CALENDAR 1935-1936

SUMMER SESSIONS, 1935.
Term I, six weeks, June 24-August 2.
Term II, three weeks, August 5-August 24.

September 9, Admission Day Holiday.
September 10 to September 17, Freshman Orientation Week (Attendance Required).
September 10, 8.30 a.m., Examination in Subject A (English Composition).
1.30 p.m., Fundamentals Test.
September 11, 8.30 a.m., College Aptitude Test.
2.00-4.00 p.m., Entrance Examination in Music (by appointment).*
September 12, 8.30-10 a.m. Entrance Examination in Music (by appointment).*
9.00-12.00 a.m., Payment of Fees by Students Who Preregistered.
September 13, 8.30-12.00 a.m., and 1.00-2.00 p.m., Registration of Entering Freshmen Students.
9.00-12.00 a.m., Payment of Fees by Students who Preregistered.
September 16, 8.30-12.00 a.m., and 1.00-2.00 p.m., Registration of Old Students with Initials A-K, New Students with Advanced Standing, and Returning Students.
September 17, 8.30-12.00 a.m., and 1.00-2.00 p.m., Registration of Old Students with Initials L-Z, New Students with Advanced Standing, and Returning Students.
September 18, Class Work begins.
November 11, Armistice Day Holiday.
November 27-December 1, Thanksgiving Recess.
December 21, Christmas Recess Begins.
January 6, Class Work Resumes.
January 22-29 Mid-Year Examinations.

* See page 42.

SPRING SEMESTER, 1936.
February 1, 10.00 a.m., College Aptitude Test.
February 3 to February 5, Freshman Orientation Week (Attendance Required).
February 3, 8.30 a.m., Examination in Subject A (English Composition).
9.00-12.00, Payment of Fees by Students who Preregistered.
1.30 p.m., Fundamentals Test.
February 4, 8.30-12.00 a.m. and 1.00-2.00 p.m., Registration of Entering Freshmen and Students Entering with Advanced Standing.
9.00-12.00 a.m., Payment of Fees by Students who Preregistered.
2.30-3.30 p.m., Entrance Examination in Music (by appointment).*
February 5, 8.30-12.00 a.m. and 1.00-2.00 p.m., Registration of Old Students and Returning Students.
February 6, Class Work Begins.
April 4-12, Easter Recess.
May 1, Dedication Day.
June 4-11, Final Examinations.
June 12, Annual Commencement Exercises.

SUMMER SESSIONS, 1936.
Term I, six weeks, June 22-July 31.
Term II, three weeks, August 3-August 21.

* See page 42.
FACULTY
For the Year 1934-1935

EDWARD L. HARDY, LL.D. PRESIDENT (until August 31, 1935)
B.L., University of Wisconsin; M.A., University of Chicago; LL.D., La Verne College.
Study of European secondary schools.
Principal, San Diego High School. (Appointed September, 1910.)

WALTER RAY HEPNER, A.M. PRESIDENT (beginning September 1, 1935)
A.B., A.M., University of Southern California.
Graduate student, University of Chicago and University of California.
High school teacher, Chicago, Illinois: Long Beach and Oxnard, California. Principal, Fresno High School; Superintendent of Schools, Fresno and San Diego. Summer session and extension instruction; State Teachers Colleges of Fresno, San Jose, and San Diego; Claremont Colleges; Stanford University; University of California at Los Angeles. Chief, Division of Secondary Education, California State Department of Education. (Appointed September, 1935.)

IRVING K. OUTCALT, M.A. VICE PRESIDENT AND PROFESSOR OF ENGLISH
A.B., M.A., Stanford University.
Student, University of Illinois; graduate study and research work, Stanford University. Travel in Europe. Head of Department of English, San Diego High School. (Appointed September, 1912.)

J. W. AULT, M.A. DEAN AND PROFESSOR OF EDUCATION
B.S., Valparaiso University; M.A., University of South Dakota.
Student, University of Southern California. Superintendent of city schools; conductor and instructor in teachers institutes; Professor of Education at Southern State Teachers College, Springfield, South Dakota.

ARTHUR G. PETERSON, M.A. DEAN OF LIBERAL ARTS, EX OFFICIO IN GENERAL CHARGE OF LOWER DIVISION STUDIES, AND PROFESSOR OF ECONOMICS
A.B., College of Pacific; M.A., Stanford University. Graduate student, University of Southern California. Principal of San Diego High School and Director of Junior College. (Appointed September, 1921.)

CHARLES E. PETERSON, A.B. DEAN OF MEN AND ASSOCIATE PROFESSOR OF PHYSICAL EDUCATION AND DIRECTOR OF PHYSICAL EDUCATION FOR MEN
A.B., State Teachers College of San Diego. Student, Oregon Agricultural College and University of California. Graduate student, Claremont Colleges. Director of Playgrounds, Portland, Oregon; Director of Physical Education, T. M. C. A.; Physical Education and Recreation work in the United States Army Camp; Director of Physical Education in San Diego High School, Berkeley, California. (Appointed July, 1921.)

MARY IRWIN McMULLEN, A.B. DEAN OF WOMEN AND PLACEMENT SECRETARY AND ASSISTANT PROFESSOR OF EDUCATION
A.B., State Teachers College of San Diego. Graduate student, University of Chicago, and Stanford University.

Public school teacher, Oakland, California. (Appointed Secretary to the President July, 1926; Director of Placement July, 1930; Dean of Women January, 1934.)

JOHN R. ADAMS, M.A. ASSOCIATE PROFESSOR OF ENGLISH
A.B., M.A., University of Michigan. Graduate student, University of Southern California. Instructor in Rhetoric, University of Michigan. Associate in English, University of Washington. (Appointed September, 1928.)

GEORGIA C. AMSDEN ASSOCIATE PROFESSOR OF COMMERCIAL EDUCATION
Gregg School, Chicago; special secretarial training in various institutions; University of California summer session, special division work. Teacher in University of California summer school; Traveling Representative and Secretary for the Federal Board for Vocational Education, France, World War; in charge of Stenographic Division, Department of Personnel, American Red Cross, Natural History, World War; Secretary, Standard Life and Accident Insurance Company, Detroit, Michigan; Assistant Editor and Reporter, Daily Press, Ypsilanti, Michigan; Instructor, San Diego High School. (Appointed September, 1925.)

GUINIVERE KOTTER BACON, M.A. TRAINING SUPERVISOR AND ASSOCIATE PROFESSOR OF EDUCATION
B.S., Utah Agricultural College; M.A., Stanford University. Graduate student, Stanford University; University of California; Teachers College, Columbia University. Teacher in Public Schools; Primary Supervisor. (Appointed July, 1928.)

O. W. BAIRD, M.A. PROFESSOR OF PHYSICS
A.B., University of Wisconsin; M.A., University of California. Graduate student, University of Minnesota. Head of Science Department, University of Wisconsin High School; Tacoma, Washington; Assistant in Physics Department, University of Washington, Seattle. (Appointed September, 1921.)

FRED BEIDLEMAN, B.Mus. ASSOCIATE PROFESSOR OF MUSIC
B.S., B.Mus., Columbia University. Teacher of Music, Boys High School, Brooklyn, N. Y.; Instructor, Columbia University; Head of Violin Department, University of Illinois; Assistant Professor of Music, University of North Dakota; Professor of Music and Director of the Conservatory of Puget Sound; National Music Camp, Interlochen, Michigan, 1922. (Appointed September, 1927.)

GERTRUDE SUMPTION BELL, M.A. PROFESSOR OF PSYCHOLOGY
A.B., Indiana University; M.A., Stanford University. Graduate, Indiana State Normal School; Research Work, Clark University. Travel in Europe. Assistant in Education and Director of Practice Teaching, University of Colorado; State Institute Lecturer, Montana; Instructor, School of Education, Indiana University. (Appointed August, 1916.)

MARJORIE KELLY BORSUM, M.A. INSTRUCTOR IN ART
B.S., University of California at Los Angeles; M.A., University of Southern California. Pupil in Paris of Andre Lhote, Painter, and of Mme. Alexandra Exter, Russian Stage Designer. Instructor in Fine Art, Pasadena Junior High School. (Appointed September, 1927.)

BAYLOR BROOKS, B.A. INSTRUCTOR IN GEOLOGY
B.A., Stanford University. Graduate student, University of Arizona; Harvard University; Oxford University; Stanford University. Travel in Europe. Member of staff, Yosemite Field School of Natural History; Summer Lecturer, National Park Service, Yellowstone and Yosemite. (Appointed September, 1921.)
M. EUSTACE BROOM, Ph.D. | ASSOCIATE PROFESSOR OF EDUCATION
A.B., M.A., University of Illinois; Ph.D., University of Southern California.
S. (A.L.S.), University of Chicago.
Assistant in Psychology, University of Illinois; Teacher, High School, Elizabeth, Illinois; Superintendent of Schools, Scales Mound, Illinois; and Brainwell, West Virginia; Instructor in Education, Extension Division, Concord State Normal School, West Virginia; Teacher, Francis W. Parker School of San Diego; Lecturer and Visiting Assistant Professor of Education, University of Southern California; Visiting Assistant Professor of Education (summer session), the College, Stanford University; Associate Editor, The High School Teacher; Contributing Editor, The Journal of Applied Psychology. (Appointed February, 1928.)

LESLEE P. BROWN, Ph.D. | ASSOCIATE PROFESSOR OF SPANISH
A.B., Yale University; M.A., Harvard University; Ph.D., University of Southern California.
Instructor in French and Spanish, Northwestern University; Harvard University; University of North Carolina; University of Chicago. (Appointed July, 1922.)

ROY E. CAMERON, Ph.D. | ASSOCIATE PROFESSOR OF ECONOMICS
A.B., Ph.D., University of California.
Student, Creighton University; Professor of Economics, University of Omaha; Teaching Fellow in Economics, University of California. (Appointed September, 1925.)

VINNIE R. CLARK, A.B. | ASSOCIATE PROFESSOR OF GEOGRAPHY
A.B., University of Wisconsin. Graduate student, University of Chicago; University of Mexico; Travel in Mexico and Europe.
Assistant in Geography, University of Wisconsin; Teacher, Oak Park High School, Illinois; Instructor in summer session, University of California; Lecturer, University of Southern California. (Appointed September, 1914.)

KATHERINE E. CORBETT, A.M. | TRAINING SUPERVISOR AND ASSOCIATE PROFESSOR OF EDUCATION
B.P., Michigan State College; B.S., A.M., Teachers College, Columbia University.
Graduate, Public School Music Course, Ypsilanti Conservatory of Music. Teacher in Public Schools, Ypsilanti, Michigan; Training Supervisor, Kent State Normal College, Ohio; Evening High School, San Diego. (Appointed July, 1921.)

JAMES ENSIGN CROUCH, M.S. | INSTRUCTOR IN BIOLOGY
B.S., M.S., Cornell University.
Assistant in Ornithology, Cornell University. (Appointed September, 1922.)

ERBY CHESTER DEPUTY, PH.D. | ASSOCIATE PROFESSOR OF EDUCATION
A.B., University of Denver; A.M., Ph.D., Columbia University.
Graduate student, University of Southern California. Teacher in rural schools and principal of high schools, Indians. Assistant Professor, University of Arkansas and Kansas State Teachers College. (Appointed September, 1921.)

FLORENCE L. SMITH DICKHAUT, M.A. | ASSOCIATE PROFESSOR OF ENGLISH
A.B., Northwestern University; M.A., University of Chicago. Graduate student, Medill School of Journalism, Chicago. Instructor, State Normal School, Oshkosh, Wisconsin. (Appointed July, 1917.)

JOHN MORTIMER GLEASON, M.A. | ASSISTANT PROFESSOR OF MATHEMATICS
A.B., M.A., University of California.
Student, Hope College, University of Michigan, and University of Southern California. Teaching Fellow in Mathematics, University of California. (Appointed September, 1930.)

MORRIS HUBBARD GROSS, A.B. | DIRECTOR OF ATHLETICS AND ASSISTANT PROFESSOR OF PHYSICAL EDUCATION
A.B., State Teachers College of San Diego.
Teacher, Chula Vista Grammar School; Basket Ball Coach, U. S. Marines and U. S. Naval Hospital. (Appointed September, 1929.)

ILSE HAMANN, B.A. | INSTRUCTOR IN ART
B.A., University of California at Los Angeles.
Student, Roland Schaeffer School; pupil of Douglas Donaldson; Teacher, San Bernardino City Schools; Instructor, Northwestern University, Evanston, Illinois; Instructor, Summer School, CALIFORNIA. (Appointed February, 1934.)

EDITH C. HAMMACK, B.A. | TRAINING SUPERVISOR AND ASSOCIATE PROFESSOR OF EDUCATION
B.A., State Teachers College of San Jose.
Graduate student, State Normal School of San Diego; graduate student, University of Southern California.
Public school teacher. (Appointments February, 1911.)

DOROTHY R. HARVEY, M.A. | ASSISTANT PROFESSOR OF BOTANY
A.B., State Teachers College of San Diego; M.A., University of Southern California.
Graduate student, Scripps Institute for Biological Research, La Jolla; University of California; University of Chicago.
Public school teacher. (Appointed September, 1924.)

ROBERT D. HARWOOD, PH.D. | ASSOCIATE PROFESSOR OF ZOOLOGY
B.A. Pomona College; Ph.D. Cornell University.
Assistant in Biology, Cornell University; Field Entomologist, Natural Survey of Illinois; Teacher, Kern County Union High School; Instructor in Biology, Bakersfield; Assistant in Cornell University; Stream Survey, Conservation Department, New York. (Appointed September, 1928.)

WALTER R. HERREID, M.S. | ASSISTANT PROFESSOR OF PHYSICAL EDUCATION
A.B., Washington State College; M.S., University of Southern California.
Graduate student, University of California.
Freshman Football Coach, Washington State College; Director of Physical Education, Aberdeen High School, Aberdeen, Washington; Director of Physical Education, Santa Maria Union High School; Coach, Huntington Park Union High School. (Appointed September, 1930.)

EVERETT GEE JACKSON, A.B. | ASSISTANT PROFESSOR OF ART
A.B., State Teachers College of San Diego.
Student, Agricultural and Mechanical College of Texas, Art Institute of Chicago. Associate Professor, Sul Ross Teachers College, Alpine, Texas; three years of travel and art study in Mexico; painter. (Appointed November, 1930.)

MARGURITE VEASEY JOHNSON, A.M. | REGISTRAR AND ASSOCIATE PROFESSOR OF LATIN
A.B., Radcliffe College; A.M., Columbia University. Teacher of Latin, History and French; Assistant in the Registrar's Office, Teachers College, Columbia University. (Appointed July, 1927.)

MYRTLE ELIZABETH JOHNSON, PH.D. | PROFESSOR OF BIOLOGY
B.S., M.S., Ph.D., University of California.
Research Assistant, Scripps Institute for Biological Research, La Jolla; Instructor, Pasadena High School. (Appointed September, 1931.)

SYBIL ELIZA JONES, M.L. | ASSISTANT PROFESSOR OF ENGLISH
B.L., M.L., University of California.
Junior Players of Pasadena Community Playhouse; Drama Instructor in Chautauk Art School, Los Angeles; Organizing Secretary
and Instructor in Playwriting of Summer Art Colony at Pasadena Community Playhouse; Drama Organizer and Director of San Diego Community Service. (Appointed September, 1926.)

JOSEPH SUMNER KEBNEY, PH.D.  INSTRUCTOR IN ENGLISH
Assistant in English at University of California; M.A., Ph.D., University of California. Instructor in English in China, Ch Qgsi, China; Instructor San Diego Army and Navy Academy; Instructor in English, University of California. (Appointed February, 1933.)

GENEVIEVE KELLY, A.M.  INSTRUCTOR IN SOCIOLOGY
A.B., University of California; A.M., Columbia University. Student, Los Angeles Public Library School. Graduate student, University of Chicago. Travel in Europe. Teacher, Corcoran Union High School; Librarian, Northern Arizona Normal School; Staff, Scripps Foundation for Research in Population Problems, Oxford, Ohio. (Appointed September, 1924.)

CHARLES R. LEONARD, PH.D.  PROFESSOR OF HISTORY
A.B., M.A., Ph.D., University of California. Instructor in History, Lowell High School, San Francisco; Teaching Fellow in History, University of California. (Appointed September, 1921.)

LEWIS B. LESLEY, PH.D.  ASSOCIATE PROFESSOR OF HISTORY
A.B., Stanford University; M.A., Ph.D., University of California. Native Sons’ Traveling Fellow in Europe from University of California. Instructor, Principia School, St. Louis, Missouri; Teaching Fellow in History, University of Southern California; Assistant Professor of American History, Pomona College; Summer session student, Chicago; Director, University of California Lecture Bureau. (Appointed September, 1924.)

GEORGE R. LIVINGSTON, M.A.  ASSOCIATE PROFESSOR OF MATHEMATICS
B.S., M.A., University of California. Graduate student, University of California at Berkeley and Los Angeles; Assistant in Mathematics. Instructor, San Diego High School and Junior College; Head of Department of Mathematics, Santa Barbara High School and Junior College. (Appointed September, 1921.)

ELMER ALLEN MESSNER, M.A.  INSTRUCTOR IN CHEMISTRY
A.B., M.A., Stanford University. Student, Marquette University, Milwaukee, Wisconsin; State Teachers College of San Diego. Registered Assistant Pharmacists, State of Wisconsin; Licensee in Pharmacy, State of California. Graduate student, University of Breslau, Germany. (Appointed September, 1921.)

CHESNEY RUDOLPH MOE, M.A.  INSTRUCTOR IN PHYSICS
A.B., M.A., Stanford University. Assistant in Physics, University of Southern California. (Appointed September, 1921.)

ABRAHAM P. NASATIR, PH.D.  ASSOCIATE PROFESSOR OF HISTORY
A.B., M.A., Ph.D., University of California. Native Sons’ Traveling Fellow in History in Europe. Assistant Teaching Fellow in History, University of California; Assistant to the President of the American Historical Association; Council Fellow, 1936-1941. (Appointed January, 1928.)

WILLIAM L. NIDA, M.A.  PROFESSOR OF EDUCATION, SUPERVISOR OF PUBLIC SCHOOL PRACTICE TEACHING
Ph.B., Ohio State University; M.A., University of Southern California. Graduate student, University of Chicago; Principal of Ohio High School; Superintendent of Schools in Illinois. (Appointed July, 1921.)

LENA PATTERSON, M.A.  ASSOCIATE PROFESSOR OF ART
A.B., B.F.A., Ohio University; M.A., Columbia University. Student, Cincinnati Art Academy; Chicago Art Institute; Otis Art Institute; Rudolph Schaeffer School; International School, Berlin, Germany; Zweybruck School, Vienna, Austria. Instructor, Nyack College; Professor, State Teachers College, Kirkville, Missouri; Assistant Scholar, Art Department, Columbia University; Instructor, Chouhard School of Art, Los Angeles. (Appointed July, 1933.)

PAUL LEWIS PFaffen, B.A.  INSTRUCTOR IN ENGLISH
B.A., Stanford University. Graduate student, Stanford University; Assistant in English, Claremont Colleges. (Appointed September, 1921.)

WALTER T. PHILLIPS, M.A.  ASSOCIATE PROFESSOR OF SPANISH AND FRENCH
A.B., University of California; M.A., Stanford University. Graduate student, National University of Mexico; Institute of French Education, Pennsylvania State College. Teaching Assistant in Spanish, Stanford University; Assistant Professor of Modern Languages, Willamette University; Instructor in Spanish, Brown University. (Appointed September, 1927.)

MABEL M. RICHARDS, A.M.  TRAINING SUPERVISOR AND ASSOCIATE PROFESSOR OF EDUCATION
R.S., A.M., University of Missouri. Graduate student, University of Southern California; City Teacher of Southern California; University of Missouri; Director, University of Southern California, Northeast Missouri State Teachers College. (Appointed September, 1921.)

DUDLEY H. ROBINSON, M.S.  ASSOCIATE PROFESSOR OF CHEMISTRY
B.S., A.B. in Sugar Engineering, University of Louisiana; M.S., University of Iowa. Chemist, University of Louisiana Sugar House; Raceland Sugar Factory, University of Louisiana; Research Chemist, Thorne and Company; Chief Chemist, Pacific Marine Chemicals, Inc. (Appointed September, 1928.)

SPENCER L. ROGERS, A.M.  INSTRUCTOR IN ANTHROPOLOGY AND ENGLISH
A.B., State Teachers College of San Diego; A.M., Claremont Colleges. Student in Archaeology, School of American Research, Santa Fe, New Mexico. Graduate student, University of California, Berkeley; University of Southern California. Curator in Anthropology, San Diego Museum; honorary curator in prehistory, San Diego Museum. (Appointed September, 1936.)

MARION LYON SCHWOB, M.S.  INSTRUCTOR IN PHYSICAL EDUCATION
B.A. University of Iowa; M.S., University of Southern California; Student, Wellesley College and Denishawn School of Dancing. Director of Department of Physical Education for Women, University of Iowa. (Appointed September, 1921.)

W. T. SKILLING, M.S.  PROFESSOR OF ASTRONOMY
B.S., M.S., University of California. Student, State Normal School, Los Angeles; Stanford University; University of California; Publicity and City Information, Los Angeles County. Assistant Professor of Astronomy, University of California. (Appointed September, 1901.)

L. DEBORAH SMITH, A.M.  ASSOCIATE PROFESSOR OF MUSIC
Mus.B. A.B., Oberlin College; A.M., Columbia University. Graduate student, University of Southern California; Head of Department of Music, State Teachers College, Winona, Minnesota. (Appointed September, 1922.)

MARIAN PEEBLES, A.M.  TRAINING SUPERVISOR AND ASSOCIATE PROFESSOR OF EDUCATION
A.B., A.M., Stanford University. Travel in Europe. Teacher in Public Schools; Assistant in History, Stanford Universi-
CHRISTINE SPRINGSTON, B.M. ASSISTANT PROFESSOR OF MUSIC
B.A., B.M., University of Redlands.
Graduate student, University of Redlands, University of California and University of Washington. Student in piano with A. E. Guérin of St. Louis and Olga Reiden of Los Angeles. "Diplôme de Musique," Conservatoire National, Fontainebleau, France. Supervisor of Music, Needles, California; Assistant in Piano, Organ and Theory, University of Redlands; Instructor, San Diego High.
(30th September, 1932.)

HARRY C. STEINMETZ, A.M. ASSOCIATE PROFESSOR OF PSYCHOLOGY AND PHILOSOPHY
A.B., University of California; A.M., University of Southern California. Assistant in Journalism, University of the Philippines, Manila; Assistant in Educational Psychology, University of California; Instructor, Glendale Union High School and San Mateo Junior College.
(30th September, 1936.)

JOHN PAUL STONE, M.S. LIBRARIAN
B.S., Northwest Missouri State Teachers College; M.S., University of Missouri.
Librarian at the Illinois Library School, Senior High School, Joplin, Missouri; Library work, University of Illinois Library; Professor of Library Science, Louisiana State Teachers College.
(30th September, 1936.)

ALVINA SUHL STORM, M.A. ASSOCIATE PROFESSOR OF GEOGRAPHY
A.B., M.A., University of California.
Teaching Fellow, University of California; teacher in public schools.
(30th September, 1926.)

JESSIE RAND TANNER, B.S. ASSOCIATE PROFESSOR OF PHYSICAL EDUCATION AND DIRECTOR OF PHYSICAL EDUCATION FOR WOMEN

FRANKLIN D. WALKER, Ph.D. ASSOCIATE PROFESSOR OF ENGLISH
B.A. (Hons., Oxon.), University of Oxford; Ph.D., University of California.
Student, University of Arizona; Holder of Arizona Riddle Scholarship to Oxford; Graduate student, University of California; Instructor in Dramatics, Francis W. Parker School, San Diego, California.
(30th September, 1926.)

HILDE MARIE KRAMER WALKER, M.A. INSTRUCTOR IN GERMAN
A.B., M.A., Northwestern University. Graduate student, University of Chicago. Teacher in high schools of Illinois; Assistant, Northwestern University.
(30th September, 1931.)

CURTIS REYNOLDS WALLING, E.E. INSTRUCTOR IN MATHEMATICS AND INDUSTRIAL ARTS
A.B., E.E., Stanford University. Student, State Teachers College of Fresno; graduate student, Stanford University. Graduate student training course, Western Electric and Manufacturing Company, East Pittsburgh, Penn.
(30th September, 1931.)

W. H. WRIGHT, M.A. ASSOCIATE PROFESSOR OF COMMERCE
B.S., M.A., University of California. Head of Department of Commerce, Visalia Union High School, Visalia, California.
(30th September, 1926.)

ASSOCIATE (PART-TIME) MEMBERS OF THE FACULTY

DEAN BLAKE INSTRUCTOR IN METEOROLOGY
Meteorologist, United States Weather Bureau, San Diego.

ELIZABETH MOLIKE BROWN, Ph.D. ASSISTANT PROFESSOR OF FRENCH
Assistant in French, University of Chicago; Head of French Department, Rockefeller College, Rockford, Illinois; Instructor in University of California, Extension Division, San Diego, California.

MARIAN EVANS, B.S. INSTRUCTOR IN EDUCATION
B.S., New York University. Graduate, State Normal School, Los Angeles; Student, University of California, University of New Mexico, State Teachers College of San Diego. Teacher, San Bernardino, Sierra Madre, San Marino; Director of Visual Education Activities, San Diego City Schools.

REGINALD POLAND, A.M. PROFESSOR OF ART
A.B., Brown University; A.M., Princeton University; A.M., Harvard University. Fellowship from Princeton University to American Academy at Rome. Director of Denver Art Association; Educational Secretary, Detroit Institute of Art; Director of San Diego Fine Arts Gallery.

WILL J. STANTON, LL.B. ASSISTANT PROFESSOR OF LAW
LL.B., University of Michigan. Graduate student, University of Michigan. Editor-in-chief, University of Michigan Law Review.
(30th September, 1926.)

ASSISTANTS

ARTHUR JAMES O. ANDERSON, A.M. ENGLISH
AUDREY BOWEN PETERSON, A.B. TRAINING SCHOOL
FRANK R. PORATH, B.S. MATHEMATICS AND SURVEYING
DONALD JAMES ROBERTSON, A.B. COMMERCE
LOUISE MCKIN ROSS, B.S. HEALTH COUNSELOR FOR WOMEN
FLORENCE I. SHAFFER, A.B. PHYSICAL EDUCATION
CHARLES ROBERTS SMITH, A.B. HISTORY
JOHN D. WIMMER, M.A. HISTORY

SUPERVISORS IN THE EUCLID SCHOOL

HELEN K. SYLVESTER PRINCIPAL
RUTH M. COOPER MURIEL CLAYTON
VESTA M. PETERSEN RUTH M. COTTER
MARIE M. JOHNSON AGNES E. CRAFFORD

SPECIAL LECTURERS

GEORGE D. HUFF, M.D., F.A.C.S.
F. G. LINDEMULDER, M.D.
MEDICAL STAFF
O. S. Harbaugh, M.D. Medical Examiner (Men)
Martha Welnpton, M.D. Medical Examiner (Women)
Rieta C. Hough, M.D. Medical Examiner (Training School)
Marilynn M. Fenwick, R.N. College Nurse

LIBRARY STAFF
John Paul Stone, M.S. in Library Science Librarian
Elsie Andersen, A.B. Assistant Librarian: Circulation
Lulu Gernann, B.S. Assistant Librarian: Reference and Circulation
Genevieve Kelly, A.M. Assistant Librarian: Cataloging
Geraldine Kirkham, A.B., B.S. Assistant Librarian: Reference, Cataloging and Circulation
Harriet B. Stovall Assistant Librarian: Reference and Repair
Charlotte G. Robinson Librarian of Training School

STAFF OF REGISTRAR'S OFFICE
Marguerite V. Johnson, A.M. Registrar
Dorothy May Cooper Assistant Registrar
Madylyn J. Barnes, B.A. Recorder

STAFF OF BUSINESS OFFICE
P. W. Van Horne Financial Secretary
L. J. Crouch Assistant Financial Secretary
Mayme J. Sullivan Telephone Operator

STAFF OF PLACEMENT OFFICE
Mary Irwin McMullen, A.B. Director
Anne Sullivan Moldenhauer Secretary

TRAINING SCHOOL STAFF
Erby Chester Deputé, Ph.D. Principal
Florence Wiggins Secretary

MAINTENANCE STAFF
C. L. Fisk Buildings
Martin Roth Grounds
A. L. Seelig Heat and Mechanical Equipment

THE COLLEGE
HISTORICAL SKETCH
The State Teachers College, formerly known as the State Normal School of San Diego, was established by legislative enactment March 13, 1897, and received its first class in the autumn of 1898. In April, 1921, the school, together with all of the California normal schools, received by act of the Legislature, later approved by the Governor of the State, and becoming effective July 28, 1921, the designation of State Teachers College, its full legal title being, "State Teachers College of San Diego." On June 4, 1935, legislation changing the name to "San Diego State College" was approved effective September 15, 1935.

In June, 1921, under an enactment of the legislative session of the same year, known as the "Junior College Law," the San Diego Junior College was merged with the State Teachers College of San Diego. Under the arrangement thus made, collegiate courses of the lower division (freshman and sophomore years) were offered, both to students preparing for the work of the upper division (junior and senior years) of colleges and universities and to students preparing themselves for the teaching service in the new three and four-year curricula recently established by the State Board of Education. The four-year curricula leading to the A.B. degree (major in Education) were established for this institution June 30, 1923.

After July 1, 1927, the courses formerly carried as "junior college" courses were offered as lower division courses of the regular four-year curricula until the current year, when junior college courses were resumed, by arrangement with the San Diego High School Board of Education, as part of the lower division offerings. On July 12, 1928, the college was authorized by the State Board of Education to offer presecondary curricula with majors in Chemistry, History, English and Romance languages, and special secondary curricula with majors in Physical Education, and Art, all of them leading to the A.B. degree. On January 6, 1930, the State Board of Education authorized the following additional majors in the presecondary curricula: Art, Biological Science (Zoology now offered), and Social Sciences (Economics, Geography and History now offered); also the special secondary certification curriculum with a major in Music. On April 12, 1930, the presecondary major in Commerce was authorized by the State Board of Education, and also the special secondary certification curriculum with a major in Commerce. On June 27, 1931, and on March 18, 1932, presecondary majors in Music and Mathematics were authorized respectively in the same manner. Presecondary majors in Physics and Physical Science were authorized March 29, 1935.

For the certification of teachers, the authorized courses (elementary, junior high school and special secondary) are offered and, requiring four years of work, lead to the A.B. degree with any of the following credentials: Elementary School, Junior High School, Special Secondary in Art, Special Secondary in Commerce, Special Secondary in Music, Special Secondary in Physical Education.
ENVIRONMENT AND STANDARD

OPPORTUNITIES FOR CULTURE AND RECREATION

Environmental conditions other than physical must be taken into account by the student choosing a college. In cultural standards in art, music, literature, and science, San Diego is a favorable college city because, while it is not large, yet it has certain metropolitan advantages for the student. Many of these are to be found in the heritage resulting from the San Diego Exposition of 1915-16, including the buildings themselves, which in their consistent and effective carrying out of motifs of the best types of Spanish colonial art, make up one of the finest exhibits in architecture in America. House in these buildings are exhibits in anthropology and culture history which are unsurpassed in certain fields, together with natural history collections, and materials for the study of American archaeology. There is complete cooperation with the directing boards controlling the collections. The Fine Arts Gallery contains excellent exhibitions of paintings. There are plans for the development of a Public Conservatory of Music for which the great outdoor organ furnishes a beginning. Balboa Park, in which all of these facilities are located, also contains a modern horticultural farm and a great stadium for games, community gatherings, and pageants.

At La Jolla within the city limits, the Scripps Institution of Oceanography, operated by the University of California, gives opportunity for important cooperation in the biological field.

The courses in commerce and other branches of economics will be considerably aided by San Diego's growing importance as a commercial point particularly as the college will be able, as is planned, through its department of economics, to assist the local Chamber of Commerce in industrial and commercial surveys.

The teacher-training program profits because of the policy of cooperation generously followed by the City School Department, which has resulted in a plan for laboratory work in practice teaching in the city schools. San Diego's fine system of schools, with all of the modern divisions of kindergarten, elementary school, junior high schools, and senior high schools, furnishes unusual opportunities for observation and demonstration to students in training, and for cooperation between the specialists of the city school system and the college.

PHYSICAL CONDITIONS: CLIMATE

The physical conditions in San Diego for study are unsurpassed, since sustained intellectual effort can be maintained always with comfort in the cool, even climate of the place. Temperatures are usually shown on a globe by lines which pass through regions of the same degree of heat or cold. Red lines of 60 degrees and 70 degrees, showing the summer temperature at San Diego, enclose Alaska and Siberia. Blue lines of 50 degrees and 60 degrees, showing the winter temperature at San Diego, enclose Egypt and Arabia. Thus San Diego may be said to have Alaskan summers and Egyptian winters.

Recreational opportunities of an unusual number and variety are open to students, because of the combination of bay, sea beach, mesas, foothills, and mountains, all within compass of two hours travel by automobile. Outdoor sports of all kinds, including swimming and rowing, are possible the year round.

BUILDINGS AND EQUIPMENT

On February 1, 1931, the college was moved to the new buildings and campus, located one mile north of the city's principal east-west boulevard, El Cajon Avenue. The campus has an area of one hundred twenty-five acres. The new buildings are part of a general plan to be completed within the next few years. This plan calls for one style of architecture for the entire group of the Spanish-Moorish type, which is well suited to the landscape and climate of the region. The buildings now in use include the Academic Building, which houses lecture halls, classrooms, and administrative offices; Science Building; Library; Little Theater; Training School; Scripps Cottage (a social clubhouse for women students); the Student Building, housing the soda fountain, cafe, and bookstore; the Physical Education Building, a structure of the duplex gymnasium type, with adequate facilities for the physical education and development of both men and women. The campus also contains playing fields and courts for collegiate sports and athletics. The training school is supplied with its own, separate play spaces.

AFFILIATED PRACTICE SCHOOL

The Euclid School, a San Diego City elementary school, is affiliated with the college for practice teaching purposes. Cadets are assigned to teach in this school after having had successful initial experience in the Training School or elsewhere. The assignment is for a half day for the semester and carries a maximum of seven and one-half units of credit.

STANDARDS OF HEALTH, SCHOLARSHIP AND CHARACTER

All entering students are required to meet the health standards set by the department of physical education, and all lower division students, unless excused for cause, are required to take the courses in physical education, prescribed for freshmen and sophomores. Furthermore, each student is expected as a matter of efficient student and community life to keep himself in the best possible physical condition.

Standards of scholarship are based upon high entrance standards. Frequent ratings of the student are made by his instructors, so that he may at all times know how he stands; but the ability of the student to manage his own educational career and to come reasonably near to his best capabilities are factors that will count in his final ratings.

Since standards of character as developed by and measured by honest student work, and as revealed by evidences of the possession of thorough-going self-respect and community feeling, particularly as to ideals in the important matters of citizenship and future parenthood, are more important than all else, every student will have full opportunity to show that he is worthy and that he has the capacity and the will to manifest and develop character.
ROUTINE AND PROCEDURE

Outside of the necessary routine and procedure in the conduct of registration, class attendance, conduct of examinations, and the like, college affairs are controlled by standards which are the result of experience or which reflect a very definite public opinion and college morale. There is no honor "system," but there is a standard of honor as to honesty in college work. Matters of personal conduct are not the subject of rules and regulations, but are affairs of personal and individual responsibility. Problems of conduct and control affecting the student body or student groups are dealt with as they arise (if they are not already the subject of custom, or of student body by-laws) and usually are settled by student action.

ORGANIZATION

THE CALENDAR AND REGISTRATION

The college year is divided into the fall and spring semesters of eighteen weeks each, followed by a summer session consisting of terms of six, nine and three weeks. Students may enter at the beginning of either semester and at the beginning of either the six or the three weeks' summer term. The Summer Session meets the needs of regular students who wish to gain credits toward the A.B. degree, of teachers in service who wish further professional training and of liberal arts students who wish to secure supplemental credit or to shorten the time for completion of work in the lower division. Registration of students will be made September 13, 16, and 17 for the fall semester, and February 4 and 5 for the spring semester. Those entering as freshmen must see that the high school principal's recommendation or the high school transcript is on file before registration day. This recommendation must be made on a form furnished by the college. Those entering with advanced standing must submit transcripts of record covering high school and college work by August 23, January 24, and June 5, for admission to the fall and spring semesters and the summer session, respectively. An application for evaluation must also be filed, stating which curriculum is desired. In the case of transcripts arriving after the dates specified, persons will run the risk of being obliged to register as special students, without adequate advice concerning their programs with reference to requirements.

ADMISSION TO COLLEGE

GENERAL REQUIREMENTS

Every person admitted as a student to this college must be a resident of the United States (including the territories), must be of good moral character, of good health, and of that class of persons, who, of proper age, would be admitted to the public schools of the State without restriction. At entrance, every student must take an examination to determine his physical fitness to do college work. Two years later a second physical examination must be taken by any student who is a candidate for a teaching credential.

A candidate for admission under any of the three following types of standing must submit the names of three persons by whom he or she has been employed (including the last employer), if the candidate has not been in attendance at school or college during the semester preceding entrance. These names should be placed on file with the Registrar at least three weeks before the date of registration.

1. Freshman Standing

Graduates of accredited public high schools of California, graduates of other schools of California, and graduates of schools of secondary grade of other States recognized by this college as equal in rank to an accredited public high school of California, who have completed a regular four-year course of study may be admitted to undergraduate standing, as indicated below.

Candidates may be admitted by either of two methods:

1. Regular (clear) admission. High school graduates who present ten recommended units and principals' certificates of recommendation, will be granted regular admission. Graduates of three-year senior high schools must present eight recommended units earned in grades ten, eleven and twelve.

2. Provisional admission. High school graduates who present fewer than ten (or eight) recommended units will be admitted provisionally, and their programs of studies will be subject to arrangement under guidance procedures which will take into account such matriculant's high school record and his needs and objectives in college studies. At the close of the first semester in residence, a complete re-evaluation of the credentials and records of all such students will be made and their status determined.

Certificates of successful examinations before the College Entrance Examination Board will be accepted to admit candidates who can not meet the requirements of any of the above methods. The entrance examinations of the Board are held in June each year (in California, at Berkeley, Los Angeles, San Diego, and other places). Applications for examinations must be addressed to the College Entrance Examination Board, 431 West 117th street, New York. They must be made upon a blank form to be obtained from the secretary of the Board upon request.

2—31612
II. Advanced Standing

Students from other institutions of recognized collegiate rank may be admitted to advanced standing upon such terms as the Committee on Advanced Standing may deem equitable. In any case a student must have a scholarship record equal to a C average in this college. Every such candidate is required to present a duly certified statement of his college record together with a statement showing in detail the basis upon which the applicant was matriculated and the preparatory subjects for which matriculation credit was given.

Ordinarily, credit is given only for regular college work in institutions uniformly recognized as standard colleges, or colleges maintained primarily for the training of teachers, or professional schools in those fields in which this college grants a special credential.

Credit earned in nonaccredited colleges may be accepted as a basis for advanced standing only to the extent that the applicant can demonstrate to the satisfaction of the teachers college authorities that a satisfactory degree of proficiency has been attained in the courses in question.

Holders of California Teachers' Certificates, or holders of similar certificates recognized by the California State Board of Education, may be admitted with credit to be determined by the Committee on Advanced Standing.

N. B.—Transcripts of record from other institutions will not be returned or copies of them made.

III. Special Standing

An adult who is at least 21 years of age, who has not had the opportunity to complete a satisfactory high school course, but who is considered competent to undertake certain courses, may be admitted to special standing. Entrance examinations in the subjects of fundamental importance for the work proposed will be assigned whenever it seems advisable. Such a student may become a candidate for graduation upon removing the high school deficiency. (Applicants will not ordinarily be admitted directly from the secondary schools to the status of special students.)

MATRICULATION RECOMMENDATIONS FOR CERTAIN CURRICULA

In planning to comply with the foregoing requirements for freshman standing, the prospective student is advised to arrange his high school program so as to enable him to enter without handicaps the work of the curriculum to which he seeks admission. Although deficiencies in certain subjects may be removed after admission to freshman standing, such removal will not only reduce the student's opportunity for elective study but may make it necessary for him to extend his college course beyond the normal period of time required for its completion.

In general preparation for a teacher-training curriculum, the prospective student should have attained proficiency in reading, spelling, handwriting, arithmetic, and the use of English.

In preparation for major work in the biological sciences and in the premedical and pre dental curricula, the prospective student is advised to include chemistry or physics and French or German. For a college major in mathematics or physics, the student should include French or German, geometry, algebraic theory and trigonometry in his high school program, and for a major in chemistry he should include algebraic theory and physics or chemistry. Algebraic theory and trigonometry are recommended for a major in commerce. In his preparation for engineering curricula, the prospective student is strongly urged to lay a good foundation in the study of elementary algebra, plane geometry, algebraic theory, trigonometry, physics, chemistry, and mechanical drawing. For a major in English or a foreign language, the study of Latin is recommended.

MATRICULATION

A student is matriculated when he has satisfied all entrance requirements. The standing of all students is conditional during the first semester of residence.
REGISTRATION PROCEDURE

REGISTRATION

Registration takes place on regularly appointed days at the beginning of each semester. Faculty advisers representing every curriculum assist students in the planning of their programs, but students are urged to study the requirements of the curriculum they intend to follow and to decide upon their choice of electives before consulting their advisers. New students should not expect assistance with their programs until registration day. Upper division students, however, are given the privilege of planning their programs during a preregistration period held in the latter part of each semester, when they may hold more lengthy consultations with their advisers than on registration day. Since registration is not complete until fees have been paid, students should be careful to provide themselves with sufficient funds on registration day.

TESTS REQUIRED AT REGISTRATION TIME AND LATER

(See Calendar for dates)

1. An examination for the determination of physical fitness is required of all students at entrance. Appointments are made during registration.

2. All students entering the college are required to take the College Aptitude test, mainly for purposes of guidance and assistance. Exceptions may be made for students who register for six units of work or less, for former graduates of this college, and for graduates of approved four-year colleges.

3. The Subject A Test (English Composition) is required of all entering students. English 1A must be taken by all students whose tests indicate that they are not qualified for English 1B, even though they may not intend to take that course. No student may enroll for his third semester of attendance unless he has qualified for English 1B or is enrolled in English 1A. Exceptions may be made for students transferring credit in English from another college.

4. Passing the Fundamentals Test in reading, spelling, arithmetic and handwriting is a prerequisite for admission to upper division courses in teacher training curricula. Students should take this test upon entrance to college in order that they may have sufficient time to make up deficiencies, if any, before applying for admission to the upper division. Exceptions may be made for former graduates of this or other California State teacher training institutions who have been teachers in service.

5. All candidates for a teaching credential are required to take a speech test. Remedial work will be required of all who fail to pass the test.

LATE REGISTRATION

A new student who registers after the close of the first week of the semester is subject to a limitation of his program. A fee of $2 must be paid for registration after the regular registration period. After the first week of the semester, the instructor's approval must be secured for each course entered.

CHANGES IN REGISTRATION

Changes in program may be made only with the approval of the student's adviser. In addition, the instructor's approval must be secured for entering a course after the first week. A statement regarding withdrawals from class is to be found on page 26.

AUDITORS

Regular auditors must register in the usual way, though this may be done on the first day on which they have classes, without payment of the late fee.

FEES AND DEPOSITS (SUBJECT TO REVISION)

Fees and Deposits Payable at Time of Registration

Fees—Registration

Resident students

Limited students and auditors (5 units or less) — resident (fee per unit)...

Nonresident students—1st semester...

2d and subsequent semesters...

Training school students...

Late registration fee...

Deposits

General service (library, locker and towel deposits)...

Deposit is for the year. New deposit required only when deposit is used up in service charges.

Chemistry: 1A, 1B, 6A, 6B, 7, 8, 10A, 10B, 10D, 107, 108, 128, 129 (each course, each semester)...

190...

Physics: 1A, 1B, 10A, 10B, 10A, 107B...

Surveying: 1A, 1B...

Local Organizations—

Student Body Fee...

Associated Men Students or Women's Governmental Association Fee...

Fees Payable When Service Is Rendered

College Aptitude Test...

English—Subject A Test...

Fundamentals Test...

Placement Office—copy of papers...

Placement Office—copy of papers...

Diploma (parchment)...

Evaluation of Record for Advanced Standing...

Duplicate Library Card...

Transcript of Record...

Carbon copy of Transcript of Record...

Special Examination...

* See page 23 for definition of residence for fee-paying purposes.
Fees Payable During Seventh Week of Each Semester

<table>
<thead>
<tr>
<th>Service</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Service (library, reader, mimeograph, health)</td>
<td>$3.00</td>
</tr>
<tr>
<td>Towel, men</td>
<td>1.50</td>
</tr>
<tr>
<td>Towel, women</td>
<td>1.00</td>
</tr>
<tr>
<td>Locker (key or combination padlock—each issue)</td>
<td>25.00</td>
</tr>
<tr>
<td>Parking</td>
<td>50.00</td>
</tr>
</tbody>
</table>

In addition to the above, there are laboratory fees and course charges for certain courses, ranging from $0.50 to $7.50 per course, which are payable during the seventh week of each semester.

LIVING EXPENSES

Since no dormitories are maintained by the college, it is impossible to supervise the living quarters of college students. Students are required to keep the office of the Dean informed of their places of residence if not living with parent or guardian, and every effort is made to assist them in choosing suitable living accommodations.

The Dean of Women will furnish upon request addresses of homes in which board and room may be secured; also lists of apartment houses and single rooms which may be patronized by students.

Board and room, two meals per day, may be procured at from $40 to $45 per month. Single rooms with kitchen privileges at from $10 to $20 per month are also available. While at present there are very few accommodations in the immediate vicinity of the college, all of those listed are within reasonable distance and easily accessible to the college.

SELF HELP AND LOAN FUND

A limited amount of clerical work in offices and library may be offered from time to time, but ordinarily is not sufficiently remunerative materially. An employment service is conducted by an administrative committee, members of which are the Dean of Women, the Dean of Men and the Dean of Liberal Arts.

The San Diego State College Loan Foundation is administered by the Alumni Association for the purpose of helping worthy students with insufficient financial resources to continue their education. Both long and short term loans are available to students who have been in attendance at the college for at least one year. Loan funds are also administered by the Associated Women Students, the City Teachers' Association, the Scottish Rite Women's Club, and the Entre Nous Club.

SCHOLARSHIPS AND PRIZES

Cap and Gown, Senior Women's Honorary Society, awards a fifty-dollar scholarship annually. Any upper division woman student with a grade-point average of at least 2.01 is eligible to apply. Application is made to the Dean of Women in May of the year preceding awarding of scholarship.

The College Y. W. C. A. has established a scholarship fund to aid women students. Both scholarship and need of applicants are considered in making the award. Application is made to the Dean of Women.

Miss Vivian Conway, past president of the San Diego chapter of the American Association of University Women, offers an annual award, written on a subject in the field of French literature. This competition is open to students in the upper division French classes.

ADMINISTRATIVE REGULATIONS

OFFICERS FOR CONSULTATION

Concerning the housing and living arrangements of students, dates and arrangements for all student social affairs, personal advice (women)—
The Dean of Women.

Concerning matters of student-body policy, personal advice (men), etc.—The Dean of Men.

Concerning supervision of practice teaching, conference, credential requirements, etc.—The Dean of Education.

Concerning matriculation, program of studies and teaching, credits, etc.—The Registrar and the Board of Student Advisers.

Concerning health and physical condition, college athletics, rowing, etc.—The Director of Physical Education (women); The Director of Physical Education (men).

Concerning relations to the training school, to pupils, routine, etc.—The Principal of the Training School.

Concerning student-body affairs—The executive officers of the student body; the Dean of Liberal Arts; the Dean of Women; the Dean of Men.

Concerning Appointments to teaching positions—The Placement Secretary.

Concerning use of the buildings—The Superintendent of Buildings.

RESIDENCE

For fee-paying purposes, residence is defined as "the place where one remains when not called elsewhere for labor or other special or temporary purpose, and to which hereturns in seasons of repose. There can be only one residence. The residence of the father during his life and after his death, the residence of the mother while she remains unmarried, is the residence of the unmarried minor child. The residence of the husband is the residence of the wife." (Sec. 52, Political Code of the State of California.)

CLASSIFICATION

Regular students are those students who have complied with the requirements of admission and are registered in 6 or more units of work.

Limited students are partial course students who, for adequate reasons, have been permitted to register for less than 6 units of work.

Special students are mature students who have not satisfied all entrance requirements and who are registered for such courses as their ability and preparation qualify them to pursue. Special students may also be limited students.

For convenience in administration, students who have completed 0 to 29 units of work are classified as freshmen; those who have completed
30 to 39 units, as sophomores; those who have completed 60 to 89 units, as juniors; and those who have completed 90 or more units, as seniors.

**UNITS OF WORK AND STUDY-LISTS LIMITS**

A unit of credit represents approximately, for the average student, three hours of actual work per week through one semester—one hour of lecture or recitation, together with two hours of preparation; or three hours of field or laboratory work.

Sixteen units, in addition to physical education (1 unit), constitute a normal semester's program for all students. An entering freshman, however, is allowed to enroll for a maximum of 17 units, and all other students for a maximum of 18 units, provided such additional enrollment seems to the adviser necessary or advisable in order to round out the study program. Ordinarily, only 16 units, in addition to physical education, will be credited toward graduation; except that, after a student's first semester at the college, a program of 17 units, in addition to physical education, will be credited provided the student was registered for at least 12 units in the preceding semester and attained an average of not less than 1.5 grade points; 18 units will be credited provided the student attained an average of not less than 2.0 grade points. Any course in which a student received a passing grade may be used in the satisfaction of course requirements, even though such course is in excess of the units credited for graduation. Credit for a program that does not conform to the above regulations can be obtained only by permission of the Scholarship Committee, upon petition. No student will be allowed to register for less than 12 units without the approval of the academic dean of his department.

**SCHOLARSHIP GRADES AND GRADE POINTS**

The following grades are used in reporting the standing of students at the end of each semester: A, excellent; B, good; C, fair; D, passed; E, conditionally; F, failed; I, incomplete.

Grade points are assigned as follows: Grade A, 3 points per unit; B, 2 points per unit; C, 1 point per unit; D, no points; E, minus 1 point per unit; F, minus 1 point per unit.

The grade E is used to record work which is of low order but which may be made passable. If by the close of the next semester the work has been satisfactorily completed the grade E is changed to a D; otherwise it is changed automatically to an F. The grade I is used to record work which may be of higher order but which is incomplete for some acceptable reason. Ordinarily to change an I to another grade the work must be completed within a year. In case of failure in a course, no credit is given until the course has been repeated.

To qualify for a certificate in any curriculum or for a diploma of graduation or for a transcript of record with recommendation, in transferring to another collegiate institution, a student must have earned as many grade points as the number of units he has attempted; that is, he must have attained an average of at least C grade in all work undertaken at the college. On a transcript of record for a student whose scholarship is below a C average, the honorable dismissal shall be qualified by the phrase "except for scholarship."

**ELIGIBILITY FOR PRACTICE TEACHING**

No student shall be eligible for practice teaching (Education 110) who has not completed 75 units, been admitted to upper division teacher training, and whose entire record, and also his record for the preceding semester, does not average C grade.

**PROBATION AND DISQUALIFICATION**

A scholarship record below an average of grade D per unit of work undertaken in any single semester disqualifies a student for further attendance at the college.

Any student whose scholarship record shows a cumulative deficit of 12 or more grade points for all work undertaken in the college to the close of any semester will be placed on probation.

A student whose study lists have averaged less than 12 units per semester will be placed on probation if his cumulative deficit equals or exceeds the average number of units carried per semester.

Any probational student whose scholarship falls below an average grade of C in any single semester is disqualified for further attendance at the college. Probationary status may be continued until the cumulative grade-point deficit be reduced, in the case of a regular student to an amount less than 12 and, in case of a limited student, to an amount less than the average number of units carried per semester.

For a student whose scholarship is below an average grade of C in any single semester is disqualified for further attendance at the college. Probationary status may be continued until the cumulative grade-point deficit be reduced, in the case of a regular student to an amount less than 12 and, in case of a limited student, to an amount less than the average number of units carried per semester.

Any student whose study lists have averaged less than 12 units per semester may be reinstated after an interval of one semester for reasons satisfactory to the Executive Committee. All applications for reinstatement must be in writing.

**SPECIAL EXAMINATIONS**

Special examinations are classified as (1) matriculation examinations; (2) final examinations taken at other than the regular time; (3) examination taken for the purpose of removing conditions; (4) examinations for advanced standing.

For every special examination given, the student shall pay a fee of two dollars at the business office. The instructor shall give such examination only on the presentation by the student of a receipt showing that the fee has been paid.

**EXAMINATIONS AT SPECIAL TIMES**

No final examinations shall be given to individual students before the regular final. Any student who finds it impossible to take a final examination on the date scheduled must make arrangements with the instructor to have an incomplete grade reported and must take the deferred final examination not later than the end of the second semester following in which the incomplete was given. No exceptions shall be made to this rule without the approval of the dean of the department and the instructor concerned.

**CONDUCT OF EXAMINATIONS**

All final examinations shall be written in Blue Books or other forms which shall be furnished by the college and distributed by the instructor.
at the beginning of the examination period. No books or papers of any kind shall be brought into the examination room, except by special order of the instructor.

WITHDRAWALS FROM CLASS

A student may not withdraw from class without the permission of the proper study-lists officer on a "change of registration card," which must be filed in the Registrar's Office. An unauthorized withdrawal from a class will result in a mark of failure on the student's record. A withdrawal after the third week of a semester except for reasons beyond the student's control is interpreted as a failure in the course. A student who is obliged on account of ill health to withdraw completely from college after the third week may, upon presentation of a physician's certificate, have his courses dropped from his record without penalty if he has maintained a C average in all his studies up to the beginning of the current semester. Any student who withdraws completely from college for any other cause after the third week may have those courses in which his grade was C or better at the time of his withdrawal dropped from his record without penalty, but a grade of F (failure) will be recorded for all courses in which his work was below C at that time.

PLACEMENT SERVICE

A Placement Office is maintained by the college as a clearing house of employment information for superintendents and employing boards and students of the college. While the purpose of this office is to assist candidates in securing positions, it is the primary aim of the office to bring about a better adjustment of the teacher to the community. A complete record of college attainments is kept in a confidential file for each registrant of the office and this material is made available to employers. Recommendations are based on records which indicate every item in the candidate's equipment, and particular care is taken to select in each case the candidate who can best meet the requirements of the position. A fee of $2 is payable each year in which active service is desired.

STUDENT LIFE

ORGANIZATIONS

Student affairs, and organizations to foster them, are many and varied, but are well coordinated through the central student body organization. The Associated Students. The following list indicates the major activities:

Art Guild, College Orchestra, El Club Azteca, Engineering Club, Four Arts Guild, Gamma Psi (English), International Relations Club, Men's Glee Club, Mu Gamma (Music), Philharmonia, Psychology Club, Skull and Dagger, Treble Clef Club.

National Honor Societies: Alpha Mu Gamma (Languages), Delta Kappa (Chemistry), Kappa Delta Pi (Education), Pi Gamma Mu (Social Science).

Men: Associated Men Students, Blue Key (national), Oceotl (lower division), College Band, Physical Education Club, Alpha Phi Omega (national), Delta Pi Beta, Epsilon Eta, Eta Omega Delta, Kappa Phi Sigma, Omega Xi, Phi Lambda Xi, Sigma Lambda, Tau Delta Chi.

Women: Women's Governmental Association, Cap and Gown, College Y. W. C. A, Women's Athletic Association, Alpha Sigma Alpha (national), Delta Chi Phi, Epsilon Pi Theta, Gamma Phi Zeta, Kappa Theta, Phi Kappa Gamma, Phi Sigma Nu, Shen Yo, Sigma Pi Theta, Tau Zeta Rho, Theta Chi.

Men's Athletics: Football, baseball, basketball, track, swimming, tennis, cross country, wrestling, fencing, and golf.

Women's Athletics: Rowing, swimming, tennis, golf, horseback riding, and seasonal sports.

Publications: The Aztec (weekly), Del Sudoeste (year book), and El Palenque (quarterly).

ALUMNI ASSOCIATION

The college has an active alumni association. Since its reorganization in March, 1929, the Association has steadily gained in membership. The annual Homecoming is an important event each year; other meetings take place on dates of important athletic contests. The Association also sponsors the organization of Aztec clubs in various communities. Information concerning the Association may be obtained by writing the secretary at the college.
DEGREE REQUIREMENTS

GENERAL REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS IN THE CURRICULA WITH TEACHING CREDENTIALS

Total Units, Length of Time, and Residence

A minimum of 124 units of college work is required, representing a four-year course. Students who are planning to secure California teaching credentials through graduation from this college are urged to follow the curriculum pattern for the credential or credentials which they wish to earn, throughout the entire four years. Not less than 54 units must be earned in the junior and senior years; at least 30 units of work at this college; twenty-four of these residence units must be taken with the rank of senior, at least twelve of which must be taken in the fall or spring semester of the final year before graduation.

Admission to Upper Division Teacher Training

Students are not admitted to upper division status in teacher training on the basis of merely having completed the lower division work. Application for admission to upper division work should be made during the final semester of the sophomore year and a committee of the faculty appointed for this purpose, will review the candidate's records and make recommendations regarding admission. In the main, this committee will be guided by the following factors:

1. The completion of the lower division work of a given teacher training curriculum including all the preliminary tests required of teacher training candidates with a scholastic record of C or better.
2. Physical fitness as shown by a prescribed examination given by a college physician.
3. Fitness for teaching, to be based on recommendations by members of the faculty and on the judgment of the committee as a result of personal interviews with the candidate.

Upper Division Course Requirements

At least 40 of the units completed during the junior and senior years shall be in upper division courses (see definition under Leading Courses of Instruction); junior standing requires 60 units of credit. Introductory courses open to first semester freshmen when taken in the junior or senior year may involve either additional work or reduction in the number of units of credit.

Advanced Standing in Teacher Training

A maximum of 18 units in courses in education will be credited toward degree requirements in case such work was taken more than 5 years before entering upon the degree curriculum at this college (date of first work taken after an evaluation of record has been made, for students entering with advanced standing). After an interval of 5 years subsequent to last attendance, evaluations are subject to revision with respect to deduction of credit in education courses and such new requirements as may have been put into effect.

Students formerly in attendance will not be considered to be working in the degree curriculum until an evaluation of record and statement of credit has been secured from the registrar's office. All courses taken either at this college or elsewhere must be approved by an official adviser or the registrar (for courses taken elsewhere) in order to be credited toward meeting degree requirements.

Summary of Basic Requirements, Common to All Curricula in This Group

<table>
<thead>
<tr>
<th>Subject</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>18</td>
</tr>
<tr>
<td>Lower division courses in English</td>
<td>6</td>
</tr>
<tr>
<td>Lower division courses in natural science</td>
<td>14</td>
</tr>
<tr>
<td>Physical Education activity</td>
<td>2</td>
</tr>
<tr>
<td>Political Science 101</td>
<td>2</td>
</tr>
<tr>
<td>Psychology 1A</td>
<td>3</td>
</tr>
<tr>
<td>Lower division courses in social science</td>
<td>14</td>
</tr>
</tbody>
</table>

Explanation of the basic requirements:

In the different curricula leading to the various teaching credentials, specific courses are required in the various subjects listed in the summary which may total more than the minimum given in the summary. In addition, the following information must be taken into consideration in connection with fulfilling the requirements in each subject.

English

Courses in journalism or in speech arts are not accepted in satisfying this requirement. The following courses or their equivalents are required: English 1A, 1B, and 2 or 3.

Natural Science

The electives in natural science may be reduced to a minimum of 8 units if the student presents acceptable grades from the high school in natural science in laboratory courses offered exclusively for the third or fourth year students. In general, each year's work of high school science will thus reduce the requirements by 3 units of credit. No college credit will be given for the high school work; merely an exemption of the requirements will be permitted. The college courses which may be used in satisfaction of this requirement are: Agriculture 20, Astronomy 1, 5, 11; Biological Science 1, 10A-10B, Botany 2A-2B, 4, 5, 7; Chemistry, 1A-1B, 6A-6B, 7A; Geography 1, 3; Geology 1A, 1B; Physical Science 1, Physics 1A-1B, 1C-1D, 2A-2B, 3A-3B; Zoology 1A-1B.

Political Science 101

Political Science 113 or 152, or History 171A-171B or 173A-173B will be accepted as substitutes for this requirement.
Social Science

Courses in the following departments may be used in satisfaction of this requirement: Anthropology (except 14A-14B, 24A-24B, 25A and 25B), geography (except 1 and 3), history, political science, social science, sociology.

Major and Minor Requirements

For the elementary school credential, two academic teaching minors are required; for the junior high school credential, or for both the elementary and junior high school credentials together, an academic teaching major and an academic teaching minor are required. For the special credentials, the requirement consists of a major in the special subject and an academic teaching minor. An academic teaching major consists of a minimum of 24 units in a field other than education, twelve of which must be in the upper division. A major in a special subject varies from 24 to 40 units as specified in the requirements for the various curricula. An academic teaching minor consists of 12 units in a field other than education, six of which must be in the upper division. Academic teaching majors and minors may be established in the following fields: English, foreign languages, general science, mathematics, and social sciences (economics, geography, history, political science, sociology). Academic teaching minors may also be established in art, music, and physical education.

Candidates for the academic teaching major in the field of English will be expected to show credit in English 1A, 1B and 2 or 3 with six units of electives in the lower division; English 120A and 120B and six units of electives in the upper division. Candidates for the academic teaching minor in this field will be expected to show credit in English 1A, 1B and three units elected from 2, 3, 4, 4A, 4B, 52A, 52B in the lower division; three units elected from English 120A or 120B, the remaining three units elected from English 101, 117, 130A, or 130B in the upper division.

Candidates for the academic teaching major in the field of general sciences must meet the general requirements of fourteen units of natural science in the lower division including Biology 10A-10B, unless taken in high school. The remaining units to complete the major must be chosen so as to include a year course in a biological science unless Biological Science 10A-10B is taken in college, a year course in physics and a concentration of twelve units, at least six of which are upper division, in one major subject (botany, chemistry, physics, zoology).

Candidates for an academic teaching major in the field of the social sciences must meet the general requirements of fourteen units of social science in the lower division including Geography 2 and Social Science 1. The remaining twenty units must be chosen so as to include a year course of six units in history in either the lower or upper division and a concentration of twelve units, at least six of which are upper division, in one major subject (economics, geography, history, political science). The following courses in economics may not be applied to the teaching 129B, 140, 150A-160B, 161, 162, 163, 164.

Women candidates for an academic teaching minor in the field of physical education will be expected to show credit in Physical Education six units elected from Physical Education 102, 157A, 157B, 158, 161, 164, 170, 178A, or 178B in the upper division.

Combinations of Credentials

In the case of students seeking more than one teaching credential, the curriculum for each credential must be completed in full, with only such exceptions as are indicated in the requirements. After July 1, 1936, for each credential in addition to one, at least 12 additional units of credit must be earned, this work to be in electives in nonprofessional fields only, after the basic curriculum requirements have been satisfied.

Scholarship

The number of grade points acquired in this college by the candidate for a degree must be equal to the number of units attempted. (See page 24 for an explanation of scholarship grades and grade points.)

Preparation for Graduate Work

Students who take the A.B. degree with only a special credential and who contemplate doing graduate work for a master's degree in an academic field at another institution of higher learning, will find it advantageous to use their electives to lay a foundation for that work. A student who plans to do graduate work in the field of his academic teaching major is advised so to arrange his electives as to complete the presecondary major to avoid the necessity of making up an undergraduate deficiency.
MEMORANDA FOR STUDENTS WHO WISH TO BECOME CANDIDATES FOR TEACHING CREDENTIALS

The college offers curricula leading to the A.B. degree with the following teaching credentials:

1. Elementary school credential authorizing the holder to teach any or all subjects in all grades of any elementary school in California.
2. Junior high school credential authorizing the holder to teach any or all subjects in the seventh, eighth, and ninth grades of any elementary or secondary school in California.
3. Special credential in Art authorizing the holder to teach art subjects in any grade of the public schools of California.
4. Special credential in Commerce authorizing the holder to teach commercial subjects in any grade of the public schools of California.
5. Special credential in Music authorizing the holder to teach music in any grade of the public schools of California.
6. Special credential in Physical Education authorizing the holder to teach physical education in any grade of the public schools of California.

For the requirements for the School Administration and School Supervision Credentials see page 47 of this bulletin.

On the following pages of this bulletin are outlines of the curricular requirements for the A.B. degree with each of the credentials enumerated above. These outlines are for the purpose of guiding the student in his preparation for professional work. Any serious lack of preparation or scholarship in any of the subjects therein indicated, whether it be in the student's high school or lower division college record may require additional work in that subject. In the opinion of the Committee of Admission to Upper Division Teacher Training, the candidate's record shows the need of such additional work.

Freshmen and students transferring to the college from another collegiate institution should take the following tests at their earliest opportunity: (Consult the College Calendar for the dates when these tests are to be given.)

1. College Aptitude Test.
2. Subject A Test (English Composition).
3. Fundamentals Test (Reading, Spelling, Arithmetic and Handwriting).
4. Speech Test.

The College Aptitude Test is for the purpose of assisting the student in overcoming his weaknesses and guiding him in his future work in the college. In case of failure to pass either of the last three tests enumerated above the student should immediately consult with his adviser relative to the remedial work he must do in that subject and arrange his program accordingly.

Several faculty members who are acquainted with teacher training curricula have been designated as teacher training advisers. There are advisers for lower division (freshman-sophomore) and upper division (junior-senior) students. The student should secure the assistance of one of the advisers for his group in making out his program of studies and learn to rely upon his adviser and the information contained in this bulletin and not to depend upon unreliable sources of information.

The subjects in the first two years of a given teacher training curriculum are quite similar to those being taken by most college students. In the last semester of the sophomore year the student who wishes to begin his professional work in teacher training must apply for admission to upper division teacher training. This is done by going to the office of the secretary of this committee and filing an application. The remaining procedure is explained under the general heading Admission to Upper Division Teacher Training, found on page 28 of this bulletin. The student's record for his first two years in college is of considerable weight in securing admission to teacher training, so it is of importance to him to make the most of his opportunities. The committee will not be impressed favorably by excuses from students who have deficiencies in their records.

It is recommended that the student give careful consideration to the teaching field in which he is most interested and best fitted to function and concentrate upon preparation in that field rather than scatter his efforts by attempting to secure several types of teaching credentials. After July 1, 1936, the A.B. degree and only one teaching credential may be secured upon completion of a given curriculum and one hundred and twenty-four units of work; each additional credential will require a minimum of twelve additional units of work.

Finally, the student's admission to college is predicated upon the assumption that he has reached a stage of maturity that will enable him to pursue his daily work and preparation in the courses in which he is enrolled without any considerable supervision and direction from his instructors. He will have a greater degree of freedom in the use of his time than he has had hitherto. One of the challenges of college life is the ability to meet and assume the responsibilities found therein in a satisfying way. The student may easily fall into the habit of justifying his failures or he may seek intelligently to determine their real causes and proceed to correct them. A definite budgeting of the student's time, both while at home and on the campus, will be of great assistance to him. If the student finds that his work is unsatisfactory for any considerable period of time he should consult with his dean in order to try to solve his difficulty.
CURRICULA LEADING TO TEACHING CREDENTIALS

A.B. Degree With Elementary School Credential

**FRESHMAN YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geography 1, Elements (Natural Science)</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education 1A or 36A</td>
<td>3/2</td>
</tr>
<tr>
<td>Art 6A, Structure</td>
<td>1</td>
</tr>
<tr>
<td>English 1A or 1B, Freshman English</td>
<td>1 or 3</td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biol. Science 10B, Science of Life</td>
<td>3</td>
</tr>
<tr>
<td>Geography 2, Regions (Social Science)</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education 1B or 36B</td>
<td>3/2</td>
</tr>
<tr>
<td>Music 1A, Music Reading and Ear-training</td>
<td>2</td>
</tr>
<tr>
<td>English 1B, Freshman English, or 2 or 3 Sophomore English</td>
<td>3</td>
</tr>
</tbody>
</table>

**Either Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Science 1, Foundations of Civilization</td>
<td>3</td>
</tr>
<tr>
<td>Electives to meet requirements in Natural Science, Social Science and majors and minors 3, 4, 8 or 6</td>
<td>32</td>
</tr>
</tbody>
</table>

**SOPHOMORE YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 1C or 37, Game and Rhythmic Activities</td>
<td>3/4</td>
</tr>
<tr>
<td>English 2 or 3, Sophomore English (unless taken in freshman year)</td>
<td>3/2</td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 1D or 38A</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education 53, Physical Education in the Elementary School, or Physical Education 54, Administration of Physical Education</td>
<td>3</td>
</tr>
</tbody>
</table>

**Either Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychology 1A, General</td>
<td>3</td>
</tr>
<tr>
<td>Art 61A, Elementary Crafts</td>
<td>2</td>
</tr>
<tr>
<td>Art 61B, Elementary Crafts</td>
<td>2</td>
</tr>
<tr>
<td>Electives to meet requirements in Natural Science, Social Science and majors and minors 3, 4, 5</td>
<td>19-22</td>
</tr>
</tbody>
</table>

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1. Possible substitutions for the requirement in Biol. Science 10A-10B.
2. High school Biology (year course with laboratory work).
4. High school Botany and Zoology 1A-1B.
5. High school Botany and high school Zoology.
6. Biological Science 1 and Physical Science 1—6 units.
7. Depending on results of Subject A test.
8. See Summary of Basic Requirements for total requirements in English, Natural Science, and Social Science.
9. Unless minor is English, General Science or Social Science.
10. If 6 units in minor taken in freshman year, none needed in sophomore year.

---

**JUNIOR YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester—</td>
<td></td>
</tr>
<tr>
<td>Psychology 102, Genetic</td>
<td>3</td>
</tr>
<tr>
<td>Education 147, Education Practicum—Lower Levels</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Semester—</td>
<td></td>
</tr>
<tr>
<td>Education 108, Educational Measurements</td>
<td>3</td>
</tr>
<tr>
<td>Education 148, Education Practicum—Upper Levels</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Either Semester—</td>
<td></td>
</tr>
<tr>
<td>Physical Education 151, Health Education, or elective</td>
<td>2 or 3</td>
</tr>
<tr>
<td>Political Science 101, American Institutions, or elective</td>
<td>2 or 3</td>
</tr>
</tbody>
</table>

**SENIOR YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester—</td>
<td></td>
</tr>
<tr>
<td>Education 116, Practice Teaching</td>
<td>6 or 7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Either Semester—</td>
<td></td>
</tr>
<tr>
<td>Education 106, Philosophy of Education</td>
<td>3</td>
</tr>
<tr>
<td>Electives including two minors (for the year)</td>
<td>21 or 19.5</td>
</tr>
</tbody>
</table>

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**SUMMARY**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 6A, 61A, 61B</td>
<td>6</td>
</tr>
<tr>
<td>Education 106, 108, 116, 147, 148</td>
<td>32 or 33.5</td>
</tr>
<tr>
<td>English</td>
<td>6 or 7</td>
</tr>
<tr>
<td>Music 1A</td>
<td>2</td>
</tr>
<tr>
<td>*Natural Science (incl. Biol. Science 10A-10B and Geog. 1)</td>
<td>14</td>
</tr>
<tr>
<td>Physical Education 1A-B-C-D or 36A-36B, 37, 38A; 53; 151-153</td>
<td>6</td>
</tr>
<tr>
<td>Political Science 101</td>
<td>2</td>
</tr>
<tr>
<td>Psychology 1A, 102</td>
<td>6</td>
</tr>
<tr>
<td>**Social Science (incl. Social Science and Geography 2)</td>
<td>14</td>
</tr>
<tr>
<td>Electives, including two academic teaching minors</td>
<td>30 or 33.5</td>
</tr>
</tbody>
</table>

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1. May be deferred until senior year and elective taken, if desired.
2. Candidates for the elementary school credential in combination with another type of credential are required to do not less than 6 units of practice teaching in the elementary school.
3. Not required if junior high school or special credential is earned at the same time.
4. If 6 units in minor taken in junior year, none needed in senior year.
5. See page 29.
A.B. Degree With Junior High School Credential

**FRESHMAN YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester—</td>
<td></td>
</tr>
<tr>
<td>Geography 1, Elements (Natural Science)</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education 1A or 36A</td>
<td>3</td>
</tr>
<tr>
<td>English 1A or 1B</td>
<td>1 or 3</td>
</tr>
<tr>
<td>Second Semester—</td>
<td></td>
</tr>
<tr>
<td>Biol. Science 10B, Science of Life</td>
<td>3</td>
</tr>
<tr>
<td>Geography 2, Regions (Social Science)</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education 1B or 36B</td>
<td>3</td>
</tr>
<tr>
<td>English 1B or 2 or 3</td>
<td>3</td>
</tr>
<tr>
<td>Either Semester—</td>
<td></td>
</tr>
<tr>
<td>Social Science 1, Foundations of Civilization</td>
<td>3</td>
</tr>
<tr>
<td>Electives, including major and minor (for the year)</td>
<td>10–12</td>
</tr>
</tbody>
</table>

**SOPHOMORE YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester—</td>
<td></td>
</tr>
<tr>
<td>English 2 or 3, Sophomore English (unless taken in freshman year)</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 1A, General</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education 1C or 38A</td>
<td>3</td>
</tr>
<tr>
<td>Second Semester—</td>
<td></td>
</tr>
<tr>
<td>Physical Education 1D or 38B</td>
<td>3</td>
</tr>
<tr>
<td>Either Semester—</td>
<td></td>
</tr>
<tr>
<td>Electives, including major and minor (for the year)</td>
<td>25–28</td>
</tr>
</tbody>
</table>

**JUNIOR YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester—</td>
<td></td>
</tr>
<tr>
<td>Education 129, Elementary School Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>Political Science 101, American Institutions</td>
<td>2</td>
</tr>
<tr>
<td>Psychology 102, General</td>
<td>3</td>
</tr>
<tr>
<td>Education 106, Educational Measurements</td>
<td>3</td>
</tr>
</tbody>
</table>

1. Possible substitutions for the requirements in Biological Science 10A-10B:
1. High school Biology (year course with laboratory work).
2. Botany 1A-1B and Zoology 1A-1B—16 units.
3. High School Botany and Zoology 1A-1B.
4. High School Zoology and Botany 2A-2B.
5. High School Botany and High School Zoology.
7. *Depending on result of Subject A test.
8. *See summary of Basic Requirements for total requirement in English, Natural Science, and Social Science.
9. **Unless major or minor in English, General Science or Social Science.
10. If 6 units in minor taken in freshman year, none needed in sophomore year.

**SECOND SEMESTER**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education 116, Practice Teaching</td>
<td>3</td>
</tr>
</tbody>
</table>

**EITHER SEMESTER—**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum in Field of Academic Major</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education 151, Health Education</td>
<td>2</td>
</tr>
<tr>
<td>Electives, including major and minor (for the year)</td>
<td>12</td>
</tr>
</tbody>
</table>

**SUMMARY**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education 108, 116, 121, 125, Curriculum in Field of Academic Major, and elective in Education</td>
<td>20</td>
</tr>
<tr>
<td>English</td>
<td>6 or 7</td>
</tr>
<tr>
<td>Natural Science (incl. Biol. Science 10A-10B and Geog. 1)</td>
<td>14</td>
</tr>
<tr>
<td>Physical Education 1A-B-C-D or 36A-36B, 38A-38B, 151</td>
<td>4</td>
</tr>
<tr>
<td>Political Science 101</td>
<td>2</td>
</tr>
<tr>
<td>Psychology 1A, 102</td>
<td>6</td>
</tr>
<tr>
<td>Social Science (incl. Social Science 1 and Geography 2)</td>
<td>14</td>
</tr>
<tr>
<td>Electives, including academic teaching major and minor</td>
<td>58 or 57</td>
</tr>
<tr>
<td><strong>SUMMARY</strong></td>
<td>134</td>
</tr>
</tbody>
</table>

1. If 6 units in minor taken in junior year, none needed in senior year.
2. *See page 29.
3. **See page 36.
A.B. Degree With Special Credential in Art

This course leads to the A.B. degree and to the Special Credential in Art which entitles the holder to teach art in senior high, junior high, and elementary schools.

**LOWER DIVISION**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 6A-6B, Structure</td>
<td>4</td>
</tr>
<tr>
<td>Art 6A-61B, Elementary Crafts</td>
<td>4</td>
</tr>
<tr>
<td>Education 19, Art in the Elementary School</td>
<td>2</td>
</tr>
<tr>
<td>English 1A, 1B, 2 or 3, Freshman and Sophomore English</td>
<td>6 or 7</td>
</tr>
<tr>
<td>Natural Science</td>
<td>14</td>
</tr>
<tr>
<td>Physical Education 1A-1B, 1C-1D (men); 36A-36B, 38A-38B (women)</td>
<td>2</td>
</tr>
<tr>
<td>Psychology 1A, General</td>
<td>3</td>
</tr>
<tr>
<td>Social Science, incl. Social Science 1, Foundations of Civilization</td>
<td>14</td>
</tr>
<tr>
<td>Electives, including additional art for major and courses for academic teaching minor*</td>
<td>14-15</td>
</tr>
</tbody>
</table>

**UPPER DIVISION**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education 116, Practice Teaching (4 units in special field)</td>
<td>6</td>
</tr>
<tr>
<td>Education 119, Art in the Junior High School</td>
<td>2</td>
</tr>
<tr>
<td>Education 121, Principles of Secondary Education</td>
<td>2</td>
</tr>
<tr>
<td>Education 125, Elementary School Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>Education elective (suggested: Education 106 or 108 or 130)</td>
<td>3</td>
</tr>
<tr>
<td>Political Science 101, American Institutions (or substitute)</td>
<td>2</td>
</tr>
<tr>
<td>Electives, including additional art and academic teaching minor</td>
<td>41</td>
</tr>
</tbody>
</table>

**SUMMARY**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art major</td>
<td>40*</td>
</tr>
<tr>
<td>Education</td>
<td>19</td>
</tr>
<tr>
<td>English</td>
<td>6 or 7</td>
</tr>
<tr>
<td>Natural Science</td>
<td>14</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Political Science 101, American Institutions</td>
<td>2</td>
</tr>
<tr>
<td>Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Social Science (including Social Science 1)</td>
<td>2</td>
</tr>
<tr>
<td>Electives, incl. academic teaching minor</td>
<td>23-24</td>
</tr>
</tbody>
</table>

---

A.B. Degree with Special Credential in Commerce

This course leads to the A.B. degree and to the Special Credential in Commerce, which entitles the holder to teach commercial subjects in senior high and junior high schools.

In addition to the following academic requirements, satisfactory evidence of one-half year, or 1000 hours of approved experience in the field named in the credential must be submitted. For the credentials in the General Business Subfield, twelve semester hours of work above the requirements for a bachelor's degree may be offered in lieu of the six months of full-time experience. At least six semester hours of the twelve must be in business or economics.

**ACCOUNTING AND SECRETARIAL SUBFIELDS.**

**LOWER DIVISION**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics 1A-1B, Principles of</td>
<td>6</td>
</tr>
<tr>
<td>Economics 14A-14B, Accounting</td>
<td>6</td>
</tr>
<tr>
<td>English 1A-1B, Freshman English</td>
<td>4</td>
</tr>
<tr>
<td>Geography 1, Elements</td>
<td>3</td>
</tr>
<tr>
<td>Geography 2, Regions</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 2, Mathematics of Investment</td>
<td>3</td>
</tr>
<tr>
<td>Natural Science</td>
<td>11</td>
</tr>
<tr>
<td>Physical Education 1A-1B-1C-1D, or 36A-36B, 38A-38B</td>
<td>2</td>
</tr>
<tr>
<td>Secretarial Training A, Business Mathematics</td>
<td>6</td>
</tr>
<tr>
<td>Secretarial Training 1A-1B, Typewriting</td>
<td>6</td>
</tr>
<tr>
<td>Secretarial Training 5A-5B, Stenography</td>
<td>10</td>
</tr>
<tr>
<td>Secretarial Training 10A, Business Correspondence</td>
<td>3</td>
</tr>
<tr>
<td>Social Science 1, Foundations of Civilization</td>
<td>3</td>
</tr>
<tr>
<td>Electives (Recommended: Speech Arts 1A)</td>
<td>3</td>
</tr>
</tbody>
</table>

**UPPER DIVISION**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics 11, Economic History of the United States</td>
<td>3</td>
</tr>
<tr>
<td>Economics 18A-18B, Commercial Law</td>
<td>3</td>
</tr>
<tr>
<td>Economics 100, Modern Economic Thought, or a course in Consumer Economics</td>
<td>3</td>
</tr>
<tr>
<td>Economics 140, Statistical Methods</td>
<td>3</td>
</tr>
<tr>
<td>Economics 160A-160B, Advanced Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Economics 161, Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Economics 163, Machine Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Education 21, Penmanship Methods</td>
<td>2</td>
</tr>
<tr>
<td>Education 116, Practice Teaching</td>
<td>6</td>
</tr>
<tr>
<td>Education 121, Principles of Secondary Education</td>
<td>3</td>
</tr>
<tr>
<td>Education 130, Educational Psychology</td>
<td>2</td>
</tr>
<tr>
<td>Education 160, Commercial Education</td>
<td>2</td>
</tr>
<tr>
<td>Education 163, Stenography</td>
<td>2</td>
</tr>
<tr>
<td>Education 164, Bookkeeping</td>
<td>2</td>
</tr>
<tr>
<td>Education 165, Typewriting</td>
<td>2</td>
</tr>
<tr>
<td>Geography 141, Economic Geography, or a course in Foreign Trade</td>
<td>3</td>
</tr>
<tr>
<td>Political Science 101, American Institutions</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 1A, General</td>
<td>3</td>
</tr>
<tr>
<td>Secretarial Training 3A, Office Methods and Appliances</td>
<td>3</td>
</tr>
</tbody>
</table>

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* See page 29.

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1 Unless minor is English, general science, or social science.

* Maximum credit allowable in art.

† See Summary of Basic Requirements.

* See page 29.

** See page 36.
If the Secretarial subfield only is elected, Mathematics 2 and Education 164 and all upper division courses in accounting may be omitted, but 12 units in upper division courses in commerce must be included. If the accounting subfield is elected, Secretarial Training 5A-5B and Education 163, 165 may be omitted.

**GENERAL BUSINESS SUBFIELD**

**LOWER DIVISION**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics 1A-1B, Principles of</td>
<td>6</td>
</tr>
<tr>
<td>Economics 11, Economic History of</td>
<td>3</td>
</tr>
<tr>
<td>the United States</td>
<td></td>
</tr>
<tr>
<td>Economics 14A-14B, Accounting</td>
<td>6</td>
</tr>
<tr>
<td>Economics 15A-A15B, Commercial Law</td>
<td>6</td>
</tr>
<tr>
<td>Economics 25A, Salesmanship</td>
<td>2</td>
</tr>
<tr>
<td>Economics 25B, Advertising</td>
<td>2</td>
</tr>
<tr>
<td>English 1A-1B, Freshman English</td>
<td>4</td>
</tr>
<tr>
<td>Geography 2, Elements</td>
<td>3</td>
</tr>
<tr>
<td>Geography 2, Regions</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics 2, Mathematics of</td>
<td>3</td>
</tr>
<tr>
<td>Investment</td>
<td></td>
</tr>
<tr>
<td>*Natural Science</td>
<td>11</td>
</tr>
<tr>
<td>Physical Education 1A-1B-1C-1D or</td>
<td>2</td>
</tr>
<tr>
<td>36A-36B, 38A-38B</td>
<td></td>
</tr>
<tr>
<td>Secretarial Training A, Business</td>
<td>1</td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
</tr>
<tr>
<td>Secretarial Training 1A-1B,</td>
<td>6</td>
</tr>
<tr>
<td>Typewriting</td>
<td></td>
</tr>
<tr>
<td>Secretarial Training 10A, Business</td>
<td>3</td>
</tr>
<tr>
<td>Correspondence</td>
<td></td>
</tr>
<tr>
<td>Social Science 1, Foundations of</td>
<td>3</td>
</tr>
<tr>
<td>Civilization</td>
<td></td>
</tr>
<tr>
<td><strong>64</strong></td>
<td></td>
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</table>

**UPPER DIVISION**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Economics 100, Modern Economic</td>
<td>3</td>
</tr>
<tr>
<td>Thought, or a course in Consumer</td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td></td>
</tr>
<tr>
<td>Economics 135, Money &amp; Banking</td>
<td>3</td>
</tr>
<tr>
<td>Economics 140, Statistical Methods</td>
<td>3</td>
</tr>
<tr>
<td>Economics 163, Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Education 21, Penmanship Methods</td>
<td>2</td>
</tr>
<tr>
<td>Education 116, Practice Teaching</td>
<td>6</td>
</tr>
<tr>
<td>Education 121, Principles of</td>
<td>5</td>
</tr>
<tr>
<td>Secondary Education</td>
<td></td>
</tr>
<tr>
<td>Education 120, Educational</td>
<td>3</td>
</tr>
<tr>
<td>Psychology</td>
<td></td>
</tr>
<tr>
<td>Education 160, Commercial Education</td>
<td>2</td>
</tr>
<tr>
<td>Education 161, Junior Business</td>
<td>2</td>
</tr>
<tr>
<td>Training</td>
<td></td>
</tr>
<tr>
<td>Education 165, Typewriting</td>
<td>2</td>
</tr>
<tr>
<td>Geography 141, Economic Geography,</td>
<td>3</td>
</tr>
<tr>
<td>or a course in Foreign Trade</td>
<td></td>
</tr>
<tr>
<td>Political Science 101, American</td>
<td>3</td>
</tr>
<tr>
<td>Institutions</td>
<td></td>
</tr>
<tr>
<td>Psychology 1A, General</td>
<td>2</td>
</tr>
<tr>
<td>Secretarial Training 3A, Office</td>
<td>3</td>
</tr>
<tr>
<td>Methods and Appliances</td>
<td></td>
</tr>
<tr>
<td>Electives (including a minimum of 5</td>
<td>17</td>
</tr>
<tr>
<td>units in the upper division,</td>
<td></td>
</tr>
<tr>
<td>3 units of which must be in</td>
<td></td>
</tr>
<tr>
<td>commerce, Speech Arts 1A recommended)</td>
<td></td>
</tr>
</tbody>
</table>

* See page 29.

---

**A.B. Degree With Special Credential in Music**

This course leads to the A.B. degree with a Special Credential in Music entitling the holder to teach music in senior high, junior high, and elementary schools.

**LOWER DIVISION**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education 17, Music in the Elementary School</td>
<td>2</td>
</tr>
<tr>
<td>English 1A, 1B, 2 or 3, Freshman and</td>
<td>6 or</td>
</tr>
<tr>
<td>Sophomore English</td>
<td>7</td>
</tr>
<tr>
<td>*Natural Science</td>
<td>14</td>
</tr>
<tr>
<td>Physical Education 1A-1B, 1C-1D</td>
<td></td>
</tr>
<tr>
<td>(men); 36A-36B, 38A-38B (women)</td>
<td>2</td>
</tr>
<tr>
<td>Psychology 1A, General (sophomore</td>
<td>3</td>
</tr>
<tr>
<td>year)</td>
<td></td>
</tr>
<tr>
<td>*Social Science, including Social</td>
<td>22 or</td>
</tr>
<tr>
<td>Science 1, Foundations of</td>
<td>23</td>
</tr>
<tr>
<td>Civilization</td>
<td></td>
</tr>
<tr>
<td>Music for major and electives,</td>
<td></td>
</tr>
<tr>
<td>including an academic teaching</td>
<td></td>
</tr>
<tr>
<td>minor *</td>
<td></td>
</tr>
</tbody>
</table>

**UPPER DIVISION**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education 116, Practice Teaching</td>
<td>9</td>
</tr>
<tr>
<td>(at least 4 units in Music)</td>
<td></td>
</tr>
<tr>
<td>Education 121, Principles of</td>
<td>3</td>
</tr>
<tr>
<td>Secondary Education</td>
<td></td>
</tr>
<tr>
<td>Education 127, Music in the Secondary School</td>
<td>2</td>
</tr>
<tr>
<td>Education 145, Org. and Adm. of Music Education</td>
<td>2</td>
</tr>
<tr>
<td>Political Science 101, American</td>
<td>2</td>
</tr>
<tr>
<td>Institutions</td>
<td></td>
</tr>
<tr>
<td>Music for major and electives,</td>
<td>42</td>
</tr>
<tr>
<td>including courses for an academic</td>
<td></td>
</tr>
<tr>
<td>teaching minor *</td>
<td></td>
</tr>
</tbody>
</table>

* See Summary of Basic Requirements.

* *Unless minor in English, general science or social science.*
### SUMMARY

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>18</td>
</tr>
<tr>
<td>English</td>
<td></td>
</tr>
<tr>
<td>Music major (including Applied Music)</td>
<td>40</td>
</tr>
<tr>
<td>* Natural Science</td>
<td>14</td>
</tr>
<tr>
<td>Physical Education</td>
<td></td>
</tr>
<tr>
<td>Political Science 101, American Institutions</td>
<td>2</td>
</tr>
<tr>
<td>Psychology</td>
<td>3</td>
</tr>
<tr>
<td><strong>Social Science (including Social Science)</strong></td>
<td>14</td>
</tr>
<tr>
<td>Electives, including an academic teaching minor</td>
<td>24-25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>124</td>
</tr>
</tbody>
</table>

1. Applied Music credits, 1½ units per semester, for not less than one lesson per week, with six hours practice per week, totaling at least ten hours instruction and one hundred hours practice per semester. Applied Music is taken under outside private teachers, subject to the approval and supervision of the music department of the college, which determines credit and grades by examination. Credit not allowed for beginning work in Applied Music.

2. Minimum attainment for completion of Piano Requirement in Music curriculum is the ability to play accompaniments such as are found in the Teachers Manuals of the Progressive Music Series, Books Three and Four. Applicants for admission to the Music curriculum will be required to take an entrance examination in Piano, to determine their ability to play satisfactory hymns and folk songs of the type found in the Golden Book of Favorite Songs. Those not able to meet this requirement must study piano without credit until able to pass such an examination. They may also take examinations in Fundamentals of Music, and Harmony, for advanced standing in these subjects.

3. Maximum credit allowable in music.

4. See page 36.

### A.B. Degree With Special Credential in Physical Education

This course leads to the A.B. degree and to the Special Credential in Physical Education which entitles the holder to teach physical education in senior high, junior high, and elementary schools.

#### MEN

<table>
<thead>
<tr>
<th>LOWER DIVISION</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biol. Science 10A-10B, Science of Life (unless taken in high school)</td>
<td>6</td>
</tr>
<tr>
<td>or Zoology 1A, General</td>
<td>4</td>
</tr>
<tr>
<td>English 1A, 1B, 2 or 3, Freshman and Sophomore</td>
<td>2</td>
</tr>
<tr>
<td>*Hygiene 1</td>
<td>1</td>
</tr>
<tr>
<td>*Natural Science</td>
<td>4 or 6</td>
</tr>
<tr>
<td>Physical Education:</td>
<td></td>
</tr>
<tr>
<td>1A-1B, 1C-1D</td>
<td>2</td>
</tr>
<tr>
<td>6A, Tennis</td>
<td>2</td>
</tr>
<tr>
<td>54, Administration</td>
<td>2</td>
</tr>
<tr>
<td>62A, 62B, Gymnastic Activities</td>
<td>4</td>
</tr>
<tr>
<td>Sports and Athletics</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 1A, General (sophomore year)</td>
<td>3</td>
</tr>
<tr>
<td>Red Cross Swimming Test</td>
<td>1</td>
</tr>
<tr>
<td>*Social Science, incl. Social Science</td>
<td>14</td>
</tr>
<tr>
<td>Speech Arts 1A, Fundamentals of Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Zoology 1B, General</td>
<td>4</td>
</tr>
<tr>
<td>Electives, incl. courses to meet minor requirements</td>
<td>9-10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>64</td>
</tr>
</tbody>
</table>

#### UPPER DIVISION

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education 116, Practice Teaching</td>
<td>6</td>
</tr>
<tr>
<td>Education 121, Principles of Secondary Education</td>
<td>3</td>
</tr>
<tr>
<td>Education 125, Elementary School Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>Education, elective</td>
<td>6</td>
</tr>
<tr>
<td>Physical Education:</td>
<td></td>
</tr>
<tr>
<td>101, Emergencies</td>
<td>1</td>
</tr>
<tr>
<td>151, Health Education</td>
<td>2</td>
</tr>
<tr>
<td>155, Applied Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>156A-156B, Sports Methods</td>
<td>4</td>
</tr>
<tr>
<td>169A, Technique of Officiating</td>
<td>3</td>
</tr>
<tr>
<td>169B, Technique of Teaching Activities</td>
<td>3</td>
</tr>
<tr>
<td>171, Community Recreation</td>
<td>2</td>
</tr>
<tr>
<td>172, Principles</td>
<td>2</td>
</tr>
<tr>
<td>175, Tests and Measurements</td>
<td>2</td>
</tr>
<tr>
<td>Sports and Athletics</td>
<td>3</td>
</tr>
</tbody>
</table>

1. Men majoring in Physical Education must actively participate in three sports each year.
2. Unless minor is English, general science, or social science.
3. See Summary of Basic Requirements.
A.B. Degree With Special Credential in Physical Education

This course leads to the A.B. degree and to the Special Credential in Physical Education which entitles the holder to teach physical education in senior high, junior high, and elementary schools.

**WOMEN**

**LOWER DIVISION**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biol. Science 10A-10B, Science of Life (unless taken in high school)</td>
<td>6</td>
</tr>
<tr>
<td>or Zoology 1A, General</td>
<td>4</td>
</tr>
<tr>
<td>English 1A, 1B, 2 or 3, Freshman and Sophomore English</td>
<td>6 or 7</td>
</tr>
<tr>
<td>Hygiene 2A, Personal and Civic</td>
<td>2</td>
</tr>
<tr>
<td>Music 2A, Appreciation and History of Music</td>
<td>2</td>
</tr>
<tr>
<td>Natural Science</td>
<td>4-6</td>
</tr>
</tbody>
</table>

**Physical Education**:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>30A, Rhythms, Formal Activities, Games</td>
<td>3</td>
</tr>
<tr>
<td>36B, Athletic Games</td>
<td>3</td>
</tr>
<tr>
<td>37, Game and Play Activities for the Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>38B, Recreational Activities</td>
<td>2</td>
</tr>
<tr>
<td>53, Physical Education in the Elementary School</td>
<td>2</td>
</tr>
<tr>
<td>55A-55B, Swimming—Beginning and Intermediate</td>
<td>5</td>
</tr>
<tr>
<td>55C, Life Saving</td>
<td>1</td>
</tr>
<tr>
<td>56, Tennis</td>
<td>1</td>
</tr>
<tr>
<td>57, Golf</td>
<td>1</td>
</tr>
<tr>
<td>59, Archery</td>
<td>1</td>
</tr>
<tr>
<td>Psychology 1A, General</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 50, General</td>
<td>3</td>
</tr>
<tr>
<td>Anthropology 50A, Man's Evolutionary History</td>
<td>3</td>
</tr>
<tr>
<td>Social Science, incl. Soc. Science 1, Foundations of Civilization</td>
<td>3</td>
</tr>
<tr>
<td>Speech Arts</td>
<td>3</td>
</tr>
<tr>
<td>Zoology 1B</td>
<td>4</td>
</tr>
<tr>
<td>Electives, including academic teaching minor*</td>
<td>12-13</td>
</tr>
</tbody>
</table>

**UPPER DIVISION**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education 106, Educational Measurements</td>
<td>3</td>
</tr>
<tr>
<td>Education 116, Practice Teaching</td>
<td>6</td>
</tr>
<tr>
<td>Education 121, Principles of Secondary Education</td>
<td>3</td>
</tr>
<tr>
<td>Education 125, Elementary School Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>Education 140, Educational Statistics</td>
<td>3</td>
</tr>
<tr>
<td>or Education 106, Philosophy</td>
<td>3</td>
</tr>
</tbody>
</table>

**Physical Education**:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>102, Emergency and Safety Programs</td>
<td>1</td>
</tr>
<tr>
<td>151, Health Education</td>
<td>2</td>
</tr>
</tbody>
</table>

*Unless minor subject is English, general science, or social science.
UPPER DIVISION—Continued

Physical Education—Continued

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>154, Applied Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>156A, 157B, Sports Methods</td>
<td>4</td>
</tr>
<tr>
<td>158, Stunts and Tumbling</td>
<td>1</td>
</tr>
<tr>
<td>160, Formalized Activities</td>
<td>2</td>
</tr>
<tr>
<td>161, Folk Dancing</td>
<td>2</td>
</tr>
<tr>
<td>164, Dancing</td>
<td>2</td>
</tr>
<tr>
<td>169, Technique of Teaching Activities</td>
<td>3</td>
</tr>
<tr>
<td>170, Recreational Leadership</td>
<td>2</td>
</tr>
<tr>
<td>173, Principles</td>
<td>2</td>
</tr>
<tr>
<td>175, Administration of Secondary Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>177, Current Problems</td>
<td>2</td>
</tr>
<tr>
<td>185, Techniques of Individual and Dual Sports</td>
<td>3</td>
</tr>
<tr>
<td>Political Science 101, American Institutions</td>
<td>2</td>
</tr>
<tr>
<td>Psychology 102, Genetic (first semester, junior year)</td>
<td>3</td>
</tr>
<tr>
<td>Zoology 100, Embryology</td>
<td></td>
</tr>
<tr>
<td>or Zoology 105, Comparative Anatomy of the Vertebrates</td>
<td></td>
</tr>
<tr>
<td>or Zoology 121, Entomology</td>
<td></td>
</tr>
<tr>
<td>or Zoology 113B, Ornithology</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>2</td>
</tr>
</tbody>
</table>

SUMMARY

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>18</td>
</tr>
<tr>
<td>Hygiene</td>
<td>6 or 7</td>
</tr>
<tr>
<td>Music</td>
<td>2</td>
</tr>
<tr>
<td>*Natural Science (including Biol. Science 10A-10B or substitute, and Zoology 1B)</td>
<td>14</td>
</tr>
<tr>
<td>Physical Education major</td>
<td>14</td>
</tr>
<tr>
<td>Political Science 101, American Institutions</td>
<td>35</td>
</tr>
<tr>
<td>Psychology</td>
<td>2</td>
</tr>
<tr>
<td>**Social Science (incl. Social Science 1 and Sociology 50 or Anth. 50A)</td>
<td>6</td>
</tr>
<tr>
<td>Speech Arts</td>
<td>14</td>
</tr>
<tr>
<td>Zoology (upper division)</td>
<td>3</td>
</tr>
<tr>
<td>Electives, including academic teaching minor</td>
<td>144-154</td>
</tr>
</tbody>
</table>

** See page 39.

* See page 29.

DIPLOMA OF GRADUATION

A diploma of graduation carrying with it any of the credentials the college is authorized to grant or any combination of them may be granted to the holder of a bachelor's degree from an accredited college, upon the completion of a minimum of 24 units. Ordinarily at least one semester of residence during the academic year is required subsequent to securing the degree; the remainder of the work may be in summer session or, in the case of students who have attended the college prior to attaining the degree elsewhere, in credit earned as an upper division student. The candidate for a diploma must offer the equivalent of all of the requirements listed in the curriculum for the A.B. degree with the credential or credentials sought.

ADMINISTRATION AND SUPERVISION CREDENTIALS

The State Board of Education has authorized this college to make recommendations for the issuance of School Administration and School Supervision credentials for holders of elementary and junior high school credentials who have completed the required 15 units beyond the requirements for the teaching credential and who have completed two years of successful teaching experience. But holders of general secondary credentials must take the required courses in and receive recommendation from an accredited graduate school, even though they may wish to qualify for administrative or supervisory work only on the elementary or junior high school level.

In order to secure the recommendation of this college for either one of these credentials, the following number of the 15 required units must be completed at this institution:

1. A.B. degree graduates of this college—6, subsequent to graduation.
2. Other graduates of this college—15.
4. County certified teachers—12.
DEGREE REQUIREMENTS

II

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS
IN THE LIBERAL ARTS (PRESECONDARY) CURRICULA
AND FOR THE JUNIOR CERTIFICATE

The liberal arts (presecondary) curricula lead to the bachelor of arts degree with majors in art, chemistry, commerce, economics, English, geography, history, mathematics, music, physical science, physics, Romance languages and zoology and qualify for graduate work in these fields in recognized American colleges and universities. Completion of the requirements of these curricula also enables the graduate to satisfy undergraduate requirements for the general secondary credential which, with graduate work, will enable the holder to teach in a senior high school or junior college.

Total Units, Length of Time, and Residence

The A.B. degree will be granted on the completion of 124 units of college work, representing a four-year course, and the junior certificate on the completion of 62 units. Certain requirements for the degree may be met by courses taken in the high school. No high school course, however, can be used to reduce the amount of college work required for the junior certificate or for the degree. Not less than 54 units must be earned in the junior and senior years; at least 30 units of work at this college; twenty-four of these residence units must be taken with the rank of senior, at least twelve of which must be taken in the fall or spring semester of the final year before graduation.

SUBJECT MATTER REQUIREMENTS IN THE LOWER DIVISION

<table>
<thead>
<tr>
<th>Physical Education</th>
<th>2 units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hygiene 1 or 2</td>
<td>2 units</td>
</tr>
<tr>
<td>English</td>
<td>6 units</td>
</tr>
<tr>
<td>Mathematics</td>
<td>15 units</td>
</tr>
<tr>
<td>Social Science</td>
<td>14 units</td>
</tr>
<tr>
<td>Natural Science</td>
<td>14 units</td>
</tr>
<tr>
<td>Year-course in foreign language or mathematics, or philosophy (in addition to the foregoing minimum requirements in foreign language and mathematics)</td>
<td>6 units</td>
</tr>
<tr>
<td>Lower division subjects for the minors, unless included in one of the above requirements, see page 50</td>
<td>12 units</td>
</tr>
<tr>
<td>Lower division subjects required for the major. See page 50</td>
<td></td>
</tr>
</tbody>
</table>

Explanation of lower division requirements

English: This requirement may be satisfied either in the freshman year or in the sophomore year. To be chosen from the following year courses: English 1B-2 or 3, 4A-4B, 52A-52B, 56A-56B.

1 For definition of units see page 24.

Foreign Languages: At least 15 units in not more than two languages are required in the lower division, except that only 10 units in a modern language are required in the commerce major. Each year of high school work in a foreign language will be counted in satisfaction of 3 units of this requirement. A minimum of two high school year-courses is acceptable in an language except Latin, in which a year-course is permissible.

Social Science: Fourteen units are required as follows:

(a) One of the following alternatives must be chosen: (1) Social Science 1, or (2) the combination of Economics 1A-1B, Political Science 1A-1B and Sociology 50.

(b) One of the following year-courses must be chosen: Anthropology 50A-50B, Economics 1A-1B, History 4A-4B, 8A-8B, Political Science 1A-1B.

(c) Additional courses, if needed to meet the total requirement, must be chosen from the following list: Anthropology 50A-50B, 54, 55; Economics 1A-1B, 11, 18A-18B; Geography 2; History 4A-4B, 8A-8B; Political Science 1A-1B; Sociology 50.

Natural Science: Fourteen units are required as follows:

(a) A maximum of 6 units in the following high school laboratory courses may be chosen to meet this requirement: Physics, Chemistry, Botany, Biology, Physiology, Zoology. Only those high school courses that are offered exclusively for students in the third or fourth year may be used. Each year of high school work in science will be counted in satisfaction of three units toward this requirement.

(b) One of the following alternatives in the biological science field must be chosen: (1) Biological Science 1 or Biological Science 10A-10B, or (2) any combination of Zoology 1A-1B or high school Zoology with Botany 2A-2B or high school Botany.

(c) One of the following alternatives in the physical science field must be chosen: (1) Physical Science 1, or (2) high school physics and chemistry, or (3) three courses in high school or college physical science including either physics or chemistry.

(d) One of the following laboratory courses is required; High school physics, high school chemistry, Biological Science 10A-10B, Botany 2A, Chemistry 1A, Geology 1A and 1B, Physics 1A-1B, Physics 3A-3B, Zoology 1A.

(e) Additional courses, if needed to meet the total requirement, must be chosen from the following list: Astronomy 1, 11: Biological Science 10A-10B; Botany 2A, 2B, 4, 5; Chemistry 1A-1B, 6A-6B, 7-8; either Geography 1 or Geography 3; Geology 1A, 1B; Physics 1A-1B, 1C-1D, 2A-2B, 5A-5B; Zoology 1A, 1B.

Mathematics: High school elementary algebra or Mathematics A and high school plane geometry or Mathematics B.

Additional Year Course: In addition to the foregoing minimum requirements in foreign language and mathematics, 6 units must be chosen from one of the following groups:

Modern foreign language: Any two consecutive college courses. Latin: Two years of high school courses in Latin.

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Mathematics: 3A-3B; 7A-7B; C and 3A; G and 7A. Students with the Commerce major may take Mathematics C and G, or equivalents, and 2.

Philosophy: 5A-5B.

Minors: A minimum of 12 units in each of two minor subjects is required. At least 6 units in each minor shall be in upper division courses completed in the junior and senior years. The entire 12-unit requirement for a minor may be met with upper division courses provided these courses have no lower division prerequisites. The prerequisites for upper division courses in various departments may be found in the course descriptions on page 61 to 117. Minors are available in the following subjects: art, botany, chemistry, economics, education, English, foreign language, geography, geology, history, mathematics, music, physics, political science, psychology, zoology.

Major: The specific requirements in each major field are listed in the paragraphs immediately following.

Elective: Among both elective and required subjects, a total of at least 12 units of the applied and vocational courses listed below will be counted toward the junior certificate or the A.B. degree, in both the lower and upper division combined:

Liberal Arts (Presecondary) Majors—Required Lower Division Subjects

The student is advised to choose his major as early in his college course as practicable so that he may be able to plan his work according to the major requirements. Failure to meet the lower division requirements of the major department before the junior year may make it impossible to satisfy the upper division requirements within the normal period of two years.

Art

Eighteen units carefully chosen from lower division art courses to meet the stated prerequisites for upper division work. These shall include Art A-B, 5, 6A-6B, 50 or the accepted equivalents, and six elective units in art.

Chemistry

Chemistry 1A-1B with an average grade of C or better, Chemistry 6A-6B or 7-S, Physics 2A-2B and 3A-3B or their equivalent, Mathematics 7A-7B or the equivalent, and a reading knowledge of German. Students planning to do graduate work in chemistry or to transfer to another college, and there work for a degree with a major in chemistry, are advised to take Physics 1A-1B-I-1D and Mathematics 3A-3B-4A-4B in place of the courses listed above.

Commerce

Economics 1A-1B, 11, 14A-14B (6 units), 18A-18B; English 1B-2 or 3; Geography 1-2; Mathematics C and G, or equivalents, and 2; History 4A-4B or 8A-8B or Political Science 1A-1B.

Economics

Economics 1A-1B and at least one of the following: Political Science 1A-1B; History 4A-4B; History 8A-8B; Psychology 1A and 1B or 4A or 4B; Geography 1 and 2; Anthropology 50A-50B. Recommended: Sociology 50; Economics 14A-14B, 18A-18B.

English

English 1B-2 or 3 and six units from 52A, 52B, 56A, 56B. Recommended: A reading knowledge of German or French.

Foreign Languages

Group major: French A-B, C-D, and Spanish A-B, C-D.

The group major requirements are based on the assumption that the student will have taken courses in the high school, equivalent to the college course in elementary French or Spanish.

Geography

Geography 1, 2, 3 and Geology 1A-1B. Recommended: A reading knowledge of French or German.

History

History 4A-4B, or 8A-8B, and either Political Science 1A-1B, Economics 1A-1B, or Geography 1 and 2. No student shall enroll in more than one lower division history course during a semester. Students who wish to major in history and who have had less than two years of European history in high school must take History 4A-4B.

Mathematics

Mathematics 3A-3B, 4A-4B. With permission of the department, 7A-7B may replace 3A-3B. Recommended: Physics, surveying, descriptive geometry, astronomy and a reading knowledge of French and German.

Music

Music 1A-1B, 2A-2B, 4A-4B, and 2 units of electives in music. The electives in music in both lower and upper division must include at least 6 units in Applied Music (study of voice, or an instrument), of which at least 3 units must be in piano. Upper division credit will not be given for beginning work in Applied Music. (For restrictions on applied courses, see page 50.

Physical Science

Fulfillment of the departmental requirements for upper division work in at least two of the following sciences: Chemistry, geology, physics. Recommended: A reading knowledge of French and German.

Physics

Physics 1A-1B-I-C-1D, Mathematics 3A-3B, 4A-4B, and Chemistry 1A-1B, or their equivalents. Recommended: A reading knowledge of French and German.
Zoology
Zoology 1A, 1B, and high school chemistry or Chemistry 1A. Recommended: Chemistry 1B, French, German, Botany 2A, 2B, 4, and 5.

SUBJECT MATTER REQUIREMENTS IN THE UPPER DIVISION
Psychology 1A (unless elected in lower division) 3 units
Political Science 101 2 units
Education 6 units
First minor (minimum in upper division courses) 6 units
Second minor (minimum in upper division courses) 6 units
Major 6 units
Electives to make a minimum total of 40 units in upper division courses and a grand total of 124 units for the degree.

Explanation of Upper Division Requirements
Required Number of Units in Upper Division Courses: At least 40 of the units completed during the junior and senior years, among required and elective subjects, shall be in upper division courses (see definition under heading Courses of Instruction); junior standing requires 60 units of credit. Introductory courses open to first-semester freshmen when taken in the junior or senior year may involve either additional work or reduction in the number of units of credit.

Political Science 101: Political Science 113 or 152 or History 171A-171B or 173A-B will be accepted as substitutes for this requirement.

Education: A minimum of 6 units in education is required and a maximum of 18 units will be counted toward the degree. The courses in education for the minimum requirement must be chosen from the following list:
- Ed. 121, Principles of Secondary Education
- Ed. 106, Philosophy of Education
- Ed. 107, History of Education
- Ed. 137, Comparative Educational Statistics
- Psychology 102, Genetic Psychology

Minors: See explanation regarding minor subjects on page 50.

Major: The specific requirements in each major field are listed in the paragraphs immediately following.

Electives: See restrictions concerning the choice of applied and vocational courses, as explained on page 50.

Major Requirements in the Various Fields

Art
Not less than twenty-four units of upper division art. These shall include Art 112A, 115A-115B, 150, 152A, 156, and ten upper division elective units in art.

It is recommended that students in meeting degree requirements and 4A-4B, 106A-106B, 107A-107B, 117; French A-B; History 4A-4B, 111A.

Chemistry
A minimum of twenty upper division units in chemistry including Chemistry 101-102. The choice of a related minor and the organization of the course of a major student must follow a definite plan approved by the department.

Commerce
Economics, 121, 140, 190 and 16 units additional chosen in one of the following groups:
- A. Accounting: Econ. 160A-160B, 161, 163, and 4 units in electives in economics.
- B. Banking and Finance: Econ. 133, 134, 135, and 7 units in electives in economics.
- C. Marketing and Merchandising: Econ. 123, 125, 171, and 7 units in electives in economics.

Geog. 141 may be used in the electives under A, B, C.

Economics
Required: Economics 100, 140 and 190, with 7 units selected from the following: Economics 101, 121, 123, 127, 131, 133, 134, 135, and 171. Electives: Nine upper division units in economics. Economic geography may be substituted for three elective units in economics.

English
Twenty-four units in upper division English to be selected and arranged under supervision of the department. Not over four units may be in composition. A reading knowledge of German or French.

Foreign Languages
Twenty-four units of upper division work in French and/or Spanish; or eighteen units in French and/or Spanish, and six units in related subjects, arranged in consultation with the chairman of the department. At least a C average in all courses. Recommended: Geography 118.

Geography
Twenty-four units of upper division work in geography or 18 units in geography and six units in related subjects arranged in consultation with the chairman of the department.

History
Twenty-four units in upper division courses in history to be arranged in consultation with the chairman of the department. The student must, in his senior year, enroll in History 199.

Mathematics
Twenty-four units of upper division work in mathematics, or eighteen units in mathematics and six units in closely related subjects, arranged.
in consultation with the chairman of the department. Mathematics 111, 112, and 119 should be included in every major. Related courses offered by other departments include statistical methods (Economics 140), mathematics in the junior high school (Education 112) and certain upper division courses in chemistry and physics.

Music


Physical Science

Twenty-four units of upper division work in two or more of the physical sciences, chemistry, geology, and physics, with a minimum of six units in each of two of these sciences.

Physics

Twenty-four units of upper division work in physics including Physics 106A-106B and 107A-107B. Six of the twenty-four units may be elected in related subjects on consultation with the chairman of the department.

Zoology

(1) At least a C average in upper division major courses. (2) Twenty-four units of upper division courses in zoology or 18 in the major subject and six in related courses in botany, organic chemistry, physics, physiology and bacteriology.

PREPROFESSIONAL CURRICULA

As shown below, the liberal arts curricula can be adapted to correspond to the typical courses of study preliminary to the professional courses of training for law, medicine, dentistry, nursing, optometry, pharmacy, social service, teaching, journalism, agriculture, and engineering. (For a complete statement of the requirements for the junior certificate and the degree in these curricula, see pages 48-54.

Prelegal Curricula

(Two-Year, Three-Year and Four-Year Curricula)

(a) The entrance requirements of law colleges range from two years to three and four years of prelegal work. The lower division requirements of the liberal arts (presecondary) curricula should be met in full whether the curriculum extends over a period of two, three or four years.

(b) The following lower division electives meet the recommendations of standard American law colleges for a broad and liberal education in those fields of human knowledge commonly involved in human affairs and those which have cultural and disciplinary values. Liberal arts subjects similar to subjects offered in law colleges should ordinarily be omitted from the prelegal curricula. History 4A-4B, 6 units; Economics 1A-1B, 6 units; Economics 14A-14B, 6 units; Sociology 50, 3 units; Political Science 1A-1B, 6 units; Speech Arts 1B, 3 units; English 52A-52B, 6 units; Psychology 1A, 3 units; Psychology 4A, 2 units; Philosophy 5A-5B, 6 units.

(c) The three-year prelegal curriculum requires the completion of 93 units of work. Some of the introductory courses should be continued in the upper division if the student is to acquire mastery and confidence in any field. The following are listed as examples of upper division courses that meet the needs of general study in the three-year or the four-year curriculum. History 111A-111B, or 121A-121B, 6 units; History 131A-131B, 6 units; History 171A-171B, 6 units; Economics 121, 3 units; Economics 133, 3 units; Economics 151, or 100, 3 units; Economics 171, 3 units; Political Science 111, 3 units; Political Science 113, 3 units; Speech Arts 101B, or 1B, 3 units; Philosophy 129, 3 units.

(d) The four-year curriculum requires the completion of 124 units of work. A student who is pursuing a four-year prelegal curriculum must major in a specific field in his junior and senior years and must meet all upper division requirements for the A.B. degree in the liberal arts curricula.

Premedical Curricula

(Two-Year, Three-Year and Four-Year Curricula)

(a) The entrance requirements of medical colleges range from two years to three and four years of premedical work. The lower division requirements of the liberal arts (presecondary) curricula should be
met in full whether the curriculum extends over a period of two, three or four years.

(b) The program of elective and required subjects in the lower division should include the following subjects: Zoology 1A-1B, 8 units; Chemistry 1A-1B, 10 units; English 1B-2 or 3, 6 units; French or German, 9 units (this requirement may be satisfied in the high school); Zoology 100, 4 units (this upper division subject should be taken in the sophomore year only when necessary to satisfy medical colleges requiring only two years of premedical work).

(c) The three-year premedical curriculum requires the completion of 33 units of work. The program in the upper division of either the three-year or the four-year curriculum should include the following subjects: Physics 2A-2B, 6 units; Physics 3A-3B, 2 units (the physics courses may be taken in the lower division); Chemistry 106A-106B, 6 units; Chemistry 107-108, 7 units; Zoology 100, 4 units.

(d) The four-year curriculum requires the completion of 124 units of work. A student who is pursuing a four-year premedical curriculum should major in chemistry or zoology in his junior and senior years and must meet all upper division requirements for the A.B. degree in the liberal arts curricula.

Predental Curricula

(One-Year Curriculum)

The following subjects should be taken to qualify for entrance to dental colleges requiring only one year of predental work. The one-year curriculum requires the completion of 31 units of work. English 1B-2 or 3, 6 units; Chemistry 1A-1B, 10 units; Zoology 1A-1B, 8 units; Social Science 1, 5 units; Physical Education 1A-1B or 36A-36B, 1 unit; Electives, 3 units.

(Two-Year Curriculum)

(a) The lower division requirements of the liberal arts (presecondary) curricula should be met in full to satisfy dental colleges requiring two years of predental work.

(b) The program of elective and required subjects in the lower division should include Chemistry 1A-1B, 10 units; Chemistry 7-8, 6 units; and English 1B-2 or 3, 6 units.

Prenursing Curriculum

(One-Year Curriculum)

(a) The lower division requirements of the liberal arts (presecondary) curricula should be met in full.

(b) The program of elective and required subjects in the lower division should include Chemistry 1A-1B, 10 units; Economics 1A-1B, 6 units; Psychology 1A-1B, 6 units; Zoology 20 (Anatomy and Microbiology), 8 units; Bacteriology 101 (General Bacteriology and increase the unit-value of Zoology 20 as soon as possible to meet prenursing.)

Preoptometry Curriculum

(Two-Year Curriculum)

(a) The lower division requirements of the liberal arts (presecondary) curricula should be met in full.

(b) The program of elective and required subjects in the lower division should include Chemistry 1A-1B, 10 units; English 1B-2 or 3, 6 units; Mathematics 7A, or equivalent, 4 units; Physics 2A-2B, 6 units; Physics 3A-3B, 2 units; Psychology 1A, 3 units; Zoology 20, 3 units.

Prepharmacy Curriculum

(Two-Year Curriculum)

(a) The lower division requirements of the liberal arts (presecondary) curricula should be met in full.

(b) The program of elective and required subjects in the lower division should include Chemistry 1A-1B, 10 units; Botany 2A-2B, 6 units; German A-B, 10 units; Mathematics D, 1 unit, or equivalent; Mathematics C, 2 units, or equivalent; Chemistry 6A-6B, 6 units; Chemistry 7-8, 6 units; Physics 2A-2B, 6 units; Physics 3A-3B, 2 units; English 1B-2 or 3, or Speech Arts 1A-1B, 6 units.

Curricula Preliminary to Social Service

(Two-Year and Four-Year Curricula)

(a) The lower division requirements of the liberal arts (presecondary) curricula should be met in full whether the curriculum extends over a period of two years or four years.

(b) The program of elective and required subjects in the lower division should include Social Science 1, 3 units; Sociology 50, 3 units; Economics 1A-1B, 6 units; Speech Arts 1B, 3 units; Biological Science 10A-10B, or Zoology 1A, 6 or 4 units; Psychology 1A, 3 units; Psychology 4A, 2 units; Anthropology 54, 3 units; Mathematics D, or equivalent, 1 unit; Mathematics C, or equivalent, 2 units.

(c) The four-year curriculum requires the completion of 124 units of work. A student who is pursuing a four-year curriculum preliminary to social service must major in a specific field in his junior and senior years and must meet all upper division requirements for the A.B. degree in the liberal arts curricula.

(d) The program of elective and required subjects in the upper division should include as many of the following subjects as possible: Economics 144, 3 units; Economics 151, 3 units; Economics 140, 3 units; Education 106, 3 units; Education 107, or Education 140, 3 units; History 3 units; Education 130, 3 units; History 163, 3 units; History 171A-171B, or 173A-173B, 6 units; Physical Education 101, or 102, 1 unit; Physical Education 151, 2 units; Physical Education 171, or 170, 2 units; Psychology 118, 2 units; Psychology 145, 3 units; Political Science 152, 3 units.
Curricula Preliminary to Journalism

A broad, cultural education, and specific information and understanding in fields with which the journalist is largely concerned, are essential to an effective training for journalism.

(Two-Year and Four-Year Curricula)

(a) The two-year and four-year curricula demand the completion of the lower division requirements of the liberal arts (presecondary) curricula in full.

(b) The program of elective and required subjects in the lower division should include the following subjects: History 4A-4B, or 8A-8B, 6 units; Economics 1A-1B, 6 units; Political Science 1A-1B, 6 units; Psychology 1A, 3 units; Psychology 4A, 2 units; English 1B-2 or 3, 6 units; French or German, 9 units (this requirement may be satisfied in the high school); Journalism 51A-51B, 6 units; Journalism 55A-55B, 2-6 units.

(c) A student who desires to build a broad foundation for graduate work in journalism is required to complete 124 units of work. He must major in a specific field preferably English, history or economics in his junior and senior years and must meet all upper division requirements for the A.B. degree in the liberal arts curricula.

(d) The program of elective and required subjects in the upper division should include as many of the following subjects as possible: English 106A-106B, or 107A-107B, 4 units; English 130A-130B, 6 units; Economics 100, 3 units; History 145A-145B, or 146A-146B, 6 units; History 171A-171B, or 175A-175B, 6 units; Political Science 111, 5 units; Political Science 113, 3 units; Journalism 100, 3 units; Journalism 155A-155B, 2-6 units.

Preagricultural Curricula

(a) The two-year curricula require the completion of 66 units of work for junior standing in recognized colleges of agriculture.

(b) Requirements of the curriculum in plant and animal sciences: Chemistry 1A-1B, 10 units; Chemistry 6A-6B, or 7-8, 6 units; Botany 2A-2B, 8 units; Physics 2A-2B, 6 units; Zoology 1A-1B, 8 units; Geology 1A, 3 units; English 1B-2 or 3, or Speech Arts 1A-1B, 6 units; Economics 1A-1B, 6 units; Botany 7, 2 units; Social Science 1, 3 units; Hygiene 1 or 2, 2 units; Physical Education 2 units; Mathematics A, B, C, D, 3 units, or equivalents; to make a total of 66 units of work. The summer course in Bacteriology 1 (General Bacteriology and Microbiology), 4 units, is recommended.

(c) Requirements of the curriculum in forestry: Chemistry 1A-1B, 10 units; Botany 2A-2B, 8 units; Botany 7, 2 units; English 1B-2 or 3, or Speech Arts 1A-1B, 6 units; Mathematics 7A-7B, 8 units; Surveying 1A-1B, 6 units; Physics 2A-2B, 6 units; Geology 1A, or Geography 1, 2 units; Economics 1A-1B, 6 units; Social Science 1, 3 units; Hygiene 1 or 2, 2 units; Physical Education, 2 units; electives, to make a total of 66 units of work.

Preengineering Curricula

(a) The following list of subjects meets the requirements for the first year of a four-year curriculum in civil engineering, mechanical engineering, electrical engineering, or mining engineering: Mathematics 3A-3B, 6 units; Chemistry 1A-1B, 10 units; Physics 1A-1B, 6 units; English 1B, 3 units; Physical Education, 1 unit; elective, 3 units.

(b) The following list of subjects partially meets the requirements for the second year of a four-year curriculum in civil engineering, mechanical engineering, and electrical engineering: Mathematics 4A-4B, 6 units; Physics 1C-1D, 6 units; Surveying 1A, 3 units; Industrial Arts 21, 3 units; Industrial Arts 23, 2 units; Geology 1A, 3 units; Physical Education, 1 unit.

(c) Additional requirements in civil engineering: Industrial Arts 25, 3 units; Industrial Arts 28, 3 units; Surveying 1B, 3 units; Surveying 3, 1 unit.

(d) Additional requirements in mechanical and electrical engineering: Industrial Arts 22, 3 units; Mathematics 124 or 119, 3 units.

SPECIAL JUNIOR COLLEGE CURRICULA

Freshmen wishing to take so-called "terminal," or "semi-professional," or "junior technical" courses, of one or two years in length should secure at the office of the registrar, a special bulletin (available after August 1) exhibiting these courses in detailed outline, with instructions as to registration.
COURSES OF INSTRUCTION

Figures in parentheses indicate the unit value of the course.

Courses numbered from 1 to 99 are lower division (freshman or sophomore) courses; those numbered 100 and above are upper division (junior or senior) courses.

Freshmen are not admitted into upper division courses. First semester sophomores who have an average grade of not less than 2.0 grade points and second semester sophomores who have an average grade of not less than 1.5 grade points may enroll in an upper division course provided they were registered in at least 12 units in the preceding semester. It is understood that ordinarily the instructor will consult by sophomore writing to take upper division courses. In such cases an upper division course will count as lower division credit.

One "unit" represents an hour recitation or lecture, together with the required preparation, or three hours laboratory work each week for a semester of 18 weeks.

The semester for offering courses is designated as follows: (1) Fall; (2) Spring, (3) Fall and Spring; (4) Year course, beginning either Fall or Spring (5) Year course. Courses designated as "Year courses" begin in the Fall, but those given in the list below may be taken in the reverse order (i.e., the second semester of the course may be taken before the first semester) or the second semester may be taken alone. In the case of other year courses, students who have completed the equivalent of the first half of the course. Single semester courses having the letter B as a part of the number (as for example, Art 61B) are not supposed to register in the pre-_requirements of the course.

YEAR COURSES OPEN TO REGISTRATION IN THE MIDDLE OF THE YEAR

Anthropology 50A-50B
Anthropology 51A-51B
Economics 18A-18B
Economics 24A-24B
Economics 190A-190B
English 4A-4B
English 52A-52B
English 56A-56B
English 106A-106B
French 107A-107B
French 101A-101B
French 103A-105B
French 107A-107B
French 110A-110B
French 111A-111B
Spanish 101A-101B
Spanish 102A-102B
Spanish 104A-104B
Spanish 106A-106B
Spanish 110A-110B
History 4A-4B
History 8A-8B
History 111A-111B
History 121A-121B
History 145A-145B
History 146A-146B
History 151A-151B
History 156A-156B
History 171A-171B
History 173A-173B
Music 2A-2B
Music 105A-105B
Music 110A-110B
Political Science 1A-1B
Speech Arts 55A-55B
Speech Arts 55C-55D
Speech Arts 155A-155B
Speech Arts 156A-156B

Although the College fully expects to carry out the arrangements planned in the list of courses, it reserves the right to make changes. Classes in the courses listed in which the enrollment does not come up to the minimum number set by the State Department of Education may not be offered or may be postponed for a semester or a year.

AGRICULTURE

A course to show the student what material, selected from the various sciences, may be woven into a nature study course suitable for children, with special reference to school and home gardening and agriculture. The subject matter covered is partly drawn from the physical sciences, astronomy, physics, etc. (for the upper grades), and partly from life studies of the plant and animal world (for lower grades). May be credited as natural science only for students majoring in Education. Fall and Spring (3).

SKILLING

ANthropology

50A-50B. Man's Evolutionary History.

51A-51B. The American Indian.
Pre-Columbian cultures of the American Indian. The origin and migration of New World peoples. Industries, arts, crafts, social organization, religion and other phases of American Indian civilization. The first semester presents a general introduction to New World culture with special attention to the tribes north of Mexico. The second semester is concerned primarily with the civilizations of Mexico, Central and South America. Year course (3-3).

52. Primitive Cultures (Ethnology).
History and cultural development of primitive races of mankind. Consideration given to industries, arts, social organization, and religion of living primitive peoples. Fall (3). (Offered in 1965-1966 and alternate years.)

53. Primitive Religious Culture.
Beliefs and ritual of primitive man. Magic and religion. Forms of animism and polytheism. Primitive mentality and the supernatural. Spring (3). (Offered in 1965-1966 and alternate years.)

54. Social Anthropology.
An anthropological study of social institutions in primitive and civilized societies. The evolution of family organization, religion, property right, and government traced in elementary and advanced civilization.
Art

Ritualism and education considered as processes of culture conservation and social control.

Fall and Spring (3).

55. Culture History.

The prehistoric and historic development of culture types entering into world civilizations. Egyptian, Semitic, Indo-European, African, Oriental, American Indian and Pale-Arctic civilizations analyzed on the basis of economics, polity, religion, science and art. Methods of culture spread and elaboration examined and applied to specific traits. Spengler's theory of culture history and similar doctrines reviewed.

Fall and Spring (3).

ART

Lower division preparation for the presecondary major in art and for the junior certificate: Eighteen units carefully chosen from lower division art courses to meet the stated prerequisites for upper division work. These shall include Art A-B, 5, 6A-6B, 50 or the accepted equivalents, and six elective units in art.

Presecondary major (upper division): Not less than twenty-four units of upper division art. These shall include Art 112A, 115A-115B, 116A, 125A, 135A, and ten upper division elective units in art.

It is recommended that the student in meeting degree requirements and in choosing free electives, select from the following courses: English 4A-4B, 106A-106B, 107A-107B, 117; French A-B; History 4A-4B; 111A-111B.

LOWER DIVISION COURSES

Art Appreciation and History

5. Fundamentals.

An illustrated lecture course intended to increase appreciation and give a basic understanding of the elements and principles of art as expressed in the architecture, painting, sculpture, and crafts of the past and present.

Fall and Spring (2).

8. Appreciation of Costume and Home Furnishing.

Design and materials of modern dress; relation to the figure and personality; suitability and expressiveness. Principles underlying the use of materials and furnishings in the home; harmony of color, problems. Lectures, discussion, and demonstration.

Fall (2).

50. Appreciation and History.

A survey of the development of painting, sculpture, architecture, and related arts from the dawn of art to the Renaissance, by means of illustrative material.

(Not open to freshmen, except by special permission.)

Fall (3).

Design

6A. Structure.

Fundamentals of design and composition and theory of color. Basic course used as a prerequisite for advanced art work.

Fall and Spring (2).

6B. Structure (continued).

BORSUM

Original work in creative design with special stress on modern tendencies. Prerequisite: Art 6A.

Fall and Spring (2).

11A. Industrial Design.

HAMANN

Original design in its relationship to various fields—ceramics, furniture, textiles, jewelry, and books. A survey and study of materials and processes in machine and hand production. Prerequisite: Art 6A-6B.

Fall (2).

11B. Advanced Industrial Design.

HAMANN

Advanced problems with emphasis upon the related factors of material and production. Application of problems designed. Prerequisites: Art 6A-6B, 11A.

Spring (2). (Offered in odd-numbered years.)

14A. Lettering.

BORSUM

Fundamental art principles applied to lettering. Practice for quick, accurate lettering; original problems using letters as design. Prerequisite: Art 6A.

Fall (2).

14B. Posters and Commercial Art.

BORSUM

The application of lettering to posters, newspaper and magazine advertising, and other forms of commercial art. The study of composition combined with lettering and special study of modern tendencies in publicity. Prerequisites: Art 6A, 14A.

Spring (3).

52A. Stage Design.

BORSUM

Theory of line, color, and lighting in relation to the stage. Original sets and costumes developed on a miniature stage. Study of the development of the modern art of the theater. Upper division credit will be given in this course to students of junior standing upon the completion of extra theme work and additional original problems. Prerequisite: Art 6A.

Fall (3).

94. Costume Design.

PATTERSON

Original problems and designing modern costumes. A study of line, color, texture, type, and suitability to the wearer and to the occasion; foreign and historic influence on dress. Prerequisite: Art 6A.

Fall (3).
Drawing and Painting

A-B. Freehand Drawing.  
Semester I: Problems involving perspective to develop ability to draw still life, furniture, exteriors, interiors, and the like.  
Semester II: Outdoor sketching of landscape and figure, and studio work from still life and costume pose. Emphasis on composition and technique in the handling of various mediums, pencil, pen and ink, charcoal, pastel, and water color.  
Year course (2-2).

15A-15B. Life Drawing.  
Drawing from the nude model. Does not duplicate the former course in painting, numbered Art 15A-15B.  
Year course, beginning either Fall or Spring (2-2).

16A-16B. Painting.  
Semester I: Composition of still life and flower forms in water color.  
Semester II: Landscape and more advanced composition in water color. Prerequisite: Art A-B. No credit for students having completed Art 15A-15B, Painting.  
Year course, beginning either Fall or Spring (2-2).

Crafts

61A. Elementary Crafts.  
Problems in elementary craft work, bookbinding, pottery, weaving and puppetry (including the dramatization and production of a puppet play). Prerequisite: Art A-B, when possible.  
Fall and Spring (2).

61B. Elementary Crafts.  
Problems involving the application of design principles to various fields—pottery, textiles, weaving, metal work, wood-carving, and bookbinding. Prerequisite: Art 6A.  
Fall and Spring (2).

UPPER DIVISION COURSES

Art Appreciation and History

150. Appreciation and History.  
The period from the Renaissance through the modern school, treated in the same manner as in Art 50.  
Spring (3).

Design

106A-106B. Advanced Design.  
Advanced problems in design, color and technique. Planned for students interested in commercial design, illustration and industrial design. Prerequisites: Art A, 5, 6A, 6B.  
Year course (2-2).

112A-112B. Composition.  
Imaginative composition of natural forms in black and white and color. Prerequisites: Art A-B, 6A-6B, and if possible 15A-15B or 106A.  
Year course (3-3).

112C. Illustration.  
Composition fulfilling the requirements of book illustration from poetry, imaginative tales, and legends, in black and white and color. Prerequisite: Art 112A.  
Spring (3). (Offered in odd-numbered years.)

152A. Stage Design.  
See Art 52A.

152B. Stage Costume.  
Costume studied in relation to drama. Original designs for mood and character. Practical problems in designing and decorating costumes and accessories for college productions. A brief history of costume from the Egyptian to the modern time. Prerequisites: Art 6A, 52A or 152A.  
Spring (3).

House planning and landscaping. Interior decoration. Study of period styles and modern decoration. Illustrated lectures and original problems. Prerequisites: Art A, 6A.  
Spring (3).

Drawing and Painting

115A-115B. Life Drawing and Painting.  
Drawing and painting from nude and costume models.  
Year course, beginning either Fall or Spring (2-2).

115C-115D. Advanced Life.  
Painting from nude and costume models and advanced composition in oil. Portraiture. Prerequisite: Art 115A-115B.  
Year course, beginning either Fall or Spring (2-2).

Painting in water color and oils from still life and landscape, stressing composition and technique. Prerequisite: Art 16A-16B.  
Year course, beginning either Fall of Spring (2-2).

ASTRONOMY

Lower division preparation in astronomy for advanced work and for the junior certificate: Astronomy 1, Plane Trigonometry, Mathematics 3A-3B, 4A-4B, Physics 2A-2B and 3A-3B, or 1A-1B and 1C-1D; a reading knowledge of French or German.

1. Descriptive Astronomy.  
A cultural course planned to give as comprehensive a view as possible of the solar system and the stars. Only calculations of an elementary nature are considered.

Scharting.
nature. Special attention to the methods and instruments by means of which astronomical knowledge has been gained. A six-inch Alvin Clarke telescope used for observation. Demonstrations given with a large spectrometer; also a good selection of lantern slides used to illustrate various topics. Prerequisites: Elementary algebra and plane geometry.

Fall and Spring (3).


The principles of spherical trigonometry and astronomy adapted to the needs of engineering students. Computing. Prerequisites: Surveying 1A; Surveying 1B to be taken concurrently.

Spring (1).


The leading facts now known in astronomy in the light of circumstances attending their discovery. Prerequisite: Astronomy 1.

Spring (3).


Stars and nebulae. Modern methods and instruments used in the observatory. Theory of matter as it applies to such studies. Prerequisites: Astronomy 1 and a knowledge of physics.

Fall (3).

BIOLOGICAL SCIENCES

(General Biological Science, Botany, Zoology)

General students who wish to take only one or two courses in this department should register for Biological Science 1, 10A-10B, Zoology 113C, 114A or 114B, Botany 4 or 5 (see below for prerequisites for each course).

Lower division preparation in botany for advanced work and for the junior certificate: Botany 2A, 2B, 4, 5, and Chemistry 1A.

Lower division preparation for the preprofessional major in zoology and for the junior certificate: Zoology 1A, 1B, and high school chemistry Botany 2A, 2B, 4, and 5.

Preprofessional major in zoology: (1) At least a C average in upper division major courses. (2) Twenty-four units of upper division courses in zoology or eighteen in the major subject and six in related courses in biology, organic chemistry, physics, physiology, and bacteriology.

Students preparing to teach science in the junior high school should try to include in their courses work in zoology, botany, physics, chemistry (at least high school chemistry), and Education 120. The following are required courses: geography, zoology, anthropology, and upper division biological sciences. See page 29.

Fee: A fee is required in all laboratory courses in this department. Material in addition to the estimated need extra charge must be made.

LOWER DIVISION COURSES

1. Man and His Biological World. M. E. JOHNSON

A general biology course with lectures, discussion, and demonstrations three hours a week. For students who are not required to take Biological Science 10A-10B or who prefer a shorter course with no laboratory work. Not open to students who have taken 10A-10B or any combination of Zoology 1A-1B or high school zoology with Botany 2A-2B or high school botany. Students who have credit for this course and later elect 10A-10B receive 1 unit of credit for 10A-10B instead of 6.

Spring (3).

10A-10B. Science of Life. M. E. JOHNSON

The fundamentals of plant and animal biology, with elementary work in human physiology and heredity. Laboratory work supplements the lecture and includes a study of living and preserved material. Aim of the course to acquaint the student with the basic facts of biology. Designed not only to give the general student an acquaintance with living things and their relationships, but also to furnish the prospective teacher with an adequate background for nature study teaching. Two lectures and one three-hour laboratory period per week. Designed for those who do not expect to specialize in zoology or botany, but not open for credit to students who have taken Zoology 1A, or Botany 2A. Students who have taken 10A-10B may elect Zoology 1B or Botany 2A, 2B for credit.

Year course (3-3).

BOTANY

LOWER DIVISION COURSES

2A. General. HARVEY

Fundamentals of structure and general behavior of seed plants. Two lectures or recitations and two three-hour laboratory periods per week.

Fall (4).

2B. General. HARVEY

A continuation of 2A treating morphology and relationship of the lower plants and including an introduction to classification of seed plants. Lectures and laboratory as in 2A.

Spring (4).

4. California Plants. HARVEY

Classification and ecology of representative orders of flowering plants of the San Diego region, including practice in the use of keys. One lecture and three hours laboratory per week.

Spring (2). (Offered in even-numbered years.)

5. Trees and Chaparal. HARVEY

Practice in the determination of the important species of the San Diego region. One lecture and three hours laboratory per week, with several Saturday field trips.

Spring (2). (Offered in odd-numbered years.)

NOTE: A course in general bacteriology is usually offered in the summer session.
UPPER DIVISION COURSES

102. Plant Geography. HARVEY
Lectures and field work on the principles of geographical distribution of plants. Prerequisite: Botany 2A-2B, or 4, or equivalent.
Fall (2). (Offered in odd-numbered years.)

104. Taxonomy. HARVEY
Identification, classification, and distribution of representative orders of flowering plants. Six hours per week of lectures, laboratory, and field work. Prerequisites: Botany 2A-2B, 4.
Spring (3). (Offered in even-numbered years.)

199. Special Study.

INSTRUCTORS OF THE DEPARTMENT
(M. E. JOHNSON in charge)
Reading or work other than is outlined in the above courses. Admission by consent of the instructor with whom the work is to be done and case. Open to students who have completed at least ten units of lower division work in the department with a grade of A or B.
Fall and Spring (1 or 2).

ZOOLOGY

1A. General. HARWOOD
An introduction to animal biology dealing with structures, functions, and habits of the vertebrates. Laboratory work supplementing the lectures. Credit and hours to be arranged in each division work in the department with a grade of A or B.
Fall (4).

1B. General. HARWOOD
A continuation of 1A. The structure, relationships, and classification of the vertebrates. Two lectures and two three-hour laboratory periods per week. Prerequisite: Zoology 1A or Biological Science 10B.
Spring (4).

20. Anatomy and Physiology. CROUCH
An elementary course in human anatomy and physiology. Prerequisite: Biology 10A-10B. Lectures three hours per week.
Fall (3).

100. Embryology. M. E. JOHNSON
The development of vertebrates as illustrated by the frog, chick, and pig. Six hours of laboratory and two hours of lecture per week. Prerequisite: Zoology 1B or Biol. Science 10B.
Spring and Fall (4). (Offered in odd-numbered years.)

106. Comparative Anatomy of the Vertebrates. CROUCH
Dissection, study, and comparison of organ systems of typical vertebrates. Two hours per week of lecture and six hours of laboratory. Prerequisite: Zoology 1B or Biol. Science 10B.
Fall (4). (Offered in odd-numbered years.)

112. Marine Zoology. M. E. JOHNSON
Designed to acquaint the student with the many interesting animals found along the beaches in the San Diego region. Identification, distribution, associations, and common behavior and life histories of the organisms. Frequent collecting and study of the animals in the laboratory. Prerequisite: A laboratory course in elementary biology or zoology.
Fall (3). (Offered in odd-numbered years.)

113A. Taxonomy and Natural History of the Vertebrates. HARWOOD
The study and identification of preserved material. One hour of lecture and two hours of laboratory per week. Prerequisite: Zoology 1B or Biol. Science 10B.
Spring (3). (Offered in even-numbered years.)

113B. Ornithology. CROUCH
The study and identification of birds, especially those of the Pacific Coast and the San Diego region. Six hours per week of lectures, laboratory, or field excursions. Prerequisite: Zoology 1B, or Biol. Science 10B.
Spring (3). (Offered in odd-numbered years.)

113C. Field Study of Birds. CROUCH
The study and identification of the birds of the San Diego region.
Three hours of laboratory or field work per week.
Spring (1). (Offered in even-numbered years.)

114A. Genetics. HARWOOD
General introductory course designed to acquaint the student with the fundamental principles of heredity and variation. Special attention given to the Mendelian interpretations of the facts of inheritance. Two lectures per week.
Fall (2).

114B. Evolution. JOHNSON
The development of theories of evolution. Two lectures or discussion periods per week.
Fall (2). (Offered in even-numbered years.)

121. Entomology. HARWOOD
The classification, life history, structure, and physiology of insects. Prerequisite: Zoology 1A or Biol. Science 10B. Two hours of lecture and six hours of laboratory per week.
Spring (4). (Offered in odd-numbered years.)

130. Readings in Biology. HARWOOD
Readings from a suggested bibliography with informal class discussion of topics. Subjects discussed will include history of biology, biology of topics. Fall (4). (Offered in even-numbered years.)
199. Special Study.

Instructors of the Department

(M. E. Johnson in charge)

Reading or work other than is outlined in the above courses. Admission only by consent of the instructor with whom the work is to be done and the head of the department. Credit and hours to be arranged in each case. Open to students who have completed at least ten units of work in the department with a grade of A or B.

Fall and Spring (1 or 2).

CHEMISTRY

Lower division preparation for the prescience major in chemistry and for the junior certificate: Chemistry 1A-1B with an average grade of C or better, Chemistry 6A-6B or 7-8, Physics 2A-2B and 5A-3B or their equivalent, Mathematics 7A-7B or the equivalent, and a reading knowledge of German. Students planning to do graduate work in chemistry or to transfer to another college, and those for a major in chemistry, are advised to take Physics 1A-1B-IC-1D and Mathematics 3A-3E-1A-1B in places of the courses listed above.

Prescience major (upper division). A minimum of twenty upper division units in chemistry including Chemistry 101-102. The choice of courses must follow a definite plan approved by the department.

For requirements for prescience major in physical science, see pages 51-54.

LOWER DIVISION COURSES

1A-1B. General Chemistry.

Messner, Robinson

The general principles and laws of chemistry, and a description of the elements and their compounds. Two lectures, one quiz and two laboratory periods per week. The laboratory work in the second semester years of high school mathematics. Recommended: High school chemistry.

Year course (3-5).

6A-6B. Introductory Quantitative Analysis.

Messner

Determination by gravimetric, volumetric, and electro-analysis, particularly the cultivation of laboratory techniques. Credit: Chemistry 1A-1B.

Year course (3-3).


Robinson

A general consideration of the carbon compounds (both aliphatic and aromatic) and their derivatives; their synthesis, constitution and properties. Two lectures and one laboratory period per week first semester; one lecture and two laboratory periods per week second semester. Prerequisite: Chemistry 1A-1B.

Year course (3-3).

UPPER DIVISION COURSES

101-102. Elementary Physical Chemistry.

Messner, Robinson

The laws and theories of elementary work from the viewpoint of physical chemistry. Laboratory work covering such topics as gas laws, mol weights, laws of combination, ionization, equilibrium relationships, and electrochemistry. Two lectures, two laboratory periods per week. Prerequisite: Chemistry 1A-1B, 6A-6B, and Mathematics 7A-7B or equivalent.

Year course (4-4).

106A-106B. Quantitative Analysis.

Messner

An upper division course covering the same field as Chemistry 6A-6B but including some more advanced work. One lecture and two laboratory periods per week. Prerequisite: Chemistry 1A-1B.

Year course (3-3).


Robinson

An upper division course covering the same field as Chemistry 7A-8 but including some more advanced work. Two lectures and two laboratory periods per week first semester; two lectures and two laboratory periods per week second semester. Prerequisite: Chemistry 1A-1B.

Year course (3-4).

110. Industrial Chemistry.

Robinson

An introductory lecture course designed to acquaint the student with types of apparatus and unit processes and their importance in industry. Prerequisite: Chemistry 1A-1B and credit or registration in Chemistry 6A-6B and 7-8.

Spring (3). (Offered in even-numbered years.)

112. Industrial Analysis.

Robinson

A laboratory course including the analysis of fuels, petroleum products, water, and gas. Prerequisite: Chemistry 6A-6B.

Spring (2). (Offered in even-numbered years.)

114. Biochemistry.

Messner

An introductory lecture course covering the carbohydrates, proteins, fats and the changes which they undergo in digestion and metabolism, as well as a consideration of the vitamins and accessory food factors. Prerequisite: Credit or registration in Chemistry 101-102. Spring (3). (Offered in odd-numbered years.)

118. Colloid Chemistry.

Messner

A short lecture course covering types of colloidal systems, their preparation, properties and practical applications. Prerequisite: Chemistry 101-102.

Fall (2). (Offered in odd-numbered years.)
123-124. Organic Preparations. Robinson
A laboratory course illustrating some of the more important synthetic methods of organic chemistry. Laboratory and conferences. Prerequisite: Chemistry 7-8. A reading knowledge of German recommended.
Year course, beginning either Fall or Spring (2 to 5-2 to 5).

128. History of Chemistry. Robinson
Development of the science of chemistry from the time of the alchemists to the present. Conducted on the reading, report, and seminar basis. Prerequisite: Chemistry 101-102.
Fall (2). (Offered in even-numbered years.)

199. Special Topics. Robinson
Supervised individual work in specialized branches of chemistry. Approval of the instructor. Credit only. Hours and credit to be arranged in each case. Open only to upper division students who have passed through the second year course in chemistry.
Fall and Spring (1-3).

ECONOMICS

Lower division preparation for the presecondary major in economics and the junior certificate: Economics 1A-1B and at least one of the following: Political Science 1A-1B, History 4A-4B, History 8A-8B, 50A-50B, 50A-30B. Recommended: Sociology 50; Economics 11A-11B, 11A-14B, 18A-18B. 100, 140 and 160, with 7 units selected from the following: Economics 114A, 115A, 116A, and 172. Electives: Nine upper division units in economics. Economic geography may be used in electives in economics.

Commerse

Candidates for a teaching credential in commerce should refer to the statement "Admission to Upper Division Teacher Training" on page 28 of the catalog. Candidates for the junior certificate in commerce and the junior certificate in commerce should refer to page 39 of the catalog.

LOWER DIVISION COURSES

1A-1B. Principles of Economics. Cameron
The basic principles of economics: utility, wealth, value, price; economic production, distribution, and consumption; rent, interest, wages and profit; competition, monopoly, and large scale production; property, economic waste, and luxury; money and banking, international trade and tariffs, transportation corporations, labor problems, socialism, taxation, etc. Aim of the course: (1) to provide a foundation for further intensive study of economic problems; (2) to furnish to those who wish to follow business pursuits a broad foundation in economic principles; and (3) to introduce future citizens to political and economic problems of our time. Lectures, discussions, quizzes, and collateral reading. Not open to entering freshmen except by special arrangement.
Year course (5-3).

11. Economic History of the United States. Wright
A comprehensive survey of American economic development and national legislation in the field of industry.
Spring (s).

14A-14B. Accounting. Wright
A knowledge of bookkeeping not required and not advantageous. The course covers the basic principles of accounting: balance sheet, profit and loss statement, various types of books of account, the opening, conducting, and closing of books for different types of businesses; organizations, reorganizations, dissolutions, and liquidations; the accounting for various types of businesses, and the accounting for various types of organizations. The course is designed for students who wish to enter the field of accounting.
Year course (3 or 4-12 or 4).

18A-18B. Commercial Law. Stanton
The leading and fundamental principles of business law. Simple cases showing the actual application of the principles to commercial and business transactions, rather than the development of those principles. The course is designed for students who wish to enter the field of commercial law.
Year course (3).

24A-24B. Merchandising. Waterpauh
The principles and methods of merchandising: the function and mode of operation of the retailer, the wholesaler, and the manufacturer; types of retailing; the sale of merchandise; competition; prices; price factors, economics of selling; principles of buying and selling; inventory procedure; stock control; principles of merchandising; statistical organization and graphic presentation of merchandising data.
Year course (3).

25A. Salesmanship. Waterpauh
The mechanics and theory of salesmanship; methods of approach and demonstration; selling ideas and services; meeting objections; inducing decisions; closing sales; the personal factor in connection with the sale.
Outstanding salesmen in the various crafts will illustrate correct methods of selling.
Fall (2).

25B. Advertising.
Functions, theory, principles and applications; selecting the right appeal; surveys and analyses; studying markets; budgeting the appropriation; layouts, type, borders and illustrations; use of color; choice of mediums; writing publicity and promotion stories; openings, anniversaries, sales and special events; institutional copy; the advertising agency and its functions; sales and collection letters.
Spring (2).

UPPER DIVISION COURSES

100. Modern Economic Thought.
A G. Peterson
Classical doctrine in the light of recent economic theory. A critical analysis of contemporary economic thought. Prerequisite: Economics 1A-1B.
Spring (3).

A G. Peterson
A description and analysis of the present economic organization from the evolutionary point of view; a consideration of the institutions of government and the processes of law in the light of the economic problems and controversies of the New Deal; a study of world economics with particular reference to the international aspects of the New Deal. Open to all upper division students.
Spring (3). (Not offered in 1935-1936.)

121. Business Administration.
A G. Peterson
Problems of business administration as an interrelated whole and as problems. A discussion of the problems of the business administrator to the control policies and devices of the manager. Questions, problems, Fall (3).

123. Marketing.
An indication of lines of study which may lead to the solution of those problems of the business administrator to the interests and devices of the manager. Questions, problems, and case studies. Prerequisite: Economics 1A-1B.
Spring (3).

125A. Advertising.
Functions, theory, principles and applications; selecting the right appeal; surveys and analyses; studying markets; budgeting the appropriation; layouts, type, borders and illustrations; use of color; choice of mediums; writing publicity and promotion stories; openings, anniversaries, sales and special events; institutional copy; the advertising agency and its functions; sales and collection letters. Fall (2). (Not offered in 1935-1936.)

125B. Salesmanship.
Salesmanship, the market basket of knowledge; the mechanics of the mind; overcoming fear; the human element in selling; meeting competition; analyzing a sale in advance and methods of using this analysis in consummating a sale; personal attributes; selling an invisible commodity; retail selling; the steps of a sale. Fall (3).

131. Public Finance.
Principles and practice of taxation, public expenditures, and financial administration. Prerequisite: Economics 1A-1B.
Spring (3). (Not offered in 1935-1936.)

133. Corporation Finance.
The corporate form of organization, instruments of long-time finance, and the methods of raising capital, efficient financial management, and the financing of reorganizations. Prerequisite: Economics 1A-1B.
Fall (3).

134. Investments.
Investment principles and practices with emphasis upon problems of the small investor, such as tests of a good investment, sources of information, types of stocks and bonds, mechanics of purchase and sale, investment trusts, real estate mortgages, and the like.
Spring (3).

135. Money and Banking.
The elements of monetary theory. History and principles of banking with special reference to the banking system of the United States. Pre- requirement: Economics 1A-1B.
Fall (3).

140. Statistical Methods.
The nature and use of statistical method in the social sciences. Practice in the tabular and graphical presentation of data; in the computation of averages, ratios and coefficients, measures of dispersion, and other techniques which are used in determining data. Research studies are made, utilizing data measures of relationship. Prerequisite: Mathematics A, C, and D, or equivalent aids to computation. Prerequisite: Mathematics A, C, and D, or equivalent aids to computation. Prerequisite: Mathematics A, C, and D, or equivalent aids to computation.
Spring (3).

151. Personnel Administration.
Principles of scientific management, labor turnover, selection and placement of personnel, discipline and discharge, methods of wage payment, health and safety, labor participation in management. Prerequisite: Economics 1A-1B.
Spring (3). (Not offered in 1935-1936.)
160A-160B. Advanced Accounting.  
Wright
An intensive study of the corporation, its accounting and financial problems; a thorough study of the balance sheet; depreciation; factory accounting, etc. Under practical accounting an endeavor is made to design, construct, and operate sets of books to meet the needs of different conditions and kinds of businesses. Six hours lecture and laboratory. Prerequisite: Economics 14A-14B.
Year course (3-3). (Not offered in 1935-1936.)

161. Cost Accounting.  
Wright
Principles and methods of cost accounting in the mercantile establishment and in the factory. A study of bookkeeping procedure, the forms used, and their application to practical problems. Prerequisite: Economics 14A-14B.
Spring (3).

162. Accounting Systems.  
Wright
The accounting systems used in various types of business and financial concerns. Some practice in devising and installing systems. Prerequisite: Economics 14A-14B.
Spring (3). (Not offered in 1935-1936.)

Wright
The application of mechanical accounting devices to accounting conditions together with a study of efficient machine methods that conform to good accounting practice and yet meet the practical accounting requirements that are found in many classes of business. In addition considerable practice in the operation of standard accounting machinery. Prerequisite: Economics 14A-14B.
Fall (3).

Wright
A consideration of the problems arising from the Federal income tax. The problems are approached from the point of view of the taxpayer who desires to determine the exact application of the law to his interests. No knowledge of accounting procedure is necessary. Prerequisite: Economics 14A-14B.
Fall (2).

171. Transportation.  
Cameron
The development of railway transportation; railroad financing; rates and rate making; government regulation; government operation of railroads; roads during the war; recent development of motor and air transportation; current problems. Prerequisite: Economics 1A-1B.
Spring (3). (Not offered in 1935-1936.)

199. Special Study.  
The Staff
Designed exclusively for seniors with a major in economics or commerce. Spring (2).

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Economic Geography  
(See Geography)

Social Science

LOWER DIVISION COURSES

1. Foundations of Civilization.  
A. G. Peterson
A survey course designed to aid the student in orienting himself effectively and usefully in the complex social life about him; to introduce the student to sound methods of approach in dealing with social, political and economic problems and to cause him to develop a scientific way of looking at himself and society; to stimulate interest and concern in the problems of the day and to arouse the student to independent and constructive thinking by bringing together the various lines of present-day thought, by offering interpretations of far-reaching and deep-moving thought, by calling attention to the essential unity of all knowledge and the basic objectives common to government, industry, education, religion and other social institutions.
Fall and Spring (3).

50. General.  
Kelly
A study of the nature and organization of human group activity, including the relation of cultural heritage to public opinion and social change.
Previous preparation in biology and psychology recommended.
Fall and Spring (3).

Social Psychology  
(See Psychology)

Secretarial Training  
Wright
A. Business Mathematics.  
A practical course in the mathematics of business. A thorough study of interest, compound interest, discount, amortization tables, insurance rates, etc.
Fall (1).

1A-1B. Typewriting.  
Amsden
A rapid development of a thorough command of a keyboard by the touch method. The acquisition of speed and the artistic arrangement of typewritten material with special reference to commercial forms, tabulation and billing; specifications, legal forms, and preparation of manuscripts; transcription, mimeographing, etc. Eight hours lecture and laboratory practice.
Year course (3-3).
2A. Typewriting.  
A short course designed for those not wishing to enter the business office but desiring a knowledge of the use of the typewriter. Five hours laboratory practice.  
Spring (2).

3A. Office Methods and Appliances.  
Practice and principles of office management, including organization, arrangement, and operation. Study and use of modern office appliances, such as the multigraph, mimeograph, filing devices, calculating and bookkeeping machines. Prerequisite: Secretary Training I A or its equivalent.  
Spring (3).

5A-SB. Stenography.  
An intensive course designed for the practical preparation of office secretaries. A thorough study of the Gregg System. Development of the ability to read and write shorthand rapidly and correctly, both literary and commercial. The shorthand speed necessary to pass a civil service examination is attained by the end of the year.  
Year course (5-5).

6A. Advanced Stenography.  
Development of speed in writing and transcription. Advanced dictation on letter forms, legal forms, speeches, and literary material.  
Fall (3).

10A. Business Correspondence.  
Theory and practice of business correspondence. Lectures and laboratory work. Prerequisite: English 1A or equivalent (as indicated by Subject A Test or record from another college).  
Fall (3).

EDUCATION

A-P-R-S.  
Supervised study in arithmetic, reading, spelling, and penmanship for the students deficient in these subjects. Successful completion of one of these courses is accepted in lieu of a passing grade in the achievement tests in arithmetic computation, reading comprehension, spelling, and penmanship, is a prerequisite for teacher training students in their freshman year. Those who pass this examination with satisfactory standing are excused from Education A-P-R-S.  
Fall and Spring (0).

Springston  
Main objectives of music teaching in the public elementary schools. Study of the child voice. Organization of song material by grades. Procedure in presenting rote songs, ear training, elementary notation, sight singing and part singing. Conducting. Not open to students taking the elementary credential. Prerequisite: Music 1A, or the equivalent.  
Fall and Spring (2).

Discussion of the elements and principles of art and their place in the art expression and appreciation of the elementary school child. Lectures illustrated with examples of children's work and opportunity given for experience with mediums used in elementary school problems. Not open to students taking the elementary credential. Prerequisite: Art 6A.  
Fall and Spring (2).

UPPER DIVISION COURSES

106. Philosophy of Education.  
Ault  
The fundamental biological, psychological, philosophical, social principles underlying modern education, in connection with the demands of modern society in a complex social, economic, and scientific world, with a view to the formulation of a working philosophy for the educative process. Designed as a culmination of the studies of education and its procedures. Open only to students with senior standing.  
Spring (3).

107. History of Education.  
Ault  
A brief study of early Hebrew, Greek, Roman and early Christian education; of the changes brought about by the Renaissance; of the transition to modern secular education; brief reviews of the educational philosophies of the great reformers; a concluding study of the development of the American school system and of American ideals and practices in education. Only 2 units allowed for students having credit for Education S107. History of Education in the United States (offered in the summer session).  
Fall (3).

Broom  
A brief survey of the development of scientific measurement in the elementary school field, including an intensive study of the more reliable and valid tests of school achievement and of mental ability. Statistical training is given in interpreting data obtained by using measurements in typical school situations, leading to a study of the uses of tests. Practice in the construction of teacher-made, objective tests in the elementary school subjects.  
Fall and Spring (3).

Broom, Harby  
A survey of the systems of organization, classification, and promotion of pupils, and such problems as finance, the teaching staff, building standards, extracurricular activities, etc. Prerequisites: Education 123, 108, or equivalents.  
Spring (2).
110. Educational Organization and Supervision.

Types of supervision and methods of evaluating and improving teaching. Prerequisites: Education 125, 108, or equivalents.

(2)

111. English in the Junior High School.

Objectives of language study and teaching in the junior high school; methods of selecting material; technique of class discussion; observation in the city schools. Prerequisite: The satisfaction of the lower division requirements in English for the teaching major in English. Spring (2).

112. Mathematics in the Junior High School.

The subject matter, general principles of its study and methods of teaching in the junior high school curriculum in general mathematics. Specific problems of the elementary level, its relation to the college mathematics. Prerequisite: Mathematics 1A and a passing grade in the Fundamentals Test. (Not offered in 1935-1936. Students will substitute Mathematics 19.)

114. Social Science in the Junior High School.

The teaching of some of the elementary facts and principles of a general social science suited to the experience and development of the student in the junior high school and its relationship to the junior high school curriculum as history, geography, and civics. The teaching of some of the fundamental concepts of human society through observation and discussion. In fall and spring (2).

116. Practice Teaching.

Systematic observation, participation and teaching under supervision in the campus training school, at the local high school and the junior and senior high schools of the city of San Francisco. Prerequisite: The general plan is for elementary school credential candidates to have daily participation in the education practicum, two hours of teaching experience in the local high school each summer and one-half hours daily in the classroom with some time assigned to the distribution of the information from their teaching experience. For teaching level must be satisfied. Further information regarding this course is available from the Dean of Education when the student registers for practice teaching. During the first term, the student will usually earn one unit of credit in the course, but the final amount of credit allowed will depend upon the character and quality of the teaching done by the student.

Practice teaching requirements may be reduced for those who furnish evidence of successful public school experience.

The maximum amount of credit allowed for this course is twelve units. Students planning to transfer to such institutions should be prepared to meet this reduction with an equal number of acceptable units in other courses.

No grade below a C is acceptable in this course.

Prerequisites: Admission to upper division teacher training; a C average in all college work and in the work of the preceding semester; three units of work in psychology. No credit will be given for this course unless registration is made in the office of the Dean of Education.

119. Art in the Junior High School.

Art curriculum planning for high schools and college and studio problems and discussion. Prerequisite: Education 19. Spring (2). (Offered in odd-numbered years.)

120. General Science in the Junior High School.

The content, methods, field work, text books, laboratory work, equipment, and reference reading for teaching general science in a junior high school. Prerequisites: Eighteen units of college science including one year-course in a college biological science, Physics 2A-2B, or equivalent, and high school or college chemistry.

Fall and Spring (2).

121. Principles of Secondary Education.

The principles of educational science that should underlie the organization, administration and curriculum of the secondary school: Developmental patterns of high school education; tendencies in the direction of future development. Particular attention to the method of directing learning in the secondary schools. Prerequisite: Psychology 1A. Open only to students with senior standing.

Fall and Spring (3).

124. Romance Languages in the Junior High School.

A consideration of the main questions of pronunciation, grammar, composition, reading, texts, etc., as applied to teaching elementary classes in French and Spanish; the different methods; their history and value. Prerequisite: Two years of college French or Spanish. Spring (2).

125. The Elementary School Curriculum.

An analytical and constructive curricular study of the subject matter taught in the elementary school, with particular emphasis on the upper elementary grades; together with an intensive study of teaching techniques in the elementary school, including observation of typical teaching procedures. The course embraces individual and group research projects in curricular materials, visual aids, type lessons, and experimental studies of teaching methods. Required of candidates for junior high and special credentials. Prerequisites: for a combination of the elementary and junior high school credentials.

S-31621
must register for the education practicum instead of this course. Prerequisite: Education 108, taken previously or at the same time.

Fall (3).

Main objectives of music teaching in the public secondary schools. Organization of the chorus and glee clubs, voice testing, seating, a survey of song materials available. Organization of courses in applied music, harmony, history and appreciation.

Fall (2). (Offered in odd-numbered years.)

130. Educational Psychology. A. M. Strother
Modern equipment for learning and the learning process. Consideration given to human behavior which is fundamental to learning. The study of learning includes such topics as laws of learning, improvements in learning, and the transfer of training. Prerequisite: Psychology 1A.

Spring (3).

137. Comparative Education. R. Ault
School systems of England, France, Germany, and Denmark; traits of peoples; origin and development of school systems; literacy of populations; traditional influences; characteristic types of schools and educational procedures; governmental and private support; training of teachers.

Fall (3). (Not offered in 1935-1936.)

140. Elementary Educational Statistics. A. M. Strother
An introductory study of measures of central tendency, of variability, and of relationship which are commonly used in connection with educational work. Laboratory training in statistical method and opportunity for practical work in the use of calculating machines and other aids to computation. Data for statistical research taken from typical school situations. Only 2 units allowed students who have taken Economics 140.

Fall (3).

145. Organization and Administration of Music Education. L. D. Smith
Theory of the general principles of music administration; correlation of music with the various subjects in the public schools; music tests; creative work.

Fall (2). (Offered in even-numbered years.)

147. Education Practicum—Lower Levels (See description below).

148. Education Practicum—Upper Levels (See description below).

The educational practicums will include the work formerly offered in Education 1, 17, 19, 125A, 125B, 126, and 129.

In place of the discontinued courses all upper division candidates for the elementary school credential will be required to take the educational practicums, the one dealing with the lower levels being prerequisite to the one dealing with the upper levels. The material covered will be equivalent to the courses discontinued, plus four units of practice teaching. The maximum credit allowed for each practicum is 10 units.

A group of courses taken at this or another institution will not be considered as a substitute for the educational practicums. If such independent courses have been completed in this college previous to September, 1934, or in another teacher training institution, credit may be submitted to the Dean of Education and, with his approval, an equivalent may be allowed.

2. Content of the Practicums.
Characteristics of children in the elementary school; organization of the activity program; study of activities and materials based on children's interests, capacities, needs, and the local environment; teaching and learning procedures in the fields of reading, language, writing, use of numbers; observation and participation in actual classroom situations.

Lectures, discussions, and observations held daily by each supervisor and the principal of the training school from 8:30 to 10:00 a.m.; also, participation for one hour daily in the activities of the pupil-group to which he is assigned will be required of each student.

4. Registration for Education Practicums.
The practicum courses are to be taken by the student in his junior year. Assignments will be made by the principal of the training school at the time of preregistration of upper division teacher training students.

160. Commercial Education. H. D. Wright
Aims, objectives and procedures in commercial education. A study of curricula, together with a consideration of the content of commercial subjects; tests applicable to commercial teaching.

Fall (2).

The methods and content of the course in the elements of business training as offered in the junior high school. Not open for credit for those who have taken Secretarial Training 3A.

Spring (2).

163. Stenography. N. Amsden
Methods and content of courses in stenography. Prerequisite: Secretarial Training 5A.

Fall (2).

164. Bookkeeping. H. D. Wright
Various types of bookkeeping method, with considerable study of content.

Fall (2).

165. Typewriting. N. Amsden
Methods in typewriting and office procedure. Prerequisite: Secretarial Training 1A.

Spring (2).
170. Administration of a Visual Instruction Program.  
EVANS
Supervised study and practical experience in the various phases of work in a visual instruction center. Aims to give teachers a specific knowledge of visual instruction materials and methods and to meet the needs of individuals interested in obtaining training in the administration phases of a visual instruction program to fit them for positions as directors of staff workers in the field.

The service program of a visual instruction center is studied as a collecting, selecting, organizing and distributing center for classroom illustrative materials; a teacher training and advisory bureau in the technique and correct use of visual aids; a photographic production laboratory for making current and local illustrative materials for the school program; a testing division for evaluating visual equipment, standardization and upkeep of same; a center for correlating and integrating the school program with opportunities offered by other community educational institutions and organizations; an advisory department for supervising school film productions and for instructing teachers and students in the art of photography and appreciation of photoplays.

This course is given at the visual education center of the San Diego city schools and the enrollment is limited to students who have made previous arrangements with the head of the Education Department and with the instructor.
Fall and Spring (2).

199. Educational Problems.  
EDUCATION STAFF  
(Dean of Education in Charge)
A course for senior students in teacher training who have shown ability to work independently on educational problems. Admission only by consent of the staff. Credit and hours to be arranged.
Fall and Spring (1-3).

ENGLISH
Lower division preparation for the presenior major in English and for the junior certificate: English 1B-2 or 3 and six units from 52A, 52B, 56A, 56B.
Alternative major (upper division): 24 units in upper division English to be selected and arranged under supervision of the department. Not over four units may be in composition. A reading knowledge of German or French.

LOWER DIVISION COURSES

1A. Freshman English.  
ADAMS, KEENEY
The elements of composition, including drill in grammar and usage, exercises in vocabulary building and careful reading, and an introduction to the principles of effective writing.
Fall and Spring (1).

1B. Freshman English.  
ADAMS, ANDERSON, DICKHAUT, KEENEY, F. D. WALKER
Reading and composition. Reading chosen from essay material of England and America since 1850. Composition stressing exposition.

Prerequisite: English 1A or equivalent (as indicated by Subject A test or record from another college).
Fall and Spring (3).

2. Sophomore English.  
ANDERSON, F. D. WALKER
Reading and composition. Reading from field of biography and memoirs. Composition stressing personal narrative and informal essay.
Prerequisite: English 1B.
Fall and Spring (3).

ADAMS
Reading and composition. Reading from contemporary periodical literature. Composition, stressing article writing of varied types. Prerequisite: English 1B.
Fall and Spring (3).

4A-4B. Great Books.
OUTCALT
A survey of books and bodies of literature that are significant sources or expressions of European and American culture. These include the Hebrew Bible, Greek epic and tragedy, Norse eddas, and other literature of religious and communal character; and highly significant masterpieces in poetry and prose by great authors down to the nineteenth century.
Year course (3-3).

10. Recreational Reading.  
DICKHAUT
Development of personal tastes for leisure-time reading through lectures and oral or written reports. May be taken a second time with new material.
Fall and Spring (1).

52A-52B. Types of Literature.  
OUTCALT
Semester I: Introduction to the study of lyrical and narrative poetry; origin and elements of poetry; typical poems. Semester II: Introduction to the study of dramatic poetry and prose, the essay, novel and short story; elements, principles and characteristics; examples.
Year course (3-3).

56A-56B. Survey of English Literature.  
KEENEY, ADAMS
The most important masterpieces of English literature from the Anglo-Saxon period through the Victorian age.
Year course (3-3).

UPPER DIVISION COURSES

DICKHAUT
Recent and contemporary fiction in novel and short story, beginning with Meredith and including the best British and American fiction of today.
Spring (3).

106A, 106B. Advanced Composition.  
DICKHAUT
the magazine article, criticism. Outside readings. Prerequisite: One year of college composition. Either semester may be taken first.
Fall, Spring (2, 2).

107A, 107B. Advanced Composition.

These courses, which have the same requirements as 106A, 106B, are designed for students who wish to do independent work in composition. The discussions will consider the problems of effective expression as exhibited in the work of the members of the class. Either semester may be taken first.
Fall, Spring (2-2). (Not offered 1935-1936.)

110. Recreational Reading.

An advanced course similar in character to English 10.
Fall and Spring (1).

116. Elizabethan Literature.

An introduction to the principal writers from Wyatt and More to Johnson and Bacon. Approximately equal attention is given to the non-dramatic poetry, the prose, and the drama of the period.
Fall (3). (Offered in even-numbered years.)

117. Shakespeare.

Extensive reading of Shakespeare's plays, with special attention to a select group of the comedies and another of the tragedies. Lectures and special reports.
Spring (3).

118. Makers of Eighteenth Century Literature.

Pope, Defoe, Swift, Johnson, Goldsmith, Fielding, and their contemporaries as interpreters and teachers of their age.
Spring (3).

119. The Romantic Poets.

Spring (3).

121. Poetry of the Victorian Period.

A study of Tennyson and Browning and their contemporaries and successors, relating English poetry to nineteenth century life and thought.
Fall (3). (Offered in odd-numbered years.)

126. Anglo-Irish Prose from Landor to Galsworthy.

Discussion, criticism belles-lettres in England and Ireland from the Victorians to the late Georgians, including selections from Carlyle, Mill, Chesterton, Inge, and others. Lectures and reports on outside reading.
Fall (3).

130A. American Literature.

A survey of American literature with its backgrounds from the beginning of the 19th century to about 1890. Cooper, Melville, Hawthorne, Poe, Emerson, Thoreau, Whitman, Mark Twain and others are considered and related to national development. Lectures, discussions, and reports.
Fall (3).

130B. American Literature.

A survey of American literature with its backgrounds, covering the period from about 1890 to the present time. Extensive reading in recent and contemporary poetry, fiction, etc. Lectures, discussions and reports.
Spring (3).

143. The Development of the English Novel.

History of the English novel from the beginnings to Hardy. Extensive reading of novels with reports. Lectures and discussion.
Fall (3). (Offered in even-numbered years.)

151. Medieval Literature.

The literature of the fourteenth century, especially the verse romances and the poetry of Chaucer.
Fall (3).

160. Milton and Dryden.

Studies in poetry of the seventeenth century, relating it to the thought and the social life of the age.
Fall (3). (Offered in odd-numbered years.)

Speech Arts

LOWER DIVISION COURSES

1A. Fundamentals of Public Speaking.

Training in fundamental processes of oral expression; methods of obtaining and organizing material; outlining principles of attention and delivery; extemporaneous speaking and open forum debating; practice in construction and delivery of type forms of speech.
Fall and Spring (3).

1B. Extemporaneous Speaking (or Forum Speaking).

Practice in extemporaneous speaking on subjects of current interest
both national and local, with stress laid on the organization and delivery of content material. Forum discussion will provide speakers with the of opportunity of assembling facts quickly to meet such questions as the audience situation might demand.
Spring (3).

1C. Oral Interpretation.

The oral interpretation of longer literary selections, both in poetry and drama as well as those majoring or minoring in English Literature.
Fall (8).
1D. Advanced Interpretation.
Emphasis placed on stage poise and grace with adequate attention given to variations in the presentation of literary selections. Much opportunity is provided for individual and group creative work. No prerequisite. Class limited. Spring (3).

Corrective laboratory training prescribed on the basis of vocalization tests made on Edison machine. Required of education majors who fail to meet speech requirements test. Also recommended for those who plan public careers.
Fall and Spring (1). (9 weeks' course.)

55A-55B. Dramatic Production.
A course for first and second year students in which, through participation, they acquire an understanding of certain dramatic periods and types studied in English literature. Individual and group expression coordinated and developed in production of scenes, acts, and plays—a fundamental drama course. No prerequisite.
Year course (3-3). (Offered in odd-numbered years.)

55C-55D. Dramatic Expression.
A course designed to help first and second year students realize and develop their own abilities for expressing character and life. Coordination of thought, voice, and body, acquired through interpretation, impersonation, and acting of contemporary situations, creative and standard drama. History, technique, and use of dramatic expression studied. Informal participation by all. Best work given public performances. A fundamental course.
Year course (3-3). (Offered in even-numbered years.)

UPPER DIVISION COURSES

101B. Argumentation and Debate.
Obtaining and organizing of evidence and the construction and use of the brief; study and discussion of current issues; the presentation of formal and informal debates. Attention to intramural and intercollegiate debating. No credit for students having taken 101B previous to 1934-1935.
Spring (3).

155A-155B. Advanced Dramatic Expression.
For upper division students training for leadership in different fields as well as drama. More advanced forms of dramatic expression studied; in relation to various subjects and activities conducted through individual research projects, group discussion and participation. Original work encouraged. Prerequisite: A fundamental drama course.
Year course. (3-3). (Offered in odd-numbered years.)

156A-156B. Advanced Dramatic Production.
The study of more difficult dramatic types and periods in the production of poetic and prose literature of different countries. Arrangement, organization, creation, direction and presentation of class room, recreational and other forms of performances. Practical participation and demonstration; A course designed for students majoring in other subjects as well as the theater arts.
Year course (3-3). (Offered in even-numbered years.)

JOURNALISM
(See page 99)

FOREIGN LANGUAGES

Lower division preparation for advanced work in a foreign language and for the junior certificate: Sixteen units of credit in the language chosen for the major, and; History 4A-4B.
Lower division preparation for the presecondary group major in the Foreign languages: French A-B, C-D, and Spanish A-B, C-D.
The group major requirements are based on the assumption that the student will have taken courses in the high school equivalent to the college course in elementary French or Spanish.

Presecondary group major (upper division). Twenty-four units in upper division work in French and/or Spanish; or eighteen units in related subjects, arranged in French and/or Spanish, and six units in related subjects, arranged in consultation with the chairman of the department. At least a C average in all courses. Recommended: Geography 118.

French

LOWER DIVISION COURSES

A-B. Elementary.
Intensive study of French grammar and syntax; daily written work; discussion in class; class drill in conversational idiom and pronunciation; reading in original literature; and composition. Prerequisite: Two years of French in high school.
Year course (3-3).

C-D. Intermediate.
Reading and composition; study of standard prose as a basis for class work; reading and writing in literature and reports in French; oral composition with resumés and résumés; andauroral conferences. Prerequisite: Two years of French in high school. French B or three years of high school French, or its equivalent, with credit for four years of high school French, or its equivalent, should enter French D.
Year course (3-3).

E. M. Brown, Phillips

E. M. Brown, L. P. Brown, Phillips
SC. Scientific.
Readings taken from the fields of chemistry, physics, medicine, zoology, biology, etc. Outside readings of books and periodicals. Oral and written reports. Prerequisite: French B or equivalent.
Fall (2). (Offered in odd-numbered years, if registration warrants.)

UPPER DIVISION COURSES

101A-101B. Conversation and Composition.
L. P. Brown
Year course (3-3). (Offered in 1936-1937.)
Prerequisite: French D or its equivalent, with grade of C.

105A-105B. Modern French Drama.
E. M. Brown
Plays of Musset, Scribe, Augier, Dumas fils, Pailleron, Brieux, Herivier, Maeterlinck, Rostand, and others read and discussed as to subject matter and technique. Outside reading and reports. Prerequisite: French D or its equivalent, with grade of C.
Year course (3-3). (Offered in 1937-1938.)

L. P. Brown
The philosophical ideas of the century as contained in the works of Montesquieu, Voltaire, and Rousseau. The Encyclopédistes. Prerequisite: French D or its equivalent, with grade of C.
Year course (3-3). (Offered in 1936-1937.)

110A-110B. Modern French Novel.
E. M. Brown
The French novel from Victor Hugo to the present day, including such authors as: Hugo, Dumas, Stendhal, Balzac, Flaubert, Loti, Anatole France, Bourget, Bordeaux, Baudelaire, Romain Rolland, A. Gide, Marcel Proust, and others. Class and outside reading and reports. Prerequisite: French D or its equivalent, with grade of C.
Year course (3-3).

111A-111B. Seventeenth Century Dramatic Literature.
E. M. Brown
Reading in class of plays of Molière, Corneille, and Racine. Outside readings and lectures on the background of the seventeenth century in France. Prerequisite: French D or its equivalent, with grade of C, and upper division standing.
Year course (3-3). (Offered in 1938-1939.)

C-D. Intermediate.
H. K. Walker
Reading and composition; study of standard prose as basis for class work; oral reading with written reports; German conversation, with the texts read as a basis; dictation. Prerequisite: German B or three years high school German, or its equivalent. Students with credit for four years high school German, or its equivalent, should enter German D.
Year course (3-3).

SC-SD. Scientific.
E. M. Brown
Full seminar. Courses in scientific reader on chemistry, physics, etc.; occasional reading of scientific subjects read outside of class; sight reading. Spring semester. Reading in special scientific or technical works; weekly written reports required; sight reading. Prerequisite: German SC-German B or German SC-B with a grade of C or three years high school German; German SD-German C with a grade of C or four years of high school German.
Year course (2-2).

Spanish

LOWER DIVISION COURSES

A-B. Elementary.
L. P. Brown, Phillips
Intensive study of Spanish grammar and syntax, with daily written work; class drill in conversational idioms and pronunciation; reading with oral discussion and summary; dictation; introduction to contemporary prose writers; study of the principles of Spanish prose, with memory work. Credit not given for Spanish A unless followed by Spanish B. Students who have had two years of Spanish in high school should register for Spanish A, and in had two years of Spanish in high school should register for Spanish B, in which case they will receive four units of credit.
Year course (3-3).

C-D. Intermediate.
M. P. Brown, Phillips
Reading and composition; study of standard prose as basis for class work; giving of Spanish proverbs, with written reports in work; oral reading in prose and drama, with written reports in work; dictation. Class work conducted mainly in Spanish. Prerequisite: Spanish B or three years of high school Spanish, or its equivalent. Students with credit for four years of high school Spanish, or its equivalent, should enter Spanish D.
Year course (3-3).

1-2. Elementary.
L. P. Brown
A course similar to Spanish A-B, but meeting only three times a week and giving only three units of credit a semester. Intended for those who do not wish to major in the Romance languages; for those who wish to go more slowly than is possible in a course meeting five times a week; and for those who wish to take only one course for one or one and one-half years to fulfill the requirement of nine units of work in one language in the first year. Students who have had one year in the prescendary curricula. Students who have had one year in the prescendary curricula. Spanish in high school should register for Spanish 2.
Year course (3-3).
3-4. Intermediate.
A continuation of Spanish 1-2. Reading of Spanish prose; composition; outside reading in Spanish 4, with reports. Students with two years of high school Spanish should register for Spanish 3 or Spanish B. Those with three years may register for either Spanish 4 or Spanish C.
Year course (3-3). (Not offered in 1935-1936.)

UPPER DIVISION COURSES

101A-101B. Conversation and Composition. PHILLIPS
Prerequisite: Spanish D, or its equivalent, with grade of C.
Year course (3-3).

102A-102B. Introduction to Spanish Classics. L. P. BROWN
Reading from several types of classical literature. Lazarillo de Tormes, and other novels of Roguery; selections from Don Quijote, and the Cien Mejores Poesias Castellanas; one drama each from the works of Lope de Vega, Calderon, Alarcon, and Moreto; collateral reading and reports. Prerequisite: A grade of C in Spanish D or permission from the instructor.
Year course (3-3). (Offered in 1938-1939.)

104A-104B. Spanish-American Literature. PHILLIPS
A survey of the whole field of Spanish-American literature during the colonial, revolutionary and modern periods, with special attention during the second semester to the literature of one country. Collateral reading and reports. Prerequisite: A grade of C in Spanish D or permission from the instructor.
Year course (3-3). (Offered in 1936-1937.)

105A-105B. Modern Spanish Drama. L. P. BROWN
The development of the drama of Spain from the beginning of the nineteenth century to the present time. Prerequisite: A grade of C in Spanish D or permission from the instructor.
Year course (3-3).

110A-110B. Novel and Short Story in Spain. L. P. BROWN
The development of the novel and short story in Spain from 1830 to the present time. Prerequisite: A grade of C in Spanish D or permission from the instructor.
Year course (3-3). (Offered in 1937-1938.)

General Language

LOWER DIVISION COURSE

A. Latin and Greek Word Derivation. L. P. BROWN
A general and elementary course in philology. A study of Latin and Greek roots of most frequent occurrence in English, and of the English words derived from them. Not open to first semester freshmen.

GEOGRAPHY

Lower division preparation for the presecondary major in geography and for the junior certificate; Geography 1, 2, 3, and Geology 1A-1B. Recommended: A reading knowledge of French or German.

Presecondary major (upper division): Twenty-four units of upper division work in geography or 18 units in geography and six units in related subjects arranged in consultation with the chairman of the department.

LOWER DIVISION COURSES

1. Introduction to Geography: Elements. CLARK, STORM
The fundamental principles of geography, the distribution of life upon the earth, and the effects of environment upon the activities of man. Climate, land forms, bodies of water, natural resources, and location in their relation to human activities. Open to all students.
Fall and Spring (3).

2. Introduction; Natural Regions and the Distribution of Population and of Cultures. CLARK, STORM
The application of the fundamental principles of geography to the various regions of the world. Comparison of regions with regard to different stages of development. Prerequisite: Geography 1.
Fall and Spring (3).

3. Elementary Meteorology. BLAKE
An elementary study of the earth's atmosphere and changes in it which produce our weather and influence human affairs. Special attention given to local conditions, instruments, and records.
Fall (3).

12. Geography of California. STORM
The main physiographic regions of California and the cultural landscapes developed by the successive cultural groups. Prerequisite: Geography 1.
Spring (2).

UPPER DIVISION COURSES

116. Geography of South America. CLARK
The climate, topography, and natural resources of the South American countries; the effect of those physical factors upon the economic, commercial, and racial problems of the different nations. Prerequisite: Geography 1.
Spring (3).

117. Geography of Northwestern Europe. CLARK
The physical environment of each of the nations of the area and their reactions to physical environment in their political and social relations. Importance of the countries in manufactures. This course is planned for students with modern European countries that he so familiarize the student with modern European countries.
can read current periodical literature with understanding and interest. Prerequisite: Geography 1.

Fall (3).

118. Geography of the Mediterranean Area. CLARK
A treatment of Southern Europe, Western Asia, and Northern Africa as a unit and a comparison of the land forms, climates, types of native vegetation, cultivated crops, industrial status, and present world position; also the effect of geographic factors on the history of the area. Prerequisite: Geography 1.

Spring (3).

121. Geography of North America. STORM
The natural regions of North America, their formation and economic and historical development. Prerequisite: Geography 1.

Fall (3).

124. Geography of Asia. STORM
The cultural regions of Asia, their physical environment, and historical development. Prerequisite: Geography 1.

Spring (3).

135. Geography of the San Diego Area. CLARK, STORM
Directed individual rural and urban field work of San Diego area including the mapping of a small area and its geographic interpretation. Prerequisites: Geography 1, 2, and Geology 1A.

Fall (2). (Offered in even-numbered years.)

141. Economic Geography. STORM
A world-wide survey of the raw materials of world trade; their production and distribution as related to the major geographic regions of the world. Prerequisites: Geography 1 and 2.

Fall (3).

GEOLGY

LOWER DIVISION COURSES

1A. General. BROOKS
The composition and distribution of earth materials, and their modification through mechanical and chemical processes of change. Three lectures and one three-hour laboratory period weekly with related field study during the semester.

(Students who have taken Geology 1C may receive only 2 units credit for Geology 1A.)

Fall and Spring (4).

1B. Historical. BROOKS
Theories of earth origin, and the evolutionary history of the earth as traced through rock and fossil records. Consideration of the geologic history of selected regions. Three lectures and one three-hour laboratory period weekly, with arrangement for field study and conference during the semester.

Spring (4).

1C. Elementary Physiography. BROOKS
An introductory course in earth science presenting a study of earth features and the condition under which they have been formed. (Not open to students who have had Geology 1A.)

Fall (3).

UPPER DIVISION COURSES

100. Physical Geology. BROOKS
The evolution and description of the structural and topographical features of the earth. Faulting, folding, and orogenic forces with practical illustrations from the North American Continent. Lectures, discussions, and occasional field trips. Prerequisite: Geology 1A-1B.

Fall (5).

101. Geologic Problems. BROOKS
Reconnaissance of adjacent areas with elementary mapping; or directed reading from a prepared syllabus introducing the several phases of geologic literature; or selection and preparation of material for the museum collection. Prerequisite: Geology 1A-1B. Registration subject to approval of instructor.

Spring (1-4).

GERMAN

(See Foreign Languages)

HEALTH AND PHYSICAL EDUCATION

(See Physical Education)

HISTORY

Lower division preparation for the presecondary major in history and for the junior certificate: History 4A-4B, or 8A-8B, and either Political Science 1A-1B, Economics 1A-1B, or Geography 1 and 2. No student shall enroll in more than one lower division history course during a semester. Students who wish to major in history and who have had less than two years of European history in high school must take History 4A-4B.

Presecondary major (upper division): Twenty-four units in upper division courses in history to be arranged in consultation with the chairman of the department. The student must, in his senior year, enroll in History 190.

LOWER DIVISION COURSES

4A-4B. History of Modern Europe. LESLEY
Development of European society and institutions from about 1500 A.D. to the present time.

Year course (3-3).

8A-8B. History of the Americas. NARATR
A general survey of the history of the western hemisphere from the discovery to the present time. Emphasis on the process of planting discovery to the present time.
hygiene in its relations to the practical problems of young women and prospective homemakers. The laws and procedures in local civic health matters of particular interest to women studied in detail. Required of all freshmen who are candidates for the junior certificate or the degree in the preprofessional curricula.

Fall and Spring (2).

INDUSTRIAL ARTS

LOWER DIVISION COURSES

3A. Mechanical Drawing.

Use and care of drafting instruments, lettering, orthographic projections, developments, intersections, tracing. Drafting room six hours per week. Required of all engineering students who have not had one full year of drafting work in senior high school.

Spring (2).


Fundamental principles of descriptive geometry and their application to problems of engineering. Lectures and drafting. Prerequisite: Industrial Arts 3A or equivalent, and sophomore standing.

Fall (3).


Design and drawing of simple machine parts with emphasis upon the production of standard drawings. Lectures and drafting. Prerequisite: Industrial Arts 21.

Spring (3).

23. Materials of Construction.

Structural properties and adaptability of materials used in engineering. Lectures. Prerequisite: Sophomore standing.

Spring (2).

25. Elements of Electrical Engineering.

Mathematical and descriptive consideration of electrical circuits together with a general survey of the electrical industry. Lectures. Prerequisite: Mathematics 4A.

Spring (3).


Fundamental consideration of fuels, combustion, steam, boilers, furnaces, chimneys, steam engines, steam turbines and auxiliaries, internal combustion engines. Lectures. Prerequisites: Mathematics 3B, Physics 1B. Primarily for engineering students other than mechanical or electrical.

Fall (3).


Theory and characteristics of fundamental radio circuits, and of the vacuum tube as detector, amplifier, and generator of alternating current power. Lectures. Prerequisites: Physics 1C, Mathematics 4A or enrollment in those courses.

Fall (3).

Note.—Both Industrial Arts 28 and 29 will not be given the same year. The course with the greater demand will be the one given.

JOURNALISM

Lower division preparation in journalism for advanced work and the junior certificate: History 4A-4B, or 8A-8B; Psychology 1A-1A; English composition, 4 units; Secretarial Training 4A; Political Science 1A-1B or Economics 1A-1B; Journalism 51A-51B. Recommended: English literature, 6 units; Speech Arts 1A-1B; Sociology 50; Economics 18A-18B; Journalism 53A-53B.

For the profession of journalism introductory work in the fields of literature, history, political science, social science, economics, the arts, etc., is recommended.

The aim in the specialized courses in journalism is to offer introductory training in the principles and practices of journalistic writing only after a good foundation in correct speaking and writing of English has been laid. Practical training in newspaper reporting and editing for student publications and for the daily press is emphasized.

LOWER DIVISION COURSES

Journalism 51A-51B. News Gathering and Reporting. Dickhaut

Study of news sources and types; practice in news writing; newspaper organization; excursions and special lectures. Course planned for sophomore or seniors who have had English 1A-1B, with high school journalism or equivalents.

Year course (3-3).

Journalism 53A-53B. Applied Journalism. Dickhaut

Credit earned for editorial or other staff work throughout a full semester on student publications such as The Actae, El Palenque, El Sudocést.

Fall and Spring (1 to 3-1 to 3).

UPPER DIVISION COURSES

Journalism 100. News and Manuscript Editing. Dickhaut

Practice in copy reading, proof reading, headline writing, and newspaper make-up. Study of editorial pages. Prerequisite: Journalism 51A-51B, or equivalent in composition.

Spring (3). (Not offered in 1935-36.)

Journalism 153A-153B. Advanced Journalism Practice. Dickhaut

Upper division work of the same type as that in 53A-53B, but with advanced requirements.

Fall and Spring (1 to 3-1 to 3).

Note.—Not more than six units in all will be given for journalism practice on student publications.
119. Differential Equations. GLEASON
Ordinary differential equations of first and second order, with applications. Prerequisite: Mathematics 4B or permission of instructor.
Spring (3).  

124. Vector Analysis. GLEASON
Vector analysis and allied topics with applications to geometry and mechanics. Prerequisite: Mathematics 4B, or permission of instructor.
Spring (3). (Not offered in 1935-1936.)

MUSIC

Candidates for a teaching credential in music should refer to the statement "Admission to Upper Division Teacher Training" on page 28 and to the other degree requirements on that page and those following.

Lower division preparation for the presecondary major in music and for the junior certificate: Music 1A-1B, 2A-2B, 4A-4B, and two units of electives in music. The electives in both lower and upper division must include at least six units in Applied Music (study of voice, or an instrument), of which at least three units must be in piano. Upper division credit will not be given for beginning work in Applied Music. (For restrictions on applied courses, see page 50.)


For information regarding majors and minors in music, and other details not found here, consult the Music Education Adviser.

LOWER DIVISION COURSES

1A. Music Reading and Ear Training—Fundamentals of Music. BENDLEMAN, L. D. SMITH, SPRINGSTON
Elementary music theory; scale construction; drill in music reading both with syllables and with words; ear training, elementary music dictation; the elements and materials of music. Basic course used as prerequisite for all advanced music work and for the courses in music education. Text—Gehrken: Fundamentals of Music.
Fall and Spring (2).

1B. Music Reading and Ear Training. L. D. SMITH
Tonal and rhythmic dictation, rhythmic writing, sight singing with Latin syllables and with words. Text—Wedge: Ear Training and Sight Singing. Prerequisite: Music 1A, or the equivalent.
Spring (2).

1C-1D. Advanced Music Reading and Ear Training. L. D. SMITH
Tonal and rhythmic dictation, rhythmic writing, and sight singing in two and three parts. Text—Wedge: Advanced Ear Training and Sight Singing. Prerequisite: Music 1A-1B.
Year course (2-2).

1E. Advanced Music Reading and Ear Training. L. D. SMITH
Advanced tonal and rhythmic dictation, rhythmic writing, and sight singing in two, three, and four parts. Prerequisite: Music 1C-1D.
Fall (2). (Offered in odd-numbered years.)

2A-2B. Appreciation and History of Music. SPRINGSTON
How and of what music is made. How to listen to, enjoy, and appreciate it. The development of music from the earliest times, with a particular effort to gain some acquaintance with the music of the various periods and composers by listening to examples of it. Illustrated with numerous phonograph records. A general fundamental, and nontechnical course, requiring no previous musical training or background.
Year course (2-2).

4A-4B. Elementary Harmony. SPRINGSTON
Scale construction, intervals, chords, structure, modulation, through various types of seventh chord. Special attention is paid to the keyboard application of problems in harmonization, transposition, and modulation. Prerequisites: Music 1A, or the equivalent, and at least one year of piano study.
Year course (3-3).

19. Instrumental Ensemble. BENDLEMAN
The practice and performance of music for small groups of string, wind, and brass instruments.
Fall and Spring (1).

20. Vocal Ensemble and Chorus. L. D. SMITH
A general course open to all students but one which may be offered by music students toward satisfying the requirement in vocal ensemble. Mixed harmony in two, three, and four parts; voice quality; phrasing, interpretation, and enunciation considered in detail; study of song material suitable for junior and senior high school.
Fall and Spring (1).

UPPER DIVISION COURSES

103A-103B. Appreciation and History of Music—Great Music. SPRINGSTON
Study of the great masterpieces of music in the larger forms, by means of phonograph records and scores. Prerequisite: Music 2A-2B, or 4A-4B, or equivalent.
Year course, (1-1).

105A-105B. Advanced Harmony. BENDLEMAN
Completion of harmonic theory; modulation, inharmonic tones, etc. Continuation of harmonic analysis, and keyboard harmony. Melody writing. Prerequisite: Music 4A-4B.
Year course (3-3).
107A. Conducting.
Beidleman
The technique of the baton. Methods and materials for use in directing choral organizations. Prerequisite: Music 1A-1B, or 4A-4B.
Fall (1).

107B. Conducting (Instrumental).
Beidleman
Theory and practice of instrumental conducting, with study of materials and methods. Taught in conjunction with, and requiring participation in, Instrumental Ensemble (Music 110). Prerequisite: Music 107A.
Fall and Spring (1).

108. Instrumentation.
Beidleman
Theory and practice of arranging music for instrumental combinations. Prerequisite: Music 4A-4B.
Spring (2).

110A-110B. Piano Class Principles.
Springston
Materials and methods used in piano classes in the elementary schools. Prerequisite: At least two years of piano study.
Year course (1-1), beginning either semester.

119. Instrumental Ensemble.
Beidleman
(See Music 10.)

120. Vocal Ensemble and Chorus.
L. D. Smith
(See Music 20.)

MUSICAL ORGANIZATIONS

11 or 111. Treble Clef (Women's) Glee Club.
L. D. Smith
Membership based on competitive try-outs.
(1-1).

12 or 112. Men's Glee Club.
Beidleman
Membership based on competitive try-outs.
(1-1).

13 or 113. Orchestra.
Beidleman
(1-1).

14 or 114. Band.
Beidleman
(1).

Applied Music.
Credit for applied music is available only for students enrolled in music classes or organizations, and is subject to special permission and arrangement.

15 or 115. Stringed Instruments.

16 or 116. Wind Instruments.

17 or 117. Voice.

18 or 118. Piano (Organ).

PHILOSOPHY

LOWER DIVISION COURSES

5A. Introduction to Philosophy.
Steinmetz
Elementary orientation; the persistent problems of philosophy, especially in epistemology, metaphysics, and ethics; the Republic of Plato, and social systems. Prerequisite: Sophomore standing or consent of instructor.
Fall (3).

5B. The Philosophy of Science.
Steinmetz
The problems of philosophy systematized according to the main modern divisions of science; the achievements and perplexities of scientific fields; the nature and place of values in a universe of facts. Prerequisite: Philosophy 5A, except that sophomores planning to major in natural science may be admitted without prerequisite.
Spring (3).

UPPER DIVISION COURSES

105B. The Philosophy of Science.
Steinmetz
Same as Philosophy 5B, save that upper division students will be held to more exacting contribution.
Spring (3).

120. Logic, and Philosophy of Mind.
Steinmetz
Formal and functional logic; examination of reflective procedures in various fields; epistemological assumptions and traditional viewpoints, especially as illustrated in recent scientific writings; review of some psychological, experimentally supported explanations of thought. Prerequisites: Psychology 1A and Philosophy 5A.
Spring (3). (Offered in even-numbered years.)

PHYSICAL EDUCATION

Men's Department

Candidates for a teaching credential in physical education should refer to the statement "Admission to Upper Division Teacher Training" on page 28.

LOWER DIVISION COURSES

A two-hour activity course each semester is required for the two years of lower division. A medical examination is given each student when entering and the work is fitted, as far as possible, to his needs. The content of the required two years is planned to give each student fundamental training in those sports which have carry-over value into after
life. Opportunity is given all students to take part in the regular competitive sports program.

1A-1B. Freshman activity.
Year course, beginning either Fall or Spring (1-4).

1C-1D. Sophomore activity.
Year course, beginning either Fall or Spring (1-4).
Class sections are so arranged that the student may choose the activity he is most desirous of learning. Fundamentals of the sports listed are taught during the class hour. Each student must choose different activities for three of the four semesters required.

2A or B. Golf. Spring (1).
3A or B. Track. Spring (1).
4A or B. Baseball. Spring (1).
5A or B. Basketball. Spring (1).
6A or B. Tennis. Fall and Spring (1).
7A or B. Boxing. Fall and Spring (1).
8A or B. Wrestling. Fall and Spring (1).
9A or B. Fall Track. Fall (1).
10A or B. Swimming. Spring (1).
11A or B or C. Fencing. Fall and Spring (1).
13A or B or C or D. American Football. Fall (1).
14A or B. Gymnastics. Spring (1).
The following courses fulfill degree requirements for physical education majors and meet state requirements for teaching credentials in physical education.

54. Administration of Physical Education. Gross
The problems that arise in the everyday experience of the instructor in physical education, such as policies in administration, classification of students, administration of activities, organization of the leadership of students, arrangement and care of the physical equipment, personal relationships with students, interdepartmental adjustments, rolls, records and reports. Material presented in latest State Department Manual used as basis.
Fall and Spring (2).

62A. Gymnastic Activities. C. E. Peterson
Theoretical and practical work in marching, free exercises, and light and heavy apparatus. Emphasis on progression and method of presenting material. The simplest and most explanatory terminology. Prerequisite: Sophomore standing.
Fall (2). (Offered in odd-numbered years.)

62B. Gymnastic Activities. C. E. Peterson
Acquisition of proficiency in the performance of a great group of gymnastic stunts always popular in the gymnasium and on the playground. Work of the recreational or self-interesting type rather than the formal. Tumbling, stunts, and pyramid-building given chief attention, although games of low organization are also considered. Prerequisite: Sophomore standing.
Spring (2). (Offered in even-numbered years.)

UPPER DIVISION COURSES

101. Emergencies. C. E. Peterson
The accepted procedure in meeting the emergencies which daily arise in schoolroom, play or athletic field, beach, mountains, or any of the many places where the physical director is called on for first aid. Special attention given to the arrangement of the apparatus and the activities so that many of the most common accidents are prevented or minimized.
Fall (1).

151. Health Education. C. E. Peterson
(See Women's Department.)
Fall and Spring (2).

155. Applied Anatomy. C. E. Peterson
Mechanics of the human skeletal and muscular-systems and their actions in games, formalized activities, and general body movements; mechanical strength and durability as influenced by anatomical factors.
Spring (2). (Offered in odd-numbered years).

156A. Sports Methods. C. E. Peterson and Staff
Different theories and methods of teaching the more highly organized sports: baseball, basketball, tennis, and track.
Fall (2). (Offered in even-numbered years.)

156B. Sports Methods. C. E. Peterson and Staff
Methods of teaching those sports most adaptable to intramural and interclass competition: golf, handball, soccer, speedball, and volleyball.
Spring (2). (Offered in odd-numbered years.)

166. Technique of Officiating. Gross
Methods of officiating all the sports common to the school or college program; also methods of training student officials. Practice in the handling of elementary, junior high, high school, and interclass college competition.
Spring (2).

169. Technique of Teaching Activities. Physical Education Staff
Directed leadership in activities. A course preliminary to practice teaching in which students are given opportunity to develop leadership and teaching technique.
Spring and Fall (1 or 3).
171. Community Recreation. C. E. Peterson
Planned to meet the needs of the various workers in community playground systems apart from schools, as well as the needs of directors of play and recreation in social service institutions, industrial plants, shops, and factories. Special attention given to scout and campcraft.
Spring (2). (Offered in even-numbered years.)

172. Principles of Physical Education. Herbert
The material which seeks to establish the place of physical education and to indicate its indispensable character in modern life.
Fall (2). (Offered in even-numbered years.)

179. Physical Education Tests and Measurements. (2).

180. American Football.
Theory and practice of individual and team play. Each student taught the fundamentals of football. Two hours of lecture and three hours of laboratory.
Spring (1)

PHYSICAL EDUCATION
WOMEN'S DEPARTMENT

Candidates for a teaching credential in physical education should refer to the statement "Admission to Upper Division Teaching Training" on page 28.

LOWER DIVISION COURSES
All new students are given a medical examination to the end that the physical needs of each student may be determined and her work planned accordingly. Two hours weekly of directed physical activity are required in freshman and sophomore years. Emphasis is upon rhythmic activities, games, and sports. In order to meet this requirement, students taking the curriculum leading to the A.B. degree with an elementary credential must take Physical Education 36A-36B, 37, and 35B. Those seeking the junior certificate or the degree in any of the presecondary curricula or the degree with the junior high school credential or with a special credential in art, commerce, or music, are required to take Physical Education 36A-36B, 38A-38B.

36A. Rhythms, Formalized Activities, Games. SCHWOB
For first semester freshmen.
Fall and Spring (1).

36B. Athletic Games. SHAFER
For second semester freshmen.
Fall and Spring (1).

37. Game and Play Activities for the Elementary School. TANNER
Prerequisite: Physical Education 36A-36B.
Fall and Spring (1).

38A and 38B. Recreational Activities. SCHWOB, SHAFER
For sophomores. Prerequisites: Physical Education 36A, 36B.
Fall and Spring (1 each).

53. Physical Education in the Elementary School. TANNER
Physical education problems, administration of tests, methods of classifying children for play activities, developing leaders, and carrying on intramural ideals. Particular attention given posture problems. The content of the state program in physical education forms the basis of the course. Prerequisite: Physical Education 37 must precede or accompany.
Fall and Spring (2).

SPORTS

1. Women not majoring in physical education may earn upper division credit in Physical Education 55, 56, 57, or 59 by special permission of the department director.

2. The Individual and Dual Sports swimming, tennis, golf and archery are offered throughout the year. Women majoring in physical education select one Individual or Dual Sport as a major activity and two others as minors. Skills in the sports thus selected must be maintained as prerequisite to the senior course, Physical Education 185. (See page 111.)

3. The Seasonal Group Sports are volleyball, basketball, hockey, speedball or soccer, baseball and track and field activities. Majors participate in at least two seasons of each.

55. Swimming.
A. Beginning (1).
B. Intermediate (1), or
C. Life Saving (1).
55A and 55B or 55C are required of freshmen women majoring in physical education.

56. Tennis. SHAFER, SCHWOB
Required of sophomore women majoring in physical education.
(1).

57. Golf. TANNER, SUPERVISING
Required of women majoring in physical education.
(1).

59. Archery. SHAFER
Required of women majoring in physical education.
(1).

UPPER DIVISION COURSES

102. Emergency and Safety Programs.
Means by which the number of accidents, especially among children, may be reduced on street, playground, or at home; practical application of first aid methods. Of value to classroom teachers as well as to specialists in physical education.
(1).
151. Health Education.  TANNER
A course for teacher-training students which includes the study of the
diseases, common physical defects, and health indices of school children;
the detection and control of communicable diseases which may appear in
the school; and the elements which underlie a health education program.
Methods of presenting personal and group health to children of different
ages. Hygiene of the schoolroom, such as seating, lighting, and ventilation.
Fall and spring (2).

153. Administration of Secondary Physical Education.  TANNER
Study of department organization and procedures with practical experi-
ence in administration. The college department and like departments
in high schools serve as laboratories. Open only to seniors majoring in
physical education.
(2).

154. Applied Anatomy.  TANNER
A study of the movements of the human body with special reference to
the physical activities and capacities of girls and women.
(2).

157A-157B. Sports Methods.  PHYSICAL EDUCATION STAFF
Practice for skill, study of rules, and of coaching methods. Prerequi-
site: A season’s experience in at least four of the following sports—volley
ball, basketball, hockey, speedball, soccer, baseball, tennis, and track
activities.
Year course (2-2).

158. Stunts and Tumbling.  TANNER
A practical course in personal technique. Progressive series of indi-
vidual, dual, and group stunts, including simple pyramids.
(1).

160. Formalized Activities.  SCHWOB, TANNER
The scientific adaptation of formalized exercises to individuals and to
groups; an activity and methods class with opportunity for supervised
practice teaching; elementary exercises on apparatus.
(2).

161. Folk Dancing.  SCHWOB
A series of folk and national dances for elementary and junior high
schools. Emphasis placed on methods of presentation as well as upon
ability to execute the various dances. Note books required.
(2).

164. Dance Activities.  SCHWOB
A course introductory to dramatic expression; interpretative, character,
and tap dancing, particularly adapted to elementary and junior high
schools.
(2).

165. Technique of Teaching Activities.  PHYSICAL EDUCATION STAFF
Observation, lesson planning, and teaching of college classes.
Fall and Spring (3).

170. Recreational Leadership.  TANNER AND STAFF
Fundamentals of recreational leadership developed by instruction in
Scout crafts, Camp Fire lore, Girl Reserve activities, the study of school
recreational needs and facilities, and of civic recreation.
(2).

173. Principles of Physical Education.  TANNER
The relation of physical education to other phases of education, with
emphasis upon health and social adaptation.
(2).

174. Campcraft.  PHYSICAL EDUCATION STAFF
Life in open camp preceded by study of selection of equipment, proper
outfitting of clothes, tents, making beds in the open, making camp fires, camp
cooking, and camp recreations. Enrollment only by permission of the
instructor.
(2).

175. Current Problems in Physical Education.  TANNER
The latest phases of general physical education; problems particularly
related to the work with younger children, girls, and college women; the
responsibility of the physical instructor toward emergencies and health
service. Open only to seniors majoring in physical education.
(2).

177. Individual Program Adaptations.  TANNER
Adjustments of the physical education program to the physical needs
and capacities of individuals; problems concerning protective and pre-
ventive measures which are not highly specialized corrective phases.
(2).

178A-178B. Camp Fire and Girl Scout Leadership.  PHYSICAL EDUCATION STAFF
The principles and procedures fundamental to leadership in these two
important organizations for girls taught by authorized local directors.
Useful to college women interested in recreational aspects of social service.
Open to all students,
A. Camp Fire Leadership (1).
B. Girl Scout Leadership (1).

185. Technique of Individual and Dual Sports.  PHYSICAL EDUCATION STAFF
A course summarizing rules, teaching methods, and individual playing
ability. A required senior course. Cannot be taken until all requirements
regarding sports have been fulfilled. (See page 100.)
(3).
PHYSICAL SCIENCE

1. Introductory.
A survey course dealing with the nature of man's physical universe. The subject matter covered includes work in fields of astronomy, chemistry, geology and physics; chosen to provide a background for present-day physical science thought. Not open to students who have taken high school or college physics and chemistry or three courses in high school or college physical science including either physics or chemistry.
   Fall and Spring (3).

PHYSICS

Lower division preparation for the presecondary major in physics and for the junior certificate: Physics 1A-1B; 1C-1D; Mathematics 3A-3B and 4A-4B, or their equivalents. Recommended: A reading knowledge of French and German.

Presecondary major (upper division) in physics, required: Twenty-four units of upper division work in physics including Physics 105A-105B and 107A-107B. Six of the twenty-four units may be elected in related subjects on consultation with the chairman of the department. For requirements for presecondary major in physical science, see pages 51, 54.

LOWER DIVISION COURSES

1A-1B. General.
Mechanics, properties of matter, and heat. A development of the fundamental ideas which underlie the subject of physics, and the application of them in the discussion of practical problems. Lectures, text assignments, problem sets, and experimental laboratory work. Two lectures, one laboratory period each week. Prerequisites: High school physics or chemistry and trigonometry.
   Year course (3-3).

1C-1D. General.
A continuation of Physics 1A-1B for students in the sophomore year, including magnetism, electricity, sound, and light. Two lectures and one laboratory period each week.
   Year course (3-3).

2A-2B. General.
Properties of matter, mechanics, heat, sound, light, electricity, and magnetism. A nonengineering course. Lectures, demonstrations, and discussions. Prerequisite: Two years of high school mathematics.
   Year course (3-3).

3A-3B. Physical Measurements.
Laboratory work in mechanics, properties of matter, heat, sound, light, electricity, and magnetism. Usually taken in conjunction with Physics 2A-2B.
   Year course (1-1).

UPPER DIVISION COURSES

Treatment of fundamental principles of statics, kinematics and dynamics of particles and rigid bodies. Prerequisites: Physics 1A-1B or 2A-2B and a working knowledge of calculus.
   Year course (3-3). (Offered in even-numbered years.)

106. Optics.
Reflection, color, interference, diffraction, polarization, radiation, and optical instruments.
   Fall (3). (Offered in even-numbered years.)

Devoted mainly to the study of potentiometer methods, capacity, inductance, resistance, and magnetic flux. Two lectures and one laboratory period each week. Prerequisite: Eight units in physics.
   Year course (3-3). (Offered in odd-numbered years.)

108. Modern.
An introductory survey of the problems of modern physics. Theories of atomic structure and series in optical spectra, radioactivity, conduction of electricity through gases, radiation and the quantum theory. Prerequisite: Eight units in physics.
   Spring (3). (Offered in odd-numbered years.)

112. Advanced Heat.
Thermal properties of matter. An introduction to the kinetic theory of gases and the laws of thermodynamics. Prerequisites: Eight units in physics and a working knowledge of calculus.
   Spring (3). (Offered in even-numbered years.)

114. Wave Motion and Sound.
A study of wave motion and its applications to sound production and transmission. The principles of musical instruments and architectural acoustics. Prerequisite: Eight units in physics.
   Fall (5). (Offered in odd-numbered years.)

199. Special Study.
Reading or work on special problems in physics. Admission by consent of the instructor. Credit and hours to be arranged in each case. Open to students who have completed at least eight units of work in the department with grade of A or B.
   Fall and Spring (1 or 2—1 or 2).

POLITICAL SCIENCE

Lower division preparation in political science for advanced work and for the junior certificate: Political Science 1A-1B and Economics 1A-1B or History 4A-4B or Geography 1 and 2. High school civics is presupposed in the following courses:

S—21612
LOWER DIVISION COURSES

1A-1B. Comparative Government.
Leonard
Year course (3-3).

UPPER DIVISION COURSES

Leonard
Origins and principles of the United States Constitution, and a survey of the political institutions which have developed under it. Prescribed by the State law for all candidates for the bachelor's degree. Enrollment is limited to juniors and seniors, except with the consent of the instructor. Attention is called to the fact that this course is offered only during the fall semester.
Fall (2).

111. Theory of the State.
Leonard
The nature of the State; its organization and activities, and its relation to individuals and to other states.
Fall (3). (Not offered in 1935-1936.)

113. American Political Ideals.
Leonard
Underlying theories and principles of American governmental policy.
Spring (3). (Not offered in 1935-1936.)

151. Governmental Organization in the United States.
Leonard
Origins; the federal system; organization, powers and functions of the executive, legislative, and judicial branches of the National government and expansion of its activities; the party system.
Fall (3).

Leonard
Development of the means for democratic control of government in the United States: the history, motivation, methods and control of political parties; party machines; election systems; influence of minority groups; the lobby; the press.
Spring (3).

PSYCHOLOGY

Lower division preparation in psychology for advanced work and the junior certificate. Required: Psychology 1A-1B, Zoology 1A-1B, or Biological Science 10A-10B, Philosophy 5A-5B. Recommended: French, German, chemistry, physics, and anthropology.

LOWER DIVISION COURSES

1A. General.
Bell, Steinmetz
An elementary survey of normal adult psychology, focused upon personality; the subjective and objective aspects of behavior; use of a work book assures individual participation and contribution. Furnishes basis for all other courses in psychology. Prerequisite: Sophomore standing.
Fall and Spring (3).

1B. General.
Bell, Steinmetz
A continuation of general psychology designed to familiarize the student with (1) elementary experimental methods, (2) famous experiments in psychology, and (3) some one topic (not included in upper division courses) in which he pursues an independent experimental approach. Prerequisite: Psychology 1A.
Spring (3).

4A. Applied.
Bell
Applications of psychology to problems of the individual in learning, making social adjustments, choosing a vocation, developing desirable personality traits, and achieving success and happiness. Survey of psychology as applied in business, education, music, art, speaking, writing, and in the professions. Prerequisite: Psychology 1A. Recommended: Psychology 1B.
Fall (2).

4B. Psychology Applied in Business.
Bell
Applications of psychology to a wide range of problems encountered by the man in business. Motives, attitudes, habits, and traits in their relation to behavior of employer, employee, and executive. Advertising, salesmanship, and problems of selecting, placing and increasing the efficiency of employees. Business cycles, and business research. Prerequisite: Psychology 1A. Recommended: Psychology 1B.
Spring (2).

UPPER DIVISION COURSES

102. Genetic (Growth and Development of the Child).
Bell, Steinmetz
The mental and physical growth and development of the child, especially with relation to norms of structure and function. Diagnosis of individual children by comparison with norms. Behavior problems and the growth of personality traits as conditioned by physical and mental factors. An intensive study of one child presenting a problem of physical or mental maladjustment made by each student. Prerequisite: Psychology 1A. Recommended: Psychology 1B.
Fall and Spring (3).

105. Mental Testing.
Bell
A brief history of intelligence testing and the fundamental assumptions underlying the construction of tests. The Stanford revision of the Binet-Simon test illustrated by demonstrations. Each student required to give at least 20 individual tests. Group intelligence tests discussed
and demonstrated. Prerequisites: Psychology 1A and Education 108. Recommended: Psychology 1B, 102, Education 140.

Fall (3).

118. Mental Hygiene. BELL

Designed primarily for teachers, nurses, physicians and social workers. Problems, personality adjustment, emotional problems, attitudes, conflicts, neurotic behavior, conduct disorders of both child and adult. The beginnings of undesirable attitudes and habits and methods of treating them are stressed more than serious cases of maladjustment which are either incurable or problems for a psychiatrist. The methods of building wholesome personality are emphasized more than the analysis of extreme disorders. Prerequisite: Psychology 1A. Recommended: Psychology 1B, 102.

Fall (2).

120. History of Psychology. BELL, STEINMEIZ

Historical development of psychology out of mental philosophy; sensationalism; the body-mind problem; associationism; structuralism; functionalism; rise of the schools and experimental procedures. Prerequisites: Psychology 1A, 1B.

Fall (2). (Offered in even-numbered years.)

140. Contemporary Psychology. STEINMEIZ

Psychoanalysis, behaviorism, and Gestalt psychology; the modern eclectic viewpoint; non-Aristotelian speculation; factor analysis; characteristic British, French, German, and American contributions; outstanding problems, publications, and fields. Prerequisites: Psychology 1A, 1B, 120, or other upper division work in the department provided instructor and head of the department consent.

Spring (2). (Offered in odd-numbered years.)

145. Social. BELL

Personality as it develops in relation to social environment. Suggestions, imitation, leadership, the crowd, public opinion, social control, prejudices, propaganda, sex differences, race differences, etc. Prerequisite: Psychology 1A. Recommended: Psychology 4B.

Spring (3). (Offered in odd-numbered years.)

Educational Psychology. See Education 130.

Educational Measurements. See Education 108.*

SPANISH
(See Foreign Languages)

SPEECH ARTS
(See English)

* Students taking a curriculum in which Education 108 is required, must substitute another three-unit course in education, if they wish to count Education 108 in a psychology minor.

SURVEYING
LOWER DIVISION COURSES

1A-1B. Plane Surveying. GLEASON

Use and adjustment of surveying instruments, computations and mapping, together with a study of land, topographic, city, and mine surveying. Two instruction periods and one three-hour period for field work and mapping each week. Prerequisites: Trigonometry and Industrial Arts 3A, or equivalent, and sophomore standing.

Year course (3-2).

3. Summer Class in Surveying.

Practical field problems in reconnaissance, triangulation, location and topographic surveys. Observations for meridian, time and latitude. Precise work in linear and angular measurements. Development of self reliance, accuracy, and professional skill on the part of the student. Four weeks course held in the mountains near San Diego. For details regarding location of camp, date of registration, date of opening, and other arrangements, a special announcement of the surveying camp may be secured at the Registrar's Office. Prerequisite: Surveying 1A-1B.

Summer (3).

ZOOLOGY
(See Biological Sciences)
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