electric Communication (3) Spring

Prerequisite: Engr. 107. Study of the entire field of electrical communication including telephone, telegraph, radio, and television. Three hours lecture.
135 Electronics (2) Spring
Prerequisite: Engr. 107. Voltage regulated power supplies; amplifiers; Oscillators; radio circuitry; transistors. Two hours lecture.
139 Industrial Controls (3) Spring
Gas tube rectifiers; thyratrons and ignitrons; electrical control systems both magnetic and electronic; electronic instrumentation; servo-mechanisms. Three hours lecture.

[^28]
## Civil Engineering

## 153 Reinforced Concrete (3) Spring

Prerequisite: Engr. 158. Theory and design of plain, reinforced and prestressed concrete structures; design of mixes; beams; tee-beams; floors; columns; footings. Three hours lecture.

## 155 Specifications and Cost Estimating (3) Spring

Building specification and codes: estimating costs; material handling and transportation; excavation; concrete, wood, masonry, and steel construction. Three hours lecture.

## 156 Foundations and Soil Mechanics (3) Spring

Prerequisites: Engr. 101 and Engr. 103. Physical and mechanical properties of soils; seepage; settlement; slope stability; bearing capacity of foundations; foundation types and construction. Three hours lecture.

## 157 Structural Analysis (3) Fall

Analysis of simple structures; beams, tension and compression members; analysis of bridge and roof trusses and of building frames. Three hours lecture.

## 158 Structural Design (4) Spring

Design of structural members, including tension and compressio ${ }^{11}$ members, beams, and built-up girders, together with connections. Framing and design of simple bridges, buildings, and frameworks in metal. Codes and specifications of various organizations used as reference. Three hours lecture and three hours computation.

## Plumbing Engineering *

## 170 Plumbing Engineering (4) Fall

Hydraulics and pneumatics; water supply and consumption; pumps and storage tanks; design and layout of piping; fire protection and sprinkler systems; drain and vent pipes; sewage and drain pumps; valves, meters, and fixtures; plumbing codes. Three hours lecture; three hout ${ }^{\text {ts }}$ laboratory.

## 175 Water Treatment and Sewage Disposal (3) Spring

Water supply and purification; operation and control of water treatment plants; sewage treatment and disposal; sewer systems. Three hours lecture.

[^29]
## Special Courses

198 Field Assignments and Reports (1-2) Fall, Spring
Prerequisite: Active, approved employment under the work-study program. Analysis and reports of the students' performance; regular group meetings.
199 Independent Study (1-3) Fall, Spring
Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

## ENGLISH

## (In the Division of Language Arts)

Staff: Kaplan (Acting Head), Amneus, Bushman, Cronin, Greer, Guyer, F. Marcus, M. Marcus, Sandelin, Senescu, Shroyer, Smith, Van Slooten.

## BACHELOR'S DEGREE CURRICULA <br> Major in English

See also page 45 for graduation requirements for the B.A. degree.
Designed for students who (1) elect to study the liberal arts with an emphasis in literature and language, or (2) plan to pursue a career in some phase of professional writing.

## Lower Division

| English 9-Survey of English Literature | 3 units |
| :--- | :--- |
| English 10-Survey of English Literature | 3 units |

## Upper Division

English 117J-Interpreting Shakespeare 3 units
Language Arts 197-Language Arts and the Democratic Tradition … 2 units

English 100-History and Philosophy of the English Language (2)
English 103-Semantics (2)
English 104-Grammar Review (2)
English 106A-Pre-professional Writing (3)
English 106B-Verse Writing (2)
English 106C-Short Story Writing (2)
At least two courses from the following 6 units
English 121-Interpreting Fiction (3)
English 123-Interpreting Poetry (3)
English 124-Interpreting Dramatic Literature (3)
English 180A-Literature and the Fine Arts, B.C. (3)
English 180B-Literature and the Fine Arts, A.D. (3)
English 181A-Contemporary World Prose (3)
English 181B-Contemporary World Poctry (3)
English 185-Philosophy of Literature (3)
At least two courses from the following
English 142-The Age of Chaucer (3)
English 146-The Age of Elizabeth (3)
English 152-The Age of Milton (3)
English 156-The Age of Reason (3)
English 158-The Romantic Age (3)
English 160-The Victorian Age (3)
At least two courses from the following
English 170A-Masters of American Literature, 1620-1860 (3)
English 170B-Masters of American Literature, 1860-1950 (3)
English 173-New England Renaissance (3)
English 174-American Realists (3)
English 177-Major American Novelists (3)

## General Secondary Teaching Major

See also pages 112-113 for professional education requirements. Candidates for the General Secondary Credential in English are required to have a collegiate course in each of the following areas: composition, literature, speech, and drama or journalism.

| Lower Division |  |
| :---: | :---: |
| English 9-Survey of English Literature | 3 units |
| Eaglish 10-Survey of English Literature. | its |
| $U_{\text {pper }}$ Division |  |
| English 117J-Interpreting Shakespeare ._ 3 units |  |
| Language Arts 197-Language Arts and the Democratic Tradition | 2 units |
| At least one course from the following English 104-Grammar Review (2) English 130A-High School Composition (3) | 2-3 units |
| At least one course from the following Speech 164D-High School Dramatics (2) Journalism 164J-High School Journalism (2) | 2 units |
| At least two courses from the following English 130B-High School Literature (3) English 146-The Age of Elizabeth (3) English 152-The Age of Milton (3) English 156-The Age of Reason (3) English 158-The Romantic Age (3) English 160-The Victorian Age (3) | 6 units |
| At least two courses from the following <br> English 170A-Masters of American Literature, 1620-1860 (3) <br> English 170B-Masters of American Literature, 1860-1950 (3) <br> English 173-New England Renaissance (3) <br> English 174-American Realists (3) <br> English 177-Major American Novelists (3) | 6 units |
| At least one course from the following <br> English 180A-Literature and the Fine Arts, B.C. (3) English 180B-Literature and the Fine Arts, A.D. (3) English 181A-Contemporary World Prose (3) English 181 B -Contemporary World Poetry (3) English 185-Philosophy of Literature (3) | 3 units |
| $\mathrm{G}_{\text {raduate ( }}$ (Fifth Year) |  |
| $\mathrm{O}_{\text {ne }}$ approved English literature course One approved American literature course | 3 units 3 units |
|  | -37 units |

## General Secondary Teaching Minor

See also pages 112-113 for professional education requirements. Candidates for the General Secondary Credential in English are required to have a collegiate course in each of the following areas: composition, literature, speech, and drama or journalism.

[^30]Lower Division
English 9 or 10-Survey of English Literature ..... 3 units
Upper Division
English 117J-Interpreting Shakespeare ..... 3 units
At least one course from the following ..... 2-3 unitsEnglish 104-Grammar Review (2)
English 130A-High School Composition (3)
At least two courses from the following ..... 6 unito
English 130B-High School Literature (3)English 146-The Age of Elizabeth (3)English 152-The Age of Milton (3)English 156-The Age of Reason (3)English 158-The Romantic Age (3)English 160-The Victorian Age (3)
At least two courses from the following ..... 6 units
English 170A-Masters of American Literature, 1620-1860 (3)
English 170B-Masters of American Literature, 1860-1950 (3)
English 173 -New England Renaissance (3)
English 174-American Realists (3)
English 177-Major American Novelists (3)

## MASTER OF ARTS DEGREE

Candidates for the General Secondary Credential in English are re quired to have a collegiate course in each of the following areas: com position, literature, speech, and drama or journalism. Graduate student ${ }^{t h}$ who have not previously met this requirement may take the following courses in each area:

Composition: English 206
Literature: English 220, 275, 281
Speech: Speech 215,220 S
Drama: Speech 220D
Journalism: Journalism 220

1. Prerequisites: For admission to candidacy for the M.A. in English, the student must have had 24 units of approved undergraduate English courses. See specific prerequisites for individual graduate courses.
2. Area of concentration:
a. At least four courses from the following

English 205-Proseminar in Current American English (3)
English 206-Proseminar in Writing (3)
English 275-Proseminar in Recent American Literature (3)
English 281-Proseminar in Literature and Human Values (3)
English 299-Graduate Project
This project must be approved preceding enrollment in the course.
b. At least one course from the following

The remaining course in the area of concentration (3)
Any 220 course offered by Language Arts Division (3)
English 130A-High School Composition (3)
English 130B-High School Literature (3)
English 142-The Age of Chaucer (3)
English 146-The Age of Elizabeth (3)

English 152-The Age of Milton (3)
English 156-The Age of Reason (3)
English 158-The Romantic Age (3)
English 160 -The Victorian Age (3)
English 173-New England Renaissance (3)
English 174-American Realists (3)
3. Approved courses exclusive of English
Courses taken for undergraduate credit may NOT be applied to
satisfy this requirement.
4. Electives 9 units
5. Comprehensive Examination

This examination searches for evidence of comprehension, assimilation, and correlation of the knowledge, values, and skills developed in the area of concentration, and for evidence of ability to employ this training in secondary education. If the student has elected English 299 , a portion of the examination will be devoted to an inquiry into his project. The examination may be oral, written, or both.

## COURSES OF INSTRUCTION

## LANGUAGE AND COMPOSITION COURSES

## 99 Writing Laboratory (2) Fall, Spring

Individual and group instruction in basic communication skills. Gives lower division unit credit, but may not be included in computing grade Point averages.

## ${ }^{1} 00$ History and Philosophy of the English Language (2) Fall

Development of the English language as an instrument of social communication.

## ${ }^{1} 03$ Semantics (2) Spring

The study of meaning in language, literature, art, ritual, science, folklore, advertising, and propaganda. Application of semantic principles to various professional fields.
104 Grammar Review (2) Fall, Spring
Practical review of the recurrent problems in English grammar. EmPhasis on current usage.
${ }^{10}{ }_{6}$ A Pre-Professional Writing (3) Fall, Spring
Fundamentals of scientific and technical exposition with emphasis upon their application to the scientific article and the technical report. Examination of sentence and paragraph construction for concise and effective expression of scientific ideas. Study of conventional styles and forms in technical reports.

## ${ }^{1} 0_{6 B} \quad$ Verse Writing (2) Spring

Prerequisite: Consent of instructor. Principles and techniques of verse Writing applied to actual composition of student poems.

106C Short Story Writing (2) Fall
Principles and techniques of short fiction applied to actual composition of from 10,000 to 20,000 words of completed manuscripts.

## INTERPRETATION COURSES

These courses propose to develop criteria for the selection, analysis, evaluation, and enjoyment of literature. Practice is offered in explication of theme, analysis of structure, language, tone, and mood, and correlation of a literary work with its own age and with contemporary life. Upper division standing and satisfactory completion of a freshman composition course (or concurrent enrollment in Language Arts 100A) are prerequisites for all interpretation courses.

## 117J Interpreting Shakespeare (3) Fall, Spring

Selected plays studied as dramatic literature and poetry.

## 121 Interpreting Fiction (3) Spring

Intensive study of representative short stories and novels.

## 123 Interpreting Poetry (3) Fall <br> Intensive study of representative poems in English.

## 124 Interpreting Dramatic Literature (3) Spring

Intensive study of representative plays in English.

## 128 Interpreting Children's Literature (3) Fall, Spring

Intensive study of the forms and kinds of children's literature. Equal emphasis given to developing artistic appreciation and to demonstrating the function of literature in child development.

## 130A High School Composition (3) Fall

Principles and techniques of composition correlated with the experience and readings of young people. Not a methods course; emphasis on subject field skills.

## 130B High School Literature (3) Spring

Principles and techniques for selecting, interpreting, and evaluating reading materials for high school students. Not a methods course; emphasis on subject field skills.

## ENGLISH LITERATURE COURSES

These courses emphasize the artistic achievement and subsequent influence of representative authors in successive ages of England's literary history. Consideration is given to the artistic, ethical, and social values of each age and to their surviving influence on the present. Completion of a survey of English literature, or consent of instructor, is prerequisite to enrollment in all upper division courses in English literature.

## Lower Division Courses

9 Survey of English Literature (3) Fall, Spring
10 Survey of English Literature (3) Fall, Spring
A reading of significant works of the most important English writers since Chaucer. Each work is read for enjoyment as literature, as revelation of the writer's point of view, and as a reflection of English cultural and social development. These courses carry lower division credit only.

## Upper Division Courses

142 The Age of Chaucer (3) Fall (Offered in alternate years; alternates with English 146)
Intensive study of selected works, primarily by Chaucer, which illustrate the transition from medieval to modern life and literature.
146 The Age of Elizabeth (3) Fall (Alternates with English 142)
Intensive study of significant and representative works of the English Renaissance, including all literary types exclusive of the drama.
152 The Age of Milton (3) Spring (Offered in alternate years; alternates with English 156)
Intensive study of representative literary works of the 17th century, primarily by John Milton.
156 The Age of Reason (3) Spring (Alternates with English 152)
Study of representative works from the Restoration writers through the pre-Romantics, including poetry, prose fiction, drama, and literary criticism.
158 The Romantic Age (3) Fall
Detailed study of the works of the major Romantic poets and prose Writers. Emphasis on the aesthetic, political, and philosophical ideas embodied in their literary productions.

## 160 The Victorian Age (3) Spring

Detailed study of the scientific, philosophical, aesthetic, and political thought embodied in the prose and poetry of the major writers of the age.

## AMERICAN LITERATURE COURSES

These courses emphasize the artistic achievement and subsequent influence of representative authors in successive periods in the literary history of the United States. Consideration given to the artistic, ethical, and social values of each age and to their surviving influence on the Present. Upper division standing and satisfactory completion of a freshtan composition course (or concurrent registration in Language Arts 100 A ) are prerequisites for registration in American literature courses.
170A Masters of American Literature, 1620-1860 (3) Fall, Spring

## 170B Masters of American Literature, 1860-1950 (3) Fall, Spring

A reading of significant works of the most important American writers. Each work is read for enjoyment as literature, as revelation of a writer's point of view, and as reflection of American cultural trends. These courses may be taken separately or in any sequence.
173 New England Renaissance (3) Fall, Spring
Prerequisite: English 170A or consent of instructor. Emerson, Hawthorne, Melville, and others as literary spokesmen for American romantic faith.

## 174 American Realists (3) Fall, Spring

Prerequisite: English 170B or consent of instructor. Twain, James, and others as literary spokesmen for American realistic temper.

## 177 Major American Novelists (3) Spring

Prerequisite: English 121, 181A, or consent of instructor. Intensive study of representative examples of American prose fiction from Cooper to Faulkner.

## COMPARATIVE LITERATURE COURSES

These courses emphasize the artistic achievement and subsequent influence of authors who have contributed significantly to world literature. Foreign works are read in translation. Upper division standing and satisfactory completion of a freshman composition course (or concurrent registration in Language Arts 100A) are prerequisites for registration in comparative literature courses.

## 180A Literature and the Fine Arts, B.C. (3) Fall

Masterpieces of oriental and classical literature studied in relation to cultural movements in thought and art. May be taken separately or in any sequence with English 180B.

## 180B Literature and the Fine Arts, A.D. (3) Spring

Masterpieces of literature from the western heritage studied in $\mathrm{re}^{-}$ lation to cultural movements in thought and art. May be taken separately or in any sequence with English 180A.

## 181A Contemporary World Prose (3) Fall

Prerequisite: English 121 or consent of instructor. Readings in twent tieth century prose fiction representative of major trends in contemporary forms and thought. May be taken separately or in any sequence with English 181B.

## 181B Contemporary World Poetry (3) Spring

Prerequisite: English 123 or consent of instructor. Readings in twent tieth century poetry representative of major trends in contemporary forms and thought. May be taken separately or in any sequence with English 181A.

185 Philosophy of Literature (3) Fall, Spring
Introduction to representative examples of literary criticism and to the major modes of critical thought. The nature and significance of various philosophies of literature. Special emphasis on the development of the student's own powers of critical reading and writing.

## SPECIAL PROJECTS

198 Field Assignment and Reports (1-2) Fall, Spring
Prerequisite: Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular group meetings.

## 199 Independent Study (1-3) Fall, Spring

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

## GRADUATE COURSES

Graduate standing is prerequisite to registration in the following courses.

## 200 Project Writing (2)

An all-college service course dealing with techniques of investigation and reporting.

## 205 Proseminar in Current American English (3) Fall

Prerequisite: English 100 or 104. A study of current English; reading of major scholarly investigations, examination of contemporary prose, and applications to the practical problems of the secondary school class${ }^{1} 00 \mathrm{~m}$.

## ${ }^{206}$ Proseminar in Writing (3) Spring

An opportunity for written expression in a variety of forms appropriate to the resources and interests of graduate students. Study of the ways to apply to the teaching of writing the insights and techniques provided by the student's own experiences in writing.
${ }^{2} 20$ Proseminar in Literature (3) Spring
Prerequisite: Completion of one upper division English, one American and one comparative literature course, or consent of instructor. Selected problems emphasizing the relevance and significance of literary study for contemporary life.

## 275 Proseminar in Recent American Literature (3) Fall

Prerequisite: at least one upper division course in American literature. A study of twentieth century American culture and of the living tradition it embodies as reflected in various types and qualities of recent American literature.

## 281 Proseminar in Literature and Human Values (3) Spring

Prerequisite: at least two upper division courses in literature. A study of the ways in which the literature of other nations and times has dealt with human problems having special relevance to the present generation. Supplementary consideration of relevant literary and historical works attractive to younger readers. .

## 299 Graduate Project (3) Fall, Spring

Prerequisite: at least one graduate course in English. An opportunity for the investigation of a sizable problem in language or literature showing how its results can be utilized effectively in secondary educatioth, the results to be presented in a written report having clarity, order, and cogency of expression. Project must be approved before enrollment.

## FRENCH

(In the Division of Language Arts)
Staff: Bonhard, Lionetti.

## BACHELOR'S DEGREE CURRICULUM

## No major in French is offered <br> General Secondary Teaching Minor

See also pages 112-113 for professional education requirements. A teaching major in a different field is also required for the general secondary credential.

## $\mathrm{L}_{0 \text { wer }}$ Division

$\begin{array}{ll}\begin{array}{l}\text { French (Intermediate) } \\ \text { Upper Division }\end{array} & 8 \text { units } \\ \begin{array}{l}\text { French } 101 \mathrm{AB}-\mathrm{Oral} \text { and Written Composition (3-3) } \\ \text { French 102AB-French Literature From Middle Ages to } \\ \text { Century (3-3) Twentieth }\end{array} & 6 \text { units } \\ & 6 \text { units } \\ & 20 \text { units }\end{array}$

## COURSES OF INSTRUCTION

101A-B Oral and Written Composition (3-3) Offered alternate years.
Prerequisite: Intermediate French.
102A-B French Literature: The Middle Ages to the Twentieth Century (3-3)
Offered alternate years.
Prerequisite: Intermediate French, or French 101A or 101B.
199 Directed Individual Studies (1-3) Fall, Spring
Prerequisite: Offered only on petition. Petition must contain a digest of work completed, of work proposed, and evidence that 199 is essential to this program. Student enrolls only if faculty member is free to supervise work.

# GEOGRAPHY <br> (In the Division of Social Sciences) 

Staff: Durrenberger (Department Head), Byron, Lydolph, Nishi, Price.

## BACHELOR'S DEGREE CURRICULUM

## Major in Geography

Geography involves study of the earth, its peoples, and their ways of inhabiting it. The major in geography is designed to fulfill the purposes both of a liberal education and of vocational preparation in geography or allied fields. Optional courses are recommended in accordance with the candidate's aims.
Lower Division
Elements of Geography or Economic Geography ..... 6 unis
Elements of Weather and Climate ..... 3 units
Choose from basic courses in Geology and/or Anthropology ..... 6 unit
(Recommended course: Map Reading and Interpretation (2) )
Upper Division
Geography 102-Geomorphology orGeography 110-Climatology3 units
Geography 105-Cartography ..... unisGeography 121-Anglo-America3 unib
Geography 141-World Resources ..... 3 units
Regional Geography. Select from list below. ..... 6 unitGeography 109-Geography of the Pacific Area (3)Geography 122-Geography of Latin America (3)Geography 123-Geography of Europe (3)Geography 124 -Geography of Asia (3)Geography 131-Geography of California (3)
Electives in Geography6 unitsElectives in related Natural and Social Sciences (with the approval ofan adviser)

## MASTER OF ARTS DEGREE

The graduate program is built on the foundation of undergraduat preparation. The master's degree requires intensive directed study in geography aimed at depth of understanding.

1. Prerequisite: Acceptable undergraduate preparation in geography.
2. Area of concentrationa. Social Science 250 A3 unutis
b. Approved graduate " 200 " courses in the field of geography. Graduate project not to exceed three units of credit may be includedc. Other approved courses in the field of geography; may be upperdivision " 100 " courses3 unib
d. Comprehensive written examinations in selected fields of geography3. Approved courses outside the area of geography
3. Other courses approved in advance by the adviser ..... $1 \mathrm{ur}^{15}$

## - COURSES OF INSTRUCTION

Note: Geography 102, 110, and 115 satisfy the general education requirement in natural science (physical science); Geography 110 also satisfies the general education requirement in natural science (electives). All other courses in geography except 105 are classified as social science.

Prerequisite: A basic geography course or consent of instructor. Exception: No prerequisite for Geography 101.
101 Survey of the Modern World (3) Fall, Spring
A regional survey of major cultural and economic features of the modern world. Emphasis on matters of critical importance for understanding current problems. Physical elements introduced as needed. Intended primarily for candidates for teaching credentials.

## 102 Geomorphology (3) Fall

Identification of the surface features of the earth and their meaning. Local landforms will be observed on a field trip.
105 Cartography (3) Spring
Maps and techniques of map drafting. Lecture one hour; laboratory four hours.
109 Geography of the Pacific Area (3) Fall, Spring
The human and physical features which characterize the islands of the Pacific, Australia, and the Pacific rim; major stress upon geographic factors influencing contemporary events.
${ }^{1} 10$ Climatology (3) Fall, Spring
The major climatic types of the earth, including their significance in the landscape and to man.

## 115 Physical Geography (3) Fall, Spring

The natural features of the continents, with emphasis on climate, landforms, soils, and plant life.
121 Geography of Anglo-America (3) Fall, Spring
Settlement and development of the regions of the United States, Canada, and Alaska.
122 Geography of Latin America (3) Fall, Spring
The development and character of the lands of Latin America.
123 Geography of Europe (3) Spring
The formation of the natural, cultural, and political regions of Europe and the Soviet Union.
124 Geography of Asia (3) Fall, Spring
A survey of the physical, economic, cultural, and political geography of China, Japan, Korea, India, Pakistan, and Southeastern Asia.

## 131 Geography of California (3) Fall, Spring

A regional study of California, including consideration of settlement and utilization of resources as topics of major interest.

## 141 World Resources (3) Fall, Spring

The distribution and utilization of the major agricultural and mineral resources of the world.

181 Political Geography (3) Spring
Areal differentiation of the natural and cultural phenomena which affect the world's political organization.
198 Field Assignment and Reports (1-2) Fall, Spring
Prerequisite: Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular group meetings.

## 199 Independent Study (1-3) Fall, Spring

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings are held regularly thereafter until the end of the semester.

## GRADUATE COURSES

Minimum prerequisites: A bachelor's degree and superior academic performance.

## 270 Studies in the Nature of Geography (3)

A seminar in the history, objectives, and methods of geography.

## 271 Studies in Regional Geography (3)

A seminar in regional analysis.
280 Studies in Physical Geography (3)
A seminar in the nature, origin, and areal occurrence of the physical qualities of the land (climate, land forms, soils, and vegetation).

## 299 Graduate Project (3)

## GOVERNMENT

(In the Division of Social Sciences)
Staff: Guild (Department Head), Black, Misner, Potter, Sandler, Warren.

## BACHELOR'S DEGREE CURRICULUM

## Major in Government

Four distinct majors in government, each representing a different objective, are offered.

1. Pre-professional and professional training for entrance into government service as a career, on the federal, state, or local government levels, or for positions on the research or administrative staffs of quasi-public or endowed organizations.
2. Foundational training for entrance into a graduate school of law.
3. Foundational training for careers in the field of international relations.
4. A general major, encompassing such ultimate objectives as teaching in junior colleges, entrance into politics, citizenship participation, liberal arts training, and pregraduate study.
Work-study credit is given to government majors serving as interns in governmental agencies in the Los Angeles area. In most instances these internships must be attained through civil service screening tests conducted by the respective governmental agency.

## Lower Division

Lower division requirements are the same for each of the above indicated optional majors in government: six units of introductory political science.

Students electing pre-law (Option 2) are required to have completed a year of United States history, or English history, or history of western civilization (preferably one of the two former), and a year of accounting; students majoring in the international relations field (Option 3) are urged to have eight lower division units or equivalent knowledge in one foreign language.

[^31]Government 160-Principles of Public Administration ..... 3 units
Government 163-Public Personnel Administration orGovernment 165-Principles of Imployee Supervision3 units
Mathematics 113-Elementary Statistical Methods ..... 3 units
Select from courses numbered above 163 ..... 9 units
Option 2-Pre-Law
Social Science $150-$ Scientific Method and Applied Logic ..... 3 units
Government 103 -State and Local Government or
Government 104-Municipal Government ..... 3 units
Government 112-Political Theory or
Government 113-American Political Thought ..... 3 units
Government 157-Constitutional Law or
Government 176-Administrative Law3 units
Government 158-The Anglo-American Legal System ..... 3 units
Business 185-Business and Government or
Government 117-Government Controls in the American Economy3 units
Government 160 -Principles of Public Administration ..... 3 units
Economics 110-Economics of the Business Firm ..... 3 units
History 179-Constitutional History of the United States ..... 3 units3 unitsEnglish 106A-Pre-Profess6 units
Business 102, 103; Economics 171, 172, 190; English 170A, 170B; Govern-ment 105, 126; History 148, 175, 153AB; Mathematics 113; Philosophy104; Psychology 110; Sociology 102, 163; Speech 110.
Option 3-International Relations
Government 105-American Federal Government ..... 3 units
Government 125-United States Foreign Policy ..... 3 units ..... 3 units
Select from the following ..... 6 units
Government 126-International Law (3)Government 127 -International Relations (3)
Government 128-International Organization (3)
Select from the following
$\qquad$Government 150-European Government (3)Government 151-Governments of Latin America (3)Government 152-Asiatic Governments (3)
Government 160 -Principles of Public Administration ..... 3 units
3 units
History 178-Diplomatic History of the United States ..... 3 units
Economics 106-Principles of International Trade(Recommended: Upper division work in the foreign language begun inlower division)

## Option 4-General Government

Of the following six fields of Government, coverage of at least fouts fields is required, with a total of not less than 27 upper division units. The program pattern in each instance will be determined in consultation with the appropriate departmental adviser.

[^32]Govt. 170-Public Relations in Government (3)
Govt. 171-Governmental Report Writing (2)
Govt. 172--Organization and Methods Analysis (3)
Govt. 174-Introduction to City Planning (3)
b. Comparative Government

Govt. 150-European Governments (3)
Govt. 151-Governments of Latin America (3)
Govt. 152-Asiatic Governments (3)
c. International Relations

Govt. 125-United States Foreign Policy (3)
Govt. 126-International Law (3)
Govt. 127-International Relations (3)
Govt. 128-International Organization (3)
d. Political Theory

Govt. 112-Political Theory (3)
Govt. 113-American Political Thought (3)
e. Political Parties and Politics

Govt. 105-American Federal Government (3)
Govt. 114-Public Opinion and Lobbies (3)
Govt. 118-American Political Parties and Politics (3)
f. Public Law

Govt. 117-Governmental Controls in the American Economy (3)
Govt. 157-Constitutional Law (3)
Govt. 158-The Anglo-American Legal System (3)
Govt. 176-Administrative Law (3)

## MASTER OF ARTS DEGREE

The graduate program is built upon the foundation of an undergraduate major in Government (or, as designated in some institutions, Political Science).

1. Prerequisite: Acceptable undergraduate preparation in government.
2. Area of concentration
a. Social Science 250 A 3 units
b. Approved graduate " 200 " courses in the field of government. Graduate project not to exceed 3 units of credit may be included. $\qquad$
c. Other approved courses in the field of government; may be upper division " 100 " courses 3 units
d. Comprehensive written examination in four selected fields of govern-
3. Approved courses outside the area of government 6 units
4. Other courses approved in advance by the adviser 9 units

## COURSES OF INSTRUCTION

Prerequisites: One year of university or college political science or consent of instructor. Exception: No prerequisites for Government 101, 103, 104, 105.

## *101 American Institutions (3) Fall, Spring

Development of the American constitutional system and its ideals. Meets the United States Constitution and California state and local *Designates a course which satisfies the United States Constitution requirement and the California
state and local government requirement.
government requirements. Not open to students who have completed an introductory course in American government.

## $\dagger 103$ State and Local Government (3) Fall, Spring

The structures, functioning, and relationships of state and local gorernments, with special reference to California.
$\dagger 104$ Municipal Government (3) Spring
Contemporary American municipalities and their relationships to other governmental jurisdictions, particularly state governments. Aspects of the California State Constitution with reference to such municipal subjects as home rule, referendum, initiative, recall, metropolitan government.
$\ddagger 105$ American Federal Government (3) Fall, Spring
The policy-making and administrative structures and operations of the Federal Government. Make-up of Congress; the electoral college; committee composition. Executive departments and agencies; regulatory commissions; government corporations.

## 112 Political Theory (3) Fall

Survey of European thought from Plato to the present, emphasizing modern contributions.

## 113 American Political Thought (3) Spring

Examination of political thought in America from colonial times to the present, as expressed in political addresses, constitutional decisions, and treatises.

## 114 Public Opinion and Lobbies (3) Spring

Tactics and aims of pressure groups, particularly lobbies, in the influt encing of American public sentiment. Political significance of public opinion polls.

## 117 Government Controls in the American Economy (3) Spring

Government control of business activity. Rise of regulatory commissions; administrative courts; licensing authorities. Changing concepts of the public interest and public welfare.

## 118 American Political Parties and Politics (3) Fall

The rise of American political parties, including third parties; party structure, operation, and control, with emphasis on political leadership.

## 125 United States Foreign Policy (3) Fall, Spring

Theory and practice of contemporary American foreign policy.

## 126 International Law (3) Fall

Regulation of international relations in peace and in war.

[^33]
## 127 International Relations (3) Fall, Spring

Theories and practices of international politics today and yesterday.

## 128 International Organization (3) Spring

Methods that have been attempted to prevent war.

## 150 European Governments (3) Fall

A survey of the political structures, institutions, problems, and trends of the governments of the major European countries.
151 Governments of Latin America (3) Fall
Political concepts, structures, and trends in the governments of Mexico, Brazil, Argentina, Chile, and others selected for study by the instructor.

152 Asiatic Governments (3) Spring
Analyses of the political institutions and problems of China, India, Japan, Indonesia, and the Philippines.

## *157 Constitutional Law (3) Fall

Basic principles of American constitutional law, and the role of the United States Supreme Court in our political and social development.

## 158 The Anglo-American Legal System (3) Fall

Development of our legal system from Anglo-Saxon and Roman roots to a case system of law and equity based on English and American common law.

160 Principles of Public Administration (3) Fall, Spring
Analysis of the executive function in government; survey of the principles of administrative organization, personnel management, financial administration, administrative law, public relations. Problems and trends in government as a career.
163 Public Personnel Administration (3) Fall
Growth of the merit system concept and development of the civil Service; recruitment procedures and examinations; position classification; salary structures; retirement plans; in-service training; supervision; employee organizations.
165 Principles of Employee Supervision (3) Spring
Prerequisite: Consent of instructor. A series of discussions on government employee situations and problems from the point of view of the lower-level supervisor.
166 Public Financial Administration (3) Fall (Offered 1955-56)
Principles of governmental financial controls; budgeting; capital outlays; treasury functions; governmental purchasing; assessment practices; financial reporting.
${ }^{4}$ Designates a course which satisfies the United States Constitution requirement.

## 168 Public Welfare Administration (3) Spring

The internal administration of government programs such as social security, child care, corrections, pensions. Operation of the grant-in-aid principle. Interagency relationships; problems of field coordination.

## 170 Public Relations in Government (3) Fall

Principles and media used to inform the public of governmental services and programs. Public relations as a staff function. The roles of "information officer," "public service features," public information counters. Agency case histories.
171 Governmental Report Writing (2) Spring (Offered 1956-57)
Preparation of effective government reports; principles in the composition of letters, memoranda, directives, research reports and recommendations; progress reports; improvement of phraseology in government communications.
172 Organization and Methods Analysis (3) Fall (Offered 1955-56)
Special studies in governmental office and agency operations; organizational charting; work simplification; space and equipment layouts; preparation of administrative and procedure manuals; form requirements. Problems of control, delegation, and coordination.

## 174 Introduction to City Planning (3) Spring (Offered 1955-56)

Functions and administrative structures of city and regional planning departments. Composition and requisites of planning staffs. Zoning; master planning; urban redevelopment. Economic, legal, aesthetic, and social considerations in program formulation and execution.

## 176 Administrative Law (3) Spring

Functions of regulatory commissions; processes in administrative adjudication; duties and liability of public officers; appeal procedures; trends in regulation.

## 198 Field Assignment and Reports (1-2) Fall, Spring

Prerequisite: Active, approved employment under the government internships program. Analysis and reports of the student's performance; regular group meetings.

## 199 Independent Study (1-3) Fall, Spring

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

## GRADUATE COURSES

Minimum prerequisites: A bachelor's degree and superior academic performance in government.

## 205 Seminar in Contemporary American National Government (3)

Case studies in the formulation and execution of policy, reflecting executive, legislative, and judicial influences as well as the pressures exerted by interest-groups.

## 218 Seminar in Political Problems (3)

Special studies of party management, control, finance, campaign strategies, publicity, and public relations. Problems of regional organization, blocs, sectionalism. Changing concepts of party responsibility, political fitness, political education. Case studies of political careers.
227 Advanced Studies in International Relations (3)
Examination of special problems in international politics.
260 Seminar in Public Administration (3)
Advanced studies in administrative organization-delegation, field coordination, accountability, and controls. Values, ends, structures and arrangements in large scale governmental management in a democracy. Growth of the administrative corps. Trends in administrative research.

## 263 Advanced Problems in Public Personnel Administration (3)

Case studies of the more complicated personnel problems encountered in governmental agencies, including examination of the varying roles of boards, commissions, and official legislative bodies. New frontiers in personnel research and personnel legislation.
299 Graduate Project (3)

# HEALTH AND SAFETY EDUCATION <br> (In the Division of Health and Safety, Physical Education, Recreation and Athletics) 

Staff: Elliot (Department Head), Adams, Cake, Deeds, Ennen, Mochel, Osboth Reeves, Warner.

## BACHELOR'S DEGREE CURRICULUM

No major offered.

## General Secondary Teaching Minor in Health Education

Designed for students training to become secondary school teachers. See also pages 112-113 for professional education requirements. A teaching major in a different teaching field is also required for the general secondary credential.


## MASTER OF ARTS DEGREE

Prerequisite: Acceptable undergraduate preparation in the field of health and safety.

1. Required courses:

H. \& S. Ed. 299-Graduate Project or Comprehensive Examination
0-3 units
2 units
H. \& S. Ed. 220-Administration of Health Education
2. Additional health education " 200 " courses $\quad 5-8$ units
3. Additional upper division or graduate courses in the Division of Health and Safety, Physical Education, Recreation and Athletics
4. Courses outside the Division of Health and Safety, Physical Education, Recreation and Athletics.
5. Electives

## COURSES OF INSTRUCTION

## 113 Administration of School Health Programs (2) Fall

Fulfills the state code requirements for a health and development credential and for a teaching minor in health education. Principles and practices of supervision and administration in school health program ${ }^{\text {s. }}$

## 121 First Aid (1) Fall, Spring

Standard Red Cross first aid.
122 Survival Training Education (2)
The analysis of civil defense organization. Personal survival training information. Methods of educating the public for emergency conditions. Latest developments and information in survival training education.
131 Methods of Teaching First Aid (2) Spring
Prerequisite: Current Red Cross certificate in standard first aid. American Red Cross course which qualifies students in Advanced and Instructor First Aid.
150 School Health Education (3) Fall, Spring
Prerequisites: Health education or equivalent. Responsibilities of the classroom teacher in school health education program. Cooperation with medical services, provision of healthful classroom environment, health instruction.
153 Principles of Community Health (2) Spring
Prerequisite: Health education or equivalent. Historical and modern efforts to meet health needs of the community.

## 154 Personal Health and Safety Problems (2) Fall, Spring

Fulfills state code requirements in health and safety education including statutory requirements, procedures, and organization and selection of materials.

## 174 Driver Education and Driver Training (2) Fall, Spring

Prepares students to meet the state code requirements for teaching driver education and driver training. Persons enrolled must be qualified operators of motor vehicles in California.

## 175 Safety Education (2) Fall, Spring

Safety education and accident prevention. Fulfills state requirement in public safety for graduation.

## 198 Field Assignment and Reports (1-2) Fall, Spring

Prerequisite: Active, approved employment under the work-study Program. Analysis and reports of the student's performance; regular group meetings.

## 199 Independent Study (1-3) Fall, Spring

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

## GRADUATE COURSES

220 Administration of Health Education (2) Spring
Prerequisite: Health Education 150 or consent of instructor. Bases for organization, content, and evaluation of health education programs.
221 Appraisal and Guidance in Health and Safety Programs (2) Fall
Prerequisite: Graduate standing. Designed for teachers, counselors and health administrators. Methods through which these professional people can assist others in recognizing their health problems and in understanding the necessity for action. Health programs, their functional organization, their importance, and evaluation.

## 222 Seminar in Health and Safety Education Research (3) Fall, Spring

Prerequisite: Graduate standing. Investigation and analysis of research in health and safety education.

## 299 Graduate Project (3) Fall, Spring

## HISTORY <br> (In the Division of Social Sciences)

Staff: Catren (Department Head), Bonar, DeArmond, Fleming, Greenwalt, Guerrant, Hansen, Jefferis.

## BACHELOR'S DEGREE CURRICULUM

## Major in History

The history major may be undertaken to attain professional, academic, or cultural objectives; such objectives include: an understanding of the past and its contributions to the present, preparation for graduate Work and advanced degrees, proficiency in historical method and historical information in preparation for appointment as specialists in business, in government, and in cultural institutions.

## Lower Division

> United States History or
> History of the Americas 6 units
> European History or
> History of England 6 units
> $U_{\text {pper Division }}$
> Select from the following 6 units An approved combination in Old World History. Choices are 111A-B; 121A-B; 145, 146; 146, 147; 146, 148; 147, 148; 147, 149; 148, 149; 148, 158; 153A-B; 191A-B.
> Select from the following
An approved combination in New World History.
Choices are: 159,$166 ; 162 \mathrm{~A}-\mathrm{B} ; 172,173 ; 173,174 ; 174,175 ; 174,178 ;$
175, 178; 175, 179; 177 and any course in the 170 or 180 groups;
178, 179; 178, 181; 181, 188; 181, 190; 188, 190.

History 197-History Proseminar (to be taken in the senior year) _ 3 units
History and other electives 12 units
Select 6 of the 12 units from related courses in the following fields: anthropology, economics, geography, government, philosophy, sociology, or a national literature (e.g., English literature).

## MASTER OF ARTS DEGREE

The graduate program is built on the foundation of undergraduate preparation. The master's degree requires intensive directed study in history aimed at depth of understanding.

1. Prerequisite: Acceptable undergraduate preparation in history.
2. Area of concentration
a. Social Science 250 A 3 units
b. Approved graduate " 200 " courses in the field of history 9 units


## COURSES OF INSTRUCTION

Prerequisite: One year of college history, or consent of instructor. Exceptions: No prerequisite for History 130 and 175.
111A-B The Ancient Mediterranean World (3-3)
A historical survey of the ancient Mediterranean world from earliest time to the reign of Constantine; main attention to the Greeks and Romans. Begins either semester.

## 121A-B The Middle Ages (3-3)

Europe from the fall of the Roman Empire to the fifteenth century, with emphasis upon cultural, social, and economic contributions to the modern era. Begins either semester.

## 130A-B-C-D Great Personalities (3-3-3-3)

No prerequisite. Sections of this course may be taken independently, Biographical study of history through examination of the careers of representative men and women.
A. Latin America (Fall, 1956)
B. Europe (Spring, 1958)
C. United States (Fall, 1957)
D. Asia (Spring, 1957)

145 Europe: From the Rennaissance to Waterloo (3) Fall, Spring
Survey of Europe from the close of the medieval period to the opening of the nineteenth century; politics, society, and institutions.

## 146 Europe: The Nineteenth Century (3) Fall, Spring

The hundred years from the end of the Napoleonic wars to the out break of World War I, with emphasis upon nationalism, international ${ }^{21}$ rivalries, and economic changes.

## 147 Europe: The Twentieth Century (3) Fall, Spring

The course of Europe in recent times; political, military, economic, and social developments from the inception of World War I to yes terday.
148 Economic History of Europe (3) Fall, Spring
Examination of the economic development of Europe in moder times, with special attention to the industrial revolution and its effect. (Same as Economics 172)

149 Russia and the Balkans (3) Fall, Spring
Russia, Poland, and the Balkan countries; their internal and international history in the nineteenth and twentieth centuries, emphasizing Soviet Russia in international politics.

## 153A-B Great Britain in Modern Times (3-3)

Main currents in the stream of British history from Tudor times to the present day. Particular attention to the modern period and to cultural and social matters. Begins either semester.

## 158 The British Empire (3) Fall

Political and economic development of the British Empire since the late eighteenth century, with major consideration given to the expansion of the colonial empire and the evolution of the modern empire-commonwealth.

159 Canada (3) Fall
Historical survey of the growth of Canada from French colony to Contemporary British Dominion. Treatment both as a part of the British Empire and as one of the Americas.

## 162A-B Latin America (3-3)

History of the Americas south of the United States from earliest times to the present. The first semester covers the colonial period; the second Semester deals with the years since the achievement of independence. Begins either semester.

## 166 Mexico (3) Spring

The course of the Mexican people and nation since the days of the Aztecs; particular attention to social and cultural matters and to the more recent national period.

## ${ }^{\text {" }} 172$ The United States: The Colonial Period (3) Fall

History of the 13 colonies from their European origins to the completion of American independence. Emphasis on colonial life and problems, the revolution, and the early national period.

## ${ }^{*} 173$ The United States: The Nineteenth Century (3) Spring

The evolution of the American people and Nation from Jefferson's administration to the war with Spain. Main topics include sectionalism, civil war and reconstruction, and industrializaton.

## "174 The United States: The Twentieth Century (3) Fall, Spring

Political, economic, and social history of the United States in recent years; the Progressive Era, World War I, the "twenties," the New Deal, World War II, and postwar United States.

[^34]*175 Economic History of the United States (3) Spring
Historical survey of American economic development to the present, particularly industrialization and national legislation in the fields of industry and commerce. (Same as Economics 171.)

## *177 Social History of the United States (3) Fall

The development of America's social and cultural structure; the relationships and contributions to that structure brought about by changes in religions, education, music, art, drama, and architecture.

## *178 Diplomatic History of the United States (3) Fall, Spring

Historical analysis of the foreign relations of the United States from colonial backgrounds to the contemporary scene, with special attention to recent diplomatic problems.
*179 Constitutional History of the United States (3) Fall, Spring
Prerequisites: Six units of American history, or six units of government, and consent of instructor. The Federal Constitution from the historical point of view. Major considerations: the Constitutional Convention, and constitutional controversies and changes since John Marshall.
*181 The Westward Movement and the West (3) Fall, Spring
Study of the advance and characteristics of the American frontier from colonial times through the nineteenth century and the development of the West in the past half century.

## 188 California (3) Fall, Spring

The political, economic, social, and intellectual history of California from Spanish times to the present, with emphasis upon current characteristics, problems, and trends.

## 190 The Pacific Area (3) Fall, Spring

Synthesis of the historical development of eastern Asia, Oceania, and the American lands bordering the Pacific; analysis of the impact of the West upon the East, with special attention to the role of the United States and to contemporary problems of the Pacific.

## 191 A-B The Far East (3-3)

Survey of China, Japan, and the Indies from ancient to recent times, Oriental culture, political and social developments, westernization, current trends, international politics. Begins either semester.

## 197 History Proseminar (3) Fall, Spring

Senior course: Required of all history majors. An introduction to historical method. Prepares the student for graduate seminar work in history; utilizes historical method and bibliography to equip the history major for certain specialized positions in business, government, and cultural institutions.

[^35]199 Independent Study (1-3) Fall, Spring
Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

## GRADUATE COURSES

Minimum prerequisites: A bachelor's degree and superior academic performance in history.

## 201 Historiography and Bibliography (3)

Development of historical writing, with an examination of the works of representative historians and various philosophies of history.

## 274 Seminar in Recent United States History (3)

Discussion of selected topics relating to American cultural, economic, social, and political developments in the more recent national periods from 1865 to the present.
277 Studies in the Social History of the United States (3)
Guided study in the social history of the United States.

## 281 Studies of the American West (3)

Guided student research in the history of the American West.

288 Studies in California (3)<br>Guided student research in the history of California.

## 299 Graduate Project (3)

# HOME ECONOMICS (In the Division of Technical Sciences) 

Staff: Gregory (Department Head), Chamberlain, Cornish, Graves, Miller.

## BACHELOR'S DEGREE CURRICULA

## Major in Homemaking

Designed for the student who desires intensive preparation for home and family life.

| Lower Division |
| :--- |
| Elementary Clothing |
| Textiles |
| Food Preparation |
| Lower or Upper Division |
| A course in marriage and family relationships |$\quad 3$ units

## HOMEMAKING

## Special or General Secondary Teaching Major in Homemaking

Designed for the student who wishes to prepare for a career in teaching in the field of home economics. See also pages 112-114 for professional education requirements.

## Lower Division

| Elementary Clothing - | 3 units |
| :--- | :--- |
| Textiles | 2 units |
| Elementary Nutrition | 2 units |
| Food Preparation | 3 units |
| Home Nursing | 2 units |
|  | 12 units |
| Upper or Lower Division | 3 units |
| A course in marriage and family relationships |  |
| Upper Division Core | 3 units |
| Home Economics 101-Advanced Clothing | 2 units |
| Home Economics 102-Tailoring | 3 units |
| Home Economics 11-Consumer Buying | 3 units |
| Home Economics 121-The Home and Its Furnishings | 3 units |
| Home Economics 131-Advanced Foods | 3 units |
| Home Economics 140-The Child | 1 unit |
| Home Economics 141-Child Care Laboratory | 2 units |
| Home Economics 150-Organizing and Managing the Home | 2 units |
| Home Economics 151-Home Living Experience |  |

## Upper Division Electives

Recommended:
Home Economics 132-Demonstration Techniques (3)
Select from the following
4 units
Art 114-Furniture Design and Construction (3)
Art $147 \mathrm{~A}-\mathrm{B}-$ Textiles and Weaving (2-2)
Home Economics 122A-B-Interior Design (2-2)
Home Economics 103-Costume Design (2)
41 units
Note: When fulfilling science requirements in the general education program, credential majors should take six units in chemistry, biology, physics, physiology, or bacteriology. Students must complete H.E. 101 and H.E. 131 before doing student teaching.

## General Secondary Teaching Minor in Homemaking

Designed for the student who is a candidate for the general secondary credential and who wishes to prepare for a second teaching subject in this field.

```
Lower Division
    Elementary Clothing 3 units
    Food Preparation _ - _ 3 units
Upper or Lower Division
    A course in marriage and family relationships \(\quad 3\) units
Upper Division Core
    Home Economics 101-Advanced Clothing —— 3 units
    Home Economics 111-Consumer Buying \(\quad 3\) units
    Home Economics 121-Furnishing the Home ............... 3 units
    Home Economics 131-Advanced Foods .............. 3 units
    Home Economics 140-The Child _ 3 units
    Home Economics 150-Organizing and Managing the Home 2 units
26 units
```



33-37 units

## COURSES OF INSTRUCTION

## 100 Simplified Dressmaking (3) Fall, Spring

No prerequisite. For nonmajors. An overview of basic techniques; the use of effective shortcuts of value to the homemaker.

## 101 Advanced Clothing (3) Fall

Prerequisite: Elementary clothing. Advanced garment construction involving principles of fabric selection and design, and the necessary skills in working with wool, silk, and synthetic fibers. Consideration of the effect on individual personality of appropriate costume selection. Two 3 -hour labs combined with lecture.

102 Tailoring (2) Spring
Prerequisite: H.E. 101. The principles, processes, and skills involved in women's tailoring. Construction of a wool suit or coat. Two 2-hour labs combined with lectures.

## 103 Costume Design (2) Fall

Development of necessary skills in the designing of costumes for stage, street, and other occasions. Involves principles used in industry. Emphasis upon functional design.

## 111 Consumer Buying (3) Fall

The evaluation of marketed goods and services and their contribution to desired goals of family living. Consideration of expenditures for essentials and luxuries.

115 Marriage and Family Relationships (3) Fall, Spring
Interpersonal relationships of family members and the resulting effects on the individual, family group, and the community. Problems involved in courtship, marriage, and establishing the home.

## 121 The Home and Its Furnishings (3) Fall, Spring

A study of the home, its decoration and furnishings, based upon family needs, income, and interests. Laboratory experience with colors, fabrics, and construction of accessories. Field trips.

122A-B Interior Design (2-2) A-Fall, B-Spring
Prerequisites: One semester of design or H.E. 121. The elements of visual expression and design as related to contemporary concepts of family needs.
131 Advanced Foods (3) Fall, Spring
Advanced study of principles and techniques involved in the selection, preparation, and preservation of foods used in the home. Six hours laboratory.

## 132 Demonstration Techniques (3) Spring

Practice in techniques involved in promotional and educational demonstrations. Field experience through cooperation with local business and utility companies. Two hours lecture; four hours laboratory.
140 The Child (3) Fall, Spring
Prenatal care of the expectant mother. Care and training of the child from infancy to preadolescence to insure maximum physical and emotional well-being.
141 Child Care Laboratory (1) Fall, Spring
Active participation in nursery schools and child care centers, followed by evaluation. Open only to credential majors.

## 150 Organizing and Managing the Home (2) Fall

Study of ways in which the efficient use of time, energy, and money in household management and the selection, care, and use of household equipment can contribute to enriched family living.
151 Home Living Experience (2) Fall, Spring
Prerequisites: H.E. 111, 121, 131, 150. Group living experiences under supervision in the home management house. Practical application of basic principles of homemaking.

198 Field Assignment and Reports (1-2) Fall, Spring
Prerequisite: Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular group meetings.
199 Special Problems in Home Economics (1-3) Spring, Fall
Approval of the staff is required. Independent study of home economics problems designed to meet the individual needs and interests of the major students with upper division standing.

## INDUSTRIAL ARTS <br> (In the Division of Technical Sciences)

Staff: Nihart (Department Head), LaMonica, Lappin, Roysher. Part time: Hoffman, Thomson.

## BACHELOR'S DEGREE CURRICULA

## Major in Industrial Arts

Students desiring to receive the A.B. degree with a major in industrial arts may plan this major with the advice and counsel of the department adviser.

## Special Secondary Limited Credential in Industrial Arts Education

Students who have a high school diploma or equivalent, who have five years of acceptable trade experience in an approved field, and who passed the approved trade tests may upon the completion of 60 hours of acceptable teacher training courses apply to the State Board of Education for the Special Secondary Limited Credential in Industrial Arts Education.

## Special Secondary Teaching Major in Industrial Arts

See also pages 113-114 for professional education requirements.
Designed to prepare teachers for elementary and secondary school positions.

Ordinarily Industrial Arts is offered as a teaching major. Unless authorized by the department, the student must qualify for a Special Secondary Credential in Industrial Arts as a part of major department requirement.

The following sequence of courses is listed as a guideline to students wishing to secure this credential. Upon completion of the required courses, the student may secure his credential upon direct application to the State Department of Education.

| Lower Division | 3 units |
| :--- | :--- |
| Woodwork | 3 units |
| General Metalwork | 3 units |
| Industrial Drawing | 3 units |
| Electricity-Radio | 3 units |
| Graphic Arts |  |
| Upper Division | 2 units |
| Ind. Arts 105-Industrial Arts Orientation | 2 units |
| Ind. Arts 106-Industrial Arts Curriculum Materials. |  |
| Select from the following-at least two areas must be selected |  |
| Woodwork Area |  |
| Ind. Arts 110AB-Cabinetmaking and Carpentry (3-3) |  |
| Ind. Arts 111-General Woodwork for Teachers (3) |  |

```
    General Metal Area
    Ind. Arts. 170AB-General Metal (Advanced) (3-3)
    Ind. Arts 176 AB -Metalsmithing-Forging (2-2)
    Ind. Arts 171-General Metalwork for Teachers (3)
Industrial Drawing
    Ind. Arts \(121 \mathrm{AB}-\) Machine Drawing (3-3)
    Ind. Arts 122AB-Architectural Drawing (3-3)
Electricity-Radio Area
    Ind. Arts 150 AB -Electricity-Radio (Advanced) (3-3)
    Ind. Arts 151-General Electricity and Radio for Teachers (3)
Grapbic Arts Area
    Ind. Arts 141-Graphic Arts (Advanced) (3)
    Ind. Arts 142-Graphic Arts (Advanced) (3)
    Ind. Arts 143-Graphic Arts Special Processes for Teachers (3)
Handicraft Area
    Ind. Arts 130-Handicrafts in the Secondary Schools (3-3)
```


## Recommended Electives

```
Ind. Arts 104-Construction of Teaching Aids (3)
Ind. Arts 113-Introduction to Industrial Arts Design (3)
Ind. Arts 114-Furniture Design and Construction (3)
```


## General Secondary Teaching Major

The industrial arts requirements for the general secondary credential in industrial arts are the same as those for the special secondary credent tial. See also pages 112-113 for professional education requirements. A teaching minor in a different teaching field and a graduate year including additional professional education courses are required for the general secondary credential.

## General Secondary Teaching Minor

| Ind. Arts 113-Introduction to Industrial Arts Design | 2 units |
| :--- | :--- | :--- |
| Ind. Arts 106 -Industrial Arts Curriculum Materials |  |$\quad 2$ units

## MASTER OF ART'S DEGREE

Industrial arts majors who wish to take a master's degree in this field are referred to page 126 . Here is described a program leading to a mas ${ }^{-1}$ ter's degree in Secondary Teaching with specialization in industrial arts.

## COURSES OF INSTRUCTION

## 104 Construction of Teaching Aids (3) Spring

The construction of teaching aids for shop class use, such as cut-away models and mock-ups, assignment boards, checking devices for course coverage, blown-up models, electrical identification panels, procedure boards, and material specimens.

## 105 Industrial Arts Orientation (2) Fall

The background and philosophy of industrial arts education in the United States and foreign countries. Its present place and function in the total program of elementary and secondary education.

## 106 Industrial Arts Curriculum Materials (2) Spring

The development and use of instructional materials for different industrial arts areas. The preparation of objective tests, instruction sheets, and courses of instruction, through individual and group participation. Study of shop planning.

## 110A-B Cabinetmaking and Carpentry (3-3) Fall, Spring

Basic cabinet and furniture construction as used in period and contemporary styles. Operation of woodworking machines and the use of hand tools. Cabinet detailing and stock billing. House framing construction and nomenclature. Safety will be emphasized.

## 111 General Woodwork for Teachers (3) Spring

Review of tool skills and machine operations with emphasis on teaching techniques. The development of sample projects suitable for use in secondary school shop classes. To be taken concurrently with directed teaching.

## ${ }^{1} 13$ Introduction to Industrial Arts Design (2) Fall

Basic skills and appreciation of industrial arts. Lecture, field trips, and laboratory. Student-designed industrial arts projects will be carried to conclusion during the laboratory period.
${ }^{1} 14$ Furniture Design and Construction (3) Spring
Appreciation of good functional furniture design; experiences in designing and constructing furniture. Methods of teaching furniture design and construction. Lectures, field trips, and study of outstanding examples of good furniture design. Recommended for industrial arts teachers.

## 121A-B Machine Drawing (3-3) Fall, Spring

Sketching of machine parts. Principles of mechanical motion; belts and pulleys, gears, cams, etc. Machine design; detail and assembly drawings. Aircraft details and production illustration.
122A-B Architectural Drawing (3-3) Fall, Spring
Fundamentals of architectural drawing, conventions, electrical plumbing symbols, sections, frame construction, building codes and ordinances. Home planning-traditional and contemporary styles. Drawing and Printing a complete set of plans for a single-family dwelling; writing ${ }^{\text {a }}$ set of basic specifications covering these plans.

## 130A-B Handicrafts in the Secondary Schools (3-3) Fall, Spring

Basic skills and understanding of the handicrafts which will enable junior and senior high school teachers to provide worthwhile experiences for class use. Work in model making, leather tooling and carving, plastics, metal tooling, metal enameling, and wood carving.

## 141 Graphic Arts (Advanced) (3) Fall

Application of typographical principles through individual projects. Problems in job, periodical, and book composition, together with imposition, lock-up, and limited instruction in press work according to student abilities and interests. Historic, conventional, and contemporary styles in typography.

## 142 Graphic Arts (Advanced) (3) Spring

Prerequisite: Ind. Arts 141. The study of typography with instruction based upon the student's ability and progress. Additional instruction in press work, linotype, and pamphlet bindery techniques.

## 143 Graphic Arts Special Processes for Teachers (3) Spring

The development of sample projects suitable for use in secondary school shop classes. Includes silk screen, rubber stamp, linoleum block, bookbinding, etc. Teaching techniques stressed. To be taken concurrently with directed teaching.

## 150A-B Electricity-Radio (Advanced) (3-3) Fall, Spring

Emphasis on radio, sound, television, and electronics. Opportunity for practice in radio construction and repair together with the use of variety of electrical testing instruments. Safety instruction given special attention.

## 151 General Electricity and Radio for Teachers (3) Spring

Review of the fundamental principles of electricity and radio with emphasis on teaching techniques. The development of sample projects suitable for use in secondary school shop classes. To be taken concurrently with directed teaching.

## 170A-B General Metal (Advanced) (3-3) Fall, Spring

Comprehensive training in machine shop practice, wrought metal, metal casting, welding, and sheet metal taught in a limited general shop. The class will be conducted as in junior and senior high school shops with all activities going on simultaneously. Safety will be emphasized.

## 171 General Metalwork for Teachers (3) Spring

Review of the various metalworking processes with emphasis on teaching techniques. The development of sample projects suitable for use in secondary shop classes. To be taken concurrently with directed teaching.

176A-B Metalsmithing-Forging (2-2) Fall, Spring
Beginning and advanced techniques of forging metal; forming of flatware, decorative sections, handles, and special applications. (Same as Art 176A-B.)

198 Field Assignment and Reports (1-2) Fall, Spring
Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular group meetings.

## GRADUATE COURSES

204 Development, Use, and Evaluation of Instructional Aids in Industrial Arts (3)

## 205 Supervision and Organization of Industrial Arts Programs (3) Spring

Responsibilities of the supervisor for organizing industrial arts programs on various levels and for the improvement of instruction in the field.

## 206 Teaching Problems in Industrial Arts (3) Summer

Study and investigation of teaching problems in the field of industrial arts. Provision for individual and group studies of special problems. Teaching experience is a prerequisite.

## 233 Seminar in Advanced Industrial Arts Design (3) Fall

Design as applied to projects of metal, plastics, wood, leather, and Other materials. Students must show graduate competence in design and research.

> JOURNALISM
> (In the Division of Language Arts)

Staff: Borders, Scott, Williams.

## BACHELOR'S DEGREE CURRICULUM

## Baccalaureate Major in Journalism

Lower Division
Collecting and Writing News. ..... 6 units
Upper Division
At least one course from the following3 units
Speech 155-Television Techniques (3
"Journalism 130A-News Editing ..... (3)
*Journalism 130B-News Editing ..... (3)
Journalism 160-Industrial Magazine Publishing (3)
Journalism 192-Radio and Television Continuity Writing (3)
At least one course from the following to total
$\qquad$4 units
-Journalism 138-Typography and Mechanics of Newspapers (4)
Journalism 155-Photo-Journalism (3)
Art 133A-Advertising Design ..... (2)
Art 133B-Advertising Design ..... (2)
Att 190A-Industrial Graphics
Art 191A-Catalog Illustration (2)
wing3 units
*Journalism 140-History and Philosophy of Journalism (3)
Government 103-State and Local Government (3)
Government 104-Municipal Government (3)
Government 114 -Public Opinion and Lobbies (3)
Government 170-Public Relations in Government (3) ..... (3)

$\qquad$
Business 104-Principles of Marketing (3)
*Journalism 150-Contemporary Editorial Problems (3)Economics 100-Economics of Industry (3)
Economics 112-Development of Economic Thought (3)Economics 190-Current Economic Problems (3)
At least one course from the following
(3)
Business 140-Principles of Advertising (3)
Business 141-Advanced Advertising (3)
Business 148-Public Relations Methods for Business (3)
Journalism 170-Newspaper Management (3)
*Journalism 171-Newspaper Advertising (3)
Home Economics 111-Consumer Buying (3)
Home Economics 115-Marriage and Family Life (3)
Journalism 190-Press and World Affairs2 units
Journalism 191-Law of the Press ..... 2 units
At least one course from the following, at least ..... 2 units
English 106A-Preprofessional Writing (3)
English 106C-Short Story Writing (2)

- Journalism 196-Special Projects in Journalism (2)
Journalism 198-Field Assignment and Reports (2)
Speech 110-Public Speaking (3)
English 185-Philosophy of Literature (3)
Language Arts 197-Language Arts and the Democratic Tradition2 units

[^36]
## Teaching Major in Journalism

No teaching major is offered in the field of journalism exclusively. Students interested in a composite-field teaching major which includes journalism should refer to pages 192-193, where the Language Arts Major is outlined.

## MASTER OF ARTS DEGREE

See "Language Arts," page 194.

## COURSES OF INSTRUCTION

Ability to type or concurrent enrollment in typing is a prerequisite for all students majoring in journalism.
130A-B News Editing (3-3) A-Fall; B-Spring
Prerequisites: Two semesters of collecting and writing of news or equivalent, or consent of instructor. Techniques of copyreading and headline writing, theories of news selection and makeup, examination of newspaper editorial practice.

## 138 Typography and Mechanics of Newspapers (4) Spring

A study of the techniques of publishing, including typography, typesetting, photoengraving, printing methods and machines. A background for understanding and supervising printing problems.
140 History and Philosophy of Journalism (3) Fall
Study of the development of journalism, particularly in the United States, with an introduction to important papers and personalities. Development of freedom of the press with consideration of its responsibilities under law.

## 145 Feature Article Writing (3) Spring

Open to all upper division students and to sophomores who have completed two semesters of collecting and writing of news, and one semester of copyreading and headline writing, or their equivalents. Deals princiPally with the writing of articles for the Sunday feature section of the newspaper and for trade and regional magazines. Analysis of the requirements of all types of publications.

## 150 Contemporary Editorial Problems (3) Fall

An examination of current editorial practice to determine the philos${ }^{0}$ phy and social attitudes of present day publishers. Integrates the broad field of sociology and philosophy with journalism.

## 155 Photo-Journalism (3) Spring

News photography, including Speed Graphic camera, flash, exposure, development, and printing. Evaluating the finished news picture. Cam${ }^{\text {eras }}$ and dark rooms provided; students must furnish a minimum of supplies.

## 160 Industrial Magazine Publishing (3) Fall, Spring

The editing and business management of the house organ and industrial magazine, stressing format, copy, illustration, and promotion. For the beginner or, as a refresher course, for the working editor.

## 164 J High School Journalism (2) Spring

Theory and technique of advising school newspaper and yearbook staffs. Relation of staff assignments to classroom instruction. Designed for credential candidates in Education, English, and Language Arts who may supervise school publications. Practice in rating the quality of secondary yearbooks and newspapers. Not a methods course; emphasis on subject field skills.

## 170 Newspaper Management (3) Fall

Analysis of the economy, organization, and business operation of daily and weekly newspapers. Circulation, advertising, promotion, production, and plant design problems. Practice in simple cost accounting and bookkeeping procedures useful in newspaper business management.

## 171 Newspaper Advertising (3) Spring

Principles of advertising with emphasis on the newspaper as an advertising medium. Relationship of advertising to the newspaper as a whole. Instruction and practice in preparing pictures, layouts, and copy for newspaper use, including attention to mat services and available syndicated materials.

## 190 The Press and World Affairs (2) Spring

Comparative world journalism with an examination of sources of news from various capitals. Analysis of propaganda. Comparative study of the four streams of news: local, state, national, and international.

## 191 Law of the Press (2) Fall

Chiefly a study of the law of libel. Consideration of the right of privacy, contempt of court, freedom of the press, copyright, statutory limitations, postal regulations and the right to print news of public affairs. Privileged matter under law.

## 192. Radio and Television Continuity Writing (3) Fall

The analysis and preparation of local news and commercials, musical introductions, and special news features for radio and television.

## 196 Special Projects in Journalism (1-2) Fall, Spring

Prerequisite: Consent of instructor. Recommended for members of the College Times or Night Times staff, the Pitchfork staff, and the Statement staff. One hour class plus three hours additional supervised
activity weekly. May be taken in any combination and may be repeated for a total of eight units.

196B College News Bureau (2)
196N College Times or Night Times (2)
196M Statement (1)
196Y Pitchfork (1)

## 198 Field Assignment and Reports (1-2) Fall, Spring

Prerequisite: Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular group meetings.

## 199 Independent Study (1-3) Fall, Spring

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

## 220 Proseminar in Journalism (3)

Combines intensive training in advanced journalistic writing at the graduate level and study of outstanding contemporary publications and the contemporary publication field. Analysis of leading contemporary magazines, pocket reprints of full length works, and library editions of works reprinted from magazines selected on these bases: (1) demonstrated significance and appeal to large audiences; (2) contemporary documentary relevance; (3) intrinsic merit of writing.

## LANGUAGE ARTS

## (In the Division of Language Arts)

Staff: Faculty from cooperating disciplines within Language Arts Division.

## BACHELOR'S DEGREE CURRICULA

## Major in Language Arts

Ordinarily Language Arts is offered as a teaching major. Students wishing to qualify for a bachelor's degree in this field should follow the requirements listed below for the general secondary teaching major.

## General Secondary Teaching Major

See also pages 112-113 for professional education requirements. A teaching minor in a different teaching field is also required for the getreral secondary credential.
This broad field major in language arts is a functionally organized composite program for students training to become secondary school teachers.

Core Requirements: To insure familiarity with the practical contributions each of the language arts can make to a broad field teaching major, to provide actual experience in the functional integration of courses into a common program, and to demonstrate the importance of broad field instruction at the secondary level, all students preparing for teaching majors in this field take a common core of lower division and upper division courses.
Candidates for the General Secondary Credential in Language Ar ${ }^{\text {ts }}$ are required to have a collegiate course in each of the following areas composition, literature, speech, drama or journalism, and motion picturle or radio.

## Lower Division


At least one course from the followingEnglish 130B-High School Literature (3)English 158-The Romantic Age (3)English 160 -The Victorian Age (3)English 170B-Masters of American Literature 1860-1950 (3)
Core Supplements: With the approval of his major adviser, the student supple-ments his core program by taking at least six additional units in one of the fol-lowing options:
DRAMA SUPPLEMENT
At least two courses from the following ..... 6 units
Speech 150A or B-Principles of Directing (3)
Speech 112A or B-Advanced Acting (3)
Speech 196A, B, C, or D-Special Projects in Speech and Drama (3)
JOURNALISM SUPPLEMENT
At least two courses from the following ..... 6 units
Journalism 130A or B-News Editing (3)
Journalism 140-History of Journalism (3)
Journalism 150-Contemporary Editorial Problems (3)
LITERATURE SUPPLEMENT
English 117J-Interpreting Shakespeare ..... 3 units
3 units English 158-The Romantic Age (3)
English 160-The Victorian Age (3)
English 160-The Victorian Age (3)
English 170B-Masters of American Literature 1860-1950 (3)
English 170B-Masters of American Literature 1860-1950 (3)
English 173-New England Renaissance (3)
English 177-Major American Novelties (3)
English 177-Major American Novelties (3)
English 181A-Contemporary World Prose
English 181A-Contemporary World Prose ..... (3) ..... (3)
SPEECH SUPPLEMENT
At least two courses from the following ..... 6 units
Speech 100-Group Discussion (3)
Speech 110-Public Speaking (3)Speech 120-Oral Interpretation (3)
$G_{\text {raduate ( }}$ (Fifth Year)Guided Electives: With the approval of his assigned graduate adviser, each stu-dent working for a teaching credential in the broad field major of Language Artsselects a minimum of six units in drama, English, journalism, language arts, orspeech. These courses are chosen to meet actual placement requirements in thestudent's proposed teaching field. Often these courses may be in the area of thestudent's undergraduate core supplement, provided additional work in such anarea is relevant to his teaching objective.
At least two courses from the following with approval of adviser ..... 6 units
English 206-Proseminar in Writing (3)
English 220-Proseminar in Literature (3)Language Arts 220 -Proseminar in Communication Problems (3)
Speech 215-Performance (3)
Speech 220D-Proseminar in Dramatic Arts (3)Speech 220S-Proseminar in Speech Arts (3)

## General Secondary Teaching Minor

See also pages 112-113 for professional education requirements. A teaching major in a different field is also required for the general secondary credential.
Lower Division
At least one course from the following ..... 3 unitsEnglish 9 or 10-Survey of English Literature (3)
Collecting and Writing News (3)
Elements of Public Speaking (3)
Upper Division
Journalism 164J-High School Journalism ..... 2 units
Language Arts 164 M -Mass Communication Arts ..... 2 units
Speech 164D-High School Dramatics ..... 2 units
Speech 164S-High School Speech Arts ..... 2 units
At least one course from the following ..... 3 units
English 121-Interpreting Fiction (3)
English 123-Interpreting Poetry (3)
English 130A-High School Composition (3)
At least one course from the following ..... 3 units
English 130B-High School Literature (3)English 158-The Romantic Age (3)
English 160-The Victorian Age (3)
At least one course from the following3 units
English 170B - Masters of American Literature 1860-1950 (3)
English 173-New England Renaissance (3)
English 181A-Contemporary World Prose (3)

## MASTER OF ARTS DEGREE

## 1. Prerequisites:

a. A formal oral conference with the assigned graduate adviser is required before the student makes application for candidacy.
b. Undergraduate preparation: The normal prerequisite for entry upon the mas ${ }^{5^{-5}}$ ter of arts program in language arts is a baccalaureate major in English, for eign language, language arts, or speech. The graduate faculty will, however, consider applications from students who can meet all course prerequisites, and who have completed at least 24 units of approved upper division work in language arts fields directly related to their teaching objectives.
2. At least four courses from the following
English 220-Proseminar in Literature (3) Journalism 220-Proseminar in Journalism (3) Language Arts 220-Proseminar in Communication Problems (3) Speech 220S-Proseminar in Speech Arts (3)
Speech 220D-Proseminar in Dramatic Arts (3)
3. Select with the approval of the graduate adviser
Graduate (and selected upper division) courses in the language arts related to student's teaching objective.
4. Outside the field of language arts... 6 units
5. Electives $\quad 9$ units
6. Final comprehensive examination.

## COURSES OF INSTRUCTION

## 100A Written Expression (3) Fall, Spring

Prerequisite: One semester of freshman composition, grade of "C" in English 99, or junior standing. Principles of grammar, rhetoric, and semantics applied to practical problems in written communication. Rapid review of composition problems; regular practice in reading, writing, speaking, and listening.

## 100B Oral Expression (3) Fall, Spring

Principles of oral communication. Emphasis on definition, exposition, organization, and reasoning. Conducted through individual and group activities.

# 104 Grammar Review (2) Fall, Spring Register for English 104. 

164D High School Dramatics (2) Spring
Register for Speech 164D.

## 164J High School Journalism (2) Spring

Register for Journalism 164J.

## 164M Mass Communication Arts (2) Fall

Educational importance of motion pictures, radio, and television in the school and home. Extended practice in comparative analysis and evaluation of most of the mass communication arts. Not a methods course; emphasis on subject field skills.
164 S High School Speech Arts (2) Fall
Register for Speech 164 S .
197 Language Arts and the Democratic Tradition (2) Fall, Spring
Prerequisite: Second semester senior standing. Role of language arts in democratic life in terms of the literature which has mirrored, analyzed, and disseminated the major philosophical concepts of democracy. Reading from significant novels, essays, poems and other language arts forms within their cultural and historical contexts.

## GRADUATE COURSES

220 Proseminar in Communication Problems (3) Fall
Selected problems related to the teaching of communication skills.

# MATHEMATICS <br> (In the Division of Natural Sciences) 

Staff: Urner (Adviser), Rasof.

## BACHELOR'S DEGREE CURRICULA

## Major in Mathematics

Designed for students who plan to pursue advanced work in mathematics or accept employment in industry or government work involving mathematics.

## Lower Division

Basic courses in Mathematics up to and including integral calculus . 12-20 units (Duplicate courses or courses on high school level taken in the junior college are not acceptable.)

```
Upper Division
    Select from the following
                16-24 units
            Mathematics 107-Introduction to Modern Geometry (3)
            Mathematics 108-Theory of Algebraic Equations(3)
            Mathematics 109-Topics in History of Mathematics (3)
            Mathematics 110-Overview of Secondary Mathematics (3)
            Mathematics 112-Third Course in Calculus (3)
            Mathematics 116-Differential Equations (3)
            Mathematics 117AB-Numerical Calculus (3)
            Mathematics 121AB-Advanced Calculus (3-3)
            Mathematics 130-Modern Algebra (3)
            Mathematics 131AB-Mathematical Statistics (3-3)
```


## General Secondary Teaching Major

Designed for students who plan to become secondary teachers. See also pages 112-113 for professional education requirements. A teaching minor in a different teaching field is also required.

## Lower Division

Basic courses in mathematics up to and including integral calculus. (Duplicate courses or courses on the high school level taken in the junior college not acceptable)

12-20 units

```
Upper Division
    Mathematics 107-Introduction to Modern Geometry 3 units
    Mathematics 108-Theory of Algebraic Equations...................... 3 units
    Mathematics 109-Selected Topics in History of Mathematics ... 3 units
    Mathematics 110-Overview of Secondary Mathematics...................... 3 units
    Select from the following
        Mathematics 112-Intermediate Calculus (3)
        Mathematics 116-Differential Equations (3)
```



36 units
Note: When 24 units of upper division work in the teaching major are completed the candidate may apply for the B.A. degree, providing other requirements for the degree have been met.

## General Secondary Teaching Minor

Designed for students who plan to become secondary teachers. See also pages 112-113 for professional education requirements. A teaching major in a different teaching field is also required.
Lower Division
Basic courses in mathematics which satisfy prerequisites for upper
division courses
Upper Division

| Courses approved by adviser |
| :--- |


| $12-14$ units |
| :--- |

COURSES OF INSTRUCTION

15 Basic Mathematics for Business and Social Sciences (3)
Prerequisite: None. Fundamental concepts and skills in arithmetic and algebra needed in business and social sciences.
107 Introduction to Modern Geometry (3) Fall
Prerequisite: Introduction to Mathematical Analysis or equivalent. A study of some of the synthetic geometry which has been developed since the time of Euclid, followed by a brief survey of non-Euclidean geometry.
108 Theory of Algebraic Equations (3) Fall, Spring
Prerequisite: Calculus. Complex numbers, properties of polynomials, with especial reference to the field concept; equations in the fields of rational numbers, real numbers. Elimination, resultants; algebraic extensions of a field, cubic equations, constructability problems.
109 Selected Topics in the History of Mathematics (3) Fall, Spring
Prerequisite: Calculus or equivalent. Traces the development of fundamental concepts and techniques in the fields of algebra, geometry and trigonometry.

## ${ }^{1} 10$ Overview of Secondary Mathematics (3) Fall, Spring

Prerequisite: Calculus. A study of the subject-matter of secondary Thathematics, directed toward a thorough understanding of basic concepts and ideas.

112 Intermediate Calculus (3) Fall, Spring
Prerequisite: Calculus. Solid analytic geometry, functions of several variables, multiple integration and applications.

## 116 Differential Equations (3) Fall, Spring

Prerequisite: Calculus. A first course in differential equations emphasizing their application in science and engineering.

## 117A Numerical Calculus (3) Fall

Prerequisite: Calculus. Designed to bridge the gap between classroom mathematics and such applications as the calculations in the aircraft industry or in actuarial work. Includes solution of equations (including methods of approximation), interpolation, numerical integration, numerical solution of differential equations. (Formerly Mathematics 117.)

## 117B Numerical Calculus (3) Spring

Prerequisite: Calculus. A continuation of 117 A , but may be taken before 117 A . Includes finite differences, orthogonal polynomials, least squares, harmonic analysis, smoothing of data.

## 121A Advanced Calculus (3) Fall

Prerequisite: Calculus. An extension of the techniques and ideas of analysis into higher fields essential to more advanced or graduate work. Special emphasis on applications to science and engineering. Includes vector analysis, and an advanced study of functions of several variables. (Formerly Mathematics 121.)

## 121B Advanced Calculus (3) Spring

Prerequisite: Mathematics 121 A or equivalent. A continuation of Mathematics 121A. The principal topics are infinite series and functions of a complex variable. (Formerly Mathematics 122.)

## 130 Modern Algebra (3) Spring

Prerequisite: Mathematics 108. An introduction to some of the principal concepts of modern algebra, including integral domains, groups, rings, and fields, as well as vector spaces and matrices.

## 131 A Introduction to Mathematical Statistics (3) Spring

Prerequisite: Calculus or equivalent. A basic course in the theory and application of statistical methods. Theoretical and empirical frequency distributions of one or two variables. Large and small sample theory. Correlation.

## 131B Introduction to Mathematical Statistics (3) Fall

Prerequisite: Mathematics 131A. Nonparametric methods. Testing "goodness of fit." Testing statistical hypotheses. Design of experiments.

## 198 Field Assignment and Reports (1-2) Fall, Spring

Prerequisite: Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular' group meetings.

## MUSIC

## (In the Division of Fine Arts)

Staff: Snyder (Department Head), Baxter, Beckstead, Cook, Griffith, Leidig, Mullins, Reilly, Schliestett, Schubert, Susca, Timmerman, Zack.

## BACHELOR'S DEGREE CURRICULA

Curricula in music are designed for (1) those seeking one of the several teaching credentials; (2) those who are preparing for a professional career in performance, arranging, composition, or writing; (3) those Who have avocational interests in music; and (4) those who seek experiences which will extend and enrich their general cultural background. Two patterns for the fulfillment of degree requirements are offered, one satisfying the requirements for the special or general secondary credential and one providing for considerably more freedom of election for those students motivated by musical interests other than teaching in the public schools.

## Special Secondary Teaching Credential

Designed for those who expect to teach music in the public elementary or secondary schools. See also pages 113-114 for the professional education requirements.

| Lower Division | 6 units. |
| :--- | :--- |
| Solfege | 6 units |
| Harmony | 4 units |
| Piano (1 unit per semester) | 4 units |
| Voice (1 unit per semester) | - |
|  | 20 units |

Certain courses taken in the lower division in excess of the above minimum may be accepted for equivalent upper division requirements.

| Uper Division |  |
| :--- | :--- |
| Music 105A-E-Instruments | 4 units |
| "Music 114-Functional Piano for Music Education Majors | 1 unit |
| Music 131AB-History of Music in Western Civilization | 6 units |
| Music 158AB-Music Theory and Composition | 6 units |
| Music 159A-Musical Form and Analysis | 2 units |
| Music 160 A or B-Orchestration and Arranging | 2 units |
| Music 161-Choral Conducting | 2 units |
| Music 162-Instrumental Conducting | 2 units |
| Music 163-Counterpoint | 2 units |
| Music 179-Senior Recital Preparation | 1 unit |
| "May be waived by examination. |  |


| Elect from the following courses <br> Music $115,135,155$ | 2 units |
| :--- | :--- |
| Elect from the following courses |  |
| Music 106, 107,108, 115, 135,145,146, 147, 155, 175 | 4 units |
|  | -34 units |

Note: Candidates for the special or general secondary credential must have completed Music 114, at least one Education 193 methods course in music, and Music 161 prior to enrolling for directed teaching. Those students who expect an instrumental directed teaching assignment must also have completed the Music 105 requirements of the credential program.

Those students who have completed their music requirements for the special or general secondary credential at another institution must complete at least 4 units in music courses and participate in one performance organization at Los Angeles State College before they may expect to obtain the department's recommendation for directed teaching.

## Bachelor's Degree Major in Music

| Lower Division |  |
| :--- | :--- |
| Solfege | 6 units |
| Harmony | 6 units |
| Piano (1 unit per semester) | 4 units |
| Voice (1 unit per semester) | 2 units |
|  | -18 units |

Certain courses taken in the lower division in excess of the above minimum may be accepted for equivalent upper division requirements.

| Upper Division |  |
| :---: | :---: |
| Music 131AB-History of Music in Western Civilization 6 units |  |
| Music 158AB-Music Theory and Composition | 6 units |
| Music 160A-Orchestration | 2 units |
| Music 159A-Introduction to Form Analysis | 2 units |
| Music 161-Conducting | 2 units |
| Music 163-Counterpoint | 2 units |
| Music 179-Senior Recital Preparation | 1 unit |
| Elect from the following courses | 10 units |
| Music 132, 167, 172, 173, 160B, 159B, 162, 105ABCDE, 168 |  |
| Elect from the following courses . | 2 units |
| Music 115, 135, 155 |  |
| Elect from the following courses | 4 units |
| Music 106, 107, 108, 115, 135, 145, 146, 147, 155, 175 |  |

## units

## General Secondary Teaching Major

The music requirements for the general secondary credential in music are the same as those for the special secondary credential. See also pages 112-113 for professional education requirements. A teaching minor in a different teaching field and a graduate year including additional professional education courses are required for the general secondary credential.

## General Secondary Teaching Minor

See also pages 112-113 for professional education requirements. A teaching major in a different teaching field is also required for the gent eral secondary credential.

Upper Division
From Music 154, 132, 167, and 173-Music History and Literature 4 units
Music 161 or 162 -Courses in conducting ..... 2 units
From Music 112, 114,* 148, or 174-Piano courses ..... 2 units
From Music 105, 109, 110, or 130-Instruments or voice ..... 2 units
Note: Prospective teachers should plan to take Education $193 \mathrm{Mu}, 193 \mathrm{MuA}$ or 193 MuB prior to or concurrently with directed teaching. Participation in a musical organization is re- quired each semester.

## MASTER OF ARTS DEGREE

1. Prerequisites
a. A baccalaureate degree with a major in music.b. The completion of the instrumental, vocal, and piano requirementsfor the special secondary credential.
c. Ability to perform acceptably as an instrumentalist on a standard orchestral instrument, piano, organ, or as a vocalist; and as a con- ductor.
2. Area of Specialization
a. Music Education
Music 202-Modern Trends in Elementary Music Education (2)4 unitsMusic 203-Advanced Problems in Secondary Choral Methods (2)Music 204-Advanced Problems in Instrumental Methods (2)
b. Music4 units
Music 216-Piano, Voice or Orchestral Instruments (2) Music 261-Advanced Choral Conducting or Music 262-Advanced Instrumental Conducting (2)
c. Theory ..... 2 units
Selected from any approved upper division or graduate " 200 " course.
d. Music History and Literature ..... 2 units
Selected from any approved upper division or graduate " 200 " course.
e. Music 299-Graduate Project ..... 3 units
3. Outside the field of music ..... 6 units
4. Electives ..... 9 units

Selected from music theory, applied music, music history and literature, professional education, liberal arts and sciences, or fine arts.

## COURSES OF INSTRUCTION

## 103A Music for Children (2) Fall, Spring

Methods of teaching music in the elementary schools: rhythmic activities, use of simple instruments, and music reading. Basic methods course for general elementary and kindergarten-primary credentials.

## 103B Music for Children (2) Fall, Spring

Prerequisite: Music 103A. Methods of teaching music in the elementary schools: singing, creative, and listening experiences.

## 105A-B Stringed Instruments (1-1) Fall, Spring

Instruction in violin, viola, cello, and string bass. Problems of tone production, right- and left-hand technique, knowledge of fingering. First

[^37]semester: violin or viola and cello or bass. Second semester: experience on the remaining two instruments; ensemble experience.

## 105C Brass Instruments (1) Fall, Spring

Class instruction in brass instruments. Correct embouchure, tone production, and execution. Knowledge of basic playing techniques and fingering on all brass instruments. Participation in beginning band or orchestra.

## 105D Woodwind Instruments (1) Fall, Spring

Class instruction in woodwind instruments. Correct embouchure, tone production, and execution. Knowledge of basic playing techniques and fingerings on all woodwind instruments.

## 105E Percussion Instruments (1) Fall, Spring

Essential rudiments for snare drum. Extensive experience in reading snare drum literature. Tuning and technique in tympani playing. Introduction to other essential percussion instruments.

## 106A-B-C-D Brass Ensemble (1-1) Fall, Spring

Prerequisite: Consent of instructor. For advanced students. Rehearsal and performance of standard brass ensemble literature, including brass choir, sextets, quintets, and quartets.

## 107 A-B-C-D Woodwind Ensemble (1-1) Fall, Spring

Prerequisite: Consent of instructor. For advanced students. Rehearsal and performance of standard woodwind ensemble literature, including woodwind choir, sextets, quintets, and quartets.

## 108A-B-C-D String Ensemble (1-1) Fall, Spring

Prerequisite: Consent of instructor. For advanced students. Rehearsal and performance of standard chamber music for strings alone and strings with piano.

## 109A-B Elements of Vocal Technique (1-1) Fall, Spring

Prerequisite: Ability to read music notation. The techniques of voice production; study of song interpretation; participation in vocal ensembles.

## 110A Intermediate Voice (1) Fall, Spring

Prerequisite: Music 109A or B, or equivalent. A continuation of the study of vocal technique and study of representative song literature from the classic and preclassic eras.

## 110B Intermediate Voice (1) Fall, Spring

Prerequisite: Music 109A or B, or equivalent. A continuation of the study of technique and study of representative song literature from the romantic era.

110C Intermediate Voice (1) Fall, Spring
Prerequisite: Music 109A or B, or equivalent. A continuation of the study of vocal technique and study of representative song literature from the modern era.

## 112A-B-C-D Class Piano Instruction (1-1-1) Fall, Spring

Problems of piano technique, sight reading, and repertory. Introduction to keyboard harmony.

## 113 Elements of Harmony for Teachers (2) Spring

Prerequisite: Music 103A, or Music 112A, or qualifying examination. The elements of harmony applied to singing and the keyboard. Designed to assist classroom teachers in teaching music and creating simple piano accompaniments.

114 Functional Piano for Music Education Majors (1) Fall, Spring
Prerequisite: Music 112C. The practical application of harmonic principles to develop the keyboard facility demanded in the public schools; transposition, choral score reading, sight reading, improvisation of accompaniments, and directing from the piano.

## 115A-B-C-D Band (1-1-1-1) Fall, Spring

Prerequisite: Consent of instructor.

## 116A-B-C-D Individual Lessons on Instruments or in Voice (1-1-1-1) Fall, Spring

On-campus, private lessons with approved instructors. Special fee.
119A-B Review of Harmony and Ear Training (2-2) Fall, Spring
Prerequisite: One year of elementary harmony and ear training. Review of diatonic harmony and elements of music writing. Melodic and harmonic dictation and sight singing. Keyboard applications. Does not count toward music major requirements.

## 123 Music Appreciation Materials for Elementary School Teachers

(2) Spring

Materials and methods for conducting listening activities and teaching music appreciation. Elementary level. (Formerly called Appreciation Materials for Schools.)

## 124 Piano Methods and Materials (2) Spring

Practical procedures for teaching piano, from preschool child to adult level. Methods and materials for public school class and private teaching.

## 125 General Music in the Junior High School (2) Fall

Methods and materials for junior high level. Consideration of problems of changing voice, voice testing, and part-singing. The general music class, (Formerly called Junior High School Music Methods.)

127 A-B-C-D Advanced Strings (1-1-1-1) Fall, Spring
Prerequisite: Consent of instructor. Class instruction in technique and repertoire for advanced students of violin and viola.

## 129A-B-C-D Advanced Brass (1-1-1-1) Spring

Prerequisite: Consent of instructor. Class instruction in technique and repertoire for advanced students of brass instruments.

## 130A-B-C-D Advanced Voice (1-1-1-1) Fall, Spring

Prerequisite: Consent of instructor. Performance of art song, opera, and oratorio literature. Advanced techniques.
131 A-B History of Music in Western Civilization (3-3) Fall, Spring
A survey course considering music in general culture; stylistic development of music with emphasis on its relationship to the history of the other arts. A: Medieval through Baroque; B: Preclassical to modern.

## 132A Italian and French Operatic Literature (2) Fall

A brief history of development of opera through seventeenth and eighteenth centuries, with detailed analysis, using scores and recordings of representative operas.

## 132B German and Modern Opera (2) Spring

Operatic innovations of late nineteenth and twentieth centuries, with detailed analysis using scores and recordings of several examples of German and modern operas, chosen from the standard operatic repertoire.

## 135A-B-C-D Orchestra (1-1-1-1) Fall, Spring

Prerequisite: Consent of Instructor.
145A-B-C-D Madrigal Singers (1-1-1-1) Fall, Spring
Prerequisite: Consent of instructor.
146A-B-C-D Women's Glee Club (1-1-1-1) Fall, Spring
Prerequisite: Consent of instructor. Designed for nonmusic majors.
147A-B-C-D Men's Glee Club (1-1-1-1) Fall, Spring
Prerequisite: Consent of instructor. Designed for nonmusic majors.
148A-B-C-D Intermediate Piano (1-1-1-1) Fall, Spring
Prerequisite: Music 112 C or equivalent. Technical study and performance of some of the smaller compositions in the standard piano literature.

## 154 Music Appreciation (3) Fall, Spring

Introduction to sufficient rudiments of music to play simple instruments, and study of significant music literature (where possible through participation.) Attendance at eight community concerts required. For nonmusic majors only. (Formerly called Music Appreciation for Teachers (2).)

## 155A-B-C-D A Cappella Choir (1-1-1-1) Fall, Spring

Prerequisite: Consent of instructor.

## 158A-B Music Theory and Composition (3-3) Year course

Prerequisite: One year of harmony and some ability to play the piano. A review of diatonic harmony; study of chromatic harmony, melodic and harmonic dictation; chromatic alteration; practical application to composition in elementary forms.

## 159A Musical Form (2) Fall

Prerequisite: One year of harmony and musicianship. Analytic techniques for the study of balance in the organization of musical material. (Formerly called Introduction to the Analysis of Form.)

## 159B Advanced Problems in Musical Form (2) Spring

Prerequisite: Music 159A. Analytic techniques for the study of balance in the organization of music material in contrapuntal textures and in larger forms. (Formerly called Advanced Form.)

## 160A-B Orchestration and Arranging (2-2) A-Fall, B-Spring

Prerequisite: Elementary harmony. It is recommended that Music 105 A and D be completed prior to this course; Music 105C and E may be taken concurrently. The theory and practice of writing for instrumental ensembles. The study of orchestral scores and an introduction to symphonic orchestration.

## 161 Choral Conducting (2) Fall, Spring

Principles of choral conducting; problems of choral organization.
162 Instrumental Conducting (2) Fall, Spring
Prerequisite: Music 161. It is recommended that Music 105A, E, and C or D be completed prior to this course. Experience offered in transposition, score reading, baton technique, and interpretation of symphonic literature. Recognition of psychologically sound rehearsal procedure. Experience given conducting performance organizations.

## 163 Counterpoint (2) Fall, Spring

The study of eighteenth century contrapuntal techniques, including some work in the species; invertible counterpoint; motive development; two- and three-part inventions. Introduction to linear counterpoint.

167A-B History and Literature of the Symphony Orchestra (2-2) Fall, Spring
Masterpieces of symphonic literature. Classic, romantic, and contemporary developments; study of scores and recordings.

## 168A-B Composition (2-2) Fall, Spring

Prerequisite: Music 158B (may be taken concurrently). Composition in small and large forms with parallel analysis.

## 169 Harmonic Analysis (2) Fall

Prerequisite: Music 158A-B (may be taken concurrently). Analysis, by scores, recordings, and performance; classification and practical application of the harmonic procedures of Mozart, Beethoven, Brahms and Wagner.

## 171 A-B-C-D Opera Workshop (1-1-1-1) Fall, Spring

Problems of opera production; presentation of typical operatic ensembles and scenes. Open to qualified singers.

## 172A Piano History and Literature (2) Fall

Survey of pre-piano and piano literature; changes in keyboard technique and style. Representative piano literature performed and analyzed.

## 172B Chamber Music History and Literature (2) Spring

Development of forms and survey of the literature for string quartets, trios, quintets, and other small combinations.

## 172C Contemporary Techniques (2) Fall

Study of the techniques used in contemporary composition and application to practical writing.

## 172D American Music (2) Spring

American music from colonial times to the present; brief survey of Latin American music.

## 173A Art Song (2) Fall

A survey of literature for solo voice from earliest times to the present.

## 173B History and Literature of the Larger Choral Works (2) Fall

Historical and analytical study of oratorios, masses, cantatas, and other large choral works.

## 174A-B-C-D Advanced Piano (1-1-1-1) Fall, Spring

Prerequisite: Consent of instructor. Advanced repertory and interpretive coaching for public performance, with consideration of materials selected from the different periods of musical composition.
175A-B-C-D Piano Ensemble (1-1-1-1) Fall, Spring
Prerequisite: Consent of instructor.

## 179 Senior Recital Preparation (1) Fall, Spring

Required of all music majors. Instruction in advanced technical problems, style, repertoire and performance experience.

## 198 Field Assignment and Reports (1-2) Fall, Spring

Prerequisite: Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular group meetings.

## 199 Independent Study (1-3) Fall, Spring

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

## GRADUATE COURSES

## 202 Modern Trends in Elementary Music Education (2) Fall

Prerequisite: A baccalaureate degree with a major in music education. Modern trends in philosophy of education and how to apply them in elementary school music classes.

## 203 Advanced Problems in Secondary Choral Methods (2) Fall

Prerequisites: Education 193Mu and Education 193MuB. An advanced course in methods of teaching choral music; a survey and evaluation of current choral materials, with classification as to appropriate levels; consideration of problems involved in various type of choral activities.

## 204 Advanced Problems in Instrumental Methods (2) Spring

Prerequisites: Education 193Mu, and Education 193MuA, or equivalent. An advanced course in the methods of teaching instrumental music on the various levels of the public schools; consideration of materials suitable for various types of instrumental organizations; study of the problems involved in setting up a successful instrumental music program.

## 207 Psychology of Music (2) Spring

A study of musical growth and development. The physical, mental, emotional, and social impacts of music upon the lives of people. Various learning theories explored and related to the development of musical insights, appreciations, and skills.

## 208A-B Advanced Composition and Analysis (2-2) Fall, Spring

Prerequisite: Music 168A-B or equivalent. Free composition in all the vocal and instrumental forms.

209A-B Advanced Orchestration and Arranging (2-2) Fall, Spring
Prerequisite: Music 160A-B or equivalent. Specialized work in arranging for ensembles including the symphonic band and standard symphony orchestra.

## 212 Music of the Baroque Period (2) Fall

Prerequisite: Music 131A-B. Styles, forms, composers, and compositions from the early Baroque through the works of J. S. Bach.

## 213 Music of the Classical and Pre-classical Period (2) Spring

Prerequisite: Music 131A-B. Styles, forms, composers, and compositions of preclassical and classical masters of the eighteenth century.

214 Music of the Romantic Period (2) Fall
Prerequisite: Music $131 \mathrm{~A}-\mathrm{B}$. From the beginning of the romantic period to the late nineteenth century; symphony, romantic opera, artsong, tone-poem.
215 Music of the Twentieth Century (2) Spring
Prerequisite: Music 131A-B. Contemporary trends and techniques. Study of representative works by Debussy, Ravel, Stravinsky, Hindemith, Bartok, Schoenberg, and others.

## 216A-B-C-D Individual Lessons on Instruments or in Voice (1-1-1-1) Fall, Spring

On-campus, private lessons with approved instructors. Special fee.

## 261 Advanced Choral Conducting (2) Spring

Prerequisites: Music 161 and Music 162. (Formerly Music 177.)

## 262 Advanced Instrumental Conducting (2) Spring

 Prerequisites: Music 161 and Music 162. (Formerly Music 178.)
## 263 Canon and Fugue (2) Spring

Prerequisite: Music 163 or qualifying examination. Strict canonic writing from rounds through the four-part double canon; simple fugues through the double and triple fugue. Study and analysis of scores. (Formerly Music 164.)

## 299 Graduate Project (3) Fall, Spring

## NURSING

## (In the Division of Technical Sciences)

Staff: Bosworth (Department Head). Part time: Byberg, Gooding, Lamona, Martinetti, Thomes.

## BACHELOR'S DEGREE CURRICULA

## Major in Nursing

(For Registered Nurses)
A total of 128 units must be completed to qualify for graduation with a B.S. degree in nursing. A nurse who has graduated from an accredited school of nursing and is registered in the State of California may be granted 36 units toward a B.S. degree with a major in nursing. Additional requirements for the completion of the major at Los Angeles State College are as follows:

| Nursing 108-Community Nursing | 2 units |
| :--- | :--- |
| Nursing 112-Nutrition in Family Health Service | 2 units |

Major in Nursing
(For Student Nurses)
A total of 128 units is required for the B.S. degree in nursing.

## Lower Division

| Human Anatomy | 3 units |
| :--- | :--- |
| General Physiology | 5 units |
| Introduction to Sociology | 3 units |
| General Microbiology | 4 units |
| Nutrition and Cookery | 3 units |
| Diet Therapy | 3 units |
| Survey of Nursing | 2 units |
| History of Nursing | 3 units |
| General Psychology | 3 units |
| Upper Division |  |
| Nursing 103-Pediatric Nursing | 5 units |
| Nursing 104-Psychiatric Nursing | 5 units |
| Nursing 106-Tuberculosis Nursing | 3 units |
| Nursing 121-Fundamentals of Nursing I* | 9 units |
| Nursing 122-Fundamentals of Nursing II * | 8 units |
| Nursing 123-Fundamentals of Nursing II * | 11 units |
| Nursing 124-Fundamentals of Nursing IV * | 5 units |

## Special Secondary Teaching Major

1. A standard college course with a bachelor's degree.
2. Graduation from an accredited school of nursing.
3. Verification of current nursing registration in California.
4. Fulfillment of the professional education requirements for a special secondary credential; see pages 113-114.
5. Completion of Nursing 111, Principles of Nursing Education, as a prerequisite to Education 193N.

## COURSES OF INSTRUCTION

## 103 Pediatric Nursing (5) Fall, Spring

Prerequisite: Enrollment in affiliated hospital school. Physical and mental development of normal children, including their care and feeding. Common diseases of infancy and childhood, preventive measures, and medical and nursing care.

## 104 Psychiatric Nursing (5) Fall, Spring

Prerequisite: Enrollment in affiliated hospital school. Principles of mental hygiene and the etiology, symptomatology, treatment, special therapy, and nursing care of the more common types of mental diseases.

## 106 Tuberculosis Nursing (3) Fall, Spring

Prerequisite: Enrollment in affiliated hospital school. The medical and social aspects of tuberculosis, including control programs, nursing measures, and rehabilitation.

## 111 Principles of Nursing Education (2) Fall, Spring

Prerequisite: Registered nurse or enrollment in affiliated hospital school. An introduction to nursing education for those who plan to enter the field of administration or teaching in schools of nursing. Emphasis on the application of nursing education to clinical programs.

## 112 Nutrition in Family Health Service (2) Fall, Spring

Prerequisites: Nutrition and Cookery, Diet, Therapy or equivalents; registered nurse or enrollment in affiliated hospital school. Nutrition and food service problems presented by families in moderate and low income groups. Special consideration of the various age and dietary needs within the family group, the problems of food purchasing, and the adaptation of both American and foreign food habits to meet good nutritive standards.

## 114 Principles and Practices of Public School Nursing (4) Fall

Practical application of basic principles, functions, techniques, and methods of public school nursing in California. Emphasis on relationship with authorized agencies in promoting health and welfare of public school children. Open only to currently employed public school nurses since daily laboratory work is required.

## 121 Fundamentals of Nursing I (9)

Prerequisite: Enrollment in affiliated hospital school. Skills in planning and executing elementary nursing care in relation to the patient's individual needs.

## 122 Fundamentals of Nursing II (8)

Prerequisite: Enrollment in affiliated hospital school. Understanding the basic principles of medical and surgical nursing.

## 123 Fundamentals of Nursing III (11)

Prerequisite: Enrollment in affiliated hospital school. Acquaints the nurse with advanced nursing procedures and responsibilities involved in administration of drugs in medical, surgical, and obstetrical nursing.

## 124 Fundamentals of Nursing IV (5)

Prerequisite: Enrollment in affiliated hospital school. Understanding the nature, functions and services of community health and welfare agencies, the factors which influence their development, and the nurses' responsibilities in relation to them.

## 143 Principles of Nursing Clinical Instruction (2) Fall

Principles of instruction, methods of teaching, opportunities for ward instruction, and demonstration of ward methods. Group participation in demonstrations. Not a required course.

## PHILOSOPHY <br> (In the Division of Social Sciences)

Staff: J. Wilson, Zimmerman.

## COURSES OF INSTRUCTION

## General Prerequisite: Consent of instructor.

## 104 Ethics (3) Fall

The historical and scientific backgrounds of morality. Theories of the highest good. Ethical ideals of some of the world's major religions. Problems of personal and social morality.

## 110 Types and Problems (3) Spring

Basic types of philosophy, such as materialism, naturalism, idealism, pragmatism, and realism. Attention to certain major problems: spacetime and relativity, the relationship of science to philosophy, human freedom, the nature of knowledge, ethics, aesthetics, belief in God, and the implications of philosophy for the contemporary social scene.

## 138 Comparative Religions (3) Fall, Spring

A comparative study of the world's living religions: Buddhism, Confucianism, Judaism, Christianity, Islamism, and others. Concepts of deity, the immortality of the soul, methods of salvation, and the influence of environment and culture upon these beliefs.

## PHYSICAL EDUCATION

## (In the Division of Health and Safety, Physical Education, Recreation and Athletics)

Staff: Wise (Department Head for Men), Yerrington (Department Head for Women), Adams, Cake, Deeds, Elliott, Ennen, Johnson, Jumonville, Mochel, Nilsen, O'Brien, Reeder, Reeves, Warner. Part-time: Berg, Wroblicky.

## BACHELOR'S DEGREE CURRICULA

## Major in Physical Education

Designed for students who expect to become physical education leaders in other than public school programs.
Lower Division
Physical Education-One semester of at least one activity from each of the following: (a) aquatics, (b) individual or dual sports, (c) team sports, (d) rhythmic activities 4 units
Upper Division
P.E. activities 2 units
P.E. 114-Kinesiology ..... 3 units
P.E. 116-Physiology of Activity ..... 3 units
P.E. 117-Prevention and Care of Athletic Injuries (required for men; open to women) ..... 2 units
P.E. $132-$ Methods in Teaching Individual Sports ..... 2 units
P.E. 144-Organization and Administration of P.E. and Athletics ..... 2 units
P.E. 145-History and Principles of Physical Education ..... 2 units
H. \& S.Ed. 150-School Health Education ..... 3 units
Rec.Ed. 179-Organization and Administration of Club Activities orRec.Ed. 185-The Recreation Program2 units
Select from the following ..... 6-10 units
P.E. $125-$ Methods of Teaching Square and Round Dance (2
P.E. $126-$ Methods of Teaching Modern Dance (2)
P.E. 127-Methods of Teaching Social Dance (2)
P.E. $130-$ Methods of Teaching Team Sports for Women (2)
P.E. 135-Methods of Coaching Tennis and Swimming (2)
P.E. $160-$ Methods of Coaching Football (2)
P.E. $161-$ Methods of Coaching Basketball (2)
P.E. $162-$ Methods of Coaching Track and Field (2)
P.E. $163-$ Methods of Coaching Baseball (2)
Select from the following ..... 4-6 units
P.E. 115-Corrective Physical Education (2)
P.E. 120 -Physical Education in Elementary Schools (3)
Rec.Ed. 161-Social Recreation Leadership ..... (2)

## Special Secondary Teaching Major

Designed for students who plan to teach in the secondary schools. See also pages 113-114 for professional education requirements.

## Lower Division

Physical Education-One semester of at least one activity from each of the following groups: (a) aquatics, (b) individual or dual sports, (c) team sports, (d) rhythmic activities
Upper Division
PE. 114-Kinesiology ..... 3 units
P.E. 115-Corrective Physical Education ..... units
P.E. 116-Physiology of Activity ..... units
P.E. 117-Prevention and Care of Athletic Injuries (required for men; optional for women) ..... 2 units
P.E. 132-Methods in Teaching Individual SportsP.E. 144-Organization and Administration of Physical Education and
AthleticsP.E. 145-History and Principles of Physical Education2 units
H. \& S.Ed. 150-School Health Education2 units
H. \& S.Ed. 121-First Aid orH. \& S.Ed. 131-Methods of Teaching First Aid1-2 units
P.E. 121-Water Safety or ..... 1-2 unitsP.E. 131 -Methods of Teaching Water Safety6-10 units6-10 units
P.E. 125 -Methods of Teaching Square and Round Dance ..... (2)
P.E. 126-Methods of Teaching Modern Dance (2)
P.E. 127 -Methods of Teaching Social Dance (2)
P.E. 130 -Methods of Teaching Team Sports for Women ..... (2)
P.E. $135-$ Methods of Coaching Tennis and Swimming ..... (2)
P.E. $160-$ Methods of Coaching Football (2)
P.E. 161-Methods of Coaching Basketball (2)
P.E. $162-$ Methods of Coaching Track and Field (2)
P.E. $163-$ Methods of Coaching Baseball (2)
Recreation education course, approved by adviser2 units
(P.E. 140-School Camping and Outdoor Education is acceptable.)

## General Secondary Teaching Major

The general secondary teaching major in physical education is the same as the major for the special secondary credential. See also pages 112-113 for professional education requirements. A teaching minor and a graduate year including additional professional education are required for the general secondary credential.

## General Secondary Teaching Minor

Designed for students who plan to teach in the secondary schools. See also pages 112-113 for professional education requirements. A teaching major in a different teaching field is also required for the general secondary credential.
Lower Division
Physical education activities, at least one course in each area ..... 4 units
Upper Division
Physical education activities ..... 2 units ..... 2 unitsPhysical education methods.
2 units
Physical education science. ..... 2 units
Recreation education
Additional courses with the division selected with the approval of the8 unitsadviser

## MASTER OF ARTS DEGREE

Prerequisite: Acceptable undergraduate preparation in the field of physical education.

1. Required courses:
2. Required courses:
P.E. 299-Graduate Project or Comprehensive Examination
P.E. 200-Tests and Measurements in Physical Education
P.E. 222-Seminar in Current Problems in Physical Education
3. Additional Physical Education "200" courses
4. Additional upper division or graduate courses within the Division of
Health and Safety, Physical Education, Recreation and Athletics
5. | units |
| :--- |
| Courses outside the Division of Health and Safety, Physical Education, |
| Recreation and Athletics |

| 5. Electives |
| :--- | :--- |

## COURSES OF INSTRUCTION

## 100 Varsity Athletics

Counts as activity credit for one semester only as follows:

| 100A | Baseball (1) Spring |
| :--- | :--- |
| 100 B | Basketball (1) Fall, Spring |
| 100 C | Football (1), Fall, Spring |
| 100 D | Track and Field (1) Spring |
| 100 E | Water Polo (1) Fall |
| 100 F | Cross Country (1) Fall |
| 100 G | Wrestling (1) Fall |
| 100 H | Golf (1) Spring |
| 100 I | Tennis (1) Spring |
| 100J | Bowling (1) Fall |
| 100 K | Swimming (1) Spring |
| 100L | Gymnastics and Tumbling (1) Spring |

## 101 Aquatic Skills (1) Fall, Spring

Practice in performance and analysis of swimming, diving and other aquatic skills.

## 102 Tennis Skills (1) Fall, Spring

Development of proficiency in tennis skills, including rules, tournaments, court etiquette, and officiating.

103 Golf Skills (1) Fall, Spring
Development of skill in playing golf, including rules, etiquette, background, and analysis of techniques.
105A Advanced Team Sports Skills (1) Fall
Advanced practice in performance techniques and analyzing procedures for various team sports. Selection of activities dependent upon the needs of students enrolled.

## 105B Advanced Dual and Individual Sports Skills (1) Spring

Practice in advanced performance techniques and analyzing procedures for various individual and dual sports. Selection of activities dependent upon the needs of students enrolled.

## 106 Basic Dance Skills (1) Fall, Spring

Survey, analysis, and practice of the fundamental dance skills of all types of dancing.

## 107 Badminton Skills (1) Fall, Spring

Development of skill in playing badminton. The etiquette, rules, background, and techniques of playing badminton.

## 108 Archery Skills (1) Fall, Spring

Development of skill in archery. The rules, etiquette, safety factors, and techniques of archery.

## 114 Kinesiology (3) Fall, Spring

Prerequisite: Human Anatomy. Analysis of joint and muscular action in relation to movement; application of the basic principles of mechanics to efficiency of performance in a variety of selected physical education activities.

## 115 Corrective Physical Education (2) Fall

Prerequisites: Human Anatomy. Administration of group and individual exercises for the prevention and correction of various functional disorders and structural defects; laboratory practices.

## 116 Physiology of Activity (3) Fall, Spring

Prerequisite: Physiology. Effects of various types of physical activity upon the circulatory, respiratory, and other physiological processes. How skill, endurance, fatigue, training, and related factors affect athletic performance.

## 117 Prevention and Care of Athletic Injuries (2) Fall, Spring

Prerequisites: Physiology or Human Anatomy. Conditioning for the prevention of injuries; techniques of massage, bandaging, and taping; immediate care of injuries; methods of recovery treatment.

## 120 Physical Education in Elementary Schools (3) Fall, Spring

Physical education in the elementary schools; program organization and activities.

## 121 Water Safety (1) Fall, Spring

Red Cross senior lifesaving.

## 125 Methods of Teaching Square and Round Dance (2) Fall

Techniques and materials for teaching and calling square and round dances.

## 126 Methods of Teaching Modern Dance (2) Spring

Prerequisite: Elementary Modern Dance, or consent of instructor. Techniques and organization of teaching modern dance in the elementary and secondary schools; history, philosophy, principles, composition.

## 127 Methods of Teaching Social Dance (2) Fall

Techniques and materials for teaching the basic steps of the waltz, fox trot, tango, samba, and other current popular dances.

128 Methods of Teaching Rhythms in Elementary Schools (2) Spring
Techniques and materials for the elementary school teacher in fundamental rhythms, rhythmic interpretations, dramatized rhythms, singing games; practice in the use of various devices of accompaniment.
130 Methods of Teaching Team Sports for Women (2) Fall
Prerequisites: Basketball, hockey, softball, and speedball activity, or consent of instructor. Techniques and organization of teaching basketball, hockey, softball, and speedball in the secondary schools.
131 Methods of Teaching Water Safety (2) Spring
Prerequisite: Current Red Cross certificate in senior lifesaving. American Red Cross course which qualifies instructors in water safety.
132 Methods of Teaching Individual Sports (2) Fall, Spring Organization and techniques of teaching individual and dual sports.

## 135 Methods of Coaching Tennis and Swimming (2) Spring

Prerequisite: Tennis and swimming activity, or consent of instructor. Problems involved in coaching tennis and swimming; methods of coaching skills and techniques of competitive tennis and swimming; laboratory practice.

## 137 Sports Officiating for Men (2) Fall

Problems and techniques of officiating various sports for boys and men.

## 138 Sports Officiating for Women (2) Spring

Prerequisites: Physical Education 130, 132, and 135, or consent of instructor. Problems, techniques, and practice in officiating various sports for girls and women. Leads to local and national officials ratings.

## 140 School Camping and Outdoor Education (2) Fall

Aims, organization, administration, and program of the school camp.

## 144 Organization and Administration of Physical Education and Athletics (2) Fall, Spring

Administrative policies, selection of staff; construction and use of facilities; class organization, finances and budgeting; purchase and care of equipment; publicity in physical education, athletics, and intramurals.

## 145 History and Principles of Physical Education (2) Fall, Spring

Problems, issues, and controversies in the field of physical education; history, development, and current practices.

## 160 Methods of Coaching Football (2) Fall

Prerequisite: Football activity, or consent of instructor. Techniques of coaching, organization of practice; handling of players; principles of competition; systems of offense and defense; purchase and care of equipment.

## 161 Methods of Coaching Basketball (2) Fall

Prerequisite: Basketball activity, or consent of instructor. Techniques of coaching, organization of practice; handling of players; principles of competition; systems of offense and defense; purchase and care of equipment.

## 162 Methods of Coaching Track and Field (2) Spring

Prerequisites: Track and field activity or consent of instructor. Problems involved in coaching track and field; methods of coaching skills and techniques, track, and field events, laboratory practice.
163 Methods of Coaching Baseball (2) Spring
Prerequisite: Baseball or softball activity or consent of instructor. Problems involved in coaching baseball; methods of coaching skills and techniques of baseball; laboratory practice.

## 196A-B-C-D Special Projects * (1-2) Fall, Spring

Prerequisites: Consent of instructor and the division chairman. Participation, under faculty supervision, in planning, preparing, presenting, and coaching of Los Angeles State College sponsored intramural and intercollegiate athletic activities.

## 198 Field Assignment and Reports * (1-2) Fall, Spring

Prerequisite: Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular group meetings.

## 199 Independent Study (1-3) Fall, Spring

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

[^38]
## GRADUATE COURSES

200 Tests and Measurements in Physical Education (2)
Prerequisite: Graduate status with major in physical education or consent of instructor. Test of anthropometry, organic function, native physical capacity, achievement, and knowledge; their uses in the physical education program.

## 210 Supervision of Physical Education (2)

Prerequisite: Graduate status with major in physical education or consent of instructor. History, philosophy, principles, and techniques of supervising physical education in the elementary and secondary schools; professional qualities and preparation of supervisors.

## 222 Seminar in Current Problems in Physical Education (3)

Prerequisite: Graduate status with major in physical education or consent of instructor. Consideration of current problems in physical education through analysis of literature and research findings.

## 245 Program Planning in Physical Education (2)

Prerequisites: Graduate status with major in physical education or consent of instructor. History, background, philosophy, and current types of physical education instructional programs at the elementary, junior high school, high school, and junior college levels; methods of planning functional physical education curricula; adaptation of programs to facilities and staff.

> 246 Problems in Intramural and Interscholastic Athletics (2)
> Prerequisite: Graduate status with major in physical education or consent of instructor. Current problems and recent trends in the conducting of intramurals and interscholastic athletics. Principles, procedures, and organization in competitive athletics.

## 299 Graduate Project (3) Fall, Spring

# PHYSICAL SCIENCES (In the Division of Natural Sciences) 

Staff: Johnston (Division Chairman), Andreoli, Jacobs, Peterson, Richmond, Welsh.

## BACHELOR'S DEGREE CURRICULA

## Major in Physical Science

The courses listed below are selected to provide a broad training in the physical sciences for nonteaching majors. If a student desires to deviate somewhat from this program in order to prepare for specific fields such as graduate study in chemistry or physies, or employment in certain industries or governmental agencies as a chemist or physicist, he may select, with the aid of the adviser, a course of study designed to achieve this objective.
Lower Division
General Chemistry ..... 10 units
Quantitative Analysis ..... 3 units
General physics ..... 8 units
*College mathematics ..... 6 units(Courses recommended but not required include organic chemistry,general biology, calculus.)
Upper Division
Select from upper division chemistry courses ..... 7 units
Select from upper division physics courses ..... 6 units
Select from upper division biological science courses ..... 3 units2 units6 units
Elective courses in the physical sciences approved by adviser6 nitsNote: Physical Science 125 may not be included in the above major.
General Secondary Teaching Major in Physical Science and General Science
See also pages 112-113 for professional education requirements. A teaching minor in a different teaching field is also required.

## Lower Division

Basic courses in physics and chemistry ..... 16 units
*College mathematics ..... 6 units ..... 6 units
Upper Division
Physical Science 125-Physical Science Activities3 unitsCourses to be selected with approval of the adviser from the fields ofastronomy, chemistry, conservation, geology, and physics 13-19 units

[^39]Courses to be selected from the biological sciences with the approval of
the adviser (may be satisfied by acceptable lower division courses)
Chemistry 190 AB -Seminar

Note: When 24 units of upper division work in the teaching major are completed the candidate may apply for the B.A. degree, providing the other requirements for the degree are met.

## General Secondary Teaching Minor in Physical Science and General Science

See also pages 112-113 for professional education requirements. A teaching major in a different teaching field is also required.
Basic courses in chemistry, physics or geology (some approved electives
in closely related felds may also be included)
Basic courses in biological science
Physical Science 125-Physical Science Activities
Electives to be selected with the approval of the adviser
Note: At least 6 units of the minor must be in upper division courses.

## COURSES OF INSTRUCTION

## ASTRONOMY

## 105 History of Astronomy (3) Fall, Spring

Important astronomical concepts and problems from the standpoint of their historical development and the contributions of great astronomers.

## CHEMISTRY

## 104 Colloid Chemistry (3) Fall

Prerequisites: General chemistry and organic chemistry or the equivalent. Principles of colloid chemistry and industrial applications, with special attention given to topics such as adsorption, surface tension, surface films, polymers and colloidal electrolytes.

## 105 Industrial Chemistry (3) Spring

Prerequisites: Year of general chemistry and at least one semester of organic chemistry. Fundamental chemical and physical principles applied to typical industrial processes. Industrial stoichiometry and unit processes are given special attention.

## 106 Advanced Organic Chemistry (3) Spring

Prerequisite: Lower division organic chemistry. The theoretical aspects of organic chemistry and the less common organic compounds.
108A Biochemistry (3) Fall, Spring
Prerequisite: Organic chemistry. A study of carbohydrates, fats, proteins, enzymes, and vitamins, with special reference to the nutrition of the living cell.

## 108B Biochemistry Laboratory (1) Fall, Spring

A laboratory course to accompany 108A. Laboratory three hours.

## 111A Clinical Biochemistry (3) Spring

Prerequisite: Chemistry 108AB. A study of biochemical methods for the analysis of blood, urine, and other body fluids. Emphasis on standard clinical procedures.

## 111B Clinical Biochemistry Laboratory (1) Spring

A laboratory course to accompany 111A. Laboratory three hours.

## 112 Organic Analysis (2) Spring

Prerequisites: Quantitative analysis with grade of at least "C," and Organic Chemistry. Preparation and identification of organic compounds. Laboratory six hours.

## 113 Advanced Inorganic Chemistry (3) Fall

Prerequisite: Year of general chemistry. A detailed study of the inorganic elements based on the periodic grouping and stressing electronic configuration, physical and chemical properties.

## 114A-B Physical Chemistry (3-3) Year course

Prerequisite: A year of general chemistry, mathematics (calculus), and general physics. Fundamental physical laws and theories as applied to chemistry. Lecture three hours.

## 114C-D Physical Chemistry Laboratory (1-1) Fall, Spring

Laboratory courses to accompany Chemistry 114AB. Laboratory three hours.

## 124 Chemistry of Plastics (3) Spring

Prerequisites: Year of general chemistry and one year of organic chemistry. The resinous and the plastic state, polymerization and the mechanism of polymerization. Plastic properties and their relation to chemical structure. Types of plastics and methods of fabrication considered.

## 190A-B Seminar (1-1) Fall, Spring

Prerequisites: Senior standing and consent of instructor. Reviews of current literature and concepts in the various fields of chemistry. Required of all seniors majoring in the physical sciences.

## 198 Field Assignment and Reports (1-2) Fall, Spring

Prerequisite: Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular group meetings.

## 199 Independent Study (1-3) Fall, Spring

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written
and oral reports. Project selected in conference with the sponsor at the time of registration; and progress meetings held regularly thereafter until the end of the semester.

## CONSERVATION

Conservation 161 is acceptable as an elective course for natural science general education requirement.

## 141 Conservation of Wildlife (3) Spring

Open only to qualified majors and minors in the biological and physical sciences. Basic environmental needs of wildlife, value of wildlife to humans, methods involved in conservation of this resource, current problems involved.

## 161 Conservation of Natural Resources (3) Fall, Spring

Physical and biological factors involved in the depletion of the natural resources of the United States, such as soil, water, minerals and forests. The need for and application of conservation practices. Credit not given for both this course and Conservation 171. (Not accepted for majors or minors.)

## 171 Conservation Problems and Practices (3) Fall

Prerequisite: Open only to qualified majors and minors in the biological and physical sciences. An ecological approach to the biological and physical factors involved in the conservation of natural resources; consideration of conservation practices. Credit not given for both this course and Conservation 161.

## GEOLOGY

## 101 Principles of Geology (3) Fall, Spring

Prerequisite: Upper division standing. Principles of physical and historical geology. Not open to students with credit in undergraduate geology. Geologic features will be observed on a field trip.

## 110 Economic Geology (3) Spring

Prerequisite: Course in lower division geology or Geology 101. Source, distribution, and exploration of economically important metallic and nonmetallic mineral deposits.

## 111 Rocks and Minerals of California (3) Fall, Spring

Prerequisites: A year of high school chemistry or the equivalent. Minerals and rocks which make up the earth; their occurrence, origin, uses, and recognition. Special emphasis on California rocks and minerals.

## 124 Petrology (4) Spring

Prerequisites: Course in minerology and crystallography. The origin of rocks and their identification without the aid of a polarizing microscope. Lecture two hours; laboratory six hours.

## 141 Structural Geology (3) Fall

Prerequisites: Historical geology and trigonometry. Lectures, problems, and map studies for the recognition and interpretation of structures of the earth's crust.

## PHYSICS

## 110 Modern Physics (3) Fall, Spring

Prerequisite: Lower division physics or chemistry. The basic principles of modern particle physics and electronics. Involves a minimum of mathematics and stresses accurate understanding of the basic concepts. Recommended for teaching majors. Lectures and demonstrations.

## 111 Electrical Measurements (3) Spring

Prerequisite: General physics (electricity and magnetism). Theory and application of electrical and magnetic measuring instruments. Includes error analysis and application of modern techniques to measurement of radiation and light, etc., as well as electrical quantities. Lecture two hours; laboratory three hours.

## 112 Basic Physical Electronics (3) Fall

Prerequisite: General physics (electricity and magnetism). Design of electric circuits and their application to laboratory problems. Begins with basic principles and develops a working knowledge of standard amplifiers and control circuits. Mathematical considerations are not stressed.

## 123 Analytical Mechanics (3) Spring

Prerequisites: Year of general physics and integral calculus or equivalent. The principles of Newtonian mechanics and the mathematical treatment of the principles of kinematics and kinetics.

## 198 Field Assignment and Reports (1-2) Fall, Spring

Prerequisite: "Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular group meetings.

## PHYSICAL SCIENCE

Physical Science 100 is a general education course. Physical Science 200 AB is a graduate course for the physical science major and physical science and general science major.

## 100 Survey of Physical Science (3) Fall, Spring

No prerequisites. An overview of the physical sciences as applied to modern living. Credit not given if student has taken a college course in physics or chemistry.

## 125 Physical Science Activities (3) Fall

Practical field and laboratory activities in geology, astronomy, meteorology, physics, and chemistry. Field work in collecting rocks, studying stars, making weather observations, and examining local resource areas of practical physics and chemistry. Designed for physical science and general science majors and minors. Lecture two hours; laboratory two hours plus field trips.

200A-B Graduate Seminar (1-1) Fall, Spring
Reviews and discussions of current literature to provide an acquaintance with present developments in physical sciences.

## POLICE SCIENCE AND ADMINISTRATION

## (In the Division of Technical Sciences)

Staff: Barker (Department Head). Part-time: Bennett, Burger, Collins, Davis, Duncan, Fulton, Glavas, Gourley, Houghton, Iannone, Ireland, Koenig, Murdock, Puthuff, Simon, Walton.

## BACHELOR'S DEGREE CURRICULUM

## Major in Police Science and Administration

Designed for either inservice or preservice students who wish to prepare for, or to improve themselves in, the several forms of police work.
A total of 128 units is required for the B.S. degree in Police Science and Administration, including a minimum of 48 units within the major, not less than 34 units of the major being in upper division work.
Lower Division
Police Administration ..... 2 units
Basic Legal Procedure ..... 2 units
Basic Laboratory and Scientific Techniques ..... 2 units
Investigation ..... 2 units ..... 2 units
Criminal Law ..... 3 units
Upper Division
Police Science 131-Police Administration ..... 3 units
Police Science 134-Police Ethics ..... 3 units
Police Science 136-Police Patrol ..... 3 units
Police Science 138-Investigation of Major Crimes ..... 3 units
Police Science 139-Traffic Regulation and Control ..... 3 units ..... 3 units

- Sociology 155-Criminology ..... 3 units
Police Science 197-Special Police Problems ..... 3 units
Select from the following:
Administration ..... 3 units
Police Science 133-Police Personnel Supervision (3)
Police Science 143-Comparative Police Administration ..... (3)
Police Science 147-Correctional Administration (3)Police Science 149-Police Planning (3)
Evidence and Legal Procedure ..... 3 units
Police Science 132-Evidence for Law Enforcement Officers (3)
Police Science 135-Criminal Procedure (3)
Laboratory and Scientific Techniques ..... 7 units
Police Science 137-Advanced Police Laboratory (3)
Police Science 142-Interrogation and Lie Detection (3
Police Science 144-Police Photography (2)
Police Science 145-Forensic Ballistics and Explosives (2)
Criminal Law ..... 3 units
Police Science 141-Juvenile Law (3)
Police Science 152-Law for the Police Supervisor (3)

[^40]
## COURSES OF INSTRUCTION

Prerequisites: Completion of appropriate lower division introductory courses, or equivalent training, or consent of instructor.

## 131 Police Administration (3)

Analysis of the functional divisions of the modern police department; applications of principles of organization and administration; structure and functions of the police record system; police statistical methods; administrative reports and analyses.

## 132 Evidence for Law Enforcement Officers (3) Fall, Spring

Leading rules and principles of exclusion and selection; burden of proof; nature and effect of presumption; proof of authenticity and contents of writings; examination, competency, and privilege of witnesses; respective functions of court and jury.

## 133 Police Personnel Supervision (3) Spring

Administration of police personnel; setting up entrance standards; techniques of selection and examination; training; probation; rating; promotion; discipline; morale; promotional examination and merit system.

## 134 Police Ethics (3) Fall, Spring

The relationship of actions to motives; concepts of ethical conduct and the rules and principles used to direct them; institutional ethics; personal and professional standards; historical problems in ethics from the law enforcement point of view; present day conflicts and compromises.

## 135 Criminal Procedure (3) Fall

Criminal procedure from apprehension to conviction, based on the Penal Code of California; arrest with and without warrants by police officers; arrest by private citizens; extradition proceedings; information and indictment; functions of the grand jury and coroner's inquest; procedure at the trial; appeals and new trials.

## 136 Police Patrol (3) Fall

Responsibilities, powers, and duties of the uniformed patrolman; patrol procedure; mechanics of arrest; transportation of prisoners; raids; riot and crowd control; crime prevention functions of the officer on patrol.

## 137 Advanced Police Laboratory (3) Fall

Lectures, demonstrations, and actual use of laboratory equipment in the collection, preservation, analysis, and interpretation of physical evidence of various types, including: footprints, tiretracks, toolmarks, blood, hair, textiles, stains, dust, dirt and debris; narcotic identification and determination of intoxication; casing, moulage, photomicrography; spectrography; court presentation and expert testimony.

138 Investigation of Major Crimes (3) Fall, Spring
Investigative methodology in the field of major crime; relations of the detective with other law enforcement divisions; techniques and principles for gathering, evaluating, and preserving physical evidence; modus operandi; personal identification; interrogation, preliminary and followup investigations.

## 139 Traffic Regulation and Control (3) Spring

Organization and functions of the police traffic division; educational, engineering, and enforcement methods; technique of the traffic survey; traffic accident investigation; elements of a sound traffic program.

## 141 Juvenile Law (3) Fall, Spring

The California Juvenile Court Act, The Youth Authority, and other legislation governing juvenile delinquency and crime prevention; rights of juveniles as distinguished from those of adults; sociological and psychological development in California law in the prevention of crime by juveniles, including probation procedures and institutional care.

## 142 Interrogation and Lie Detection (3) Fall, Spring

Survey of modern methods of handling witnesses, informants, and suspects; evaluation of so-called truth serums, lie-detectors, and other laboratory devices; the psychology and physiology involved in deception.

## 143 Comparative Police Administration (3) Spring

A comparative approach to the study of administrative patterns in the police services of selected American cities and in European police systems.

## 144 Police Photography (2) Fall

The application of photography to the police field with reference to the preservation of physical evidence and courtroom presentation.

## 145 Forensic Ballistics and Explosives (2) Spring

Prerequisite: Consent of instructor. Lectures, demonstrations, and practical work in the preparation, analysis, and court presentations of ballistics evidence, including weapons, projectiles, cartridges, propellants; commercial, military, and homemade explosives, their composition, stability, and destructive force.

## 147 Correctional Administration (3) Fall

Aims and objectives of correctional administration; laws; records; public relations; types of personnel and relationships to programs, including custodial and noncustodial interrelationships and divisions; physical plant and security; employment and care and treatment program.

## 148 The Police and the Public (2) Spring

Training of uniformed officers in securing public cooperation and approval; coordination of internal and external public relations on the
staff level; use of photographs, radio, television, and press releases, particularly in cases affecting juveniles and race and other special group relations; public appearances of peace officers; special Southern California problems.
149 Police Planning (3) Fall
Organization for planning and research as a separate police function; theoretical factors in determination of need and objective; the planning process as an aid to administrative operation in procedure, tactics, operations, and equipment-budget-building on all law enforcement levels; police planning as related to municipal, county, and state planning.

## 151 Vice Control (3) Spring

Code and case law dealing with vice; detection and suppression; apprehension and prosecution of violators; special consideration of lotteries and other forms of gambling and gambling methods, and of prostitution and other sex crimes from the law enforcement point of view.

## 152 Law for the Police Supervisor (3) Fall, Spring

Practical methods whereby the police officer can determine what the law is; jurisdiction and other legal problems involved in the organization and functions of administrative agencies in fields related to law enforcement; specific problems of administrative law from the point of view of the police supervisor; analysis of new legislation and recent judicial trends; problems with regard to arrest, searches and seizures, civil rights, etc.

## 197 Special Police Problems (3) Fall, Spring

Problems inherent in the special economic, social, and political status of the police officer; police attitudes toward minority groups and professional police methods in handling tension situations; causes, methods of prevention, and handling of race riots, strikes, and other disturbance situations by the police; use of special equipment, including chemical agents, and the suppressing of civil disturbances. Research project and report required of each student in his particular field of interest.

## 198 Field Assignment and Reports (1-2) Fall, Spring

Prerequisite: Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular group meetings.

## PSYCHOLOGY <br> (In the Division of Social Sciences)

Staff: Wilkening (Department Head), Bernberg, Clark, Diamond, Goldenberg, Haralson, Hutchinson, Lewis, Thompson, Troup, Wang, Weckler.

## BACHELOR'S DEGREE CURRICULA

## Major in Psychology

The major in psychology, consisting of 30 units of upper division courses, prepares students for graduate professional training as psychologists (Option 1), while offering opportunity for specialized training in such areas as counseling (Option 2), and industrial psychology (Option 3).

```
Lower Division
    Introduction to Psychology
    Elementary Physiological Psychology or
    Personal and Social Adjustment
    Recommended: One course from each of the following groups:
        1. Algebra, analytic geometry, or mathematics for social and life
            sciences.
            2. Sociology or anthropology.
            3. Physics or chemistry.
            4. Physiology, zoology, or genetics.
            5. Philosophy, scientific method, logic.
```


## Upper Division

A. Core requirements (regardless of option selected all students must complete the core requirements).
Psychology 114-Experimental Psychology - 3 units
Psychology 116-Physiological Psychology —._ 3 units
Psychology 120A-Elementary Statistical Methods . 3 units
Psychology 126B-Contemporary Schools of Psychology _- 3 units
B. Option requirements (select any 18 units with consent of an adviser from Option 1, 2, or 3).

## Option 1-General

| Psychology 110-Abnormal Psychology | 3 units |
| :--- | :--- |
| Psychology 112-Child Psychology | 3 units |
| Psychology 120B-Statistical Methods in Psychology | 3 units |
| Psychology 126A-History of Psychology | 3 units |
| Psychology 127A-Psychological Testing (group) | 3 units |
| Psychology 130-Psychology of Personality | 3 units |
| Psychology 142-Human Communication | 3 units |
| Psychology 145-Social Psychology | 3 units |
| Psychology 164-Psychology of Learning | 3 units |
| Psychology 170-Psychology of Marital Adjustment | 3 units |
| Psychology 197-Psychology Proseminar | 3 units |

## Option 2-Counseling

| Psychology 110-Abnormal Psychology | 3 units |
| :--- | :--- |
| Psychology 112-Child Psychology | 3 units |
| Psychology 113-Psychology of Adolescence | 3 units |
| Psychology 127A-Psychological Testing (group) | 3 units |
| Psychology 127B-Psychological Testing (individual) | 3 units |
| Psychology 130-Psychology of Personality | 3 units |
| Psychology 145-Social Psychology | 3 units |
| Psychology 154-Survey of Clinical Psychology | 3 units |
| Psychology | 3 units |
| Psychology 170-Pounseling and Interviewing | 3 units |
| Psychology 181-Emplology of Marital Adjustment | 3 units |
| Education 188-Psychology and Education of the Exceptional Child | 3 units |

Option 3-Industrial Psychology

Psychology 120B-Statistical Methods in Psychology - 3 units
Psychology 127A-Psychological Testing (group) - 3 units
Psychology 142-Human Communication .-. 3 units
Psychology 144-Attitude and Opinion Measurement 3 units
Psychology 145-Social Psychology ...... 3 units
Psychology 156-Industrial Psychology ... 3 units
Psychology 160-Counseling and Interviewing - 3 units
Psychology 180-Psychology of Advertising and Selling - 3 units
Psychology 181-Employment and Personnel Psychology 3 units
Psychology 183-Psychology of Labor Relations. units
(Recommended: 12 units in the related fields of economics, business, sociology, or government)

## MASTER OF ARTS DEGREE

The graduate program is built on the foundation of undergraduate preparation. The master's degree requires intensive directed study in psychology aimed at depth of understanding.

1. Prerequisite: Acceptable undergraduate preparation in psychology, including completion of core requirements. (See major in psychology.)

## 2. Area of specialization

a. Psychology 290A or B-Seminar in Advanced General Psychology 3 units
b. Minimum additional " 200 " courses in psychology .. 9 units
c. Approved courses in psychology; may be upper division 3 units
d. Comprehensive written examinations in selected fields of psychology.
3. Approved courses outside the area of psychology 6 units
4. Other courses approved in advance by the adviser 9 units

## COURSES OF INSTRUCTION

General prerequisites: One year of college psychology, or consent of instructor. Exception: no prerequisite for Psychology 100.

100 Survey of Psychology (3) Fall, Spring
An introduction to the psychological processes of perception, learning, thinking, motivation, intelligence, personality, and social behavior. Facts and principles pertinent to an analysis of everyday behavior. Not open to students who have completed an introductory course in psychology.

## 106 Mental Deficiency (3) Fall, Spring

The nature and causes of mental deficiency; physiological and psychological characteristics. Problems of social control, including education, social adjustment, institutionalization, and community responsibility.

## 108 Mental Hygiene (2) Fall, Spring

Social and emotional adjustment and personality in the light of mental hygiene principles; special attention to adjustment problems of the college student.

## 110 Abnormal Psychology (3) Fall, Spring

Historical overview of abnormal psychology; criteria of abnormal behavior; symptomatology; disturbing forces in personality formation; therapeutic considerations.

## 112 Child Psychology (3) Fall, Spring

Developmental trends in infancy and childhood. Study of current literature.

Credit will not be given for both Psychology 112 and Education 102.

## 113 Psychology of Adolescence (3) Fall, Spring

Recommended prerequisite: Psychology 112. Problems of adolescents; physical and social development during adolescence.

## 114 Experimental Psychology (3) Fall, Spring

Prerequisite: Psychology 120A. Experiments in problems of human learning, remembering, perception, and personality. Emphasis on basic problems of research-design and experimental techniques. Lectures and laboratory.

## 116 Physiological Psychology (3) Fall, Spring

The relationship between integrated behavior and physiological processes. Study of theories relating psychology and physiology.

## 120A Statistical Methods in Psychology (3) Fall, Spring

Prerequisite: Mathematics 15 or equivalent. Commonly used measures of central tendency, variability and correlation; significance of individual scores and of individual and group differences; elementary principles of research design.

## 120B Statistical Methods in Psychology (3) Spring

Prerequisite: Consent of instructor. More advanced techniques of correlation analysis of variance, and factor analysis, as applied to testing procedure and research. Further study of research design.

## 126A History of Psychology (3) Fall

Consideration of the historical development of psychology from its origins in ancient philosophy and science to the end of the nineteenth century.

## 126B Contemporary Schools of Psychology (3) Spring

Contemporary psychological theories and systems in their historical perspective and present position.

## 127A Psychological Testing (Group) (3) Fall, Spring

Prerequisite: Psychology 120A or equivalent. Selection, administration, and interpretation of commonly used group tests of intelligence, interests, aptitudes, etc.
127B Psychological Testing (Individual) (3) Fall, Spring
Prerequisite: Psychology 120A or equivalent. The concept of intelligence; the most commonly used tests of intelligence; emphasis on practical experience in administering and interpreting individual intelligence tests (especially the Revised Stanford-Binet and the Wechsler scales).

127C Psychological Testing (Individual Performance Tests) (3) Spring
Prerequisite: Psychology 127B. Practical experience in administering the Grace Arthur, Cornell-Coxe, and other performance and aptitude tests.

## 127D Psychological Testing (Applied to the Mentally and Physically Atypical) (3) Fall

Prerequisite: Psychology 127B. Selection, administration, and interpretation of tests used for appraising the atypical individual. Survey of etiological theories.

## 130 Psychology of Personality (3) Fall, Spring

Biological and cultural determinants of personality; dimensions of personality and their measurement or appraisal; integration of personality as related to adjustment.

## 142 Human Communication (3) Spring

Psychological factors involved in the creation and manipulation of symbols. Art and science as forms of communication. Emphasis on psychological aspects of communication media (radio, television, and motion picture).

## 144 Attitude and Opinion Measurement (3) Fall

Prerequisite: Psychology 120A. Attitude scales and public opinion surveys. Design of investigation, sampling methods, analysis of results, and applications to various psychological problems. Field work.

## 145 Social Psychology (3) Fall, Spring

Inquiry into group dynamics. Study of social interaction and its effects upon the individual and the group. Credit not given for both Psychology 145 and Sociology 145.

## 154 Survey of Clinical Psychology (3) Fall, Spring

Prerequisite: Psychology 110. An elementary course in clinical techniques of psychology with consideration of the relationship of diagnosis, therapeutic techniques, and research to the field of clinical psychology.

## 156 Industrial Psychology (3) Fall, Spring

Psychological techniques in modern industry; selection, training, and evaluation of employees; morale and promotion; fatigue and safety practices.

## 160 Counseling and Interviewing (3) Fall, Spring

Prerequisite: Consent of instructor. An introduction to the problems and techniques of counseling and interviewing. Presentation of the attitudes and objectives of the counselor and counselee.

## 164 Psychology of Learning (3) Fall, Spring

A consideration of major theoretical systems of learning; Hull, Guthrie, Tolman, Skinner. Analysis and interpretation of experimental literature.

## 170 Psychology of Marital Adjustment (3) Fall, Spring

Problems of money, in-laws, sex, etc., considered primarily as symptoms of a disordered personality. Emphasis on the psychological insights necessary for adjustment to self and others and to social and cultural institutions.

## 180 Psychology of Advertising and Selling (3) Fall

The relative strength of the desires in buying; attention value of form, size, color, and typographical layout and methods of measuring the effectiveness of advertisements; characteristics of salesmen. Practical projects in cooperation with advertising agencies and various sales groups.

## 181 Employment and Personnel Psychology (3) Fall

Prerequisite: Psychology 120A. The application of psychological principles to the technical problems involved in developing a personnel testing program and in appraising its effectiveness; employment procedures; job success.

## 183 Psychology of Labor Relations (3) Spring

Exploration of the human relations involved with union and management; psychological aspects of conflict and cooperation between labor and management; the role the psychologist plays in union relations. Field work and guest speakers.

## 197 Psychology Proseminar (3) Fall, Spring

Senior course: recommended for all psychology majors. An introduction to psychological method. Designed to prepare students for graduate work in psychology.

## 198 Field Assignment and Reports (1-2) Fall, Spring

Prerequisite: Active, approved employment under the work-study or internship program. Analysis and reports of the student's performance; regular group meetings.

## 199 Independent Study (1-3) Fall, Spring

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

## GRADUATE COURSES

Minimum prerequisites: A bachelor's degree and superior academic performance in psychology.

## 212 Behavior Disorders in Children (3)

Application of principles of psychology to behavior disorders in children. Designed primarily for clinicians, social workers, and parent educators.

## 215 Advanced Experimental Methods (3)

Emphasis on design of experiments and apparatus employed in psychological research. The student becomes familiar with basic laboratory equipment and designs an experiment in his field of major interest.

## 227 Psychodiagnostic Testing (3)

Prerequisites: Psychology 127B, 130, 154, or equivalent, or consent of instructor. Clinical application of tests for the measurement of intelligence; evaluation of qualitative aspects and limitations in functioning due to emotional and organic factors and the integration of these findings into the clinical case history.

## 228A Methods of Appraising Personality (3)

Prerequisite: Psychology 227, and permission of instructor. Appraising personality by means of thematic projective material. Theories of perception and personality as a background for understanding the implications of projective material. Experience in administering and interpreting the TAT, MAPS, Four-picture Test, and other thematic material.

## 228B Methods of Appraising Personality (3)

Prerequisite: Psychology 228A and permission of instructor. Appraising personality by means of the Rorschach Technique: administration, scoring, and basic interpretation.

## 245 Seminar in Social Psychology (3)

Prerequisites: Psychology 145 and the equivalent of Psychology 142 and 144. Theory, methodology, and applied problems dealing with the
complex phenomena of group life. An analysis of the psychological tools for group adjustment; group dynamics, assessment of social attitude, role playing, psycho-drama, etc. Individual projects.

## 246 Applied Methods for Group and Leadership Situations (3)

Prerequisite: 12 units in courses dealing with human relations and consent of instructor. Study of interpersonal relations and leadership within various social organizations. The origin of conflict, cooperation, and misunderstanding within groups. Emphasis on superior-subordinate relations. Applied methods for group motivation and activities toward accomplishing group goals with emphasis on minimizing conflict and maximizing effort.

## 254 Clinical Techniques in Psychology (3)

Prerequisite: Psychology 228B or consent of instructor. Experience in working as a diagnostic team to evaluate actual clinical cases. Advanced analysis and integration of projective techniques and case history material with stress on the effective oral and written presentation of clinical findings.

## 260 Seminar in Counseling (3)

Prerequisites: Psychology 130 or 154,160 , or their equivalents, and consent of instructor. Intensive class discussion of recorded counseling interviews and of typical counseling situations, coordinated with reading of current literature in this area.

270A-B Seminar in the Psychodynamics of the Family (3)
An approach to a deeper understanding of the personality in family patterns through an analysis of case histories. An extended analysis of the interacting personalities that make up the family with emphasis on group interaction and therapeutic techniques.

## 272 Practicum in Counseling (3)

Supervision of field experiences in counseling; analysis, use and interpretation of methods and materials used by the counselor. Open only to those already working in some counseling capacity.

## 290A Seminar in Advanced General Psychology (3)

A critical review of current literature, theories, methods and problems, concerning sensory, learning, and symbolic processes.

## 290B Seminar in Advanced General Psychology

A critical review of current literature, theories, methods and problems, concerning motivation, emotion, and perception.
299. Graduate Project (3)

# RECREATION EDUCATION (In the Division of Health and Safety, Physical Education, Recreation and Athletics) 

Staff: Willott (Department Head), Cake, Heaton, O'Brien. Part-time: Bahr.

## BACHELOR'S DEGREE CURRICULUM

## Major in Recreation Education

Designed for students who plan professional careers in recreation. A total of 124 units is required for the B.S. degree in Recreation Education.

| Lower Division |  |
| :--- | :--- |
| Games of Low Organization | 2 units |
| Methods of Officiating Competitive Sports | 2 units |
| Music in Recreation | 2 units |
| Drama in Recreation | 2 units |
| Introduction to Club Leadership and Camp Activities | 2 units |
| Principles of Community Recreation. | 3 units |


| Upper Division |  |
| :--- | :--- |
| Required Basic Core Courses |  |
| Art 102A-Introduction to Craft Materials, or |  |
| Art 120 - Crafts for the Elementary School, or |  |
| Art 162 -Arts and Crafts in Recreation | 2 units |
| H\&S. 121-First Aid | 1 unit |
| N.S. 120-Nature in California | 3 units |
| P.E. 121-Water Safety | 1 unit |
| P.E. 132-Methods of Teaching Individual Sports | 2 units |
| R.E. 161-Social Recreation Leadership | 2 units |
| R.E. 175-Organization and Administration of Recreation | 3 units |
| R.E. 176AB-Directed Leadership | 6 units |
| R.E. 177-Community Relations in Recreation | 2 units |
| R.E. 179-Organization and Administration of Club Activities | 2 units |
| R.E. 185-The Recreation Program | 2 units |
| R.E. 187-Dance in Community Recreation, or | 2 units |
| P.E. 125-Methods of Teaching Square and Round Dance |  |
| R.E. 188-Camp Leadership, or | 2 units |
| P.E. 140-School Camping and Outdoor Education |  |
| Required Supporting Courses | 2 units |
| Ed. 102-Child Growth and Development | 2 units |
| Ed. 147-Audio-Visual Instruction | 3 units |
| Govt. 163 -Public Personnel Administration, or | 2 units |
| Govt. $65-$ Principles of Employee Supervision | 2 units |
| Psych. 108-Mental Hygiene |  |
| R.E. 189-Philosophy. of Recreation | 3 units |
| Soc. 102-Social Processes and Institutions, or |  |

## COURSES OF INSTRUCTION

## 160 Special Events in Recreation (2) Fall

The function of, and planning for, festivals and pageants in community and private recreation programs.
161 Social Recreation Leadership (2) Fall, Spring
Leadership techniques in the various social phases of recreation.

## 175 Organization and Administration of Recreation (3) Fall

Problems encountered in establishing and organizing a community for recreation services. Special emphasis given to governmental control, legislative provision, municipal control, budgets, personnel, departmental organization, and administrative practices.

## 176A Directed Leadership in Private Recreation Agencies (3) Fall, Spring

Prerequisite: Major in Recreation Education. Supervised experience in recreation programs.

## 176B Directed Leadership in Public Recreation Agencies (3) Fall, Spring

Prerequisite: Major in Recreation Education. Supervised experience in recreation programs.

## 177 Community Relations in Recreation (2) Spring

Development of the ability to interpret, promote, and publicize community recreational programs and activities through personal contacts and various publicity media.

## 178 Industrial Recreation (2) Fall

The fundamental techniques of organization and administration of recreation in industry.

179 Organization and Administration of Club Activities (2) Fall
Techniques in the organization and general program planning for recreation in club activities.

## 185 The Recreation Program (2) Fall

Problems commonly encountered in planning the content of the recreation program including principles of program construction, scheduling, and evaluation in the various fields of recreation.

## 187 Dance in Community Recreation (2) Fall, Spring

Conduct of community dancing including advanced techniques in round, square, and social dances.

## 188 Camp Leadership (2) Spring

Techniques of camp counseling and leadership; some program content; visits to nearby camps.

## 189 Philosophy of Recreation (2) Fall, Spring

The interpretation of recreation as a basic part of the living process; its importance in individual, community and national life; its social and economic significance; the growing importance of leisure time problems.

## 198 Field Assignment and Reports (1-2) Fall, Spring

Prerequisite: Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular group meetings.
199 Independent Study (1-3) Fall, Spring
Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

## GRADUATE COURSES

## 270 Seminar: Recreation in Public Education (2) Spring

Prerequisite: Graduate status or consent of instructor. Uses of educational resources for recreation and community living. The after school program, summer programs, school camping, outdoor education, and adult education.

## 271 Surveys and Planning in Recreation (2) Fall

Prerequisite: Graduate status or consent of instructor. Planning for recreation services and facilities based on studies and surveys. The scope, content, objectives, procedures, and types of recreation surveys.

## 275 Seminar in Administration of Public Recreation (2) Spring

Prerequisite: Graduate status or consent of instructor. An analysis of administrative duties and responsibilities, and suggested approaches and methods of administration that have been proved by actual experience.

# SOCIAL SCIENCE (In the Division of Social Sciences) 

Staff: Chosen from the Division of Social Sciences and the College at large.

## BACHELOR'S DEGREE CURRICULA

## Major in Social Science

The social science major is not intended to qualify students for professional, educational, or vocational objectives. Its purpose is cultural: to provide a liberal education with main emphasis in the social sciences.
Lower Division
Basic social science courses chosen from two or three of the followingfields
Social Anthropology
Economics
Social Geography
Government (Political Science)
History
Social Science
Sociology
Upper Division
Social Science 150-Scientific Method and Applied Logic ..... 3 units
Courses chosen in conference with a social science adviser from fields below:
One principal field ..... 15 units
Two other fields: 6 units each ..... 12 units
Note: Social Science fields include: cultural anthropology, economics, social geography, government, history, social psychology, social science, sociology.
General Secondary Teaching Major in Social StudiesThe major in social studies has been designed specifically for teachers-in-training who have chosen social studies as their composite field majorfor the general secondary credential. Completion of this major willprepare students to teach effectively the subjects in the several socialsciences commonly taught in the junior high and high schools and jun-ior colleges of California. See also pages 112-113 for professional ed-ucation requirements. A teaching minor in a different teaching field isalso required for the general secondary credential.

## Lower Division

10-12 units of basic social science courses from two or three of the social sciences: anthropology, economics, history, geography, government (political science), social science and sociology. The upper division program will be planned to balance courses taken in the lower division.

## Upper Division

With the approval of a social studies adviser, 24 units of upper division work will be selected by the candidate in at least four of the following fields (must
include both United States history and United States government). The selection will be made on the basis of the student's future plans, the work taken in the lower division, and the aptitude of the student.

| Cultural Anthropology | Government (other) |
| :--- | :--- |
| Economics | Cultural Geography |
| History (United States) | Social Psychology |
| History (other) | Social Science |
| Government (United States) | Sociology |

Graduate (Fifth Year)
With the approval of the social studies adviser, 6 units from " 200 " courses in the social sciences, including Social Science 250A.
Note: When 24 units of upper division work in the teaching major, and 5 units in professional education are completed, the candidate may apply for the B.A. degree, providing other requirements for the degree have been met.

## General Secondary 'Teaching Minor in Social Studies

See also pages 112-113 for professional education requirements. A teaching major in a different teaching field is also required for the general secondary credential.

## Lower Division

10-12 units in basic social science courses chosen, with approval of an adviser, from at least two fields.

## Upper Division

With the approval of a social studies adviser 10-12 units from at least three fields listed above under social studies major will be selected by the candidate. If necessary, a part of this requirement may be completed in the graduate year.

## MASTER OF ARTS DEGREE

The graduate program is built on the foundation of undergraduate preparation. The master's degree requires intensive directed study in the social sciences aimed at depth of understanding and appreciation of significant relationships. See page 48 for the total requirements for the master of arts degree.

1. Prerequisite: Acceptable undergraduate preparation in social science.
2. Area of concentration
a. Social Science 250A and B

6 units
b. Approved graduate " 200 " courses chosen from two of the following fields: economics, or geography, or government, or history, or sociology, or social psychology. Approved graduate project, not to exceed 3 units of credit, may be included
c. Other approved courses in the social sciences; may be upper division 3 units
d. Comprehensive examinations in the composite field of social science and in designated social science areas.
3. Approved courses outside the area of the social sciences 6 units
4. Other courses approved in advance by the adviser $\quad 9$ units

## COURSES OF INSTRUCTION

Prerequisites: Completion of two introductory courses in the social sciences. Exception: No prerequisite for Social Science 100.

## 100 The United States (2) Fall, Spring

An orientation course designed for, and open only to, students from foreign countries. American historical, political, economic, and social backgrounds; American educational and vocational principles and practices; American values. Recommended for international students.

## 150 Scientific Method and Applied Logic (3) Fall, Spring

Nature and application of logic, in its relations to the social sciences. Special attention to the foundation in logic of the methods of scientific inquiry.

## 169 Contemporary Latin America (3) (Offered 1955-56)

Prerequisite: Knowledge of the Spanish language. Introduction to the contemporary Hispanic world by means of identification of analysis of significant trends and problems. Particular emphasis upon recent economic and social developments in the Southwest. Lectures and discussions in Spanish and English.

## GRADUATE COURSES

Minimum prerequisites: A bachelor's degree and superior academic performance in the social sciences.

250A-B Seminar in Social Science (3-3) Fall, Spring
An interdisciplinary approach to selected problems, regions, or trends; directed by the staff of the division. 250 A is prerequisite to 250 B .

## SOCIOLOGY

(In the Division of Social Sciences)
Staff: Wallace (Department Head), Diehl, Ford, Nahrendorf, Penchef.

## BACHELOR'S DEGREE CURRICULUM

## Major in Sociology

The sociology major leads to a bachelor's degree in sociology with a concentration in either sociology or social welfare, and also prepares the student for graduate study toward an advanced degree in one of the major areas of sociology or social work.

| Lower Division |  |
| :---: | :---: |
| Introduction to Socio | units |
| Recommended: Inductive Logic (Social Science 150 will substitute in upper division) |  |
| Upper Division |  |
| A. Core Requirements |  |
| Sociology 163-Elementary Social Statistics | units |
| Sociology 167-Development of Sociology. | 3 units |
| Sociology 197-Introduction to Social Resear | 3 units |
| B. Option Requirements (Select option 1 or 2) |  |
| Option 1-Sociology |  |
| Sociology courses chosen with the approval of an adviser 15 units |  |
| Courses in allied fields, or in sociology, chosen with the approval of an adviser $\qquad$ 6 units |  |
| Option 2-Social Welfare |  |
| Sociology 156-The Field of Social Work | units |
| Sociology 170-Methods of Social Work | 3 units |
| Sociology courses chosen with the approval of an adviser | 9 units |
| Courses in allied fields, or in sociology, chosen with the approval of an adviser. (Recommended: Anthropology 104 and 105) | 6 units |

## MASTER OF ARTS DEGREE

The graduate program is built on the foundation of undergraduate preparation. The master's degree requires intensive directed study in sociology aimed at increased competency and depth of understanding. 1. Prerequisite: Acceptable undergraduate preparation in sociology.
2. Area of concentration
a. Social Science 250 A
3 units
b. Approved graduate " 200 " courses in the field of sociology. Sociology
290 must be included
c. Other approved courses in the field of sociology; may be upper divi-
sion " 100 " courses
d. Comprehensive written examinations in selected fields of sociology.
3. Approved courses outside the area of sociology

6 units
4. Other courses approved in advance by the adviser - 9 units

## COURSES OF INSTRUCTION

Prerequisite for upper division courses: Introduction to Sociology, or consent of instructor.

102 Social Processes and Institutions (3) Fall, Spring
Introductory analysis of social processes and institutions, and clarification of basic sociological concepts. Study of the various aspects of sociology from the standpoint of their contributions to present day American life.

## 103 Marriage and the Family (3) Fall, Spring

Recent social changes affecting marriage and family behavior. Love, courtship, engagement, mate selection, and marital success. The family as a unity of interacting personalities.

## 110 The City (3) Fall

A study of the city with special attention to the psycho-social features of urban phenomena.

## 112 Regional Sociology (3) Spring

Ecological factors in society. Attention is given to social and cultural regionalism, and to the development, form, spatial distribution, and organization of communities and institutions in relation to their habitats. (Formerly Regions of the United States.)

## 122 Social Change (3) Spring

Changes in technology, ideology, and social organization. Theories of social change and progress. Adjustments within society to social change.

## 126 Social Legislation (3) Fall

A study of the socio-philosophical movements and democratic processes directed toward bringing about and maintaining laws relating to social security. Health insurance, workmen's compensation, employment, and other measures and proposals examined with reference to the larger cultural body of which they are a part.

## 145 Social Psychology (3) Fall, Spring

Inquiry into group dynamics. Study of social interaction and its effects upon the individual and the group. (Credit not given for both Sociology 145 and Psychology 145.)

## 146 Social Control (3) Fall

Nature of social controls, and their classification. Means and agencies, with particular attention to controls in law, religion, education, the family, and the economy.

## 147 Mass Communication and Propaganda (3) Fall

Communication in its sociological aspects, especially in mass and crowd behavior. Propaganda in its relationship to social actions and social systems.

## 148 Juvenile Delinquency (3) Fall, Spring

Extent and distribution of delinquency with emphasis on the local area. Meaning, implications, and treatment of delinquency. Personal and environmental conditioning factors.

## 150 Population (3) Fall

An analysis of the causes and consequences of major population trends throughout the world; changes in birth and death rates, sex ratio, age distribution, race and nationality composition; marital, educational, and occupational status; religious composition; population density; migration.

## 155 Criminology (3) Fall, Spring (See Police Science 155)

The nature of crime; the conditioning factors in criminal behavior of the individual and group.

## 156 The Field of Social Work (3) Fall, Spring

The development of American social work; the scope and diversity. of specific programs used in meeting welfare problems in contemporary society.

## 158 Community Welfare Organization (2) Fall, Spring

Evaluation of the interdependency of individual and group and their common human needs in regard to resources such as family service agencies, clinics and hospitals, schools, youth and adult organizations. The coordination of social agencies and welfare services, with emphasis on local community resources. (Formerly Community Organization.)

## 159 Child Welfare (3) Spring

Trends affecting the growth and change of the movement toward establishing the rights of the child to care and protection. Emphasis on the child and the law, compulsory education, school social work, child labor legislation, institutional and foster care for the healthy and sick child, and adoption legislation.

## 160 Industry in Modern Community (3) Fall

The sociological analysis of employee, employer, and consumer relationships. Typical problems in personnel administration, vocational guidance, job training, industrial health, employee morale, and collective bargaining.

## 163 Elementary Social Statistics (3) Fall, Spring

Inquiry into statistical methods: ways in which social data are presented and treated in sociological literature. The use of descriptive statistical techniques.

164 Social Statistics (3) Spring
Prerequisite: Sociology 163 or equivalent. (Recommended for all sociology majors, especially those planning graduate work.) The use of formulae applicable to the matters of central tendency, variability,
reliability, comparison, and correlation. Problems illustrating the social scientific methods of collecting data.

## 167 Development of Sociology (3) Fall, Spring

Contributions of social philosophy and the social and natural sciences to the growth of sociology, considered historically and analytically.
168 Contemporary Sociology (3) Spring
Growth of sociology in the United States. Contribution of present day sociologists. Relation of sociology to other fields, such as psychology, education, and anthropology. Occupational opportunities in sociology.

## 170 Methods of Social Work (3) Fall, Spring

Theories, principles, and practices of social case work in group, medical, and psychiatric settings. Discussion of case material and literature for the appreciation and development of skills in social welfare work.

## 172 Contemporary Treatment of Law Violators (3) Spring

A survey of general and specific treatment programs used in the rehabilitation of the offender in correctional institutions, probation and parole. Field trips.

## 175 In-service Training (Variable credit) Fall, Spring

In-service training for social service personnel in local, state, and federal agencies. Conferences and field supervision.

## 190 Race Relations (3) Fall

An analysis of the processes leading to the organization and disorganization of majority and minority group relations. Attention to the most successful experiments in the field of ethnic group interaction.

## 194 Social Dynamics of Abnormal Behavior (3) Spring

The sociological aspects of defiant behavior and personality disorganization. Social research methods applied to the problem of individual and group tension.

## 197 Methods of Social Research (3) Fall, Spring

Prerequisites: Inductive Logic and Scientific Method, or Social Science 150, or equivalent. Application of the scientific method to social phenomena. An analysis of the more important techniques used in sociological research. Preparation of research papers and reports. Methods of collecting, classifying, interpreting, and presenting social data. Case studies of typical research monographs. (Formerly Introduction to Social Research.)

198 Field Assignment and Reports (1-2) Fall, Spring
Prerequisite: Active, approved employment under the work-study or internship programs. Analysis and reports of the student's performance; regular group meetings.

## 199 Independent Study (1-3) Fall, Spring

Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

## GRADUATE COURSES

Minimum prerequisites: A bachelor's degree and superior academic performance in sociology.

## 245 Seminar in Social Psychology (3)

Advanced investigation of the dynamics of social interaction. Interdisciplinary research.

## 270 Studies in Contemporary Sociology (3)

A survey of the methods and research of contemporary sociologists, with particular attention to the convergence of apparently divergent methodologies in this swiftly maturing science.

## 271 Studies in Social Welfare (3)

Understanding of individual and group phenomena as related to specific phases of social welfare on the local, state, and federal level. Field studies and class planning based upon the student's interest in his field of study or employment.

279 Seminar in Marriage and the Family (3)
An advanced study of the sociodynamics of the family as a social institution, with emphasis on recent research regarding processes of family change, family disorganization and reorganization.

## 280 Social Statistics (3)

Advanced interpretation of empirical findings in terms of mathematical proof. Statistical inference, the analysis of variance, the analysis of covariance, microstatistics, and nonparametric statistics.

## 281 Practicum (3)

Individual and group experiences in the use of sociological scales, the techniques of sociometry, and social interaction schedules.

## 290 Social Research (3)

Advanced study of social research techniques, with supervised application of research methods in a laboratory or field study situation. Required for the master's degree in sociology.
SPANISH(In the Division of Language Arts)
Staff: Bonhard, Lionetti.
BACHELOR'S DEGREE CURRICULA
Major in SpanishDesigned for students who elect to study the liberal arts tradition withan emphasis on modern languages.
Lower Division
Elementary Spanish (one year) ..... $6-8$ units
Intermediate Spanish (one year) ..... $6-8$ units
Upper Division
Spanish 102A-B-Spanish Literature to 1800 units
Spanish 103A-B-Spanish Literature Since 1800
Spanish $116 \mathrm{~A}-\mathrm{B}-$ Advanced Composition and Syntax ..... 6 units
Upper division electives in Spanish ..... 6 units
36-40 units
General Secondary Teaching MajorSee also pages 112-113 for professional education requirements. Ateaching minor in a different teaching field is also required for the gen-eral secondary credential.
Lower Division
Elementary Spanish 6-8 units
Intermediate Spanish ..... 6-8 units
Upper Division
Spanish 101A-B-Oral and Written Composition (3-3) ..... 6 units
Spanish 116A-B-Advanced Composition and Syntax (3-3) ..... 6 units
Spanish 102A-B-Spanish Literature to 1800 (3-3) ..... 6 units
Spanish 103A-B-Spanish Literature Since 1800 (3-3) ..... 6 units
Graduate (Fifth Year)
Select from the following ..... 6 units
Spanish 104A-B-Survey of Spanish-American Literature (3-3)
(Note: Required of all fifth year students who have not had previously a six-unit survey of Spanish-American literature.)
Speech 164D-High School Dramatics (2)
Language Arts $164 \mathrm{M}-$ Mass Communication Arts (2)
42-46 units

## General Secondary Teaching Minor

See also pages 112-113 for professional education requirements.


See "Language Arts," page 194.

## COURSES OF INSTRUCTION

101A-B Oral and Written Composition (3-3) Offered alternate years Prerequisite: Intermediate Spanish.
102A-B Spanish Literature to 1800 (3-3) Offered alternate years
Prerequisite: Intermediate Spanish, or Spanish 101A or 101B.
103A-B Spanish Literature Since 1800 (3-3) Offered alternate years
Prerequisite: Intermediate Spanish, or Spanish 101A or 101B.

## 104A-B Survey of Spanish American Literature (3-3) Offered alternate years

Prerequisite: Intermediate Spanish, or Spanish 101A or 101B. First semester literature to 1888.

116A-B Advanced Composition and Syntax (3-3)
Prerequisite: Intermediate Spanish, or Spanish 101A or 101B.
199 Independent Study (1-3) Fall, Spring
Prerequisites: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

# SPEECH AND DRAMA <br> (In the Division of Language Arts) 

> Staff: Stansell (Department Head), Altenberg, Beaver, Cathcart, Chase, Cullen, Daniel, DeLay, Douglass, Gardemal, Gillen, Hillbruner, Huber, Mudd, Schlosser, Scott, Sillars.

## BACHELOR'S DEGREE CURRICULA

## Major in Speech and Drama

Designed for students who (1) elect to study the liberal arts with an emphasis in speech and drama, or (2) plan to engage in professional work on the stage, screen, or television, or in careers where skill in public speaking or dramatic art is essential.

## Lower Division

From the following areas ..... 3 units
Public speaking, acting fundamentals, oral interpretation, voice training, stagecraft
Upper Division
Language Arts 197-Language Arts and the Democratic Tradition 2 units
Speech 110-Public Speaking ..... 3 units
Speech 112A-Advanced Acting ..... 3 units
Speech 120-Oral Interpretation ..... 3 units
Speech 130 -Voice and Diction ..... 2 units
Speech 153 -History of the Theater ..... 3 units
Speech 196A or E-Special Projects in Speech and Drama ..... 3 units
At least one course from the following ..... 3 units
Speech 100-Group Discussion (3)
Speech 131-American Phonetics (3)
Speech 150 AB -Principles of Directing (3-3)
Speech 196BCDF-Special Projects in Speech and Drama (3-3-3-3)
Select from the following5 units
English 117J-Interpreting Shakespeare (3)
English 124-Interpreting Dramatic Literature (3)
Journalism 192-Radio and Television Continuity Writing (3)
Language Arts 164 M -Mass Communication Arts (2)
Speech 111-Persuasive Speaking (2)
Speech 112B-Advanced Acting ..... (3)
Speech 134-Introduction to Speech Therapy (3)
Speech 155-Television Techniques (3)
Speech 156ABCD-Information Programs in Television (2-2-2-2)
Speech 170-Set Construction, Design, and Lighting (3)Speech 173-Advanced Technical Production (3)
30 units
Major in Speech Therapy
Designed for students who plan to engage in speech therapy as acareer.
Lower Division
Public Speaking 3 units
Voice Training or Interpretation ..... 3 units

| Upper Division |  |
| :--- | ---: |
| Audiology 100-Audiology | 3 units |
| Language Arts 197-Language Arts and the Democratic Tradition | 2 units |
| Spech 120-Oral Interpretation | 3 units |
| Speech 130-Voice and Diction | 2 units |
| Speech 131-American Phonetics | 3 units |
| Speech 134-Introduction to Speech Therapy | 3 units |
| Speech 135-Advanced Speech Therapy | 3 units |
| Speech 136-Clinical Practice | 2 units |
| Speech 163A-Speech and Dramatic Activities in Elementary Schools | 3 units |
|  | -30 |

## General Secondary Teaching Major

See also pages 112-113 for professional education requirements. A teaching minor in a different teaching field is also required for the General Secondary Credential. Candidates for the General Secondary Credential in Speech are required to have a collegiate course in each of the following areas: composition, literature, speech, and drama or journalism.
Lower Division
From the following areas ..... 3 unitsPublic speaking, acting fundamentals, stagecraft, oral interpretation,voice training
Upper Division
Language Arts 197-Language Arts and the Democratic Tradition ..... 2 units
Speech 100-Group Discussion ..... 3 units
Speech 112A-Advanced Acting ..... 3 units
Speech 131-American Phonetics ..... 3 units
Speech 164D-High School Dramatics ..... 2 units
Speech 164S-High School Speech Arts ..... 2 units
Speech 196A or E-Special Projects in Speech and Drama ..... 3 units
At least one course from the following ..... 3 units
Speech 120-Oral Interpretation (3)
Speech 173-Advanced Technical Production (3)
Speech 196BCDF-Special Projects in Speech and Drama (3-3-3-3)
Select from the following ..... 6 units
Speech 110-Public Speaking (3)
Speech 111-Persuasive Speaking (2)
Speech 130-Voice and Diction (2)
Speech 134-Introduction to Speech Therapy (3)
Speech 150A or B-Principles of Directing (3)
Speech 153-History of the Theater (3)
Speech 155-Television Techniques (3)
Speech 156ABC or D-Information Programs in Television (2)
Speech 170-Set Construction, Design and Lighting (3)
Graduate Year
With approval of adviser ..... 6 units
36 units
General Secondary Teaching Minor
See also pages 112-113 for professional education requirements.

## Lower Division

From the following areas ..... 3 unitsPublic speaking, acting fundamentals, stagecraft, oral interpretation, voicetraining

| Upper Division |  |
| :--- | ---: |
| Speech 100-Group Discussion | 3 units |
| Speech 164D-High School Dramatics | 2 units |
| Speech 164S-High School Speech Arts | 2 units |
| Speech 196A (BCDEF)-Special Projects in Speech and Drama | 3 units |
| At least one course from the following | 3 units |
| Speech 112A-Advanced Acting (3) |  |
| Speech 120-Oral Interpretation (3) | 4 units |
| At least two courses from the following |  |
| Speech 110-Public Speaking (3) |  |
| Speech 111-Persuasive Speaking (2) |  |
| Speech 130-Voice and Diction (2) |  |
| Speech 150AB-Principles of Directing (3) |  |
| Speech 155-Television Techniques (3) |  |

MASTER OF ARTS DEGREE $\overline{20}$ units

See "Language Arts," page 194.

## COURSES OF INSTRUCTION

## REMEDIAL SPEECH

## 99A Individual Speech Therapy (1) Fall, Spring

Prerequisite: Consent of instructor. Practical individual assistance for students who have deficient speech. Students with articulatory defects, organic defects, stuttering, etc., are eligible to enroll.
99B Individual Speech Therapy (Foreign Students) (1) Fall, Spring
Prerequisite: Consent of instructor. Individual and small group assistance for students with foreign language backgrounds. Correct articulation, pronunciation, and the use of the American idiom.

## ORAL SKILLS

## 100 Group Discussion (3) Fall, Spring

The role of group discussion in a democratic society. Principles and methods of group discussion in problem solving and learning situations. Development of individual skills in discussion preparation, participation, and leadership through practical application.

## 100B Oral Expression (3)

Students enroll in Language Arts 100B.

## 110 Public Speaking (3) Fall, Spring

Prerequisite: Three units of public speaking or consent of instructor. Preparation, organization, and delivery of practical speeches. Emphasis upon audience analysis and speeches for special occasions.

## 111 Persuasive Speaking (2) Fall, Spring

Prerequisite: Consent of instructor. Methods of persuasion with emphasis upon ethical, logical, and pathetic proofs.

## 112A-B Advanced Acting (3-3) A-Fall, B-Spring

Gesture, movement, timing, and pointing; problems of characterization; styles of acting and characteristics of acting in various dramatic media. Presentation of scenes from plays of various types. May be taken in any sequence.

## 120. Oral Interpretation (3) Fall, Spring

Theory of oral interpretation; readings of poetry and prose.

## 130 Voice and Diction (2) Fall, Spring

Studies in phonation, articulation, and pronunciation. Special attention to diction for classroom teachers, public speakers, and actors.

## 131 American Phonetics (3) Fall, Spring

Systematic analysis of the sounds of speech, structure and function of the speech mechanism, and the use of the International Phonetic Alphabet. Application of phonetic principles to articulation, to the teaching of speech, and to speech therapy.

## SPEECH THERAPY

## 134 Introduction to Speech Therapy (3) Fall, Spring

Characteristics, causes, and treatment of speech defects. Designed to acquaint the special education teacher with common speech problems of children and to serve as an introductory course for speech therapists.

## 135 Advanced Speech Therapy (3) Spring

Prerequisite: Speech 134 or equivalent. Intensive study of the speech handicapped individual. Consideration of various causal factors, including cleft palate and cerebral palsy. Theories of treatment and observation of speech therapy in practical situations.

## 136A-B Clinical Practice in Speech and Hearing (2-2) Fall, Spring

Prerequisite: Consent of instructor. Supervised clinic experience with speech and hearing handicapped children.

## DRAMA

150A-B Principles of Directing (3-3) A-Fall, B-Spring
Lectures and practice in problems of stage and television direction. Opportunity to direct college-sponsored productions. May be taken in any sequence.

## 153 History of the Theater (3) Spring

Dramatic literature from the Greek period to the present. Selected critical readings about the theater and drama.

## 155 Television Techniques (3) Fall, Spring

Survey of current trends in television programming and production. Occupational opportunities in commercial and educational television. Lectures and demonstrations with class participation.

## 156A-B-C-D Information Programs in Television (2-2-2-2) Fall, Spring

Prerequisite: Speech 155 (may be taken concurrently). A survey of the techniques which may be employed in presenting educational opportunities to the public through the medium of television. Planning and preparation of educational, information, and public service television programs. May be taken in any sequence.

## SPEECH EDUCATION

## 163A Speech and Dramatic Activities in Elementary Schools (3)

Fall, Spring

Theory and techniques of creative dramatics, puppetry, cutout shadow plays, choral reading, and story telling. Designed primarily for kindergarten, primary, and elementary teachers. Also valuable to leaders in extracurricular activity.

## 163B Speech Problems in the Classroom (3) Fall, Spring

Identification of common deviations from the normal pattern of development and function of oral language in elementary school children. Techniques appropriate for speech improvement and for entrenchment of proper speech habits. Designed for kindergarten, primary, and elementary teachers; not for special education or preprofessional therapy majors. (Replaces Speech 134 in composite minor program.)

## 164D High School Dramatics (2) Spring

Theory and techniques of dramatic production in secondary schools. Requires attendance at typical high school dramatic activities. Not a methods course; emphasis on subject field skills.

## 164 S High School Speech Arts (2) Fall

Techniques of speech in the secondary school. Survey of textbooks suitable for secondary schools. Includes public speaking, oral interpretation, discussion, debate, and other speech activities. Requires attendance at high school speech arts activities. Not a methods course; emphasis on subject field skills.

## TECHNICAL THEATER

## 170 Set Construction, Design, and Lighting (3) Spring

Prerequisite: Lower division course in stagecraft or consent of instructor. Theory and practice of set design, construction, and lighting for plays, pageants, dance, television, and other dramatic productions for professional, educational, and community presentations. Course designed to serve speech, drama, television, industrial arts, and recreation majors. Practical experience through participation in college sponsored productions.

## 173 Technical Production (3) Fall, Spring

Prerequisite: Lower division course in stagecraft or consent of instructor. Study of advanced techniques in scenery and costume construction, production organization, and house management. Course designed to serve speech, drama, television, industrial art, art, and recreation majors. Practical experience through participation in college sponsored productions.

## SPECIAL STUDIES

## 196A-B-C-D-E-F Special Projects in Speech and Drama (3-3-3-3-3-3) Fall, Spring <br> Prerequisite: Consent of instructor. Participation under faculty supervision in the planning, preparation, and presentation of college sponsored speech and dramatic activities. May be taken in any sequence.

## 198 Field Assignment and Reports (1-2) Fall, Spring

Prerequisite: Active, approved employment under the work-study program. Analysis and reports of the student's performance; regular group meetings.

## 199 Independent Study (1-3) Fall, Spring

Prerequisite: Consent of an instructor to act as sponsor; ability to assume responsibility for independent work and to prepare both written and oral reports. Project selected in conference with the sponsor at the time of registration; progress meetings held regularly thereafter until the end of the semester.

## GRADUATE COURSES

Graduate standing is prerequisite to registration in the following courses.

## 215 Performance (3) Fall

Prerequisites: An undergraduate course in speech or drama, or consent of instructor. Intensive study of the organization, presentation, and theory of the use of significant themes and ideas in the professional lecture and lecture recital. Planning, practice, and presentation of monodramas, oral readings, book reviews, and speeches for use in classroom and community.

## 220D Proseminar in Dramatic Arts (3) Fall

Backgrounds in theatrical art; an analysis of the aesthetic principles and content of the theater; selected problems in the philosophy of dramatic art.

## 220S Proseminar in Speech Arts (3) Spring

Selected problems in the philosophy of the speech arts, their influence upon contemporary movements and affairs in the American democratic society.

## 235 Seminar in Speech Disorders (3) Fall

Prerequisite: Speech 135 or equivalent. Analysis and evaluation of the basic concepts in the field of speech pathology and their applications to the development of modern techniques of diagnosis and therapy.
236 AB Advanced Clinical Practice in Speech and Hearing (2-2) Fall, Spring
Prerequisite: Consent of instructor. Supervised experience in diagnosis and therapy with speech and hearing handicapped children and adults.

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## NOTES





[^0]:    ${ }^{1}$ San Fernando Valley campus will offer selected courses, not necessarily complete sequences in 1956-57.
    ${ }^{2}$ Graduate programs only.

[^1]:    204
    Seminar in Painting (3) Spring
    Prerequisites: Graduate standing, 8 units of painting and drawing or consent of instructor.

[^2]:    * Under some circumstances a student may use up to 6 units of upper division courses, other than botany, to satisfy the lower division requirements.

[^3]:    *Students desiring to continue toward a graduate degree should elect the following additional lower division courses: organic chemistry laboratory, a second semester of physics ( 4 units), general physiology, and mathematics (to include some calculus).

[^4]:    * Microbiology 100A-B may be used to satisfy this requirement.

[^5]:    * Microbiology 100A-B may be used to satisfy this requirement.

[^6]:    ${ }^{*}$ Courses need not be taken in A-B sequence.

[^7]:    * Courses need not be taken in A-B sequence.

[^8]:    Adviser: Chrysler.
    Core requirements. See page $79 \quad 28$ units
    Business
    Business 145 -Wholesaling
    Econess 145-Wholesaling
    Busing Indes 106 -Principles of International Trade
    Bunts
    3 units
    $\begin{array}{ll}\text { Businescs 106-Principles of International Trade } & 3 \text { units } \\ \text { Busines } 153 \text {-Principles of Transportation } & 3 \text { units }\end{array}$
    $\begin{array}{ll}\text { Business } 154 \text {-Traffic Management } & 3 \text { units } \\ 3\end{array}$
    Select two courses from the following:
    Business 150-Foreign Trade Practices (3)
    Business 150-Moreign Trade Practices (3)
    Economics 100-Economics of Industry (3)

[^9]:    * One of these courses must be taken prior to directed teaching in business education.

[^10]:    * Adequate typing and shorthand skill are prerequisites to Business 111.

[^11]:    $\dagger$ It is reco
    It is recommended that Economics 102 and 103, Business 103 and 109, and Social Science 150
    t The taken in the junior year.
    Those taking Economics 103 to remove a lower division deficiency, and those who have taken a lower division course in Money and Banking, will take Economics 130 (Monetary Management) or another upper division course to be selected in conference with a major adviser.

[^12]:    * An oral review of the proposed project is to be held before a division committee not latel than the twelfth week of the first semester in residence. Project is to be presented to the chai man of the candidate's committee at least three weeks prior to the end of the semester which the degree is to be conferred.

[^13]:    *See Pupil Personnel Services Credential, page 122.

[^14]:    * Check course description for eligibility to enroll.

[^15]:    Art, see page 56.
    Business Education, see page 86.
    English, see page 151.
    Foreign Languages, see page 248.
    Health Education, see page 170.
    Homemaking, see page 178.
    Industrial Arts, see page 184.
    Language Arts, see page 192.

[^16]:    *This 40 -unit general requirement is completed when a student meets the graduation requirements
    outlined on pages 45-46.

[^17]:    * Students studying for a special secondary in Homemaking must take Education 130 if their credential is to be granted after September 15, 1956.

[^18]:    * Education 100 is not required of students who have regular valid California public school teaching credentials.

[^19]:    Behavior Problem Children
    No special credential is required to teach children with behavior disorders. Students interested in this type of work are advised to consult the Coordinator of Special Education for a list of suggested courses.

[^20]:    * Students who earned credit in Education 270 when it was offered as a 2 -unit course must
    enroll in Education 271, Organization and Administration of Public School Systems, and
    need not enroll in Education 279.

[^21]:    * Students who earned credit in Education 276 when it was offered as a 2 -unit course muls enroll in Education 271, Administration and Organization of Public School Systems, ald need not enroll in Education 279.

[^22]:    * At the discretion of the division chairman a student may take a comprehensive examination in $\mathrm{h}^{\text {is }}$ field in lieu of the graduate project. In this case, a 3-unit course would be substituted for Edd cation 299AB.

[^23]:    ${ }^{*}$ Students
    enroll who earned credit in Education 270 when it was offered as a 2 -unit course must need not enroll in Education 279.

[^24]:    Student
    Arts will be advised to utilize these units to take the Seminar in Advanced Industrial $\dagger$ The "thesign (Industrial Arts 233) and any "shop course" they may need.

    Seconpical" student will probably utilize these units to fulfill requirements for the General Secondary Credential and for the completion of his minor.
    Students who earned credit in Education 276 when it was offered as a 2 -unit course must
    enroll in Education 271, Administration and Organization of Public School Systems, and need
    not enroll in Education 279.

[^25]:    * At the discretion of the division chairman a student may take a comprehensive examination in his field in lieu of the graduate project. In this case, a 3 -unit course would be substituld for Education 299AB.

[^26]:    Qualified students may petition the department head to substitute a graduate project for this requirement.
    5-31113

[^27]:    * Ordinarily taken by candidates for the master of arts degree during the semester in which the degree requirements are completed.

[^28]:    140 Electronics Laboratory (1) Spring
    Prerequisite: Engr. 135. (May be taken concurrently.) Experiments based on Engr. 135. Three hours laboratory.

[^29]:    * Plumbing Engineering students are advised to select three courses from the following: Engr. ${ }^{116}$ Engr. 155, Public Health 105, Public Health 120 and Business 160.

[^30]:    $\mathrm{NOTE}_{\mathrm{TE}} \mathrm{T}$
    the The candidate may apply for the B.A. degree when 24 units of upper division work in
    the teaching major have been completed, provided that other requirements for the degree have
    also been met.

[^31]:    Upper Division
    Option 1-Government Service
    Select from the following
    Government 103-State and Local Government (3)
    Government 104-Municipal Government (3)
    Government 105-American Federal Government (3)
    Government 114-Public Opinion and Lobbies (3)
    Government 117-Government Controls in the American Economy (3)

[^32]:    a. Public Administration

    Govt. 103-State and Local Government (3)
    Govt. 104-Municipal Government (3)
    Govt. 160-Principles of Public Administration (3)
    Govt. 163-Public Personnel Administration (3)
    Govt. 165-Principles of Employee Supervision (3)
    Govt. 166-Public Financial Administration (3)
    Govt. 168-Public Welfare Administration (3)

[^33]:    $\dagger$ Designates a course which satisfies the California state and local government requirement.
    $\ddagger$ Designates a course which satisfies the United States Constitution requirement.

[^34]:    *Designates a course which satisfies the American History requirement.

[^35]:    * Designates a course which satisfies the American History requirement.

[^36]:    * Normally these courses are recommended for the major unless similar courses from other college have been completed in lower division.

[^37]:    - May be waived by examination.

[^38]:    * Eight units is the maximum number permitted in 196 or a combination of 196 and 198. No more than 4 units may be earned in any one activity. 196 and 198 may not be taken concurrently.

[^39]:    * Not required of students who present a minor in mathematics.

[^40]:    * May be met in lower division.

