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SAN DIEGO STATE COLLEGE
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## CALENDAR 1937-1938

SUMMER SESSIONS, 1937.
Term I, six weeks, June 21-July 30.
Term II, three weeks, August 2-August 21.
FALL SEMESTER, 1937-1938.
September 8 and 10-Wednesday and Friday. Orientation Program for all New Students (Attendance Required) Aptitude Test-8:00 A.M., September 8. Fundamentals Test-8:00 A.M., September 10.

September
9-Thursday. Office closed.
September 13-Monday. 8:00-12:00 A.M., and 1:00-4:00 P. M. All students register and pay fees.

September 14-Tuesday. Instruction begins. Late registration fee becomes effective.
November 11-Thursday. Armistice Day Holiday.
November 25 and 26-Thursday and Friday. Thanksgiving Recess.
December 17-Friday. Christmas Recess Begins.
January 3-Monday. Classwork Resumes.
January 20-27 incl.-Mid-Year Examinations.
SPRING SEMESTER, 1938.
January 31 and
February
1-Monday and Tuesday. Orientation Program for all New Students (Attendance Required) Aptitude Test-8:00 A.M., January 31 Fundamentals Test-1:00 P.M., January 31.

February 2-Wednesday, 8:00-12:00 A.M. and 1:00-4:00 P. M. All students register and pay fees.

February 3-Thursday. Instruction begins. Late registration fee becomes effective.
February 22-Tuesday. Washington's Birthday Holiday.
April 11-15 incl-Easter Recess.
May
1-Sunday. Founder's Day Celebration.

SUMMER SESSIONS, 1938.
Term I, six weeks, June 20 -July 29.
Term II, three weeks, August 1-August 19.

## THE COLLEGE

## Historical Sketch

The growth of the San Diego State College has involved three stages of development. When it was established by legislative enactment in 1897 it was known as the State Normal School of San Diego. It opened its doors in 1898.
The second cycle of its growth began in 1921 when the legislature converted all the California normal schools into State teachers colleges. During the same year, the San Diego Junior College was merged with the teachers college. Lower division courses were then available in a single institution for the various types of students in the community. From 1927 to 1934, the junior college relationship was discontinued, and the teachers college carried the lower division offerings. These offerings were enriched when the junior college arrangements were resumed in September, 1934.
The four-year curricula, leading to an A. B. degree with a major in education, were established in 1923. At that time and subsequently, the State Board of Education authorized the following teaching credentials, which were to be granted in connection with the degree: general elementary, general junior high school, general junior high-general elementary; special secondary in art, business education, music, and physical education. Presecondary curricula were first authorized by the State Board of Education in 1928, and majer subjects were approved from time to time until a total of thirteen was finally reached: art, chemistry, commerce, economics, English, geography, history, mathematics, musie, physical science, physics, Romance languages, and zoology.

In September, 1935, the college entered upon its third phase when it became, by legislative enactment, the San Diego State College. This enabled the college to drop the requirement in education courses from the curricula previously known as presecondary and to convert them into liberal arts curricula leading to the A. B. degree with any one of the thitteen majors enumerated above. Thus, while still retaining teacher training as a major function, the San Diego State College is-now able to offer a rather broad liberal arts program for students with varied objectives and needs.

## Location and Environment

Renowned as a winter resort with a mild but invigorating climate, San Diego has become equally famous for its cool summers. High cultural standards in art, music, literature and science create a stimulating environment for a college. While San Diego is not large, it has certain admirable metropolitan advantages for the student. Many of these are to be found in the heritage resulting from the expositions of 1915-16 and $1935-36$, including the buildings themselves, which portray the best
types of Spanish colonial art, and represent one of the finest exhibits in architecture in America. Housed in these buildings are exhibits in anthropology and cultural history which in many respects are unsurpassed. Cooperation with the directing boards opens to the student rare natural history and American archaeological 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 out-of-door organ furnishes a beginning. Balboa Park, in which all of these facilities are located, also contains a modern horticultural farm. At La Jolla, the Scripps Institute of Oceanography, operated by the University of California, gives opportunity for important cooperation in biological science.

## Buildings and Equipment

On February 1, 1931, the college was moved to the new campus, which is 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, the Spanish-Moorish type, which is well suited to the landscape and climate of this region. The buildings now in use include the Academic Building, which houses lecture halls, classrooms, and administrative offices; the Science Building; Library ; Little Theater; Training School; Scripps Cottage (a social clubhouse for women students); the Student Building, housing the cafe and bookstore; and the Physical Education Building, a structure with adequate facilities for both men and women. The gymnasium contains a very fine basketball floor with stands that will accommodate 1500 spectators. A fine concrete football stadium is in the process of construction and a portion of the stands, adequate to meet present needs, was finished for the 1936 season. Ultimately this structure will provide a seating capacity of approximately 45,000 and the final cost will be about $\$ 425,000$.

## Facilities for the Training of Teachers

The college maintains a modern elementary training school on the campus where it has developed an extensive program for the education of elementary school teachers. The classroom-laboratory plan calling for the use of work-rooms, the library, and shops, affords unusual opportunities for the induction of students into teaching.

By arrangement with the Board of Education and the administrative officers of the San Diego City Schools, practice teaching for one-half day throughout a semester is provided in the Euclid elementary school, and a somewhat similar arrangement exists at the Woodrow Wilson Junior High School for students who are preparing to teach junior high and special secondary school subjects. Students preparing to teach only special secondary school subjects may be assigned to one of the senior high schools.

## The Library

The library facilities of this college are noteworthy for an institution of this size. The library consists of 55,000 volumes selected to meet the requirements of a modern educational institution. Seven professionally
trained librarians are available to render assistance to students in their reading and reference work.

The Training School Library, representing a collection of 8000 volumes possesses equipment and building facilities that are unique.

## Living Accommodations

The college does not maintain dormitories since nearly all of the students live with parents or guardians. Living arrangements for students whose homes are not in San Diego, or within commuting disstudents whose through the offices of the Dean of Women and the tance, are mecure the approval of the Dean Dean of Men. It is of changing residence at any time during the year.

## Student Life

A rich field of extra-curricular activities is available to the student throughout his college life. The student is urged to carefully select hese activi these activities in order that he may profit by these extra-class experiences without lowering his stan conHandbook, available at time of registration, gives information concerning activities which include organizations in every department of the college, as well as opportunity for individual and group experience in the social, athletic, fraternal, religious and governmental life of the campus.

## Student Health Service

The Health Department is maintained for the protection and care of student health. A complete physical examination is required of each student upon admission to college. Careful attention is given to cases undergoing remedial treatment or to cases in which a modification of study load or of participation in physical activities seem advisable.
A representative of the Health Department is available throughout the entire day for consultation and emergency treatment. Students who have been absent because of illness should receive clearance from the Health Department before returning to classes.

## Placement Service

The college offers placement services of three distinct types for students and graduates of this institution:

1. Students who seek part-time employment may register with the Dean of Women or the Dean of Men.
2. A Placement Office is maintained by the college as a clearing house of employment information for employers of State College graduates. While the purpose of this office is to assist candidates in securing positions, its primary aim is to bring about better adjustment between the teacher and community.
3. The Placement Office also serves students in liberal arts curricula who desire employment.

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. Teacher training graduates pay a fee of two dollars for each year in which active service is desired, and in turn are aided by a field worker who assists them in locating positions. Iiberal arts students may register their records without charge, but no attempt is made by the office to find positions for them. Three sets of records will be issued for each liberal arts graduate without charge, after which a fee of two dollars will be made for another set of three

## 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.

## FEES, EXPENSES, AND LOAN FUNDS

## Probable Expenses for One Semester

An estimate of the expense of attendance for one semester is given below. No estimate is made as to the cost of clothing, or other personal items, ince these figures vary with the demands of the individual. Laboratory fees are additional.


Before enrolling in college, the student should possess sufficient resources to meet the minimum expenses for one semester. A limited amount of lerical work in offices and in the library may be offered from time to time, but ordinarily it is not sufficiently remunerative to reduce expenses materially. An employment service is conducted by the expenses materially. An employm Men to assist students who must earn part of their expenses.

## List of Fees and Deposits (Subject to Revision) PAYABLE AT TIME OF REGISTRATION

$\begin{array}{ll}\text { imited students and auditors (5 units or less) - per unit_-....- } & 2.50\end{array}$
*Nondern 75.00
2 d and subsequent semesters..........-- 37.50

Locker (key or combination padiock, each insern $\quad . .25$

| General service deposit (paid by every student registered) --...- | 3.00 |
| :--- | :--- |


| Chemistry deposit (each course in chemistry) | 5.00 |
| :--- | :--- |

Physics deposit

Associated Men Students or Associated Women Students fee....... .50
PAYABLE WHEN SERVIOE IS RENDERED
College Aptitude Test


Placement Office
2.00
*See page 15 for definition of residence for fee-paying purposes.

Placement Office-copy of papers- 3 for
$\begin{array}{ll}\text { Evaluation of record for advanced standing } & 2.00\end{array}$

**Transcript of record (first copy free)
Carbon copy of Transcript of Record .25
Special Examination

## State Teaching Credentials***

Elementary
Elementary and Junior High School
Special Secondary
School Administration
School Supervision
Each credential
PAYABLE DURING SEVENTH WEEK OF EACH SEMESTER Library
Health15
Towel, Women ..... 1.00

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

## Loans and Scholarships

Scholarships for both men and women have been made available through the efforts of the college officers, student organizationg, avable throug organizations. Superiority in scholarship, worthiness form the point of view of need, and contribution to the college are the standards upon which selection is based. Scholarship aid is therefore standard for the most part to students who have completed the lower division
of the college.

Both long and short term loans are available to students who have been in attendance for at least one year and who btudents who have been ability to do satisfactory college work. Application for en evidence of to the Committee on Loans and Scholarships through any Dean of the
college.
**The $\$ 1.00$ fee must accompany each application for a transcript
of record. of record.
$* *$ The credential fee is collected through the
money order payable to the State Department of college by post office year previous to the date of their application. resided in California one

## ADMISSION AND REGISTRATION

## General Admission Requirements

High school graduates and other applicants possessing equivalent preparation may be admitted to this college upon evidence of fitness to profit by college instruction, such fitness to be shown by previous scholastic records, by evidence of good moral character and personal qualifications, and by a entard college aptitude test. Regular matriculain after the satisfactory completion of a full semesthe ter's program of curriculum.

- Students who enter with eight or more recommended units, earned during their last three years in high school, and who receive a satisfactory score the College Aptitude Test will be admitted to any curricula without a on tudents who fall below this standard will be given restricted standing or non-degree status and will be limited to a restricted program, or will be required to take a non-degree curriculum.
Certificates of successful examination before the College Entrance Examination Board will be accepted when candidates cannot meet the above scholarship requirements.
Credit earned in recognized institutions of collegiate grade shall be evaluated and advanced standing allowed on the basis of the evidence submitted. Credit toward the fulfillment of graduation requirements will be allowed only in so far as the courses satisfactorily completed meet the standards and requirements of the basic course pattern of this institution. Applicants for advanced standing must show an average grade of $C$ or better in all college work previously undertaken. No applicant may disregard his collegiate record and apply for admission with freshman standing.
Not more than sixty-four semester hours of junior college work may be allowed for credit.
Students who seek to gain admission with advanced standing must furnish complete transcripts of record for all work attempted beyond the eighth a most accompany the application for admission.
Applicants over twenty-one years of age, who are not high school graduates and who do not possess the equivalent preparation but who receive a satisfactory score on a standard college aptitude test, may be granted provi-解 comletion of one satisfactory college work in the chosen pletion or


## Registration

Registration for the fall semester of 1937-38 will take place on September 13, and for the spring semester on February 2. Candidates for
admission should obtain an application blank from the Registrar which must be filed, with complete transcripts of record, two weeks before registration.
The college year is divided into fall and spring semesters of eighteen weeks each, followed by a summer session consisting of terms of six and three weeks, respectively. Students may enter at the beginning of either semester or at the beginning of either of the summer terms.
The summer session meets the needs of regular students who wish to gain credit toward the bachelor's degree, of teachers in service, and of liberal arts students who wish to secure supplemental credit or to shorten the time for completion of their curricula.

## Tests Required at Registration Time and Later

1. A physical examination is required of all students upon entering the college. Appointments for this examination are made during registration. 2. All entering students are required to take the College Aptitude Test. Exceptions may be made for students who register for five units of work or less, for former graduates of this college, and for graduates of approved four-year colleges.
2. The Subject A Test (English Composition) is required of all entering students. English 1A must be taken by all students whose tests indicate hat they are not qualified for English 1B, even though they may not intend to enroll in English 1B. 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 other colleges.
3. Passing the Fundamentals Test in reading, spelling, arithmetic and handwriting, and a Speech Test are prerequisites for admission to upper division courses in teacher training curricula. Students should take these tests at the beginning of the sophomore year in order that they may have sufficient time to make up deficiencies, if any exist, before applying for dayssion to the upper division of teacher training curricula. Exceptions training institur ormer graduates of this or other California State teacher training institutions who have been teachers in service.

## Late Registration

A student who registers after the first week of the semester is subject to a limitation of his program. A fee of two dollars 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 proper dean. Petitions for changes in program may be secured at the Registrar's
office.

A statement regarding withdrawals from class is to be found on page 18

## Auditors

Auditors must register in the usual way. They are not subject to the late registration fee providing they register on the first day their classes

## GENERAL REGULATIONS

## Officers for Consultation

Concerning the housing and living arrangements of students, personal problems, part-time employment, etc.-Women, The Dean of Women; Men, The Dean of Men.
Concerning the scheduling and arrangement for all student social affairs -The Dean of Women.
Concerning admission, program of studies, credits, degree requirements, ete.-The Registrar; The Dean of Liberal Arts; The Dean of Education.
Concerning health and physical condition-The Health Department.
Concerning student-body affairs, student-body policy, 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 and other types of fulltime employment-The Director of Placement.
Concerning Admission to Upper Division Teacher Training Curriculum, practice teaching, credential requirements, etc.-The Dean of Education. Concerning use of the buildings-The Dean of Women; The Dean of Men.

## 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 he returns 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, unless they are legally separated or divorced, is the residence of the minor. Barring separation or divorce, the residence of the husband is the residence of the wife. In case of legal separation or divorce, the residence of the parent with whom the minor makes his home is his residence.

## Classification

Regular students are those students who have complied with the requirements of admission and are registered in more than 5 units of work.
Limited students are partial course students who, for adequate reasons, have been permitted to register for 5 units of work or less.
Special students are mature students who have not satisfied all entrance requirements but 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 59 units, as sophomores; those who have completed 60 to 89 units as juniors ; and thse who have completed 90 or more units, as seniors.

## Units of Work and Study-Lists Limits

A unit of credit represents approximately 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 ( $\frac{1}{2}$ 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 points; 18 units will be credited an average of not less than 1.5 grade of not less than 2.0 grade points. Anyed the student attained an average a passing grade may be used in Any course in which a student received even though such course is in excess of thaction of course requirements, credited for graduation.
Credit for a program that does not conform to the above regulations can tee. No student through a petition addressed to the Scholarship Committhe approval of the academic dean of his for less than 12 units without

## 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, conditioned; F , failed; I, incomplete, and W , withdrawn.
Grade points are assigned as follows: Grade A, 3 points per unit; B, 2 points per unit; $\mathrm{C}, 1$ 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 which may been satisfactorily completed the grade $\mathbf{E}$ is changed to a D . is changed automatically to an F. The grade I is used to retherwise it which may be of higher order but which is incomplete for so record work reason. Ordinarily, to change an I to another grade, the work must be
completed within a year.

To qualify for a certificate in any curriculum, a diploma of graduation, or a transcript of record with recommendation to aploma of graduation, tution, a student must have earned as many grade points as the colle instileast C grade in all work is, he must have attained an average of at scholarship falls in all work undertaken at the college. If a student's on his transcript shall be qualified by the phrase "except for sele dismissal

## Transcripts of Record

Students may secure one official transcript of record without fee. Afterwards, applications for transcripts should be accompanied by the one dollar transcript fee. After a student has matriculated in this institution, transeripts of record from other schools will not be returned or copies of them made.

## Eligibility for Practice Teaching

No student shall be eligible for practice teaching (Education 116) 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.
A disqualified student may be reinstated after an interval of one semester for reasons satisfactory to the Executive Committee. All applications for reinstatement must be in writing.

## Examinations

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 that 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.
All final examinations shall be written in Official Examination 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.
Students shall pay a fee of two dollars at the business office for every special examination given. The instructor shall give such examination

## 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. If a student withdraws from class for acceptable reasons during the first twelve weeks of a semester, a grade of W will be recorded on his permanent record for those classes which he has dropped. If he withdraws from class during the last six weeks of a semester, either an I or an F will be recorded. Students who with draw from all classes during the course of a semester must petition the Executive Committee at such time as they may seek readmission to the college. A record of the quality of work maintained to the time of with drawal will be preserved to facilitate committee action.

## Extension and Correspondence Courses

Credit for extension and correspondence courses that will be accepted toward the fulfillment of the requirements for the A.B. degree will depend upon the nature of the courses, the quality of the work done, and the student's preparation for work in the field of the course. The college reserves the right to limit credit to only such courses as have been approved, and the total of such acceptable credit to twelve units.

## THE BACHELOR OF ARTS DEGREE

## General Requirements for the Bachelor of Arts Degres

San Diego State College offers the following types of curricula leading to the A.B. Degree: (1) the curricula leading to the California teaching credentials, and (2) the Liberal Arts curricula. With slight variations in definition, many of the basic requirements are the same.*
A minimum of 124 units of college work, representing a four-year course, is required for the A.B. Degree. Not less than 54 of these units must be completed in the junior and senior years and at least 30 units must be earned 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. Certain requirements for the degree may be met by courses taken in high school, No high school course, however, can be used to reduce the amount of college work required for the degree or the junior certificate.

Summary of the Basic Requirements, Common to All Curricula Leading to the A.B. Degree
Physical Education activity_-................................................... 2 units
 English 6 units

Social Sciences
14 units

Psychology 1A 3 units


## Special Degree Requirements in the Curricula Leading to Teaching Credentials

A statement of the general requirements for the A.B. Degree appears above. An interpretation of this statement which is characteristic of the requirements for the Teacher Training Curricula follows:
English Courses in journalism or in speech arts are not accepted in satisfying this requirement. The following courses or their equivalents satisfying this requirement. The following courses or their equivalents
are required: English $1 \mathrm{~A}, 1 \mathrm{~B}$, and 2 or $3,4 \mathrm{~A}, 4 \mathrm{~B}, 52 \mathrm{~A}, 52 \mathrm{~B}, 56 \mathrm{~A}, 56 \mathrm{~B}$.

Social Sciences A minimum of 14 units, eight of which must be in the lower division, is required. Courses in the following departments may be used in satisfaction of this requirement: Anthropology, economics (except $14 \mathrm{~A}-14 \mathrm{~B}$ ), geography (except 1 and 3), history, political science, social science, sociology. A maximum of two semesters of fourth
*For specific variations and additional degree requirements in Liberal Arts Curricula see page an
year high school courses in the fields of history, political science, sociology and economics taken with grades of not lower than C may be used to satisfy three units of the social science requirement

Natural Sciences A minimum of 14 units in natural science, 12 of which must be in the lower division, is required. The 12 units of lower division credit may be reduced to a minimum of six units if the student presents acceptable grades from high school in laboratory courses in natural science offered exclusively for the third or fourth year students. In general, each year's work in high school science will reduce the requirement by three units. No college credit will be given for such reduction which is merely an exemption of the total requirement. 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, 5, 7, 8; 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 171A171 B or $173 \mathrm{~A}-173 \mathrm{~B}$ will be accepted as substitutes for this requirement.

Education All Teacher Training Curricula leading to the Degree require 18 semester units in education in addition to the general degree requirements previously listed.

Teacher Training Curricula and 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. After September 15, 1938, this credential will be issued only in combination with the elementary school credential or one of the special secondary credentials. Or with the presecondary in education.
3. Special secondary credential in art authorizing the holder to teach art subjects in any grade of the public schools of California.
4. Special secondary credential in business education authorizing the holder to teach commercial subjects in any grade of the public schools of California.
5. Special secondary credential in music authorizing the holder to teach music in any grade of the public schools of California.
6. Special secondary credential in physical education authorizing the of Californis. physical education in any grade of the public schools of California.

Admission to the Upper Division of the Teacher Training Curriculum Students who have been in regular attendance at the college should make application for admission to the upper division of the year. Students who have completed three semester of their sophomore year. Students who have completed three or more semesters of work
in another college, upon transferring to San Diego State College, should make application as soon as they can meet the preliminary requirements.
The preliminary requirements which must be met before making application are:

1. A satisfactory score in a college aptitude test taken at the college, (See college calendar for date of test.)
2. Evidence of satisfactory ability in arithmetic, handwriting, reading and spelling indicated by having passed the fundamentals test. (See college calendar for date of test.)
3. Assurance of correct speech habits and voice control by having satisfactorily completed a course in corrective speech or by having passed a speech test given by the college.
4. Assurance of physical fitness by having passed a prescribed examination given by one of the college physicians.
5. If the student is to be a candidate for one of the special secondary credentials, he must furnish a recommendation from the chairman of that department stating that the student has ability and shows promise of teaching success in his field and that the department looks with favor upon his application.
6. The completion of the first two years of a given curriculum, or its equivalent, with a scholarship grade of $\mathbf{C}$ or better.

After the student has submitted evidence of having met the preliminary requirements in his application for admission to the upper division of the teacher training curriculum he will be interviewed by the members of a committee appointed by the faculty for this purpose. In the appraisal of applicants the factors established by the State Board of Education: intelligence, schol arship, professional aptitude, personality and character, speech and language usage, and many-sided interests.
Upper Division Course Requirements At least 40 units in upper division courses must be completed, 30 of which must be earned after all lower division requirements have been satisfied.

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 five 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 five 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 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 those taken elsewhere) in order to be credited toward meeting degree requirements.
(21)

Teaching Major and Teaching 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 twenty-four units in a field other than education, twelve of which must be in the upper division. A C average in scholarship is also required in all upper division courses in the field of an academic teaching major. A upper division courses in the field of an academic teaching major. A fied in the requirements for the various curricula. An academic teaching minor consists of twelve units in a field other than education, six of which minor consists of twelve units in a field other than education, six of which mand minors may 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 with nine units of electives in the lower division; English 130A and 130B 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 $2,3,4 \mathrm{~A}, 4 \mathrm{~B}, 52 \mathrm{~A}, 52 \mathrm{~B}$ in the lower division; three units elected from English 130A or 130B, the remaining three units elected from English 101, 117, 130A, or 130 B 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 Biological Science $10 \mathrm{~A}-10 \mathrm{~B}$, unless taken in high school. The remaining units to complete the major must be chosen so $10 \mathrm{~A}-10 \mathrm{~B}$ is a year course in a biological science unless Biological Science folion oble dix of which are upper division, in one major subject (botany, chemistry, physies, zoology).
Candidates for an academic teaching major in the field of the social sciences must meet the general requirements of fourteen units of social sience 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 tenehing major in social science: $14 \mathrm{~A}-14 \mathrm{~B}, 18 \mathrm{~A}-18 \mathrm{~B}, 125 \mathrm{~A}-125 \mathrm{~B}, 140,160 \mathrm{~A}-160 \mathrm{~B}, 161$. $162,163,164,165$.
Women candidates for an academic teaching minor in the field of physical 37 or $384,38 \mathrm{be}$ expected to show credit in Physical Education 36A 36B from Physical 53 , and Hygiene 2 in the lower division; six units elected 178 B in the upper division $102,157 \mathrm{~A}, 157 \mathrm{~B}, 158,161,164,170,178 \mathrm{~A}$, or on division.
Combinations of Credentials In the case of students seeking more than pleted in full, with only pleted in full, with only such exceptions as are indicated in the require-
ments. For each credential in addition to one, at least twelve additional units of credit must be earned, this work to be in electives in nonprofes sional fields only, after the basic curriculum requirements have been satis fied. If the requirements for the general elementary credential and the general junior high school credential are completed at the same time, an exception will be made to this rule until September 15, 1938.
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 to so arrange his electives as to complete the liberal arts major to avoid the necessity of making up an undergraduate deficiency.
Applied and Vocational Subjects In the teacher training curriculum, credit required in applied and vocational subjects in any credential pattern completed by the student will be allowed in fulfillment of the A. B. degree. A maximum of six units of credit in the following courses may be allowed to fulfill the requirements of any other credenfial pattern only after the student has received permission from the Dean of Education: Art 7, 14; Industrial Arts 3A, 22; Journalism $53 \mathrm{~A}-53 \mathrm{~B}, 153 \mathrm{~A}-153 \mathrm{~B}$; Library Science 10 ; Merchandising, all courses; Applied Music, all courses, including $9 \mathrm{~A}-9 \mathrm{~B}, 109$; Secretarial Training, all courses.

## Curricula Leading to Teaching Credentials <br> A.B. Degree With Elementary School Credential

Freshman Year
First Semester-
Art 6A, Structure
Biological Science 10A, ${ }^{1}$ Science of Life

Geography 1, Elements (Natural Science) $\begin{array}{r}1 \\ -\quad 3 \\ \hline\end{array}$
Physical Education 1A or 36 A $0^{\frac{1}{2}}$
Hygiene 1 or 2, Personal and Civic Electives ${ }^{3,4}$ or 2
Second Semester-
Biological Science 10B, ${ }^{1}$ Science of Life 3
English 1 B or $2,3,4 \mathrm{~A}, 4 \mathrm{~B}, 52 \mathrm{~A}, 52 \mathrm{~B}, 56 \mathrm{~A}, 56 \mathrm{~B}$ 3
Geography 2, Regions (Social Science)

Physical Education 1B or 36 B or $36 \mathrm{C}_{-}$ $\frac{1}{8}$
Electives ${ }^{3, ~ 4}$

First Semester-

## Sophomore Year

English (selected from 2, 3, 4A, 4B, 52A, 52B, 56A, 56B, unless taken in freshman year)
Physical Education 1C and 37, Games and Rhythms for the elementary school

Second Semester-
Physical Education 1D or 38A
Either Semester-
Art 61A, Elementary Craft $\qquad$ 2
Art 61B, Elementary Craft 2
Psychology 1A, General
$\qquad$ 3
Social Science 1, Pol., Soc. and Econ. Problems 3
3
Electives to meet requirements in Natural Science, Social Sciences, and minors ${ }^{3,4,5}$
${ }^{1}$ Possible substitutions for the requirement in Biol. Science 10A-10B

1. High school Biology 1. High school Biology (year course with laboratory work).
. High school Botany and Zoolo $1 \mathrm{~A}-1 \mathrm{~B}-16$ units:
2. High school Zoology and Zoology 1A-1B.
3. High school Botany and high school Zoology
${ }^{2}$ Depending on result of Subject A test Science $1-6$ units.
${ }^{3}$ See Summary of Basic Requirements for
Natural Sciences, and Social Scients for total requirements in English Unless minor is English Gei Sciences.
year.

First Semester-
Education 147, Education Practicum-Lower Levels
Education 147, Education Practicum-Lower Levels_-_-_-_-12-13 Psychology 102, Genetic.

Second Semester-
Education 108, Educational Measurements
Education 148, Education Practicum-Upper Levels

Senior Year
First Semester-
Education 116, Practice Teaching ${ }^{1}$ $\qquad$

# Either Semester- 

Education 106, ${ }^{2}$ Philosophy of Education
Electives including two minors and political science require ment (for the year)

## SUMMARY

Art 6A, 61A, 61B

Euclish 106, 108, 116, 147, 1 6 or $\quad 7$

English | or 7 |
| :--- |

Hygiene 1 or 2
2

*Natural Sciences (incl. Biol. Science 10A-10B and Geog. 1) 14
2
Physical Education 1A-B-C, 37 or $36 \mathrm{~A}-36 \mathrm{~B}, 37,38 \mathrm{~A}$ 2
2
Political Science 101
2
6
Psychology 1A, 102
6
14
**Social Sciences (including Social Science 1 and Geography 2) -- 14
Electives, including two academic teaching minors............. $33 \frac{1}{2}$ or $30 \frac{1}{2}$

1-Candidates for the elementary school credential in combination with any other type of credential are required to do not less than 6 units of ${ }_{2}$ Not required if student is meeting requirements for junior high school or special credential also.
** See page 20.
A. B. degree with Junior High School credential Note: After September 15, 1938, the Junior High School credential will be issued only in combination with one of the other teaching credentials.

$$
\begin{aligned}
& \text { Eor with the presecondary in education } \\
& \text { Freshman Year }
\end{aligned}
$$

First Semester
Biological Science 10A, ${ }^{1}$ Science of Life $\qquad$
English 1A or $1 \mathrm{~B}^{2}$ _-.................................. $-3$
Geography 1, Elements (Natural Science) $\qquad$ 1 or 3

Physical Education 1A or 36A $\qquad$ $-\quad 3$
Hygiene 1 or 2, Personal and Civic $\qquad$ $\begin{array}{r}-\quad 2 \\ -\quad 2 \\ \hline\end{array}$
Electives, ${ }^{3}$ including major and minor ${ }^{4}$ (6) or 4

Second Semester-
Biological Science $10 \mathrm{~B}^{1}$ Science of Life $\qquad$
English 1B or $2,3,4 \mathrm{~A}, 4 \mathrm{~B}, 52 \mathrm{~A}, 52 \mathrm{~B}, 56 \mathrm{~A}, 56 \mathrm{~B}$ 3
3
Geography 2, Regions (Social Science)
Physical Education 1B or 36 B $\qquad$
Electives, ${ }^{3}$ including major and minor $\qquad$ $\frac{1}{7}$ 32

## First Semester-

## Sophomore Year

English 2, 3 (selected from 4A, 4B, 52A, $52 \mathrm{~B}, 56 \mathrm{~A}, 56 \mathrm{~B}$, unless
taken in freshman year)
Physical Education 1C or 38A
Psychology 1A, General 3
$\frac{1}{2}$
3
Second Semester-
Physical Education 1D or 38B $\qquad$

## Either Semester-

Social Science 1, Pol., Soc, and Econ. Problems $\qquad$ 3
Electives, ${ }^{3}$ including major and minor ${ }^{5}$ (for the year

## First Semester

Eduction 108, Educational Measurements3

Education 125, ${ }^{6}$ Elementary School Curriculum
Political Science 101, American Institutions (or substitute) 3
2
2
Psychology 102, Genetic
${ }^{1}$ Possible substitutions for the requirements in Biological Science $10 \mathrm{~A}-10 \mathrm{~B}$

1. High school Biology (year course with Biological Science 10A-10B
2. Botany 2A-2B and Zoology 1A-1B with laboratory work).
. High School Botany and Zy 1A-1B- 16 units.
3. High School Zoology and Zoology 1A-1B.
4. High School Botany and High School Zoology.
${ }_{3}^{2}$ Depending on result of Subject 1 and Physical Science $1-6$ units.
${ }^{3}$ Dee Summary of Basic Subject A test.
Natural Sciences, and Socic Requirements for total requirement in English, ${ }^{4}$ Unless major or minor is Englishces.
${ }^{\circ}$ If 6 units in minor taken in freshmaneral Science or Social Science year. tial also.

Second Semester-

## Either Semester-

Methods, Courses in the Field of Academic Major_..................... 2
Physical Education 151, Health Education_-.................................. 12
Electives, including major and minor (for the year)

Senior Year
First Semester-
Education 116, Practice Teaching_-................................................... 3

Second Semester-
Education 121, Principles of Secondary Education
Either Semester3
Dlectives, including major and minor ${ }^{1}$ (for the year) _................. 21
Electives, including major and minor ${ }^{1}$ (for the year)

## SUMMARY

Education 108, 116, 121, 125, Methods Courses in the Field of Academic Major, and elective in Education_............................... 20
 Hygiene 1 or 2 2
(including Biological Science 10A-10B and
Geog. 1) 14
Geog. 1)
Plitical Sachee 101 B-C-D or 36A-36B, 38A38B;
Political Science 10
$\begin{array}{r}4 \\ 2 \\ \hline\end{array}$
Psychology 1A, 102 .................................................................. 6

* Social Sciences (including Social Science 1 and Geography 2)--- 14 Electives, including academic teaching major and minor_-...-56 or 55

Combination General Elementary-General Junior High School Credential A combination of the general elementary credential with the general junior high school credential may be secured by completing the requirements for the general elementary credential, substituting Education 121, Principles of Secondary Education, for Education 106, Philosophy of Education, and completing the following additional requirements :
a. An academic teaching major.
b. A methods course in the field of the academic teaching major.
c. A minimum of three units of practice teaching in a junior high school, or the equivalent

If 6 units in minor taken in junior year, none needed in senior year. * See page 20.

* See page 19 .
A.B. Degree With Special Credential in Art This course leads to the A.B. degree and to the Special Secondary Credential in Art which entitles the holder to teach art in senior high, junior high, and elementary schools.


## LOWER DIVISION

Units
Aesthetics 50, History and Appreciation of Art (unless Aesthetics 150 is taken in the upper division)

## 2

Art 6A-6B, Structure $\qquad$
$\qquad$ 4
Art 61A, 61B, Elementary Crafts $\qquad$ 4
Education 19, Art in the Elementary School $\qquad$ $-\quad 2$
English 1A, ${ }^{1} 1 \mathrm{~B}, 2,3$ or $4 \mathrm{~A}, 4 \mathrm{~B}, 52 \mathrm{~A}, 52 \mathrm{~B}, 56 \mathrm{~A}, 56 \mathrm{~B}-6$ or
Hygiene 1 or 2, Personal and Civic
$\dagger$ Natural Sciences
Physical Education $1 \mathrm{~A}-1 \mathrm{~B}, \quad 1 \mathrm{C}-1 \mathrm{D}$ (men) ; $36 \mathrm{~A}-36 \mathrm{~B}, 38 \mathrm{~A}-38 \mathrm{~B}$
(women)
(women) ----------
†Social Sciences, including Social Science 1, Political, Social and

Electives, including additional art for major and courses for academic teaching minor ${ }^{2}$

## UPPER DIVISION

Education 116, Practice Teaching (4 units in special field)
Education 119, Art in the Junior High School
Education 121, Principles of Secondary Education
Education 125, ${ }^{3}$ Elementary School Curriculum_
Education elective (suggested: Education 106 or 108 or 130 )
Political Science 101, American Institutions (or substitute) 3

Electives, including additional art and academic teaching minor.

Aesthetics 50 or 150 SUMMARY
Art major
Art major

Hygiene 1 or 2
$\begin{array}{r}-19 \\ \hline\end{array}$
2
Natural Sciences

Political Science 101, American Institutions
Psychology 1A
$\begin{array}{r}14 \\ 2 \\ \hline\end{array}$
*Social Sciences (including Social Science 1 ) $\frac{2}{3}$
Electives, including academic teaching minor

## Depending on result of Subject A test.

Not required if student is meeting reience, or social sclence.
meeting requirements for elementary creden${ }^{\dagger}$ Maximum credit allowable in art.
$\dagger$ See Summary of Basic Requirements
** See page 19 .
A.B. Degree With Special Credential in Business Education This course leads to the A.B. degree and to the Special Secondary Credential in Business Education, which entitles the holder to teach business 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

## Units

Economics 1A-1B, Principles
Economics 14A-14B, Accounting $\qquad$
English 1A, Freshman English, or elective $\qquad$
Geosh 1A, Freshman English, or elective
Geography 1, Elements (Natural Science)
 $\qquad$

$\qquad$ | 3 |
| :--- |
| 3 |


*Natural Sciences
Physical Education $1 \mathrm{~A}-1 \mathrm{~B}, 1 \mathrm{C}-1 \mathrm{D}$ (men), or $36 \mathrm{~A}-36 \mathrm{~B}, 38 \mathrm{~A}-38 \mathrm{~B}$2
1

women)
Secretarial Training 1A-1B, Typewriting6

Secretarial Training 5A-5B, Stenography
10

Secretarial Training 6A, Advanced Stenography 3
Secretarial Training 10A, Business Correspondence 3
3
Social Science 1, Pol., Soc. and Econ. Problems
Speech Arts 1A, Fundamentals of Public Speaking-
${ }^{1}$ Depending on result of Subject A test.

* See page 20 .

Economics 11, Economic History of the United States Un
Economics 18A-18B, Commercial Law
Economics 100, Modern Economic Thought, or a course in Consumer Economics
Economies 140, Statistical Methods
Economies 160A-160B, Advanced Accounting- $\qquad$ 3
6
Economics 161, Cost Accounting-- $\qquad$
Economics 163, Machine Accounting

## ting-.

 $-\quad 3$Education 116, Penmanship Method $\qquad$
Education 121, Principles of Secondary Education
Education 130, Educational Psychology_
Education 160, C
Education 163, Stenography
$\qquad$
Education 164, Bookkeeping $\qquad$
Education 165, Typewriting $\qquad$
Geography 141, Economic Geography, or a course in
Political Science 101, American Institutions (or in Foreign Trade
Psychology 1A, General
Secretarial Training 3A, Office Methods and Appliances

If the Secretarial subfield only is elected, Mathematies 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

Economics 1A-1B, Principles

Economics 11, Economic History of the United States


English 1A, Freshman English, or elective ${ }^{1}$
Gerral Science) (Natural
Geography 1, Elements (Natural Science) -........................................ 3




Physical Education $1 \mathrm{~A}-1 \mathrm{~B}, 1 \mathrm{C}-1 \mathrm{D}$ (men), or $36 \mathrm{~A}-36 \mathrm{~B}, 38 \mathrm{~A}-38 \mathrm{~B}$
Physical Education 1A-1B, 1C-1D (men), or $36 \mathrm{~A}-36 \mathrm{~B}, 38 \mathrm{~A}-38 \mathrm{~B}$
(women) (women)

Secretarial Training 1A-1B, Typewriting-
Secretarial Training 10A, Business Correspondence
Social Science 1, Pol., Soc. and Econ. Problems_


## UPPER DIVISION

Economics 100, Modern Economic Thought, or a course in Consumer Economics
(135, Money and Benking3
3
Economics 140, Statistical Methods3
3

Economics 163, Machine Accounting

Education 116, Practice Teaching
Education 121, Practice Teaching --.....---..........
Education 130, Edincatios of Secondar
Education 130, Educational Psycholog

Education 165, Typewriting
Geography 141, Economic Geography, or a course in Foreign Trade
Political Science 101, American Institutions (or substitute)
Psychology 1A, General
Electives (including a minimum of 5 units in the upper division, 3 units of which must be in Commerce)
i Depending on result of Subject A test.

- See page 20.
A.B. Degree With Special Credential in Music This course leads to the A.B. degree with a Special Secondary Credential in Musie which entitles the holder to teach music in senior high, junior high, and elementary schools.


## LOWER DIVISION

Aesthetics 1A-1B, Survey of Music
(sophomore year)
English $1 \mathrm{~A},{ }^{2} 1 \mathrm{~B}, 2$, or $3,4 \mathrm{~A}, 4 \mathrm{~B}, 52 \mathrm{~A}, 52 \mathrm{~B}, 56 \mathrm{~A}, 56 \mathrm{~B} \ldots \ldots$. or $^{2} 7$

Natural Sciences ${ }^{3}$
Physical Education $1 \mathrm{~A}-1 \mathrm{~B}, 1 \mathrm{C}-1 \mathrm{D}$ (men) ; $36 \mathrm{~A}-36 \mathrm{~B}, 38 \mathrm{~A}-38 \mathrm{~B}^{1}$ (women) neral (sophomore year)

2
Psychology 1A, General (sophomore year)
d
Social Sciences, ${ }^{2}$ including Social Science 1, Political, Social and
Economic Problems
Music for major (see below) and electives, including course for an academic teaching minor ${ }^{4}$

## UPPER DIVISION

Aesthetics 102A-102B, History of Music
Education 116, Practice Teaching (at least 4 units in Music)
Education 121, Principles of Secondary Education
Education 127, Music in the Secondary School 2
Education 145, Org, and Adm. of Music Education $\qquad$ $-\quad 2$
Political Science 101, American Institutions (or substitute) $\qquad$
Music for major (see below) and electives, including courses for an academic teaching minor ${ }^{4}$

## MUSIC

Freshman year :
B, Music Reading and Ear Training
Sophomore year :
1C-1D, Music Reading and Ear Training

Junior and senior years:
105A-105B, Advanced Harmony 6
$\qquad$ 6
${ }_{2}$ Unless also a candidate for a general elementary school credential
Unless also a candidate for a general
2 Depending on result of Subject A Test.
${ }^{3}$ See page 20 .
${ }^{3}$ See page 20 .
${ }^{4}$ See Major and Minor requirements, page 22.

16, 116, A, B, C, D, Orchestral Instruments ${ }^{2}$ (including 19 or 119, C and D, Instrumental Music, Advanced) 17, 117, A, B, C, D, Voice ${ }^{2}$ (including 20A, 20B, Vocal Music) $\begin{array}{r}6 \\ -\quad 6 \\ \hline\end{array}$ 18,118, A. B. C. D, Piano

Aesthetics

Education $\begin{array}{r}6 \\ \hline\end{array}$

English 18

Hygiene 1 or 2
Music major
Natural Sciences
Physical Education
Political Science 101, American Institutions_-....................................... 2

 3

| $\square$ |
| :--- |
| 124 |

${ }^{1}$ See page 97 .
${ }^{3}$ Maximum credit allowable in music for degree.
A.B. Degree With Special Credential in Physical Education This course leads to the A.B. degree and to the Special Secondary Credential in Physical Education which entitles the holder to teach physical education in senior high, junior high, and elementary schools.

## MEN

LOWER DIVISION
Units
Biol. Science 10A-10B, Science of Life (unless taken as a year course in high school with at least a grade of B) _.................... if

Zoology 1A, General
English 1A, ${ }^{1}$ 1B, 2 or $3,4 \mathrm{~A}, 4 \mathrm{~B}, 52 \mathrm{~A}, 52 \mathrm{~B}, 56 \mathrm{~A}, 56 \mathrm{~B}$ r 7
Hygiene 1, Personal and Civic 2
Natural Sciences
Physical Education
$1 \mathrm{~A}-1 \mathrm{~B}, 1 \mathrm{C}-1 \mathrm{D}$ 2
6A, Tennis 2
30, Emergencies
$\qquad$
62A, 62B, Gymnastic Activit.-. 1
$62 \mathrm{~A}, 62 \mathrm{~B}$, Gymnastic Activities.
66, Playing Rules of Modern Games $\qquad$ 4
72, Principles $\qquad$
$\qquad$
Sports and Athletics? $\qquad$ 2

Psychology 1A, General (sophomore year) | 3 |
| :--- |
| 3 |

Red Cross Swimming Test
 Economic Problems

Speech Arts 1A, Fundamentals of Public Speaking 14
3
Zoology 20, Anatomy and Physiology 3
Electives, including courses to meet minor requirements a

## UPPER DIVISION

Education 116, Practice Teaching $\qquad$ 6
Education 121, Principles of Secondary Education_............................................
Education 125, Elementary School Curriculum 3

Physical Education
151, Health Education
154, Organ. and Admin. of Physical Education 2
-155, Applied Anatomy $\qquad$ 2
156A-156B, Sports Methods
166, Technique of Officiating
163, Technique of Teaching Activities
171, Community Recreation
180 , Theory of Coaching Football
Sports and Athletics ${ }^{2}$ -
tball
$\qquad$

Depending on result of Sublect A test
sports majoring in Physical Education must actively participate in three 3 Unless minor is English, general science, or social science.
$\dagger$ See Summary of Basic Requirements.

MEN-Continued

## UPPER DIVISION-Continued

## Units

olitical Science 101, American Institutions (or substitute) ..... 2
Psychology 102, Genetic (first semester, junior year) ..... 3
2
2
Zoology ..... 14
Electives ..... 60

## SUMMARI


English
Hygiene 1
Speech Ars Biol. Science 10A-10B or substitute
Natural Sciences (including Biol. Science 10A-10B or substitute 14 and Zoology 20)

Political Science 101, American Institutions_-...............................................................
Psychology
$\begin{array}{r}2 \\ \hline 6\end{array}$
**Social Sciences (including Social Science 1)
Zoology 114A


* See page 20.
** See page 19.

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


## WOMEN

## LOWER DIVISION

Units
Aesthetics 1A, Survey of Music
Biol. Science 10A-10B, Science of Life (unless taken in high school) or
Zoology 1A, General
English 1A, ${ }^{1} 1 \mathrm{~B}, 2,3$, or $4 \mathrm{~A}, 4 \mathrm{~B}, 52 \mathrm{~A}, 52 \mathrm{~B}, 56 \mathrm{~A}, 56 \mathrm{~B}$
Hygiene 2, Personal
-5-7
Physical Education:
36A, Fundamental Skills
36B, Folk Dancing $\qquad$
36C, Rhythmic Skills
38B, Sports and Dancin for the Elementary School
53, Physical Education in the Elementary School
55 A or 55 B , Swimming-Beginning or Intermedinte
55C, Life Saving
56, Tennis
57, Golf.
59, Archery
Psychology 1A
Sociology 50, General
or
Anthropology 54, Social $\qquad$ $-3$
*Social Sciences, including Soc. Science 1, Political, Social and Eco-
nomic Problems

Speech Art
Zoology 20 - 3


## UPPER DIVISION

Education 108, Educational Measurements .
Education 116, Practice Teaching 3
Education 121, Principles of Secondary Education 6
Education 125, Frinciples of Secondary Education
Education 106, Philosophy School Curriculum _--.................-- 3
or
Education 140, Educational Statistics
ducation 142, Educational Sociology
Physical Education:
102, Emergency and Safety Programs $\qquad$ 1
${ }_{2}$ Depending on result of Subject A test.

- See Summary of Basic Requirements.
( 36 )


## UPPER DIVISION-Continued


${ }^{1}$ If another subject is chosen the program must be arranged to include a total of 6 units of upper division work in that subject

* See page 20

55, Applied Anatomy 4
158, Stunts and Tumbling
60 Principles of Teaching Gymnastics
2
161 (16) Dana
168, Phys, Advanced Dancing

170, Recreational Leadership
173, Principles of Physical Education
17, Individual Program Adaptations
Political Science 101, American Institutions (or substitute)
Psychology 102, Genetic (first semester, junior year)
Additional Course in Upper Division Zoology, or other subject for minor ${ }^{1}$

Aesthetics

English
2
Natural Sciences (including Biological Science 10A-10B or substitute, and Zoology 20)
Political Science 101, American Institutions_-................................. 2
Psychology
*Social Sciences (including Social Science 1 and Sociology 50 or
Ant

Electives, including academic teaching minor unless Zoology is chosen

* See page 19.
$\qquad$


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 twenty-four 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 had attended the college prior to attaining the degree elsewhere, in credit earned as an upper division student. The candidate for a diploma must meet 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 Candidates desiring to qualify for administration and supervision credentials will meet the credential requirements as outlined in State Department of Education Bulletin No. 12, Regulations Governing Granting of Credentials and Certificates for Public School Service in California. Further information will be furnished by the college upon request by the applicant.

Special Degree Requirements for the Liberal Arts Curricula The liberal arts 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.
The junior certificate will be granted on the completion of 64 units and satisfaction of all lower division requirements.

## LOWER DIVISION

Subject Matter Requirements in the Lower Division
Physical Education $\qquad$ English 2 units
 Foreign Language Mathematics A and B or high school and 15 units Social Sciences

Year-course in foreign language or mathematics, or philosonhy 14 unit (in addition to the foregoing minimum requirements in foreign language and mathematics)
Lower division subjects for the minors, unless included in one of the above requirements. See page 40 . included in one

Lower division subjects required for the major. See page 40 .
Electives to make total of 64 units.
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 courses English 1B, 2, 3, 4A, 4B, 52A, 52B, 56A, 56B.

## Psychology Psychology 1A.

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 schoo 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 accept able in any language except Latin, in which a year-course is permissible.
Social Sciences Fourteen units from two or more departments are required as follows:
(a) Social Science 1.
(b) Additional lower division courses to meet the social science requirement must be chosen from the following list and must include one of the year courses marked with an asterisk: Anthropology 50A0B,* 54, 55 ; Economics 1A-1B,* 11, 18A-18B; Geography 2, 12 History 4A-4B,* 8A-8B;* Political Science 1A-1B ;* Social Science 3 , Sociology 50.
(c) A maximum of two semesters of fourth-year high school courses in the fields of history, political science, sociology, and economics taken with grades not lower than C may be used to satisfy three mits of the social science requirement. A maximum of two unit f the social science requirement may be chosen from upper division courses if high school senior courses have been used to satisfy the requirement, otherwise a maximum of five units may be counted.

Natural Sciences Fourteen units are required as follows:
(a) Biological Science 1 or a year course in high school or college biology, botany, physiology or zoology.
(b) Physical Science 1 or a year course in high school or college chemistry or physics.
(c) Additional lower division courses to meet the natural science requirement must come from the following list and must include ne of the laboratory courses marked with an asterisk. High school ures: a 6 units, of third and fourth zear courses in botany, chemistry,* physics,* physiology, zoology and advanced biology may be used to satisfy the natural science equirement. College courses: Astronomy 1, 9, 11; Biological Science 1, 10A-10B;* Botany 2A,* 2B,* 4; Chemistry 1A, B,* $5,{ }^{*}$ *-8*; Geography 1 or 3 $1 \mathrm{~B}^{*}$ 1C Physical Science oward requirement) ; Geology 1A, 1B, 10 ; Physical science 1 Physics 2A-2B; 3A-3B,* 1A-1B,* 1C-1D,* Zoology 1A,* 1B.*
(d) A maximum of 2 units of this requirement may be chosen from upper division courses.
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, or any two consecutive high school year courses.

Latin: Two years of high school courses in Latin.
Mathematics: 1 A and $1 \mathrm{~B} ; 3 \mathrm{~A}-3 \mathrm{~B} ; \mathrm{C}$ and $1 \mathrm{~A} ; \mathrm{C}$ and 3 A . Students with the Commerce major may take Mathematics $D$ and $G$, or equivalents, and Economics 2.
Philosophy : 5A-5B.
Limited Electives Among both elective and required subjects, a total of not more than 12 units of the applied and vocational courses listed below will be counted toward junior standing or the A.B. degree, in both the lower and upper division combined: Agriculture 20; Art 7, 14A; Merchandising, all courses; all courses in education, except those listed as available for credit toward a minor (see page 46) ; Industrial Arts 3A, 22; Journalism 53A-53B, 153A-153B; Library Science 10 ; all courses in Applied Music including Music 9A-9B, 109; Physical Education, all courses except 1A-1B, 1C-1D, 30, 36A, 36B, $36 \mathrm{C}, 38 \mathrm{~A}, 38 \mathrm{~B}$, 102, 161, 164A-164B, 170 ; Secretarial Training, all courses.
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 courses courses in various departments may be found in the course descriptions on pages 58-108. Minors are available in the following subjects. ogy, art, botany, chemistry, economics, education, English, forts : anthropolgeography, geology, history, mathematies, music, Ehilosophy, foreign language, cal science, psychology, zoology. Informatic, philosophy, physics, politication is to be found on page 46 .

Major The specific requirements of lower division subjects for the degree in each major field are listed in the paragraphs following. 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 Aesthetics 5, 50; fourteen units carefully chosen from lower division art courses to meet the stated prerequisites for upper division work. These shall include Art A-B, 6A-6B, or the accepted equivalents, and six elective
units in art.
Chemistry Chemistry 1A-1B with an average grade of C or better, Chemistry $7-8$, Physics 2A-2B and $3 \mathrm{~A}-3 \mathrm{~B}$ or grade of C or better, matics $3 \mathrm{~A}-3 \mathrm{~B}$ or the equivalent, and a reading knowledge of German Students planning to do graduate work in chemistry another college, and there work for a degree with a major in transfer to are advised to take Physics 1A-1B-1C-1D and Mathematics in chemistry, 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 $D$ and $G$, or equivalents, and Economies 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 Science 1A-1B; History 4A-4B; History 8A-8B; Psychology 1A and 1B
or 4 A or 4 B ; Geography 1 and 2 ; Anthropology $50 \mathrm{~A}-50 \mathrm{~B}$. Recommended: Sociology 50; Economics 14A-14B, 18A-18B.
English English 1A-B, 2 or 3 and six units from 52A, 52B, 56A, 56B. Recommended : A reading knowledge of German or French.
Foreign Languages French: French A-B-C-D; either German A-B or Spanish A-B ; History 4A-4B. Spanish: Spanish A-B-C-D ; French A-B ; History $4 \mathrm{~A}-4 \mathrm{~B}$.

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 or Economics 1A-1B. 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.
Mathematios Mathematics $3 \mathrm{~A}-3 \mathrm{~B}, 8,4 \mathrm{~A}-4 \mathrm{~B}$ with an average grade of C or better; Physics 1A-1B or 2A-2B. Two or more of the following are recommended: Astronomy 1, Economics 1A-1B, 2, French A-B, German A-B, Industrial Arts 21, Surveying 1A.
Music Music 1A-1B, 4A-4B ; and two units of electives in music; Aesthetics $1 \mathrm{~A}-1 \mathrm{~B}$. 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. See page 97 for regulations regarding Applied Music.
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-1C-1D, Mathematics 3A-3B, 4A-4B, and Chemistry $1 \mathrm{~A}-1 \mathrm{~B}$, or their equivalents. Recommended: A reading knowledge of French and German.
Zoology Zoology 1A, 1B, and high school chemistry or Chemistry 1A1B. Recommended: French, German, Botany 2A, 2B, 4, and 7.

## UPPER DIVISION

## Subject Matter Requirements

Political Science 101 $\qquad$ 2 units
First minor (minimum in upper division courses) $\qquad$ 6 units
Second minor (minimum in upper division courses) 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. At least 30 units of upper and a grand total of 124 units for the degree. At least 30 units of upper
division courses must be earned after all lower division requirements have division cours

## Explanation of Requirements

Political Science 101 Political Science 113 or 152 or History 171A
171B or 173A-173B will be accepted as substitutes for this requirement
Minors See explanation regarding minor subjects on page 40 .
Majors The specific requirements in each major field are listed in the paragraphs following.

Electives See restrictions concerning the choice of applied and voca-
tional courses, as explained on page 40

## Major Requirements in the Various Fields

Art Twenty-four upper division units. These shall include Art 112A, 115A-115B, 152A, 195, and twelve upper division elective units in Art, an. Aesthetics 150 .

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

Chemistry A minimum of twenty-four upper division units in chemistry elated minor and $111 \mathrm{~A}-111 \mathrm{~B}$. The choice of a follow a definite plan organization of the course of a major student must follow a definite plan approved by the department.
Commerce Economics 121, 140, 199 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.

Geog. 141 may be used in the electives under A and B.
Economics Required: Economics 100, 102, 140 and 199, with 6 units tives, seven upper division units in es 123, 131, 133, 135, and 171. Elecbe substituted for three elective inits in mics. Eeonomic geography may解 in economies.
arranged under supervision in upper division English to be selected and may be in composition. A reading knowlent. Not more than four units

Foreign Languages French: Twenty-four units of upper division work, of which at least eighteen must be in French, and of which a maximum of six may be in related subjects, arranged in consultation with the chairman of the depart courses. Spanish: The may be east eighteen must be in spanish, and of with the chairman of the in related subjects, arranged in consultation with the chairman of the lepartment. At least a $C$ average in upper division major courses.

Geography Twenty-four units of upper division work in geography or 18 units in geography and six units in related subjects arranged in con18 units in geography and 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, including at least eighteen in upper division mathematics, the others being selected from Chemistry 111A-111B, 114. Economies 140, Education 112, Physics 105A-105B, 112 and other 114, Leor major should be arranged in consultation with the chairman of the department and completed with a grade of C or better.
Music Music $105 \mathrm{~A}-105 \mathrm{~B}, 106 \mathrm{~A}-106 \mathrm{~B}$, and 10 units of upper division elective courses in Music: and 2 units of upper division work in an allied subject. (See statement concerning Applied Music under lower division requirements.)
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 105A-105B and $107 \mathrm{~A}-107 \mathrm{~B}$. 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 38-43.

## 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 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: History $4 \mathrm{~A}-4 \mathrm{~B}, 6$ units; Economics 1A-1B, 6 units; Economics 14A-14B, 6
units; Sociology 50,3 units; Political units; Sociology 50,3 units ; Political Science 1A-1B, 6 units; Speech Arts 1B, 3 units; English 52A-62B, 6 units; Psychology 1A, 3 units ; Psychology 4A, 2 units ; Philosophy 5A-5B, 6 units. Liberal arts subjects similar to those offered in law colleges should ordinarily be omitted from the prelegal curricula.
(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 $111 \mathrm{~A}-111 \mathrm{~B}$, or 121A121B, 6 units ; History 151A-151B, 6 units; History 171A-171B, 6 units; Economics 102, 3 units; Economics 121, 3 units; Economics 133, 3 units ; Economics 171, 3 units; Political Science 111, 3 units ; Political Science 113, 3 units; Speech Arts 101B, or 1B, 3 units;
Philosophy 120, 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 to three and four years of premedical work. The lower division requirements of the liberal arts curricula should be met in full requirements of 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 $1 \mathrm{~A}-1 \mathrm{~B}, 10$ 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 Zoology 100, 4 units (this upper division subject shatisfy medical colin the sophomore year only when necessary work).
(c) The three-year premedical curriculum requires the completion of 93 units of work. The program in the upper division of either the three-year of 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 7-8, 6 units ; Chemistry 105, 3 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; Biological Science 10A-10B, 6 units, or Zoology 1A-1B, 8 units; Physics 2A-2B, 6 units; Physical Education $1 \mathrm{~A}-1 \mathrm{~B}$ or $36 \mathrm{~A}-36 \mathrm{~B}, 1$ unit; Electives to make a total of 30 units of work.

## (Two-Year Curriculum)

(a) The lower division requirements of the liberal arts 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; Physics 2A-2B, 6 units; Biological Science 10A-10B, 6 units or Zoology 1A-1B, 8 units; and English 1B-2 or 3, 6 units.

## Prenursing Curriculum

(Two-Year Curriculum)
(a) The lower division requirements of the liberal arts 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 Physiology), 3 units; Bacteriology 1 (General Bacteriology and Microbiology), 4 units (Summer Session). (It is planned to increase the unit-value of Zoology 20 as soon as possible to meet completely the California state requirements for a junior certificate in prenursing.)

## Preoptometry Curriculum

(Two-Year Cusriculum)
(a) The lower division requirements of the liberal arts 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; Mathematies 3A, or equivalent, 4 units; Physics 2A-2B, 6 units, Physies 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 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, 8 units; German A-B, 10 units; Mathematics D, 1 unit, or equivalent; Mathe$105 \mathrm{~A}-105 \mathrm{~B}, 6$ units, or equivalent; Chemistry 8-9, 6 units; Chemistry Physics 3A-3B, 2 units.

## Presecondary Curriculum

(Four-Year Curriculum)
Completion of the requirements of this curriculum enables the graduate to satisfy the undergraduate requirements for the general secondary teaching a senior high school or junior college, will enable the holder to teach in senior high school or junior college
(a) The lower division requirements of the liberal arts curricula should be met in full.
(b) This curriculum requires the completion of 124 units of work. In arranging his program to meet the upper division requirements for the A.B. degree in the liberal arts curricula, the student should include a major in a subject or field of subjects usually taught in high school and a minor in the field of education chosen from the following courses: Ed. 121,* Principles of Secondary Education: Ed. 106, Philosophy of Education; Ed. 107,* History of Education; Ed. 137, Comparative Education; Ed. 107,* History of Education; Ed. Ed. 140, Elementary Educational. Statistics; Ed, 142, Educational Sociology; Psychology 102,* Genetic. In order to conform to the usual university requirements, this minor should include the courses marked with an asterisk.

## Ourricula Preliminary to Social Service

## (Two-Year and Four-Year Curricula)

(a) The lower division requirements of the liberal arts 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 1A, 3 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 prelimiwory. A 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: Eeonomics 134, 3 units; Economics 102, 3 units; Economics 140, or Education 140, 3 units; Education 106, 3 units; Education 107, 3 units; Education 130, 3 units; History 163, 3 units; History 171A171B, or 173A-173B, 6 units; Physical Education 30, or 102, 1 unit; Physical Education 151, 2 units; Physical Education 171, or 170, 2 units; Psychology 102, 3 units; Psychology 118, 2 units; Psychology 145, 3 units; Political Science 152, 3 units.

Courses in social work offered by the college, summer session, or extension division should be chosen upon the recommendation of the faculty adviser for the social service curricula.

## 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 curricula in full.
(b) The program of elective and required subjects in the lower division should include the following subjects: History $4 \mathrm{~A}-4 \mathrm{~B}$, or $8 \mathrm{~A}-8 \mathrm{~B}, 6$ units; Economies 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 $53 \mathrm{~A}-53 \mathrm{~B}, 2-6$ 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 $107 \mathrm{~A}-107 \mathrm{~B}, 4$ units; English 130A-130B, 6 units; Economics 100, 3 units; History 145A-145B, or 146A-146B, 6 units; History 171A-171B, or 173A-173B, 6 units; Political Science 111, 3 units; Political Science 113, 3 units; Journalism 100, 3 units; Journalism 153A-153B, 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 $1 \mathrm{~A}-1 \mathrm{~B}, 10$ units; Chemistry 7-8, 6 units; Botany 2A-2B, 8 units; Physics 2A-2B, 6 units; Zoology 1A-1B, 8 units; Geology 1A. 4 units; Geology 10, 3 units; English 1B-2 or 3, or Speech Arts 1A-1B, 6 units; Economics 1A-1B, 6 units; Botany 7, 4 units; Social Science 1, 3 units; Hygiene 1 or 2, 2 units; Physical Education, 2 units; Mathematics A, B, C, D, 8 units, or equivalent: Foreign Language, 6 units, or two years of high school foreign language; electives to make a total of 64 units of sork The summer course in Bacteriology 1 (General Bacteriology and Microbi ology), 4 units, is recommended.
(c) Requirements of the curriculum in forestry: Chemistry 1A-1B, 10 units; Botany 2A-2B, 8 units; Botany 7, 4 units; English 1B-2 or 3 , or Speech Arts 1A-1B, 6 units; Mathematics 1A-1B, 6 units or Mathematics 3A, 3 units; Surveying 1A-1B, 6 units; Physics 2A-2B, 6 units; Geology 1A, or Geography 1, 4 or 3 units; Economics 1A-1B, 6 units; Social Science 1, 3 units; Hygiene 1 or 2, 2 units; Physical Education, 2 units; Foreign Language, 6 units, or two years of high school foreign language; electives, to make a total of 64 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 $3 \mathrm{~A}-3 \mathrm{~B}, 6$ units; Chemistry 1A-1B, 10 units; Physics 1A-1B, 6 units; English 1B, 3 units; Physical Education, 1 unit; elective, 3
units. units.
(b) The following list of subjects together with (c) and (d) 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 $1 \mathrm{C}-1 \mathrm{D}, 6$ units; Surveying 1 A 3 units; Industrial Arts 21, 3 units; Industrial Arts 23,2 units Geology 1A, 4 units; Physical Education Industrial
(c) Additional requirements in
units; Industrial ements in civil engineering: Industrial Arts 25, 3 units; Industrial Arts 28, 3 units; Surveying 1B, 3 units ; Astron my 3 , 2 units.
(d) Additional requirements in mechanical and electrical engineering Industrial Arts 22, 3 units; Mathematics 124 or 119, 3 units.

## Special Nondegree Curricula

Information relating to special two-year nondegree curricula such a aeronautics mechanics, commerce, etc., may be obtained in a separate


## THE BACHELOR OF EDUCATION DEGREE

## General Requirements

The Bachelor of Education Degree will be granted upon the successful completion of 124 semester hours of college or university work or the oquivalent of this total requirement at least 106 semester hours of york shall be completed in regular campus classes, extension classes, or work shall be completed in regular college or university direction; and not in correspondence courses hours of credit may be allowed for experiences and activities that can be evaluated as equivalent to regular academic work.

## Purpose of the Degree

The establishment of this degree provides an opportunity for improving the professional training of those teachers who are now in service and who do not meet the standards of training at present required of new people entering the teaching profession.
The degree is professional in character and is not intended to qualify students for graduate standing in the universities.
The following classes of teachers are eligible for candidacy for the Bachelor of Education Degree:

1. Graduates of the 2 -year, 21 -year, or 3 -year curricula of the California State colleges when these institutions were normal schools or teachers colleges, who have had five or more years of teaching experience.
2. Holders of California life diplomas or those who have taught five or more years in the public schools of California

## Nature of Work and Fields of Study

Candidates will take academic courses designed to strengthen them in those fields of knowledge in which their initial training is inadequate. Profes sional courses in education will be included to qualify candidates to teach te newer curricula by means of the newer methods. All work will as far as possible be provided in classes for mature and experienced teachers.

Each candidate for the Bachelor of Education degree must include in the ast 60 semester hours of credit earned a minimum of six semester hours in each of three of the following six fields of knowledge

1. Professional courses
2. Social sciences
3. Natural science
4. Psychology and philosophy
5. Fine arts and literature
6. Physical education, hygiene, and recreation

## Effective Dates of the Bachelor of Education Curriculum

The operation of this curriculum shall not extend beyond February 1 1948. All applications for candidacy must be filed and at least six semester hours of work completed before February 1, 1942. All the requirements must be completed and the degree conferred prior to February 1, 1947.

## Application for Candidacy

Anyone desiring to establish candidacy for this degree should secure an application blank from the Registrar's office. An evaluation of record cannot be made until the application blank has been entirely filled out and filed with complete transcripts of academic record. A two-dollar evaluation fee must accompany each application.

## 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 curses, those numbered 100 and above are upper division (junior or senior) courses.

Freshmen are not admitted into upper division courses. A sophomore may enroll in on upper division course for credit provided he has earned an less than 1.5 grade points in all college work undertaken, and provided he receives the instructor's permission to enroll in the course. A second semester sophomore may enroll in an uper divioredit without the foregoing grade limitasion coursid the units earned in the upper division course or courses tions provided the units earned in required in the lower division.

One "unit" represents an hour recitation or lecture, together with the equired preparation or three hours laboratory work each week for a semester of 18 weeks.
The semester in which courses are offered is designed 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 course" begin in the Fall, but those given in the list below may be taken in the reverse order ( $i$, the semester of the course may be taken before the firsi order (i.e., the case of other semester) or the second semester may be taken alone. In the case of other year courses, students who have completem the instructor to take the semester's work may.seek Sermisemester courses having the letter B as second half of the course. Single somple, Art 61B) are not supposed to follove a part of the number another course of the same number unless so indicated in the pre requisites to the course.

Year Courses Open to Registration in the Middle of the Year

Aesthetics 1A-1B
Aesthetics 102A-102B
Anthropology 50A-50B
Anthropology 151A-151B
Economics 160A-160B
English 4A-4B
English 52A-52B
English 56A-56B
French 101A-101B
French $105 \mathrm{~A}-105 \mathrm{~B}$
French 105A-100B
French 107A-107B
French 110A-110B
French 111A-111B

Spanish 102A-102B
Spanish 104A-104B
Spanish 105A-105B
Spanish 110A-110B
History 4A-4B
History 8A-8B
History 111A-111B
History 121A-121B
History 145A-145B
History 146A-146B
listory $151 \mathrm{~A}-151 \mathrm{~B}$
History $156 \mathrm{~A}-156 \mathrm{~B}$
History $171 \mathrm{~A}-171 \mathrm{~B}$
History 173A-173B

Merchandising 24A, 24B
Merchandising 25, 26, 27
Political Science $1 \mathrm{~A}-1 \mathrm{~B}$
Speech Arts $55 \mathrm{~A}-55 \mathrm{~B}$

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.

## Aesthetics

## LOWER DIVISION COURSES

## 1A-1B Survey of Music

Springston
Correlation of music and other arts. Designed to stimulate enjoyment of music by developing intelligent listening. The elements of music, its structure, folk music of all countries, musical instruments, and the contributions of the best known composers, with some biographical study of these men. Compositions are presented by orthophonic recording and by class members. Attendance at a number of local concerts is required. No previous musical training or background is necessary. Music major Year course (2-9)
Year course (2-2)
5 Fundamentals of Art
Jackson
An illustrated lecture course involving a study of gesthetic meaning and its relation to the structure of art products. Designed to inerense both understanding and appreciation of the visual world in general and of the fine arts in particular.
Fall and Spring (2)

## 50 Appreciation and History of Art

Jackson
architecture, and handicrafts from daw revealed in the painting, sculpture, trated.
Fall (3)

## UPPER DIVISION COURSES

## 102A-102B History of Music

Springston
The various movements in the development of music as related to other emphasis on the larger development of the art of music, with particular work of modern composers. Many considerable attention is given to the orchestral scores. Music majors are requiredrks are studied from the assignments for full credit majors are required to complete additional study of harmony and credit. Prerequisite: Aesthetics 1A-1B. Previous Year course (1-1)

150 Appreciation and History of Art
The period from the Renaissance through the modern school, treated
in the same manner as in Aesthetics 50 Jackson Spring (2)


## Agriculture

## 20 Nature Study

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 (S) (Not offered in 193\%-1938)

## Anthropology

## LOWER DIVISION COURSES

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

Origin and antiquity of man. Theories of human descent. Classification of races. Origin and early development of civilization.
Year course (3-3)

## 54 Social Anthropology <br> Rogers

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. Ritual ism and education considered as processes of culture conservation and social control.
Fall and Spring (3)
55 Culture History

## Rogers

The prehistoric and historic development of culture types contributing to Western European and American civilization of today. Egyptian Semitic, Indo-European, and Oriental cultures examined in light of their bearing on contemporary civilization. Methods of culture spread examined and applied to specific traits. Spengler's theory of history and similar doctrines reviewed.
Spring (3)
UPPER DIVISION COURSES
151A-151B The American Indian
Rogers
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 especial attention to the tribes north of Mexico, while the second semester is concerned primarily with the civilizations of Mexico, Central and South America.
Year course (3-3) (Offered in 1938-39 and alternate years)
152 Primitive Cultures (Ethnology) Rogers History and cultural development of primative races of mankind. Consideration given to industries, arts, social organization, and religion of living primitive peoples.
Fall (3) (Offered in 1937-38 and alternate years)

Beliefs and ritual of primitive man. Magic and religion. Forms of animism and polytheism. Primitive mentality and the supernatural. Spring (3) (Offered in 1937-38 and alternate years)

## Art

Candidates for a teaching credential in art should refer to the statement "Admission to Upper Division Teaching Training" on page 20.
Lower division preparation for the liberal arts major in art and for the unior certificate: Aesthetics 5, 50 ; fourteen units carefully chosen from lower division art courses to meet the stated prerequisites for upper division work. These shall include Art A-B, 6A-6B, or the accepted equivalents, and six elective units in art.
Liberal arts major (upper division) : Twenty-four upper division units. These shall include Art 112A, 115A-115B, 152A, 195, and twelve upper division elective units in art, and Aestheties 150 .
It is recommended that the students in meeting degree requirements and in choosing free electives, select from the following courses: Anthropology 151A-151B; English 4A-4B, 106A-106B, 107A-107B, 117; French A-B History 4A-4B, 111A-111B.

For courses in Appreciation and History of Art and Fundamentals of Art, see Aesthetics, page 52

## LOWER DIVISION COURSES

Art Appreciation

8 Appreciation of Costume and Home Furnishing
Borsum Lectures, discussions, and demonstrations on the underlying principles of fabric, and fashion in ming. (a) A study of the design, color, texture, figure, the personality modern dress with emphasis on suitability to the fabric, and personality and the occasion. (b) Line form, color, texture, fabric, and lighting in relation to the home; the selection and arrangeFall (2)

## 6A Structure

Design
Fundamentals of design and composition and theory Borsum course used as a prerequisite composition and theory of color. Basic Fall and Spring (2)

## 6B Structure (continued)

Original work in creative design with special stress on modern tendencies.
Prerequisite: Art 6A. Prerequisite: Art 6A.
Fall and Spring (2)

## 7 Line, Color and Display

Borsum
The principles of line, color to store and window display Spring (3)

11A Industrial Design
Original design in its relationship to various fields-ceramies, furniture textiles, jewelry, and books. A survey and study of materials and proctextiles, jewelry, and books. A soduction. 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 $6 \mathrm{~A}-6 \mathrm{~B}, 11 \mathrm{~A}$.
Spring (2)

## 14A Lettering

Fundamental art principles applied to lettering. Practice for quick, accurate lettering; original problems using letters as design. Prerequisite: Art 6A.
Fall (2)
Borsum
14B Posters and Commercial Art
The application of lettering to posters, newspaper and magazine adver tising, 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 (2)
Patterson
2 A Stage Design
Theory of line, color, and lighting in relation to the stage. Original sets nd costumes developed on a miniature stage. Study of the development f the modern art of the theater. Upper division credit will be given in of the modern art of the theater standing upon the completion of extra theme work and additional original problems. Prerequisite: Art 6A.
Fall (2)
94 Costume Design
Patterson
Original designs of modern costumes suitable to the individual or to distinct types; the drawing of fashion figures; the rendering of fabrics and textures. Prerequisite: Art 6A
Fall (2)

> Drawing, Painting, and Sculpture

A-B Freehand Drawing
Hamann
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 $(2\lrcorner 2)$
Jackson
5A-15B Life Drawing Does not duplicate the former course in Drawing from the nude model. painting, numbered Art 15A-15B.
Year course, beginning either Fall or Spring (2-2)

## 16A-16B Painting

Jackson
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)

## 17A-17B Sculpture

Hord
Problems in clay modeling and in wood and stone carving, including original design and anatomical studies of the human figure. Particular stress laid on the qualities of materials as related to art form.
Year course, beginning either Fall or Spring (2-2)

61A Elementary Crafts
Crafts
Hamann
Problems in elementary craft work, bookbinding, pottery, weaving, and puppetry (including the dramatization and production of a puppet play). Prerequisite: Art 6A, when possible.
Fall and Spring (2)

## 61B Elementary Crafts

Hamann
Problems involving the application of design principles to various fieldspottery, textiles, weaving, metal work, wood-carving, and book-binding. Prerequisite: Art 6A
Fall and Spring (2)
UPPER DIVISION COURSES
Design

## 106A-106B Advanced Design

Borsum
Advanced problems in design, color and technique. Planned for students requisites : Art A, 6A-6B ; esign, illustration and industrial design. PreYear course (2-2)

112A-112B Organization
Jackson
Imaginative organization of space by means of color dark and light perspective, and textures of various materials ond light, $6 \mathrm{~A}-6 \mathrm{~B}$, and if possible $15 \mathrm{~A}-15 \mathrm{~B}$ or 106 A .
Year course (2-2)

## 112C Illustration

Composition fulfilling the requirements of book illustration from poetry,
imaginative tales, and legends, in black imaginative tales, and legends, in black and white and color. Prerequi-
site: Art 112A.
Spring (2) (Offered in 1938-39 and alternate years)
152A Stage Design
See Art 52A
Patterson

## 152B Stage Costume

## Costume studied in

## Patterson

 Pattersonfor mood and character. Practical problems in designing 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 (2)

195 Home Decoration
Patterson
Lectures and designing in class, trips to art galleries, stores, factories and Lectes, study how to rosnize and choose the best in furniture, rugs, wall wall coverings furnishings in homes and Actual Werine with low architects. Arrangement of flower ond occasions. Prerequisites Art A, 6A.
Spring (2)

## Drawing, Painting, and Sculpture

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

## 115C-115D Advanced Life

Jackson
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)
116A-116B Advanced Painting Jackson
Painting in water color and oils from still life and landscape, stressing composition and technique. Prerequisite: Art 16A-16B.
Year course, beginning either Fall or Spring (2-2)
117A-117B Sculpture
See Art 17A-17B.

## Astronomy

Lower division preparation in astronomy desirable for advanced work Astronomy 1, 3, 9, and 11; Mathematies 3A-3B, 4A-4B; Physics 1A-1B and $1 \mathrm{C}-1 \mathrm{D}$; a reading knowledge of German (French also desirable).
LOWER DIVISION COURSES

1 Descriptive Astronomy
C. E. Smith

1 Description an aptronomy with A cultural course planned to develop Only calculations of an elementary special emphasis on the solar systion given to the methods and instrunature are used. Especial attenimi knowledge has been gained. A ments by means of which astronomical knowledge has bervation. Prerequi-six-inch Alvin Clarke telescope is available for sites: Elementary algebra and plane geometry.
Fall and Spring (3)
3 Surveyor's Course in Elementary Practical Astronomy C. E. Smith The principles of spherical trigonometry and astronomy adapted to the needs of engineering students. Computation. Prerequisites: Surveying 1 A or permission of instructor.
Spring (2)

The leading facts now known in astronomy in the light of circumstances attending their discovery. Prerequisite: Astronomy 1.
Spring (3)
9 Practice in Observing
C. E. Smith

A laboratory course designed particularly to go along with and to supplement Astronomy 1. The course will include constellation study, use of astronomical coordinates, elementary methods of determining time and latitude, and descriptive observations of celestial objects with the sixinch telescope. Prerequisite: Astronomy 1 or registration in Astronomy 1.
Fall and Spring (1)

## 11 Modern Astronomy

C. E. Smith

A study of sidereal astronomy and astrophysics in the light of modern research, especially photographic and spectrographic. Prerequisite: Fall (3)
Fall (3)

## UPPER DIVISION COURSE

## 100 Special Problems

C. E. Smith

Admission by consent of instructor. Credit and hours to be arranged in each case. Open to students who have completed six units in astronomy. Fall and Spring (1 or 2)

## 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 course)
Lower division preparation in botany for advanced work and for the
junior certificate: Botany 2A, 2B, 4, 7, and
Lower division preparation for the liberal arts major in zoology and
for the junior certificate: Chemistry 1A-1B. Recor : Zoology 1A, 1B, and high school chemistry or Liberal arts major in zoommended: German, French, Botany 2A, 2B, 4, 7 . Liberal arts 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 zoology or eighteen in the major subject and six in related courses in physics, physiology, and bacteriology.
to include courses in zoology, botany in the junior high school should try to include courses in zoology, botany, bacteriology, physics, chemistry (at least high school chemistry), and Education 120 . The following are also
desirable: geography, geology, desirable: geography, geology, anthropology, astronomy, and upper
division biological sciences.
Fees: A fee is required
The fee covers the cost of materials laratory courses in this department. rial in addition to the estimated need an extr breakage and extra mate- Science $10 \mathrm{~A}-10 \mathrm{~B}$ and who prefer a shorter course with no required laboratory work. A demonstration laboratory is usually offered one day a week for those who care to attend; attendance is optional. Not open to students who have taken $10 \mathrm{~A}-10 \mathrm{~B}$ or any combination of Zoology 1A-1B or high school zoology with Botany 2A-2B or high school botany. Students sher $10 \mathrm{~A}-10 \mathrm{~B}$ receive 4 units of credit for $10 \mathrm{~A}-10 \mathrm{~B}$ instead of 6 .
Spring (3)
10A-10B Science of Life
Lectures: Johnson Laboratory: Crouch, Harvey

The fundamentals of plant and animal biology, with elementary work in human physiology and heredity. Laboratory work supplements the lectures and includes a study of living and preserved material. Aim of lectures and includes a study of living and preserve facts of biology. the course to acquaint the student with the basic facts of biology. Designed not only to give the general student an acquaintance with iving things and their relationships, but also to fure study teaching. Two teacher with an adequate bockground for nature study teachig. ectures 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 (3-8)

## Bacteriology

## 199 Special Study

Reading or work other than is outlined in the regular courses. (Bacteriology 1, General, and 102, Advanced Bacteriology, or 103, Current Problems in Hygiene and Bacteriology, are usually offered in the summer session). Admission only by consent of the instructor with whom the work is to be done and the chairman of the Biological Science department. Credit and hours to be arranged in each case. Open to students who have completed at least 6 units of bacteriology with grades of A or B.

## Botany

## LOWER DIVISION COURSES

## 2A Genera

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 2 A treating morphology and relationship of the lower plants and tures and laboratory as in 2 A .
Spring (4)

4 California Plants
Harvey
Classification and ecology of representative orders of wild flowers, trees, and chaparral of the San Diego region, including practice in the use of keys. One lecture and three hours laboratory per week. Occasional Saturday field trips.
Spring (2)
7 Plant Physiology
Harvey
The activities of plants, including food manufacture, absorption, conduction, transpiration, respiration, growth, and movement. Two lectures and six hours of laboratory per week. Prerequisite: Biol. Science 10A10B or Botany 2A.
Fall (4) (Offered in 1938-39 and alternate years.)

> UPPER DIVISION COURSES

## 102 Plant Geography

Harvey
Lectures and field work on the principles of geographical distribution of plants. Prerequisite: Botany $2 \mathrm{~A}-2 \mathrm{~B}$, or 4 , or equivalent.
Fall (2) (Offered in 1937-38 and alternate years.)
104 Taxonomy
Harvey
Identification, classification and distribution of representative orders work. Prerequisites. Six hours per week of lectures, laboratory, and field work. Prerequisites: Botany 2A-2B, 4.
Spring (3) (Offered in 1938-s9 and alternate years.)
199 Special Study
Instructors of the Department (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 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 lower division work in the department with a grade of A or B .
Fall and Spring (1 or 2)

## Zoology

## LOWER DIVISION COURSES

## 1A General

Harwood and Hoard An introduction to animal biology dealing with structure, functions, and evolution of animal life. Laboratory work supplucture, functions, and and based on the study and observation of living andenting the lectures (frogs and invertebrates). Valuable to the living and preserved material the biology specialist, acquainting one with general student as well as to theories of biology as they pertain to animal life fundamental facts and tions and two three-hour laboratory periods per who lectures or recitaFall (4)
1B General
A continuation of 1 A . The structure, relationships, Hood and Hoard of the chordates. Two lectures and relationships, and elassification per week. Prerequisite: Zoology 1A two three-hour laboratory periods Spring (4)

## 20 Anatomy and Physiology

Crouch
An elementary course in human anatomy and physiology. Prerequisite High school biology, or Biol. Science 10A-10B or Zoology 1A-1B. Lecture three hours per week.
Fall and Spring (8) (Offered in 1938-39 and alternate years.)

## UPPER DIVISION COURSES

100 Embryology
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 1938-39 and alternate 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 (1) (Offered in 1937-38 and alternate years.)
112 Marine Zoology
Johnson
Designed to acquaint the student with the many interesting animals found along the beaches in the San Diego region. Identification, distribution, associations, structure, and to some extent, behavior and life histories of the organisms. Frequent collecting trips to the beach and study of the living animals in the laboratory. Prerequisite: A laboratory course in elementary biology or zoology.
Fall (3) (Offered in 1937-38 and alternate years)
113 A Taxonomy and Natural History of the Mammals Crouch Frequent field trips and the identification of preserved material. Three hours of laboratory per week.
Spring (1)
113B Ornithology
Crouch
The study and identification of birds, especially those of the Pacific coast and the San Diego region. One hour of lecture and six hours per week f laboratory or field excursions. Prerequisite: Zoology 1B, or Biol. Science 10 B .
Spring (3) (Offered in 1938-39 and alternate 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 1937-38 and alternate years)
114A Genetics
Harwood
Ceneral intredurse designed to acquaint the student with the General introductory course designed oriation. Special attention given fundamental principles of heres of inheritance. Two lectures per week.
Fall (2)

The development of theories of evolution. Two lectures or discussion periods per week.
Spring (2) (Offered in 1938-39 and alternate years)
121 Entomology
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 1938-39 and alternate years)

## 130 Readings in Biology

Harwood
Readings from a suggested bibliography with informal class discussion of topies. Subjects discussed will include history of biology, biological principles, ecology, economic zoology, zoogeography, breeding habits, animal behavior.
Spring (2) (Offered in 1937-38 and alternate years)
199 Special Study
instructors of the Department (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 liberal arts major in chemistry and for the junior certificate: Chemistry $1 \mathrm{~A}-1 \mathrm{~B}$ with an average grade of C or better, Chemistry 7-8, Physics 2A-2B and $3 \mathrm{~A}-3 \mathrm{~B}$ or their equivalent, Mathematics 3A-3B 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-1C-1D and Mathematics $3 \mathrm{~A}-3 \mathrm{~B}-4 \mathrm{~A}$ 4 B in place of the courses listed above.

Liberal arts major (upper division) : A minimum of twenty-four upper division units in chemistry including Chemistry 105A, 110A-110B and $111 \mathrm{~A}-111 \mathrm{~B}$. The choice of a related minor and the organization of the department.

For requirements for liberal arts major in physical science, see pages
41,43 . 41, 43.

## LOWER DIVISION COURSES

1A-1B General Chemistry
Messner, Robinson The general principles and elements and their compounds. Taws of chemistry, and a description of the tory periods per week. The laboratory wores, one quiz and two laborasists of work in qualitative analysis work in the second semester conof high school mathematics analysis. Prerequisites: At least two years of high school mathematics. Recommended: High sehool chemistry and
physics.
Year course (5-5)

7-8 Organic Chemistry
Robinson
A general consideration of the carbon compounds (both aliphatic and A general constheir derivatives, their synthesis, constitution and proparomatic) and one laboratory erties, and the principles invo period per week first semester; one lecture and two labora
per week second
Year course (3-3)

## UPPER DIVISION COURSES

## 105A Quantitative Analysis

Messner
The principles of gravimetric and volumetric analysis. Discussions of the theory of quantitative analysis and practice in the standardization of reagents and analysis of samples. One lecture and two laboratory periods per week. Prerequisite: Chemistry 1A-1B.
Fall (3)
Messner
105B Advanced Quantitative Analysis
Advanced work in the theory and practice of volumetric, gravimetric and electro-analysis. One lecture and two laboratory periods per week. Prerequisite: Chemistry 105.
Spring (3)
Robinson
107-108 Organic Chemistry
An upper division course covering the same field as Chemistry $7-8$ but including some more advanced work. Two lectures and one laboratory period per week first semester; two lectures and two laboratory periods per week second semester. Prerequisite: Chemistry 1A-1B.
Year course (3-4)
110A-110B Physical Chemistry
Messner
Lectures and problems on theoretical principles of chemistry. Prerequisites. Physics 1A-1B or 2A-2B and Chemistry 105 which may be taken concurrently. With the approval of the instructor, advanced courses in physics may be substituted for Chemistry 105.
Year course (3-3)
111A-111B Physical Chemistry-Laboratory Robinson Physico-chemical problems and measurements. Two laboratory periods per week. Prerequisites: Credit or registration in Chemistry 110A-110B, Physics 1A-1B or 2A-2B, and calculus. With the consent or the 105 which advanced courses in physics may be substituted for Chemistry 100 which may be taken concurrently.
Year course (2-2)
112 Industrial Analysis
Robinson
A laboratory course including the analysis of fuels, petroleum products, A laboratory course including gas. Prerequisite: Chemistry 105 which may be taken concurrently.
Spring (2) (Offered in 1937-38 and alternate 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 other accessory food factors and their importance to the body. A brief discussion of the chemistry of plant life. Prerequisites: Credit or registration in Chemistry 110A-110B Fall (3) (Offered in 1937-38 and alternate years)
118 Colloid Chemistry
Messner
A lecture course covering the theoretical principles of colloid chemistry and the preparation, properties and practical applications of colloids Prerequisite: Chemistry 110A-110B
Fall (2) (Offered in 1937-38 and alternate 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 (1 to 5-1 to 5)
125 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 110A-110B
Fall (2) (Offered in 1938-39 and alternate years)

## 144 Industrial Chemistry

Robinson
Industrial stoichiometry, flow sheets, flow of fluids and unit processes. Lectures, problems, and reports. Prerequisites: Chemistry 1A-1B, Physics $1 \mathrm{~A}-1 \mathrm{~B}$ or $2 \mathrm{~A}-2 \mathrm{~B}$, and calculus.
Spring (3) (Offered in 1937-38 and in alternate years
199 Special Topics
Instructors of the Department
Supervised individual work in specialized branches of chemistry such as colloid chemistry, biochemistry, applications of the phase rule, etc Admission only by the consent of the instructor. Hours and credit to be arranged in each case. Only open to upper division students who have shown their ability to do A or B work in chemistry.
Fall and Spring (1-3)

## ECONOMICS

Lower division preparation for the liberal arts major in economies and for the junior certificate: Economics 1A-1B and at least one of the fol lowing: Political Science 1A-1B; History 4A-4B ; History 8A-8B ; Psychology 1 A and 1B or 4 A or 4 B ; Geography 1 and 2 ; Anthropology 50A50 B . Recommended: Sociology 50 ; Economics 14A-14B, 18A-18B.
Liberal arts major (upper division) in economics, required: Economic 100, 102, 140 and 199, with 6 units selected from the following: Economics 123, 131, 133, 135, and 171 . Electives: Seven upper division units in economies. Economic geography may be substituted for three elective
units in economics.

Commerce Candidates for a teaching credential in business education
should refer to the statement "Admion should refer to the statement "Admission to Upper Division Teacher
Training" on page 20 and to currient in business education special credential in Business Education on for the A.B. degree with (64)

Lower division preparation for the liberal arts major in commerce and Lower ( 6 units) 184 18B . Welich 1B 2 . Geography 1-2. Mathematics D and $G$, or 2 4 A-4B or 8A-8B or Political equivalents, an

Liberal arts major (upper division) in commerce, required: Economics. 121, 140, 199 and 16 units additional chosen in one of the following groups:
A. Accounting: Economics 160A-160B, 161, 163 and 4 units in electives in economics.
B. Banking and Finance: Economics 133, 134, 135, and 7 units in electives in economics.
Geography 141 may be used in the electives under A and B.

## LOWER DIVISION COURSES

1A-1B Principles of Economics

## Cameron

The basic principles of economics: utility, wealth, value, price; ecomomic prodution ; rent, interest, wages, a proft; and tarfs ; labor problems, socialism, taxation, tarifis; transpor further intenetc. Aims of the course. (1) to sive study of economic proble ; follow business pursuits a broad (3) to introduce future citizens to political and economic problems of our time. Lectures, discussions, quizzes, and collateral reading. No open to entering freshmen except by special arrangement
Year course (3-3)

## 2 Mathematics of Finance

Wright
Interest and annuities; amortization; sinking funds; valuation of bonds ; depreciation , mathematics of building and loan associations; mathematics of life insurance. Prerequisites: Two years of algebra in high school, or equivalents.

## Fall (3)

11 Economic History of the United tates A comprehensive survey of American economic development and of national legislation in the field of industry.
Spring (3)
14A-14B Accounting
A knowledge of bookkeeping not required and not advantageous. The balance sheet; profit and loss statement; various types of books of original entry; the opening, conducting, and closing of bolntions, and conkinds of businesses; organizations, reorganizations, dissolutions, and consolidations, etc., keeping in view the best modern accounting practice. Five hours lecture and laboratory.
Year course ( 3 or 4-8 or 4)
18A-18B Commercial Law ple cases The leading and fundamental principles of business law. Simple cases showing the actual application of the principles to commercial and busi-5-42068
(65)
ness transactions, rather than the development of those principles. The subjects covered : contracts, sales, agency, partnerships, corporations, real property, negotiable instruments, insurance, and wills, with a brief study of evidence.
Year course (3-3)

## 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) (Offered in 1938-39 and alternate years)
102 Contemporary Theories of Social Control
A. G. Peterson

A study of principles, plans and movements for social and economic control including consideration of anarchism, individualism and liberalism, collectivism, socialism, communism, fascism, and the New Deal.
Spring (3) (Offered in 1937-38 and alternate years)

## 121 Business Administration

A. G. Peterson

Problems of business administration as an interrelated whole and as an indication of lines of study which may lead to the solution of those problems. A discussion of the problems of the business administrator with particular reference to the character of the problems involved and to the control policies and devices of the manager. Questions, problems, and case studies. Prerequisite: Economics 1A-1B.

## Fall (3)

## 123 Marketing

Our distributive organization and its functions, including the marketing of both agricultural and manufactured products, Prerequisite : Economics 1A-1B.
Spring (3) (Not offered in 1937-38)

## 125A Advertising

Functions, theory, principles and applications; selecting the right appeal ; surveys and analyses; studying markets; budgeting the appropriation; layouts, types, 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 1937-38)

## 125B Salesmanship

Salesmanship, the market basket of knowledge; the mechanics of the tion; analyzing a sale the human element in selling; meeting competiin consummating a sale; personce and methods of using this analysis modity; selling a specialty; personal attributes; selling an invisible commerchandise will be used in retail selling; the steps of a sale. Actual various crafts will illustrate correct Spring (2) (Not offered in $193 \%$ methods of selling.

Real estate in all its aspects: property rights, transfer of title, valuation, finance, selling, property management, taxation, insurance, city planning, and the like, with special emphasis upon problems as they exist in San Diego.
Spring (3)
131 Public Finance
Principles and practice of taxation, public expenditures, and financial Pministration. Prerequisite: Economics 1A-1B.
Spring (3) (Not offered in 1937-38)
133 Corporation Finance

## Cameron

The corporate form of organization, instruments of long-time finance, methods of raising capital, efficient financial management, and the financing of reorganizations, and governmental control. Prerequisite: Economics 1A-1B.
Fall (3) Investment principles and practices with emphasis upon problems of the small inestres inch as tests of a good investment, sources of informaind sale, invest-


## 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. Prerequisite: Economics 1A-1B.

## Fall (s)

Deputy
140 Statistical Methods The nature and uses of statistical method in the social sciences. Practice in the tabular and graphical presentation of data; dispersion, and tion of averages, ratios and coefficients, measure made, utilizing data measures of relationship. Research studies are made, obtained from typical economic and commercial sarometers. Opporindex numbers, time series, and business cycles and barometers and other tunity to obtain practice in the use of calculating and aids to computation. Prerequisite: Matha ents. Only two wits of credit are of students who previously have completed Education 140.

## Spring (3)

160A-160B Advanced Accounting
Wright
Advanced Accounting An intensive study of the corporation, ince sheet; depreciation; factory and accounting an endeavor is made to accounting, etc. Under practicts of books to meet the needs of different design, construct, and operate sets of Six hours lecture and laboratory. conditions and kinds of business
Prerequisite: Economics 14A-14B
Year course (s-3) (Offered in 1938-s9 and in alternate years)

## 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: Economies 14A-14B.
Spring (3) (Offered in 1937-38)
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)
163 Machine Accounting
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 to a thorough study of machine installations, the course requires considerable practice in the operation of standard accounting machinery. Prerequisite: Economics 14A-14B.
Fall (3) (Offered in 1937-88)
164 Income Tax Procedure
Wright
A consideration of the problems arising from the Federal income tax. desires to determine the represents as well as from the accountion of the law to the interests he of accounting procedure is ne accounting point of view. No knowledge Fall (2)

165 Auditing
Wright
The fundamental principles of accepted procedures related types of accounting engagements.
Year Course (2-2) (Offered in 1938 ents.

## 171 Transportation

The development of railway transportation; railroad financing; rates and rate making; governmental regulation; government operation of rail current problems war; recent development of motor and air transportation Spring (3) (Offered in 1938-39 and alternies 1A-1B.

## 199 Special Study

Designed exclusively for seniors
A. G. Peterson

Spring (2)
Economic Geography
(See Geography)

## Social Science

## LOWER DIVISION COURSES

## 1 Contemporary Political, Social and Economic Problems

A. G. Peterson

An analysis of major problems of the present day with reference to the and and to sound prerequisite: Sophomore standing
Fall and Spring (3)
3 Backgrounds of Social Institutions

## Rogers

An introductory survey of sociological viewpoints. Origin and spread of civilization. Economic backgrounds of society. Emergence and evolution of social institutions: the family, the state, the church. The growth of the idea of progress and the development of scientific thought. Fall (3)

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

# Social Psychology <br> (See Psychology) 

## Merchandising

24A Elements of Merchandising
Watenpaugh
A basic course covering the field of merchandising through a survey of the various methods by which products reach the retailer. A study of the market structure, fundamental principles and functions of marketing. Fall (3)

## Watenpaugh

24B Principles of Merchandising
rowth, and
A basic course covering retail institutions, their origin, growth, and trends. Types of institutions and functions performed by each. Analysis of difficulties confronting the retailer and the and intelligent use of place in retailing Ways and means of progress and intelligent use of resources available to retailers
Spring (3)
25 Salesmanship theory of salesmanship; methods of approach and

## Watenpaugh

 The mechanics and theory of salesmanss; meeting objections; inducing demonstration; selling ideas and services; meeting onection with the sale. decisions; closing sales; the personal factor in connstrate correct methods of sellingFall (2)

## 26 Advertising

Watenpaugh
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 functions; events; institutional copy; the advertising agency and its functions; sales and collection letters.
Spring (2)
27 Applied Salesmanship
Watenpaugh
Coordination of selling and theories of sales efficiency; store practice and theories of store operation. Application of theory to practice. Either supervised work in cooperating stores or in general selling. Discussions of problems arising from the student's work. Prerequisites: Merchandising 25 and 24 A or 24 B or 26 .
Fall (3)
28 Store Management

## Watenpaugh

The field of retailing from the point of view of the store manager, including location, organization, personnel, service features. Sales progoods, delivery goods, delivery. Investigations of the problems which confront the manFall (3)
Fall (3)

## Secretarial Training

A Business Mathematics
Wright
A practical course in the mathematics of business. A thorough study
of interest, compound interest, discount rates, ete.
Fall (1) (No degree credits in Liberal Arts curricula.)

## 1A-1B Typewriting

method. The acquisition thorough command of a keyboard by the touch written. The acquisition of speed and the artistic arrangement of typeand billing: specification special reference to commercial forms tabulation transcription, mimeographing, forms, and preparation of manuscripts; practice.
Year course (3-s) Conly three units will be counted in satisfying the
A. B. degree requirements in A. B. degree requirements in Liberal Arts curricula.)

2A Typewriting
A short course designed for those not wishing Amsden
but desiring a knowledge of the use of wishing to enter the business office tory practice.
Spring (2)

## 3A Office Methods and Appliances <br> Practice and principles Appliances

arrangement, and operation. Study and ugement, including organization, such as the multigraph, mimeograph, and use of modern office appliances keeping machines. Prerequisite: Secretaring devices, calculating and bookalent.
Spring (3)

5A-5B Stenography
Amsden
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)
Amsden

## 6A-6B Advanced Stenography

Development of speed in writing and transcription. Advanced dictation on letter forms, legal forms, speeches, and literary and technical material. Year course (3-3)
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

LOWER DIVISION COURSES
17 Music in the Elementary School Springston Main objectives of music teaching in the public elementary schools. Study of the child voice. Organization of song material by gradion, music cedure in presenting rote songs, ear traing the reading, and part singing. Conducting. Not open to studenc taking the elemetary credential, nor to freshmen. Prerequisite: Music 1A, or the equivalent.
Fall and Spring (2)
19 Art in the Elementary School
Patterson
Discussion the principles of art and their place in the Discussion of the elements and principles of art and school child. Lectures art expression and appreciation of the sork and opportunity given for illustrated with examples of children's work and opporlems. Not open experience with mediums used iny credential. Pr sequisite: Art 6A.
to students taking t
UPPER DIVISION COURSES
Ault
106 Philosophy of Education
The fundamental biological, psychological, philosophical, social principles underlying modern education, in connection with the deman of modern society in a comxplex social, economic, and scientifis society in a comxplex social, ecorg philosophy for the educative process. the formulation of a working studies of education and its procedures. Open only to students with senior standing.
Spring (3)
Ault
107 History of Education Greek, Roman and early Christian eduA brief study of early Hebrew, Greek, Roman and early ; of the transication; of the changes brought about by the Renthe educational philosotion to modern secular education; brief reviews of the of development of phies of the great reformers; a conclu
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)

## 108 Educational Measurements

Deputy
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 given in handling 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)
109 Educational Administration and Supervision
A survey of the systems of organization, classification, and promotion of pupils, and such problems as finance, the teaching staff, building standards, extra-curricular activities, etc. Prerequisites: Education 125, 108, or equivalents.

## Summer (2)

110 Educational Organization and Supervision
Types of supervision and methods of evaluating and improving teaching. Prerequisites: Education 125, 108, or equivalents.
Summer (2)
111 English in the Junior High School
Objectives of literature and language teaching in the junior high school; criteria for selection of material; technique of classroom procedure; 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, organization, and methods of teaching mathematics in a junior high school curriculum. Specific problems: the application of arithmetic in current social and business life, intuitive geometry, graphic representation, the phase of algebra suitable to the junior high school pupil, preparation for senior high school mathematics. Prerequisites: Psychology 1A and a passing grade in the Fundamentals Test.
Students may take this course in connection with Mathematics 199 by arrangements with the instructor.
(2)

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 junior high school pupil, through the medium of such social studies in the junior high ing a genuine as history, geography, and civics. Methods of developobservation and reading disussed and civic problems through observation and reading, discussed and illustrated. Special stress on
valuating historical and geographical material for educative purposes on this level. Prerequisites: Six units of geography and six units of history. Fall and Spring (2)

## 116 Practice Teaching

## Ault and Supervisors

 Systematic observation, participation and teaching under supervision in the campus training school, the Euclid affiliated city elementary school the Woodrow Wilson Junior High School, and the senior high school of the city of San Diego and vicinity.The general plan is for elementary school credential candidates to take in addition to the education practicums, an afternoon of teaching daily the campus training school or two and one-half hours daily ind secondary school throughout one semester; junior high school and specialize to the school credential candidates will be guided by their adviser relative to the distribution of their practice teaching. For those seeking a combise of credentiols, the requirements for each teaching level must be satis Further information this requirement should be requested of Further information regarding this requient first registers for practice the Dean
Thirty clock hours of practice teaching will usually carry one unit of Thirty clock hours of practice the amount of credit allowed will depend credit in the course, but the final amount of cred done by the student. upon the character and quality of the teaching donese who furnish eviPractice teaching requirements may be reduce
dence of successful public school experience.
dence of successful public school experience
The maximum amount of credit allowed for this course is twelve units The universities usully creduce the amount of practice teaching credi they will allow institutions sho to four units. Students phas reduction with an equal number of acceptable units in other courses.
No grade below a C is acceptable for credit in this course. Prerequisites: Completion of 75 units of college work: admond and in the division teacher training : a C average in all college whork in psychology. work of the preceding semester; three units of work this course in the No credit will be given unless th
119 Art in the Junior High School
Patterson
Art curriculum planning for junior high schools and studio problems and discussion. Prerequisite: Education 19.
Spring (9) (Offered in 1938-39 and alternate years)
120 General Science in the Junior High School Baird, Johnson The content, methods, field work, text books, laboratory work, equipment, and referent, methods, field work, and reference reading for teaching genera science including one year-course Prerequisites: Eighteen units of college science inclug equivalent, and high in a college biological scien
school or college chemistry.
Spring (2) (Offered in 1938-39 and alternate years)
121 Principles of Secondary Education The principles of science that should underlie the organization, administration and curriculum of the secondary school. Prevailing patterns aministration and curricula tendencies in the direction of future patterns of high school education ; ten
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 Phillips 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) (Offered in 1937-38 and alternate years)
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 work in curricular materials, visual aids, type lessons, and experimental studies of teaching methods.

Required of candidates for junior high and special credentials in art and physical education. Candidates for a combination of the elementary and junior high school credentials must register for the education practicum instead of this course.
Fall (3)
127 Music in the Secondary School
L. D. Smith

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 1937-38 and alternate years)

## 130 Educational Psychology

## Deputy

Man's 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 learn ing, remembering and forgetting, fatigue in learning, and the transfer of training. Prerequisite: Psychology 1A
Spring (3)
137 Comparative Education
School systems of England, France, Germany, and Denmark; traits of peoples; origin and development traditional influences; characteristic procedures; governmental and private support; schools and educationa A knowledge of History of Education desirabl; training of teachers Fall (3) (Not offered in 1937-38)

140 Elementary Educational Statistics
An introductory study of measures of cent
ity, and of relationship which are commonly used in tendency, of variability, and work. Laboratory training in statistical method and opportunity to obtain practice in the use of calculating machines and other aids to com-
putation. Data for statistical research taken from typical school situaions. Only 2 units allowed students who have taken Economics 140. Fall (3)
142 Educational Sociology Hepner A consideration of school practices in light of social needs; interrelation ships of schools and other social agencies; and trends indidual study activities among community organizations. Selected of public and priprojects to make personal contacts with various types movements. Preote social institutions and with some current social movements. Pre requisite: Upper division standing.
Spring (3)
45 Organization and Administration of Music Education
L. D. Smith

Theory of the general principles of music administration; correlation of usic with tive work.
Fall (2) (Not offered in 1937-38)
147 Education Practicum-Lower Levels (See description below)

## Fall (12) and Spring (18)

Barbour, Hammack, Nordahl, Patterson, Schwob, Springston, Stone
148 Education Practicum-Upper Levels (See description below.) Bacon, Barbour, Corbett, Patterson, Post, Schwob, Springston, Stone.
Prerequisite: Education 147.
Fall and Spring (12)

## The Education Practicums

The educational practicums are intended to integrate content material, The educational practicums are intended to ine found in the modern educational principles and theory with pract are held daily by each of progressive elementary school. Conferences are for a small group of the training school supervisors who is responsible practicum meet as 10-15 students. All the students enrolled in each or one of the special a group with the principal of the training school or one three times per subject supervisors of art, music and physical education then and reading week. Lectures, discussions and reports of observa order to see the assignments occupy the time of these meetings. In order school practices, relationship of the theory under discussion and actuare in observation the student is required to spend two hours per week week in parunder the direction of the supervisor and five hours direction of the ticipating in the activities of the pupil-group underction into teaching principal. This participation takes the form or inses and techniques. concurrently with the mastery of fundamental proces is not for content A considerable amount of the credit in the practicums is material ordinarily found in education courses but is evaluating credits title because the content of each practicum is distributed as follows: educaing, 3 methods, 5 units ; educational principles and psychology of 2 units; units; 5 units; educational pricits and physical education, 2 units practice teaching, 2 units

A group of courses taken at this or another college will not be recognized as a substitute for the practicums. Credit for such courses may be submitted to the Dean of Education to ascertain if it will reduce in any way the total requirements.
The student should register for his first practicum course at the beginning of his junior year or as soon thereafter as he can qualify. Assignments to supervisor-groups and to participation will be made by the principal of the training school at the time of registration. Not more than 30 fulltime participants in the lower level nor more than 45 full-time participants in the upper level may be registered in any one semester.

## 160 Commercial Education

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)
161 Junior Business Training
Wright
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
Methods and content of courses in stenography. Prerequisites: Secretarial Training 5A-5B, 6A.
Fall (2)
164 Bookkeeping
Various types of bookkeeping method, with considerable study of content.
Fall (2) Fall (2)

165 Typewriting
Methods in typewriting and office procedure. Prerequisite: Secretarial
Training 1A. Spring (2)

170 Administration of a Visual Instruction Program Evans The service program of a visual instruction center is studied as a collecttrative materials ; angang and distributing center for classroom illusand correct use of visual training and advisory bureau in the technique for making current and correct aids; a photographic production laboratory a testing divisiont and local illustrative materials for the curriculum; 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 stitufilm productions and for instructing teachers and students in the school 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. 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. Ad
sent of the staff. Credit and hours to be arranged.
Fall and Spring (1-3)

## English

Lower division preparation for the liberal arts major in English and for the junior certificate: English 1B-2 or 3 and six units from 52 A , $52 \mathrm{~B}, 56 \mathrm{~A}, 56 \mathrm{~B}$.
Liberal arts major (upper division) : 24 units in upper division English to be selected and arranged under supervision of the department. Not nore than four units may be in composition. A reading knowledge of German or French.

## LOWER DIVISION COURSES

Adams, Trail
1A Freshman English
Adams, and usage,
The elements of composition, including drill in grammar and usation xercises in to the principles of effective writing.
Fall and Spring (1)
1B Freshman English Adams, Dickhaut, Keeney, Trail, F. D. Walker Reading and composition. Reading chosen from essay material of Engand and America since 1850. Composition stressing exposition. Preequisite: Rubject A test or record from another college).
Fall and Spring (3)
F. D. Walker

2 Sophomore English
Reading and composition. Reading from field of biography and memirs. Composition stressing personal narrative and informal essay. Pre requisite: English 1B.
Fall and Spring (3)
Adams, Dickhaut
3 Sophomore English Sophomore English
Reading and composition. Reading from contemporary periodical literature. Composition stressing article writing of varied types. Prerequisite: English 1B.
Fall and Spring (3)
Outcalt
4A-4B Great Books
ources or
A survey of books and bodies of literature that are significant source the expressions of European and American culture. These lher literature Hebrew Bible, Greek epic and tragedy, Norse eddas, and ont masterpieces of religious and communal character; and highly significant entury.
in poetry and prose by great authors dow
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
The most important masterpieces of English literature from the AngloSaxon period through the Victorian age.
Year course (3-3)

## UPPER DIVISION COURSES

## 101 Modern Prose Fiction

Dickhaut
Recent and contemporary fiction in novel and short story, including British, American, and a brief selection from the Continental.
Spring (3)
106A, 106B Advanced Composition
Dickhaut
A laboratory course in modern prose writing. Semester I: Artistic narrative, with description. The short story. Semester II: The essay, the magazine article, criticism. Outside readings. Prerequisite: One year college composition. Either semester may be taken first.
Fall, Spring (2, 2).
107A, 107B Advanced Composition
Adams
These courses 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. Prerequisite: Same as for 106A, 106B. Either semester may be taken first.
Fall, Spring (3-2) (Not offered in 1937-38.)
110 Recreational Reading
An advanced course similar in character to English 10.
Fall and Spring (1)
116 Elizabethan Literature
An introduction to the principal Adams
Jonson and Bacon. Approximal writers from Wyatt and More to Ben Jonson and Bacon. Approximately equal attention is given to the nondramatic poetry, the prose, and the drama of the period.
Fall (8) (Offered in 1938-39 and alternate years.)

## 117 Shakespeare

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

118 Makers of Eighteenth Century Literature
Keeney
Pope, Defoe, Swift, Johnson, Goldsmith, Fielding, and their contemporaries as interpreters and teachers of their age.
Spring (3)
Adams
119 The Romantic Poets
rdsworth, A study of early nineteenth century poetry; the work of Wordsworth, Coleridge, Byron, Shelley, and Keats, in relation to the thought of the revolutionary period.

## Spring (3)

F. D. Walker

121 Poetry of the Victorian Period F. Walker A study of Tennyson and Browning and their contemporaries and successors, relating English poetry to nineteenth century life and thought. Fall (3) (Offered in 1937-38 and alternate years.)
126 Nineteenth Century British Prose

## Dickhaut

Readings and discussions of Victorian prose masters, emphasizing Landor, Carlyle, Macaulay, Mill, Thackeray, Newman, Ruskin, Arnold, Huxley, and Pater.
Fall (3) (Not offered in 1937-38)
Dickhaut
127 Modern British Prose
A continuation of Nineteenth Century British Prose, including the prefaces of Shaw Galsworthy, Inge, Stevenson, Tomlinson, Wells, and others.
Spring (3)
Outcalt
130A American Literature with its backgrounds from the binning A survey of American literature with its backgrounds from the beg, Poe, of the 19th century to about 1890. Cooper, Melville, Hawt considered Emerson, Thoreau, Whitman, Mark Twain and others ans reports. and related to national development. Lectures, discussions and report Fall (3)
F. D. Walker

130B American Literature
F. D. Walker

A survey of American literature with its backgrounds, covering thent survey of American literature time. Extensive reading in recent period from about 1890 to the present time. and contem
143 The Development of the English Novel F. D. Walker History of the English novel from the beginnings to Hardy. Extensive eading of no
Pall (3) (Offered in 1938-39 and alternate years)

151 Medieval Literature
Keeney
Medieval Literature - especially the verse romances and the poetry of the four
Pall (3)

## Adams

160 Milton and Dryden Studies in poe
and the social life of the age.
Fall (8) (Offered in 1937-38 and alternate years)
(79)

## 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 opportunity of assembling facts quickly to meet such questions as any audience situation might demand
Spring (3)
1C Oral Interpretation
The oral interpretation of longer literary selections, both in poetry and prose; a fundamentals course designed for the beginning students in drama as well as those majoring or minoring in English literature. Fall (3)

## D Advanced Interpretation

Emphasis placed on stage poise and grace with adequate attention give to variations in the presentation of literary selections. Much opportunity Class limited for individual and group creative work. No prerequisite Class limited
Spring (8)
20 Corrective Speech
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 participa tion, they acquire an understanding of certs in which, through particip 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 1937-38 and alternate years)
55C-55D Dramatic Expression
A course designed to help fir
develop their own to help first and second year students realize and tion of thought, voice and for expressing character and life. Coordina sonation, and acting, and body, acquired through interpretation, imperdrama. History acting of contemporary situations, ereative 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 1938-39 and alternate years)
UPPER DIVISION COURSES
101B Argumentation and Debate
101B Argumentation and Debate
Obtaining and organizing of evidence and the construction and use of Obtaining and organizing of evidence and cone issues; the presentation of formal and informal debates. Attention to intramural and intercollegiate debating.
No credit for students having taken 1B previous to 1934-1935. 0.3 Spring (3)
155A-155B Advanced Dramatic Expression in different fields as For upper division students training for leadership in different fields as well as drama. More advanced forms of dramate and stagecraft develcreative abilities in interpretation, writing, acting, anded through indioped in relation to various subjects and activites original vidual research projects, group discussion and participation. work encouraged. Prerequisite: A fundamental drama cors)
Year course (3-3) (Offered in 1937-38 and alternate 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, organiation, creation, direction and presentation of class room, recreational and other forms of performances. Practical participation and demon stration. A course designed for students majoring in other subjects as well as the theater arts.
ear (3-3) (Offered in 1938-39 and alternate years)

## Journalism

(See page 91.)

## Foreign Languages

work in Romance languages, students As a background for advanced work in Romance possible of the folare advised to include in their electives as 121A, 121B, 145A, 145 B , wing courses: Geography 118, $4 \mathrm{~B}, 52 \mathrm{~A}, 52 \mathrm{~B}, 101,116,117,118$ Aesthetics 50 or 150 ; En $119,121,126,143,160$.

## French

LOWER DIVISION COURSES
Lower division preparation for the liberal arts major in French: French Spanish A-B; History 4A-4B. A-B-C-D ; either German A-B or Spanish A-B, units of upper division work, Liberal arts major in French: Twenty-four of which at least eighteen must be in French, in consultation with mum of six may be in related subjects, arranged in in upper division the chairman of
major courses.
6-42068
(81)

A-B Elementary
E. M. Brown, Phillips

Intensive study of French grammar and syntax; daily written worb discussed in class; class drill in conversational idiom and pronunciation; reading with oral discussion and résumés; dictation ; introduction to contemporary prose writers. Credit not given for French A unless followed by French B. Students who have had one year of French in high school should register for French A, but will receive only two units of credit. Those who have had two years of French in high school should register for French B, in which case they will receive four units of credit.
Year course (5-5)

## C-D Intermediate

E. M. Brown, L. P. Brown, Phillips

Reading and composition; study of standard prose as a basis for class work, collateral reading with résumés and written reports in Frencl; dictation. Individual conferences. Prerequisite: French B or three year of high school French, or its equivalent. Students with credit for four years of high school French, or its equivalent, should enter French D Year course (3-3)

## SC Scientific

L. P. Brown

Reading taken from the fields of chemistry, physics, medicine, zoology biology, etc. Outside readings of books and periodicals. Oral and writ Fall (2) (Offer E rench or equivalent.
Fall (2) (Offered in 1937-38 if registration warrants)

## UPPER DIVISION COURSES

101A-101B Conversation and Composition
E. M. Brown

Prerequisite: French D, or its equivalent, with grade of C
Year course (3-3) (Offered in 1938-39)
105A-105B. Modern French Drama
E. M. Brown

Plays of Musset, Scribe, E. M. Brow vieux, Maeterlinck, Rostand, Augier, Dumas fils, Pailleron, Brieux, Her matter and technique. Outside reading and reports. Prerequisite: French D, or its equival Outside reading and reports
Year course (8-8)

## $07 \mathrm{~A}-107 \mathrm{~B}$ Eighteenth Century Literature

L. P. Brown

The philosophical ideas of the century as contained in the works of Montesquien, Voltaire, and Rousseau. The Encyclopedistes. PrerequiFite: French D, or its equivalent, with a grade of C.
Year course (3-3) (Offered in 1940-41)
E. M. Brown

## 110A-110B Modern French Novel <br> The French novel from Vict Novel

authors as: Hugo, Dumas, Hugo to the present day, including such France, Bourget, Bumas, Stendhal, Balzac, Flaubert, Loti, Anatole Marcel Proust, Bordeaux, Bazin, Barres, Romain Rolland, A. Gide, Prerequisite: French others. Class and outside reading and reports. Prerequisite: French D, or its equivalent, with grade of C.
Year course (3-3) (Offered in 1939-40)

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. Prerequisites: French D, or its equivalent, with a grade of C, and upper division standing.
Year course (3-3) (Offered in 1938-39)
199 Comprehensive Reading and Survey Course
The Staff
Designed to fill up the gaps in the reading done in courses. Class meeting once a week for guidance, reports, and quizzes. Required of all seniors majoring in French.
Spring (3)

## German

## LOWER DIVISION COURSES

A-B Elementary
H. K. Walker

Pronunciation, reading and grammar, with practice in simple conversation, narration reading and grammar, wral and written. Credit not given for, narration and description, both oral B. Students who have had for German A unless followed by German B. Sister for German A, but one year of German in high school should seg who have had two years will receive only two units of credit. of German in high school should register for German B, in which case they will receive four units of credit.
Year course (5-5)
H. K. Walker

C-D Intermediate
Reading a study of standard prose as basis for class work; with, collateral reading with witation. Prerequisite: German B or three texts read as a basis, dor its equivalent. Students with credit for four years high school German, or its equivalent, should enter German D.
Year course (3-3)

## Messner

SC-SD Scientific
sics, etc.;
Fall semester. Peadings in scientific reader on chemistry, physics, etc. occasional written sight rater Readings in special scientific or technical reading. Spring semester. nical works; weekly written reports requale of C or three years of high site: German SC-German B with a gradi a grade of C or four years of school German ; Germ
high school German
Year course

## Spanish

ower division preparation for the major in Spanish: Spanish A-B-C-D ; French A-B ; History 4A-4B.
Liberal arts major in Spanish. Twenty-four units of upper division work, which major in Spanish: Twenty-Sourish, and of which a maximum of six may be in eighteen must be in Spanish, ansultation with the chairman of the de in related subjects, arranged in consurat apper division major courses

## 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 idiom and pronunciation; reading with oral discussion and résumés; dictation; introduction to contemporary prose writers. Credit not given for Spanish A unless followed by Spanish B. Students who have had one year of Spanish in high school should register for Spanish A, but will receive only two units of credit. Those who have 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 (5-5)

## C-D Intermediate

## Phillips

Reading and composition; study of standard prose as basis for class work; collateral reading in prose and drama, with written reports in Spanish; dictation. Class work conducted mainly in Spanish. Individual conferences. 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 wish to go more wish to major in Romance languages and for those who week. go more slowly than is possible in a course meeting five times register for Spats who have had one year of Spanish in high school should by Spanish 2 .
Year course (3-3)

## 3-4 Intermediate

A continuation of Spanish 1-2. Reading of Spanish prose; composition: high school Sping in Spanish 4, with reports. Students with two years of with three years shoshould register for Spanish 3 or Spanish B. Those Year course thre should register for Spanish C.
ear course (3-3)

## UPPER DIVISION COURSES

Prerequisite : Spanish D, or its equivalent, with grade of C.
Year course $(3-3)$
102A-102B Introduction to Spanish Classics
L. P. Brown
and other novels of Roguery. classical literature. Lazarillo de Tormes Cien Mejores Poesias Castellanas ; ections from Don Quixote, and the Lope de Vega, Calderon, Alarcon; one drama each from the works of reports. Prerequisite: A grade of and Moreto; collateral reading and the instructor.
Year course (3-3) (Offered in 1938-39)

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 1940-41)
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 $\mathbf{C}$ in Spanish D or permission from the instructor.
Year course ( $3-3$ ) (Offered in 1939-40)
110A-110B Novel and Short Story in Spain P. Brown
The development of the novel and short story in Spain from 1830 to 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 $(3-3)$
The Staff
199 Comprehensive Reading and Survey Course The Staff Designed to fill up the gaps in the reading done in courses. Class meeting once a week for guidance, reports, and quizzes. Required of all seniors majoring in Spanish.
Spring (3)

## General Language

## LOWER DIVISION COURSES

A Latin and Greek Word Derivation
L. P. Brown

A study of Latin and general and elementary course in philology. A stady of the English Greek roots of most frequent occurrence in Engisi,
words deri
Spring (2)

## GEOGRAPHY

Lower division preparation for the liberal arts major in geography and for the junion mended: A reading knowledge of French or German
Liberal arts division) : Twenty-four units of upper division work in major (upper aivits in units in related subjects geography or 18 units in geography airman of the department. jects arranged in consultation with the chairman

## LOWER DIVISION COURSES

1 Introduction to Geography; Elements
The fundamental principles of geography, the distribution of life upon the fundamental principles of geography, the apon the activities of man. the earth, and the effects of environment upon the activith location in Climate, land forms, bodies of water, natural resoution 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: Georgraphy 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.
Spring (3)
12 Geography of California Storm
The main physiographic regions of California and the cultural landscapes developed by the successive cultural groups. Prerequisite: Geog raphy 1.
Spring (2)
13 Regions: Advanced
Clark
Special regions selected from Africa, Australia, Oceania, and Polar Areas. Prerequisites: Geography 1 and 2.
Fall (2)

## UPPER DIVISION COURSES

116 Geography of South America
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

The physical environment of each reactions to physical environme in the nations of the social rens Importance of thesical environment in their political and social reanned so to familiarize the countries in manufactures. This course is plat he can read current the student with modern European countries that le Prerequisite: Georiodical literature with understanding and interest. Pr requisite: Geography 1.
Fall (3)
Fall (3)
118 Geography of the Mediterranean Area
A treatment of Southern Europe, Western Asia, and Northern Africa as a unit and a comparison of the land forms, climates, types of native vege tation, cultivated crons, industrial status, and present world position also the effect of crops, industrial status, and present worid Prerequisite: Geography 1.
Spring (3)
121 Geography of North America

## The natural regions America

The natural regions of North America, their formation and economic and 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. Pre( Open only to liberal arts requisites: Geogra
Fall (2) (Offered in 1937-38 and alternate years)
141 Economic Geography 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)

## GEOLOGY

Department requirement in Geology for liberal arts major in Physical Science includes in addition to Geology 1A-1B, the completion of: Chemistry $1 \mathrm{~A}-1 \mathrm{~B}$, Mathetics 3 A . Physies $1 \mathrm{~A}-1 \mathrm{~B}-1 \mathrm{C}-1 \mathrm{D}$ or $2 \mathrm{~A}-2 \mathrm{~B}$; 3A-3B
Students preparing for advanced work in Geology may substitute Industrial Arts 21 for Mathematics 3A.
French or German, Surveying 1A-1B and Geology 21A-21B are recommended. The composition and distribution of earth materials, and their modification threugh and one three-hour laboratory period weekly with related field study during the semester
Fall (4)

## Brooks

1B Historical
history of the earth as theories of earth origin, and the evolutionary history of the geologic traced through rock and fossil records. Consideration hour laboratory history of selected regions. Three leetures and one the enfere during periods weekly, with arrangement for field study and conference during the semester.
Spring (4)

## Brooks

1C Physiography A study of the surface features of the earth with classifica fundamenvariety of land forms according to their cause and from local conditions tal meaning of scenery, with frequent illustration from Two lectures and and from the college collection of topographic may
one discussion hour weekly. Open to all students.
Spring (3)
21A-21B Mineralogy blowpipe and Study of the common minerals and rocks. Use of the determination. simple chemical reagents but with emphasis upon sight determis.
Year course : Geol
(87)

100 Physical Geology
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 (3)

## 01 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 collections. 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 liberal arts major in history and for the junior certificate: History $4 \mathrm{~A}-4 \mathrm{~B}$, or $8 \mathrm{~A}-8 \mathrm{~B}$, and either Political Science $1 \mathrm{~A}-1 \mathrm{~B}$ or Economics $1 \mathrm{~A}-1 \mathrm{~B}$. 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 $4 \mathrm{~A}-4 \mathrm{~B}$.
Liberal arts 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 199.

## LOWER DIVISION COURSES

## 4A-4B History of Modern Europe <br> Lesley <br> Development of European society and institutions from about 1500 A.D. Year course (3-s)

## 8A-8B History of the Americas

Nasatir
A general survey of the history of the western hemisphere from the discovery to the present time. Emphasis on the process of planting European civilization in the new world, the internation planst for the continents, the wars for independence, the dernational contest for thean republics, and their relations with each development of the American world. Based on H. E. Bolton's "Syllabus of the History of the Ameri-
cas."
Year course (8-s)

## UPPER DIVISION COURSES

111A-111B Ancient History
Semester I: Social, economic, political, and cultural development of
the Greek states with the Greek states with emphasis upon the growth of democracy, attempts
at federal union, imperialism, and Hellenism. Semester II : Roman history from the earliest times to the beginning of the medieval period; discussions of Roman imperialism and the main constitutional, econome empire
Year course (3-3)
and the cultural development of the General survey of European politics and the cultural developent of medieMiddle Ages ; the antecedents of the universities, and intelal life and institutions, feudalism, the now now the lectual tendencies. The rise of towns, of new naries. Period covered: 500especially in the twelfth and thirteenth centuries. Period covered. 500 1500 A.D.
Year course (3-3) (Not offered in 1937-38)
145A-145B Europe Since 1789
Lesley
Sinction and liberalism; development of ation the unification of Germany nationalism, with special attention devoted to War and contemporary proband Italy; events leading up to the Worlict.
ems of Europe resulting from that conflict
Year course (3-3) (Not offered in 1937-38)
146A-146B Diplomatic History of Europe Lesley European diplomatic and colonial policies since 1648, with procedure. attention to the basic factors in international organ the period 1870-1914. During the secon
Year course (3-3)
Nasatir
151A-151B England Since the Norman Conquest in England since A survey of political and constitutional development in England, Tudor 1066, stressing the transition from medieval to modern England, The rise despotism, the struggle for self-government under institutions.
and development of
Nasatir
156A-156B History of British Expansion Nasatir A study of the growth, development, and break-up of the older ore, federaempire; the beginnings of the newer empire atter 17 ; tion, and imperial relations of the British Common British expansion in crown colony system; India under British rule; and Brates.
Africa and the Pacific; development of Briti
Year course (3-3) (Not offered in 1937-38)
161 South America Since Independence The republics of South America. Attention directed to the struggles for political stability, the of nationality in South America, the strugglesmercial relations with the exploitation of resources, diplomatic and South America. SurUnited States, and other international problems of social.
rey of present-
Spring (3)
Nasatir
163 Mexico and the Caribbean Countries 161. Special attention to the Same plan in general as outlined in History 161. Specia and to the recent rolations developments in Mexico.
Fall (3)

171A-171B The Rise of the American Nation
Semester I. English colonization in North America and the development of colonial institutions and politics. Semester II. The revolutionary movement and the Revolutionary War; the establishment of the government under the Constitution to the close of the War of 1812.
Year course (3-3) (Not offered in 1937-38)
173A-173B The Expansion of the United States
Leonard
The rise of Jacksonian Democracy; territorial expansion and the Mexican War; the slavery controversy; the Civil War, and reconstruction; the growth and progress of the United States to the World War.
Year course (3-3)

## 199 Special Course for Advanced Students

Required of all students with a history major in the liberal arts curriculum and to be attended during the senior year. Other students may be admitted with the permission of the instructor. Spring (2)

## Hygiene

1 Personal and Civic (Men)
C. E. Peterson

An informational course in personal and community hygiene. A study of social hygiene and the hygienic principles of living. Special speakers the offerings County Medical Association on subjects of vital interest enrich the offerings of this course. It is especially desirable that this course be taken in the freshman year.
Fall and Spring (2)

## 2 Personal and Civic (Women)

An informational course reviewing the principles underlying the improverelat and preservation of personal and civic health. Social hygiene in its elations to the practical problems of young women and prospective home makers. A detailed study of the laws and procedures in local civic health matters of particular interest to women procedures in local civen who are eandidates for junior standing or the degree in the liberal arts
curricula. curricula.
Fall and Spring (2)

## Industrial Arts

3A Mechanical Drawing
Walling
Use and
rojections,
developments, intersections instruments, lettering, orthographic projections, Required of all drafting work engineering students who have not had one full year of Spring (2) (Onl senior high school.
requirements)

## 21 Descriptive Geometry

problems of principles of descriptive geometry and their application to Arts 3A engineering. Lectures and drafting. Pro Fall (3) or equivalent, and sophomore standing.

22 Machine Drawing
Walling
Design and drawing of simple machine parts with emphasis upon the Design and drawing of simple mas. Lectures and drafting. Prerequisite: Industrial Arts 21.
Spring (3) (Only two units will be counted in satisfying the A.B. degree requirements)
23 Materials of Construction $\quad$ Structural properties and adaptability of materials used in engineering. Structural properties and adaptability of mat
Spring (2)
25 Elements of Electrical Engineering Mathematical and descriptive consideration of electretures. Prerequisite : with a general survey of the electrical industry. Lectures. Prere Mathematics 4A

## Spring (3)

## Walling

28 Elements of Heat Power Engineering Fundamental consideration of fuels, combustion, steam, internal comchimneys, steam engines, steam turbines and anics 3B, Physics 1B bustion engines. Lectures. Prerequisites: Mat mechanical or electrical. Fall (3)

## JOURNALISM

Lower division preparation in journalism for advanced work and the Lower division preparation in 4 , or 8B ; Psychology 1A-4A; English junior certificate: History 4A-4B, Training 2A; Political Science 1A-1B or composition, 4 units; Secretarial 1 A 51 B . Recommended: English LiteraEconomies $1 \mathrm{~A}-1 \mathrm{~B}$; Journalism $51 \mathrm{~A}-51 \mathrm{~B}$. Tocy 50 . Economics 18A-18B; , 6 its. Spech Arts 1A-1B; Sociology 50 ; Economics 18A-18B; Journalism 53A-53B.
For the profession of journalism introductory work in the fields of litera, profession of journalism introducte, economics, the arts, etc., is recommended.
The im in in journalism is to offer introductory The aim in the specialized courses in journalistic writing only after a training in the principles and practices writing of English has been laid. good foundation in correct speaking and writiting for student publications Practical training in news reporting a
and for the daily press is emphasized.

## LOWER DIVISION COURSES

Study of news sources and types; practice in news writing; newspaper organization; excursions and special lectures. mores wh ; excursions and spe 1A-1B, with
equivalents.
Year course (3-3)
53A-53B Applied Journalism aflerk throughout a full semester Credit earned for editorial or other staff work throughout al Del Sudoeste. Fall and Student publications such as

## UPPER DIVISION COURSES

100 News and Manuscript Editing
Practice in copy reading, proof reading, headline writing, and newspaper makeup. Study of editorial pages. Prerequisite: Journalism 51A-51B, or equivalent in composition.
Spring (3)
153A-153B Advanced Journalism Practice
Trail
Upper division work of the same type as that in $53 \mathrm{~A}-53 \mathrm{~B}$, but with
advanced requirements.
Fall and Spring (1 to 8-1 to 3)
Note,-Not more than six units in all will be given for journalism practice on student publications.

## LIBRARY SCIENCE

## 10 Use of the Library

J. P. Stone

The chief object is to give a working knowledge of some of the resources of the library which every teacher and student should understand-the important reference, the card catalog, periodical indexes, and the most tion of bibliographies. Thos, together with some instruction in the preparathe library's staphies. The course will be a requirement of those added to student to become a librarian. assistants, although it will not prepare the Fall ant to become a librarian.
Fall and Spring (1)

## MATHEMATICS

Lower division preparation for the liberal arts major in mathematics and for the junior certificate: Mathematics $3 \mathrm{~A}-3 \mathrm{~B}, 8,4 \mathrm{~A}-4 \mathrm{~B}$ with an average grade of C or better; Physics 1A-1B or $2 \mathrm{~A}-2 \mathrm{~B}$. Two or more of the A-B, German A-B A-B, German A-B, Industrial Arts 21, Surveying 1A.
Liberal arts major (upper division) : Twenty-four units including at least Chemistry $111 \mathrm{~A}-111 \mathrm{~B}$, mathematies, the others being selected from 105B, 112 and other 144 , Economics 140, Education 112, Physics 105Aconsultation with the chairman courses. The major should be arranged in grade of C or better.

## LOWER DIVISION COURSES

A, B, C, D, E, F, G, Introductory Mathematics

## Livingston

Instruction and supervised study in elementary
Livingston
who have taken these courses previously mantary mathematics. Students for the credit indicated. Courses A and may take them for review, others half years of algebra in high school. And $D$ are equivalent to one and oneStudents regur
course for credit; except that students whocted to complete at least one may withdraw without penalty before who begin with an extensive review A. Algebra to quadratic equations before the time of the mid-term reports. B. Plane geometry (2) equations (2).
C. Plane geometry (2).
. Plane trigonometry (2).
D. Algebra beyond quadrutics (2).
E. Solid geometry (2).
F. Spherical trigonometry (1).
G. Intermediate algebra (2).

Fall and Spring

## Livingston

## Elementary Analysis

A general course including topics for algebra, trigonometry, analytic soometry and calculus. Of interest to students not having tor for wo or three-year courses in analysis. Either 1A or 1 B may be taken credit, the prerequisite being advanced algebra in high sch redit, the prerequisite being advare made to many fields.
A. The differentiation and integration of algebraic, exponential and logrithmic functions, with selected topics in college algebra. Fall (3) (Not offered in 1937-38)
1B. The usual course in plane trigonometry, with selected topies in college algebra and analytic geometry.
Spring (3)
3A-3B Analytic Geometry and Calculus Livingston, Walling, C. E. Smith
Analytic geometry and differential calculus, together with an introduction to the integral calculus. Prerequisites: Trigonometry and advanced algebra in high school, with recommended grades, or permission of the department.
Year course $(3-3)$
Gleason, Livingston
4A-4B Intermediate Calculus infinite series and multiple integrals. Integration, partial differentiation, infinite series and muiplege algebra Prerequisite: Mathematics $3 \mathrm{~A}-3 \mathrm{~B}$. Solid geometry and college algebra are recommended.
Year course (3-3)

## Gleason

8 College Algebra
ry topics
Complex numbers, determinants, partial fractions and elementary algebra in theory of equations. Prerequisites: trigonometry and advanced algebra in high school, or equivalent.
Fall and Spring (2)

## Livingston, Gleason

14A Intermediate Calculus
Mathematics $3 \mathrm{~A}-3 \mathrm{~B}$.
Substantially the same as $4 \mathrm{~A}-4 \mathrm{~B}$. Prerequisite:
Solid geometry the same as 4A-4B.
Fall (5)
14B Advanced Calculus and Differential Equations Livingston, Gleason
Selected calculus with major attention to differen
(rom advanced calceltics 14 A or $4 \mathrm{~A}-4 \mathrm{~B}$.
Spring (5)

## UPPER DIVISION COURSES

105 College Geometry
An extension of the high school course in plane geometry, dealing largely with triangles and circles. Several new procedures, including inversion, are introduced. Prerequisites: Plane geometry and trigonometry. Fall (3)

106 Projective Geometry
Livingston
Concurrence of lines, collinearity of points and other properties of figures not altered by projections ; construction and study of ellipses, hyperbolas and parabolas by means of projections. Prerequisites: Plane geometry and trigonometry.
Spring (3) (Not offered in 1937-38)
111 Theory of Equations
Gleason
General solutions of algebraic equations; approximate numerical solutions; applications. Prerequisite: Mathematics $3 \mathrm{~A}-3 \mathrm{~B}$ and 8 .
Fall (3)
112 Analytic Geometry of Space
Gleason
Planes, lines, and quadric surfaces. Prerequisite: Mathematics 3A-3B and 8.
Spring (3)
118-Advanced Calculus
Livingston, Gleason
Selected topics in advanced calculus, exclusive of differential equations. Prerequisite: Mathematics $4 \mathrm{~A}-4 \mathrm{~B}$, or 4 A with 4 B taken concurrently. Spring (2)
119 Differential Equations
Livingston, Gleason
Ordinary differential equations of first and second order, with applications. Prerequisite: Mathematics 4 B or permission of instructor.
Spring (2)

## 140 Statistical Theory and Method

Statistical theory and method from the mathematical standpoint; applications in social and natural science. Prerequisite: Mathematics, $4 \mathrm{~A}-4 \mathrm{~B}$, Economies 1A-1B and senior standing.
Spring (3) (Not offered in 1937-38)

## 199A-199B Special Study

The Staff
An opportunity is offered for advanced work in algebra, geometry and calculus; or for study of vector analysis, theory of numbers, or history of mathematics. Adapted to the needs of individual students. Prerequisite: age grade of $B$, upper division courses in mathematics with an average grade of B , or senior standing.
Fall or Spring (1 to 3, each semester)

## Music

Candidates for a teaching credential in music should refer to the statement "Admission to Upper Division Teacher Training" on page 20 and to the other degree requirements on that page and those following. The
rriculum for the A.B. Degree with a Special Secondary credential in Music is on page 32 .
Lower division preparation for the liberal arts major in music and for ower division preparation for the 1 B er en elives in music in both lower and upper music; Aesthets (study of voice, division must include at least 6 units in Applied be in piano. See page 97 for regulations regarding Applied Music.
or minors in music, and other details not found here, consult the Music Education Adviser.
For courses in Appreciation and History of Music, see Aesthetics, page 52.

## LOWER DIVISION COURSES

## A Music Reading and Ear Training-Fundamentals of Music <br> L. D. Smith

Elementary music theory; scale construction; drill in music reading oth with syllables and with words; ear training, elementars used as pretion the elements and materials of music. Basic course used as pre; the elements and materials work and for the courses in music educa.in . Fundamentals of Music.
Fall and Spring (2)
L. D. Smith

1B Music Reading and Ear Training Tonal and rhythmic dictation, rhythmic writing, Sigining and Sight Singsyllables and with words. Text-Wedge: Ear
ing. Prerequisite: Music 1A, or the equivalent.
Spring (2)
L. D. Smith

1C-1D Advanced Music Reading and Ear Training sight singing in Tonal and rhythmic dictation, rhythmic writing, and sigaing and Sight two and three parts. Text-Wedge: Advanced Ear Iraini Singing. Prerequisite: Music 1A-1B.
Year course (2-2)
Beidleman
4A-4B Elementary Harmony Scale construction, intervals, chords, structure, modulation, the keyboard ious types of seventh chord. Especial attention iosition, and modulation. application of problems in harmonization, transposid at least one year of Prerequisites: Music 1A-1B, or the

Year course (3-3)

## Beidleman

19A-19B Instrumental Music, Elementary instruments, intended Class instruction for beginners on any orchestral insledge of the instruto develop a thorough theoretical and practical knowlary conducting is also ments, and some facility in playing them. Eion for orchestral directing. included. Especially intended as preparation for ors others for a low Some instruments will be available on rental.
Year course (1-1)

19C-19D* Instrumental Music, Advanced
A composite course, including:
(a) Instrumental Ensemble. The practice and performance of musie for small groups of string, wind, and brass instruments. Prerequisite: A fair amount of playing ability on some orchestral instrument.
(b) Instrumental Conducting. Theory and practice, with study of materials and methods. Not open to freshmen. Prerequisite: Music $1 \mathrm{~A}-1 \mathrm{~B} ; 19 \mathrm{~A}-19 \mathrm{~B}$, or the equivalent.
Year course. Units: (a) alone, $\frac{1}{2}$; (b), with (a), 1.

## 20* Vocal Music

L. D. Smith

A general course open to all students. 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. Choral conducting.
Fall and Spring (1)

## UPPER DIVISION COURSES

## 105A-105B Advanced Harmony

Beidleman
Completion of harmonic theory ; modulation, inharmonic tones, etc. Continuation of harmonic analysis, and keyboard harmony. Melody harmonizing. Prerequisite: Music 4A-4B.
Year course (3-3)

## 106A-106B Applied Harmony

Beidleman
Including counterpoint, form and analysis, keyboard harmony, creative work, and instrumentation-theory and practice of arranging music for instrumental combinations. Prerequisite: Music 105A-105B.
Year course (3-3)
119* Instrumental Music (See Music 19)
Vocal Music (See Music 20)
L. D. Smith

## Musical Organizations

(For music majors, eredit allowed only in conjunction with Applied Music study. See below.)
11 or 111* Treble Clef (Women's) Glee Club
L. D. Smith

Membership based on competitive try-outs.
(1-1) (Not more than 4 units may be counted tovard the A.B. degree)

## 12 or 112* Men's Glee Club

Membership based on competitive try-outs.
(1-1) (Not more than 4 units may be counted toward the A.B. degree)
13 or $113^{*}$ Orchestra
Beidleman
(1-1) (Not more than 4 units may be counted tovard the A.B. degree)
*These courses are recorded by using letters with the number in alphabetical sequence for each semester the course is pursued, as for example
Music $9 \mathrm{~A}, 9 \mathrm{~B}, 9 \mathrm{C}$, Music 9A, 9B, 9C, etc.

## Applied Music

Credit in Applied Music is available only for students enrolled in music lasses or organizations, and is subject to special permission and arrange anses or organizations, and is subject eginning work in Applied Music Crit. Creait is not les than one lesson per week, with Oredits: 1 unit per semester, for six hours of practice per week, towne Applied Music is taken under one hundred hours practice per semester Aproval and supervision of the outside private teachers, subject to music department of the college, which determise by examination.
ORCHESTRAL INSTRUMENTS: Music 16 or 116.* Credit for study of an orchestral instrument is granted only upon satisfactory completon of work for an equal length of time in Music 19, 119, Instrumental Music; and/or Orchestra or Band.
VOICE: Music 17 or 117.* Credit granted only upon satisfactory completion of work for an equal length of time in Music 20, 120, Vocal Music and/or Glee Club.
PIANO (or Organ): Music 18 or 118.* Prerequisite: The ability to play satisfactorily hymns and folk songs of the type found in the Golden Book of Favorite Songs.
Minimum attainment for completion of piano requirement in music curriculum is the ability to play at sight accompaniments such as are found in the Teachers Manuals of the Progressive Music Series, Books Three and Four.

## 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 soct. pomore standing, or consent of instruetor.

Fall (3)

## Steinmetz

5 B The Philosophy of Science to main modern The problems of philosophy systematized according to the main modern ivisions of science; the achievements and perplexities of scientiferequisite: he nature and place of values in a universe of facts. Prerequatural Philosophy 5A, except that sophomores planning to major in mate cience may be admitted without prerequisite.

Spring (3)

## UPPER DIVISION COURSES

Steinmetz
105B The Philosophy of Science division students will be held Same as Philosophy 5B, save t to more exacting contribution.
Spring (3)
*These cole by using letters with the number example,
*These courses are recorded by using letters wis pursued, as for example, betical sequence for ea

7-42068
(97)

120 Logic, and Philosophy of Mind Formal and functional logic; examination of reflective procedures in various fields; the logie argument and analysis of fallacies; review of some ssychological, experimentally supported explanations of thought. Prerequisites: Psychology 1A and Philosophy 5A.
Spring (3) (Offered in 1938-39 and alternate years)
130 Ethics
Steinmetz
The meaning of morality; motives and sources of belief, aspiration, ideal; psychological and sociological factors; representative ethical systems; relation of ethics to other axiological studies.
Spring (3) (Offered in 1937-38 and alternate 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 20 .

## 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. 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.

A-1B Freshman Activity
Year course, beginning either Fall or Spring $\left(\frac{1}{2}-\frac{1}{2}\right)$

## 1C-1D Sophomore Activity

Year course, beginning either Fall or Spring ( $\frac{1}{2}-\frac{1}{2}$ )
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.
2A-B-C.D Golf Spring ( $\frac{1}{2}$ )
3A-B-C-D Track Spring (3)
4A-B-C-D Baseball Spring (2)
5A-B-C-D Basketball Spring (1)
6A-B-C.D Tennis Fall and Spring ( $\frac{1}{2}$ )
7A-B-C-D Boxing Fall and Spring ( $\frac{1}{2}$ )
8A-B-C-D Wrestling Fall and Spring (1)
9A-B-C-D Fall Track Fall ( $\frac{1}{2}$ )
10A-B-C-D Swimming Spring ( $\frac{1}{2}$ )
11A-B-C-D Fencing Fall and Spring ( $\frac{1}{2}$ )
13A-B-C-D American football Fall (1)
$13 X-Y-Z \quad$ Spring Football Spring ( $\frac{1}{2}$ )
14A-B-C-D Gymnastics Spring (i)

The following courses fulfill degree requirements for physical education majors and meet state requirements for teaching credentials in physical education.

## C. R. Smith

30 Emergencies The accepted procedure in meeting the emergencies or any of the many schoolroom, play or athletic field, beach, moun for first aid. Special places where the physical director is called on forities attention given to the arrangement of the apparatus or minimized. that many of the most common accidents are prevented or minimized. Fall (1)

Schwob
53 Physical Education in the Elementary School forms the basis The content of the State program in physical education forms the basis of the course.
Required of men and women majoring in physical education. Not required of students taking the Educational Practicum. Prerequisite : Sophomore standing. Physical Education 37 must precede or accompany. Fall and Spring (?)

## C. E. Peterson

## 62A Gymnastic Activities

Theoretical and practical work in marching, free exercises, af presenting heavy apparatus. Emphasis on progression and method material The simplest and most explanatory terminology.
Fall (2)
C. E. Peterson

62B Gymnastic Activities Acquisition of proficiency in the performance of a great group of gymnastic stunts always popular in the gymnasium ander than the formal. Work of the recreational or self-interesting type rhef attention, although Tumbling, stunts, and pyramid-building given
games of low organization are also considere
Spring (2)
Gross
66 Playing Rules of Modern Games
major and minor sports.
Fall and Spring (1

## Calland

72 Principles of Physical Education Cultivation of a favorable attitude for a professional stuay relation of education. Ideals and aims of physical education stressed.
physical education to school and society stressed.
Fall (2)

## UPPER DIVISION COURSES

B. I. Stone

151 Health Education A course for teacher-training students which includes of school children; diseases, common physical defects, and health indices which may appear in the detection and control of communicable diseases whealth education program. the school; and the elements which underlie a health to children of different Methods of presenting personal and group health to ching, and ventilation. ages. Hygiene of th
Fall and Spring (2)

154 Organization and Administration of Physical Education Gross Material presented in Physical Education 54 plus general and specific problems that confront physical education departments in junior and senior high schools and in colleges. Prerequisite: Physical Education 72. Fall and Spring (3)

## 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)
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)
156B Sports Methods
Calland
Methods of teaching those sports most adaptable to intramural and interclass competition : golf, handball, soccer, speedball, and volley ball. Spring (2)
166 Technique of Officiating

## Gross

Review of material presented in Physical Education 66. 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, senior high and intramural 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 (1-2)

## 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, Spring (2) . Special attention given to scout and camperaft.
Spring (2)
180 Theory of Coaching Football
Calland
Methods of coaching football. Details of teaching individual funda-
mentals, offensive and defensive team play, mentals, offensive and defensive team play, strategy, and conditioning of Spring (2)

## PHYSICAL EDUCATION

Women's Department Candidates for a teaching credential in physical education should refer to the statement "Admission to Upper Division With Special Credential in Physien to the outline for the A.B. Degree With Special Credential in Physical Education on pages 35,36 .

## LOWER DIVISION COURSES

Two hours weekly of directed physical activity are required in freshman In order to meet this requirement, students takinh
 he curriculum leading to the A.B. $2 \mathrm{~B}, 37$, and 38 A . All other student ust take Physical Education 36A-36B, 37,

## re required to take Physical Education 36A-36B, 38A-38B.

## 36A Fundamental Skills <br> Bennett

Required of all freshmen.
Fall and Spring ( $\frac{1}{2}$ )
Bennett
6 B Folk Dancing
or
Schwob
36C Rhythmic Skills
Required of all freshmen.
Both courses required of women majoring in physical education
Fall and Spring ( $\frac{1}{2}$ )
7 Games and Rehwob, Shafer Prerequisite: Physical Education $36 \mathrm{~A}-36 \mathrm{~B}$.
Fall and Spring ( $\frac{1}{2}$ )

## 38A, 38B Sports and Dancing

Physical Education Staff
Sophomores may elect from the following :
Folk dancing
Beginning or advanced dancing
Tennis
Swimming
Golf
Badminton
Archery
Recreational sports
Seasonal sports
Prerequisites: Physical Education 36A, 36B.
Fall and Spring ( $\frac{1}{2}$ each)
Schwob

## Social Dancing

Beginning class for men and women
No eredit
Fall and Spring
(1)

School Schwob
The contical Education in the Elementary School education forms the baxis of the course.
majoring in physical education. Not required of students men and women解

Fall and Spring (2)

## SPORTS

1. Women 1. Women not majoring in physical education may earn permission of the credit in Physical Edu
department director
2. The Individual Sports swimming, tennis, golf, archery and badminton are offered throughout the year. Women majoring in physical education select one as a major activity and two others as minors. Skills in the sports thus selected must be maintained as prerequisite to the senior sports thus selected must be maintained as prer
course, Physical Education 185. (See page 103.)
3. The Seasonal Group Sports are volley ball, basketball, hockey, speedball or soccer, and baseball. Majors participate in at least two seasons of each.
4. The Woman's Athletic Association sponsors the Intramural Sports program. Under its direction competition in dual and group games is promoted throughout the year. Open to all college women.

## 55 Swimming

Shafer
A. Beginning. $\frac{1}{2}$ unit.
B. Intermediate. $\frac{1}{2}$ unit.
C. Life Saving. $\frac{1}{2}$ unit.

Students passing examination receive American Red Cross Life Saving Certificate.
55 A or 55 B and 55 C are required of freshmen women majoring in physical education.

## 56 Tennis <br> Shafer, Bennett

Required of women majoring in physical education.
( $\frac{1}{2}$ )
57 Golf Schwob, Supervising
Required of women majoring in physical education.
( $\frac{1}{2}$ )
59 Archery Shafer
Required of women majoring in physical education. ( $\frac{1}{2}$ )

## UPPER DIVISION COURSES

Open to all women Required of women majoring in physical education

## 102 Emergency and Safety Programs

Prevention of accidents ; practical application of first aid methods leading (1) American Red Cross First Aid Certificate.

153 Administration of. Secondary Physical Education Schwob (2)

## 155 Applied Anatomy

Mechanies of the human skeletal and museular-systems and their actions in games, formalized activities, and general body movements; mechanical strength and durability as influenced by anatomical factors. Spring (2)

157A-157B Sports Methods Shafer Practice for skill, study of rules, and of coaching methods. Prerequisite: A season's experience in at least four of the following sports-volley ball, basketball, hockey, speedball, soccer, baseball.
Year course (2-2)
158 Stunts and Tumbling
Bennett
A practical course in personal technique. Progressive series of individual, dual, and group stunts, including simple pyramids.
(1)

160 Principles of Teaching Gymnastics
Schwob
Gymnastic materials and methods followed by practice in teaching marching gymnastics and use of apparatus.
(2)

161 Folk Dancing Schwob
Practice in folk and clog dancing. Methods of presentation and study of costumes and customs related to the dance. Notebooks required. Open to all upper division men and women.
(2)

164A-164B Advanced Dancing
Schwob
Prerequisite: Physical Education 36B, Beginning Dancing or equivalent. Year course (2-2)

Bennett
168 Physiology of Exercise
(2)

169 Technique of Teaching Activities
Observation, lesson planning, and teaching of college classes.
Fall and Spring (3)

## Shafer and Assistants

170 Recreational Leadership instruction in Scout Fundamentals of recreational leadership developed by instruction in scout craft, Camp Fire lore, Girl Reserve activities, the study of school upper tional needs and facilities, and of civic recreation. Open to acreational division women. Recommended to students interested in the recreationa aspects of social service.
(2)

Schwob
17 Principles of Physical Education
(2)

Schwob
177 Individual Program Adaptations Schwob
Adjustments of the physical education program to the physical needs and capacities of individuals; problems concerning protective and

Ineas
(2)
185 Technique of Individual Sports Shafer
A course summarizing rules, teaching methods, and individual playing ability. A required senior course. Can not be taken until all require ments regarding sports and games have been fulfilled. (See page 101. (1)

## PHYSICAL SCIENCE

1 Introductory A survey course dealing with the nature of man's physical universe. Th 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 either of these subjects combined with astronomy or geology.
Fall and Spring (3)

## PHYSICS

Lower division preparation for the liberal arts major in physics and for the junior certificate: Physics 1A-1B-1C-1D; Chemistry 1A-1B; Mathematics $3 \mathrm{~A}-3 \mathrm{~B}$ and $4 \mathrm{~A}-4 \mathrm{~B}$, or their equivalents. Recommended: A reading knowledge of French and German.
Liberal arts major (upper division) in physics, required: Twenty-four units of upper division work in physics including Physics 105A-105B and $107 \mathrm{~A}-107 \mathrm{~B}$. Six of the twenty-four units may be elected in related subjects on consultation with the chairman of the department.
For requirements for liberal arts major in physical science, see pages 41, 43.

LOWER DIVISION COURSES
1A-1B General Moe
Mechanics, properties of matter, and heat. A development of the fundamental ideas which underlie the subject of physies, and the application of them in the discussion of practical problems. Lectures, text assignments, problem sets, and experimental laboratory work. Two lectures, and one laboratory period each week. Prerequisites: High school physics or chemistry, and trigonometry. Students deficient in any part of this requirement may enroll only with the permission of the instructor.
Year course (3-3)

## 1C-1D General

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

## 2A-2B General

Baird
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 Baird
Laboratory work in mechanies, properties of matter, heat, sound, light, electricity, and magnetism. Usually laken in conjunction with Physics

Year course (1-1)
UPPER DIVISION COURSES
105A-105B Analytical Mechanics
Moe

## Treatment of fundamental prineiples

of particles fundamental principles of statics, kinematics and dynamics and and bodies. Prerequisites: Physies 1A-1B or 2A-2B and a working knowledge of calculus.
Year course (3-3) (Offered in 1938-39 and alternate years)
(104)

106 Optics
Refraction, color, interference, diffraction, polarization, radiation, and ptical instruments. Prerequisite: Eight units in physics.
Fall (8) (Offered in 1938-39 and alternate years)

## 107A-107B Electrical Measurements

Baird
Devoted mainly to the study of potentiometer methods, eapacity, indue tance, resistance, and magnetic flux. Two lectures and one laboratory period each week. Prerequisite: Eight units in physics.
Year course (3-3) (Offered in 1937-38 and alternate 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: Elight units in physies.
Spring (3) (Offered in 1938-39 and alternate years)
112 Advanced Heat
Moe
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 1937-38 and alternate years)
114 Wave Motion and Sound Moe
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 (3) (Offered in 1937-38 and alternate years)

## 199 Special Study

Baird, Moe
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 science for advanced work and for the ention Science 1A-1B and Economics 1A-1B or te: Political science is presupposed in the following History

## OWER DIVISION COURSES

1A-1B Comparative Government
overnments. Semester I: England, A comparative study of typical governments. Semester, Russia, and France, and Switzerland
Japan.
Year course (3-3)
UPPER DIVISION COURSES
Leonard
101 American Institutions
Origins and principles of the United States Constitu it.
the political institutions which have developed under
(105)

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 1937-38)

## 113 American Political Ideals <br> Leonard

Underlying theories and principles of American governmental policy.
Spring (3) (Not offered in 1937-38)
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)
152 Popular Government in the United States
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, physies, and anthropology.

## 1A General

## LOWER DIVISION COURSES

An elementary survey of normal adult psychology, focused upon personality; the subjective and objective aspects of behavior. 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 psychology, and (3) experimental methods, (2) famous experiments in psychology, and (3) some one topic (not included in upper division Prerequisite: Psych 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 personality traits, and achieving success and happiness. Survey of psychology as applied in education, music, art, speaking, writing, law and Fall (2) Prerequisite: Psychology 1A. Recommended: Psychology 1B.

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 and Psychology 4A. 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
A brief history of intelligence testing and the fundamental assumptions underlying the construction of tests. The Stanford revision of the BinetSimon 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 penality adjustment, emotion 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: extreme disorders.
Psychology 1B, 102.
Fall (2)
120 History of Psychology Bell, Steinmetz
120 History of Psychology tionism; the body-mind problem; associationism; structuralism; functionalism the body-mind problem; associationism, sedures. Prerequisites: Psychology 1A, 1B.
Fall (2)
140 Contemporary Psychology Steinmetz
Psychoanalysis, behaviorism, and Gestalt psychology; the modern eclectic viewpoint; non-Aristotelian speculation; factor analysis; characteristic British, French, German, and American contributions; outstanding prob- or lems, publications German, and American con: Psychology 1A, 1B, 120, or
other upper division work in the department provided instructor and head of the department consent.
Spring (2) (Offered in 1938-39 and alternate years)

## 145 Social

Personality as it develops in relation to social environment. Suggestion, imitation, leadership, the crowd, public opinion, social control, prejudice, propaganda, sex differences, race differences, etc. Prerequisite: Psychology 1A. Recommended: Psychology 4A
Spring (3)
Educational Psychology See Education 130
Educational Measurements See Education 108*

## Spanish

(See Foreign Languages)

## Speech Arts

(See English)

## Surveying

## LOWER DIVISION COURSES

## A-1B Plane Surveying

Gleason
Use and adjustment of surveying instruments, computations and mapmaking, together with a study of land, topographic, city, and mine surand mapping each Arts mapping each week. Prerequisites: Trigonometry and Industrial Yeav course $(\Omega-\beta)$, or equivalent, and sophomore standing.

## Yeav course (3-3)

## 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 selfreliance, 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 equisite: Surveying 14 . Offered if demand is sufficient. PreSummer (3)

## Zoology

(See Biological Sciences)

* Students taking a curriculum in which Education 108 is required, must Education 108 in a psychology minor.


## FACULTY

## For the Year 1936-1937

WALTER R. HEPNER, A.M.-President. A.B. A.M., University of Southern California A.B., A.M., Udent, University of Chicago and University of California. Instructor, La Verne College; High School Teacher: Chicago, Illinois: Long Beach and Oxnard, California. Vice-Principal; Principal, Fresno High School; Assistant Superintendent; Superintendent of Fresno High schools, Fresno; Superintendent of Schools, San Diego. Sum Jose, Session and extension instruction: State Colleges of Fresno, University and San Diego; Claremont Colleges; Stanford Universiary Education, of California at Los Angeles. Chief, Dation.
(Appointed September, 1935.)
RVING E. OUTCALT, M.A.-Vice President and Professor of English. A.B., M.A., Stanford University
A.B., M.A., Stanford University. Student, University of Travel in Europe.
Stanford University. Trigo High School,
Head of Department of English, San Diego High School. (Appointed September, 1912.)
W. AULT, M.A.-Dean and Professor of Education.
B.S., Valparaiso University ; M.A., University of South Dakota. tudent, Miami University; gradua
Superintendent of city schools; conductor and instructor in teachers institutes ; Professor of Education at Southern State Teachers Coler, 1925.) Springfield, South Dakota.
(Appointed September, 1925.)
ARTHUR G. PETERSON, M.A.-Dean of Liberal Arts, ex officio inomics. charge of Lower Division stuales, University.
A.B., College of Paciffc; M.A., Stanford Southern California. Graduate student, University of Sice Principal of San Diego High School and Director of Junior
Vice Vice

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(115)

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