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# SAN DIEGO STATE COLLEGE

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BULLETIN

*Circular of Information*

ANNOUNCEMENT  
OF COURSES



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FOR THE YEAR 1945 - 1946

# STATE DEPARTMENT OF EDUCATION

WALTER F. DEXTER.....Superintendent of Public Instruction  
and State Director of Education

J. A. BURKMAN.....Assistant Director of Education

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J. M. TADLOCK.....Eureka

Walter F. Dexter, Secretary and Executive Officer

Mrs. Florence B. Argall, Assistant Secretary

## OFFICERS OF THE COLLEGE

WALTER R. HEPNER.....President

EDWARD L. HARDY.....President Emeritus

JESSE W. AULT.....Director of Placement and Dean of Education

ARTHUR G. PETERSON.....Dean of Liberal Arts

CHARLES E. PETERSON.....Dean of Men

MARY MENDENHALL.....Dean of Women

DONALD R. WATSON.....Acting Registrar and Director of Student Personnel

FAY V. PERRY.....Director of Guidance for Two-Year Students

SPENCER L. ROGERS.....Director of Extension

RICHARD MADDEN.....Principal of the Campus Elementary School

JOHN PAUL STONE.....Head Librarian

FRANK M. WATENPAUGH.....Comptroller

GEORGIA C. AMSDEN.....Secretary of Faculty

# BULLETIN AND ANNOUNCEMENT OF COURSES

VOLUME 32  
JUNE, 1945

SAN DIEGO STATE COLLEGE  
SAN DIEGO, CALIFORNIA

1945							1946						
JULY							JANUARY						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
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16	17	18	19	20	21	22	16	17	18	19	20	21	22
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30	31						30						

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## CALENDAR 1945-46

## SUMMER SESSION, 1945

Term I, June 25—August 3

Term II, August 6-24

## FALL SEMESTER, 1945-46

September 1	Applications for admission must be filed on or before this date.
September 4	Entrance Examinations for all entering Freshmen who have not previously taken these examinations. No Freshmen will be granted admission until these examinations have been taken. Out-of-town students may arrange to take tests during the first week of school.
September 13	First Day of Orientation Program. All entering Freshmen must appear on the campus at 8:30 A.M. and remain until 3 P.M.
September 14	Second Day of Orientation Program. All entering Freshmen must appear on campus at 9:00 A.M. and remain until 3:00 P.M.
September 14	8:30 A.M.—12:00 M. Fundamentals Tests—Required for admission to Teacher Education. Should be taken at the end of the first semester of the Freshman year when possible. 1:00—2:30 P.M. College Aptitude Test for students entering with advanced standing.
September 17	Registration and Payment of fees.
September 18	Instruction begins. Late registration fee becomes effective.
November 16	End of the First Term of the Semester.
November 19	Registration and beginning of classes for Second Term of the Semester.
November 22-23	Thanksgiving Recess.
December 14	Last day before Christmas Recess begins.
January 2	Classwork resumes.
January 23-29	Semester Examinations.

## SPRING SEMESTER, 1945-46

January 23	Applications for admission must be filed on or before this date.
January 31	First Day of the Orientation Program. All entering Freshmen must appear on the campus at 8:30 A.M. and remain until 3:00 P.M.
February 1	Second Day of the Orientation Program. All entering Freshmen must appear on campus at 9:00 A.M. and remain until 3:00 P.M.
February 1	8:30 A.M.—12:00 M. Fundamentals Tests—Required for admission to Teacher Education. Should be taken at the end of the first semester of the Freshman year when possible. 1:00—2:30 P.M. College Aptitude Test for students entering with advanced standing.
February 4	Registration and payment of fees.
February 5	Instruction begins. Late registration fee becomes effective.
April 5	End of the First Term of the Semester.
April 8	Registration and beginning of class work for Second Term of the Semester.
April 15-20	Spring Recess.
May 30	Memorial Day Holiday.
June 6-13	Semester Examinations.
June 14	Annual Commencement.

## SUMMER SESSION, 1946

Term I, June 24—August 2

Term II, August 5-23

## FUNCTIONS OF THE STATE COLLEGES OF CALIFORNIA

The State Colleges have three major functions, namely, (1) to help the individual student to develop a well-rounded and adjusted personality; (2) to promote civic intelligence and competence; and (3) to create supplies of trained men and women, some to serve as teachers in the elementary and secondary schools, some to fill intermediate places of leadership, and some to transfer to graduate institutions to equip themselves to extend the frontiers of knowledge and to occupy the higher positions of leadership. In terms of publicly supported higher education, the State Colleges and the University together make provision for the realization of all the essential objectives of higher education in our State.

To achieve their unique purposes the State Colleges have developed and are improving offerings as follows:

1. Teacher education curricula for those students who plan to teach in the elementary school, the junior high school, and in the special fields in all secondary schools.
2. Preprofessional curricula.
3. Curricula of varying lengths in such fields as business, industry, governmental services, homemaking, and social service.
4. General education for students who take work which leads toward the bachelor of arts degree or to the higher professions through graduate work.
5. Guidance services to assist the individual student to plan his educational program and to make his college and life adjustments.
6. Extension courses in appropriate fields.

The State Colleges accept the principle that higher education should be available to all capable high school graduates. The preservation and improvement of democracy depends upon the full and unhampered development of all potential citizenship and leadership resources. In keeping with this principle the State Colleges maintain flexible entrance requirements. Each applicant is treated individually in terms of his potential capacity and his potential contribution and not in terms of past academic pattern or accomplishment alone.

The State Colleges purposely maintain not only flexible entrance requirements, but also, adjustive curricula, and adequate and effective guidance and counseling services to promote the personal and educational development of worthy students. The State Colleges modify traditional academic restrictions and provide new curricula and services whenever such modifications and additions seem to serve the legitimate desirable needs of individuals and society.

The promotion of civic intelligence and competence is the underlying aim of all activities on State College campuses. Special emphasis centers on warm personal relationships between instructors and students, on friendly counsel in time of need, and on the day-to-day routine of living in a friendly atmosphere. Because the majority of State College students live at home, it is possible to link together the college, the home, and the community in realistic democratic relationships.

The democratic controls exercised over the State Colleges make them readily and effectively responsive to individual and community needs and encourage them continuously to make significant improvements in both curriculum and personal services. The State Colleges are thus laboratories in which the facts and theories developed in research, in community living, and in daily association with students are reflected in the instructional program.

The State Colleges plan their program of higher education so as to provide educational services inherent in the principle of equality of opportunity.

## THE COLLEGE

### 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. Many of these advantages 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 architecture. Housed in these buildings are the Fine Arts Gallery, exhibits in anthropology, natural history, and American archaeology, which are in many respects unsurpassed. The outdoor organ, the Ford Bowl, and the horticultural gardens make Balboa Park, in which all these facilities are located, world renowned. The Scripps Institute of Oceanography, operated by the University of California at La Jolla, gives opportunity for important cooperation in the biological sciences.

### Buildings and Equipment

On February 1, 1931, the college was moved to the new campus, located one mile north of the city's principal east-west boulevard, El Cajon Avenue. The buildings are of Spanish-Moorish architecture which is well suited to the landscape and climate of this region. They include the Academic Building (which houses lecture halls, classrooms and administrative offices); the Science Building; the Library, the Little Theater; the Music Building; the Campus Elementary School; Scripps Cottage (a social clubhouse for women students); the Cafe and Book Store; 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 stadium, constructed in a natural site, has a seating capacity that is adequate for present needs. The open air theater, seating 4200 persons, serves as a meeting place for large groups.

### Facilities for the Education of Teachers

The college maintains a modern elementary school on the campus where it has developed an extensive program for the education of elementary school teachers. The classroom-laboratory plan which calls for the use of work-rooms, the library, and shops, affords unusual opportunities for the induction of students into teaching. By arrangement with the San Diego City Schools, directed teaching is provided in the Euclid elementary school for one-half day throughout a semester. A 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 its size. The library consists of well over 80,000 volumes selected to meet the requirements of a modern educational institution. Six professionally trained librarians are available to render assistance to students in their reading and reference work.

For the duration of the war the library service has been further augmented by the loan of a librarian and three special libraries, namely, a collection of 3,000 volumes on Anthropology and Ethnology from the San Diego Museum of Man, the U. S. Grant Memorial Library of 1,375 volumes, and the 25,000 volume Scientific Library of the San Diego Society of Natural History.

The Campus Elementary School Library, representing a collection of 11,000 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 distance are made through the offices of the Dean of Women or the Dean of Men. All women students are urged to live in the residence hall adjoining the campus. Careful consideration is given to study conditions, healthful living, and adequate social opportunities. Room and board may be secured for approximately \$200 per semester, payable in four installments. Opportunities to reduce this figure by working a few hours each week are occasionally available. Reservations should be made in advance through the Manager of Quetzal Hall, 5192 College Avenue, San Diego 5, California. Where students find other accommodations more desirable, written permission from parents must be secured and filed with the Dean of Women or Dean of Men.

### Student Life

A rich field of extra-curricular activities is available to the student throughout his college life. The student is urged to select these activities carefully in order that he may profit by these extra-class experiences without lowering his standards of scholarship. The *Student Handbook*, available at the time of registration, gives information concerning activities which include organizations in every department of the college, and opportunities 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 in the amount of participation in physical activities seem advisable.

A representative of the Health Department is available a part of each 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.

A group plan for accident insurance is in operation for students who desire to participate.

### Placement Service

A Placement Office is maintained by the college, which serves as a clearing house for part time and full time jobs. Employers notify this office of available openings in their organizations, and also turn to the office for information concerning graduates or nongraduates whom they are considering for employment.

Included in the service of the office are the listing of part time jobs of all types available, including opportunities to work for board and room, teacher placement, and full time jobs in commerce and industry.

This service is free to students, who are invited to arrange for interviews with members of the placement staff if in need of assistance in finding work. Students who know of jobs in which they are not themselves interested are encouraged to notify the office of such vacancies.

The Placement Secretary should be seen or called regarding vacancies or work applications.

### Vocational Rehabilitation Service

The Bureau of Vocational Rehabilitation, California State Department of Education, offers its service to students who have an employment handicap resulting from physical disability of any kind. Included are vocational counselling, the payment of tuition and fee, and the providing of textbooks without charge to the trainee. Details of the service may be obtained from the Dean of the College of Liberal Arts.

## FEES AND EXPENSES

### 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, since these figures vary with the demands of the individual. Laboratory fees are additional.

#### A Partial Estimate of Expenses

	One Semester	<i>Minimum</i>	<i>Maximum</i>
Fees and Deposits-----		\$20.00	\$27.50
Books -----		12.00	20.00
Board and Room-----		200.00	-----
Incidentals:			
Transportation -----		10.00	20.00
Lunches (daily in cafe)-----		35.00	50.00
Organizations:	<i>Average</i>		
Fraternity			
Initiation and pin-----	\$16.50}	\$7.50	\$25.00
Dues and Assessments-----	5.50}		
Sorority			
Initiation and pin-----	16.00}	16.75	25.00
Dues and Assessments-----	8.00}		
Miscellaneous -----			5.00

Before enrolling in college, the student should possess sufficient resources to meet the minimum expenses for one semester. A limited amount of clerical 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.

### 1 List of Fees and Deposits (Subject to Revision)

#### ENROLLMENT FEES AND DEPOSITS

##### PAYABLE AT TIME OF REGISTRATION

By all students:

Tuition:

Regular students (carrying over 5 units)	\$6.50
Limited students (carrying 5 units or less) per unit	2.50

Materials and service:

Regular students	4.00
Limited students per unit	.50

General service deposit (unexpended portion is refunded)	3.00
Personnel examination (new students only)	2.00
(Limited students and graduate students exempted)	

2 Student activity fees:

Regular students	6.00
Limited students	2.00

<sup>1</sup> Auditors pay same fees as students enrolled for credit.  
<sup>2</sup> Not required by the State.

## MISCELLANEOUS FEES AND DEPOSITS

## DEPOSITS PAYABLE BEFORE LABORATORY WORK IS STARTED

Chemistry .....	\$5.00
Geology 21A-21B .....	1.00

## FEES PAYABLE WHEN SERVICE IS RENDERED

Change of program .....	.50
College Bulletin (free to prospective students) .....	.20
Duplicate library card .....	.10
Duplicate registration book .....	.10
<sup>1</sup> Evaluation of records for advanced standing .....	2.00
Fundamentals test .....	.50
Late filing of registration book .....	1.00
Late registration .....	1.00
<sup>2</sup> Transcript of record (1st copy free) .....	.50

## GRADUATION FEES

State Teaching Credentials (each credential) .....	\$3.00
Kindergarten-Primary	
General elementary	
General Junior High	
Special secondary	
School administration	
Diploma .....	\$1.00

The credential fee is collected through the college by cashier's check or post office money order made payable to the State Department of Education.

<sup>1</sup> Paid by all students entering with advanced standing.

<sup>2</sup> The 50-cent fee must accompany each application for a transcript of record. Ten cents will be charged for each duplicate of this record which accompanies the original.

## 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 satisfactory scores on tests which the college may require.

**Admission of High School Graduates.** (1) A high school transcript must be presented showing satisfactory scholarship, and (2) applicants must demonstrate readiness for college instruction by making satisfactory scores on such tests as the college may designate.

Students will be granted *regular* status if they have earned recommended grades \* in not less than 16 semester courses in English, Social Sciences, Foreign Language, Mathematics, Natural Sciences, and related fields, during the tenth, eleventh, and twelfth years in high school.

Provisional *regular* status will be granted if the student has earned recommended grades \* in not less than 12 semester courses in the above subjects. The student will attain full regular status at the end of the first semester in college if a scholarship average of C or better is maintained in at least 12 units of work. Failure to secure a C average will disqualify the student for further attendance.

Students who do not qualify for *regular* (provisional) status may enroll in one of the two-year curricula if they have earned recommended grades \* in at least 12 semester courses during the tenth, eleventh, and twelfth years in high school. Individuals who fall slightly below this standard may be admitted to the two-year curricula if qualifying examination scores indicate probable success in these courses.

**Admission by Examination.** Certificates of successful examination before the College Entrance Examination Board will be accepted when candidates can not meet the above scholarship requirements.

**Admission With Advanced Standing.** Credit earned in recognized institutions of collegiate grade will be evaluated and advanced standing allowed accordingly toward the graduation requirements of this institution. Applicants must show an average grade of C or better for all college work, for the last college attended, and for the last semester of attendance in order to qualify for regular status. A student who enters with advanced standing is one who has completed at least 15 units of passing work in another collegiate institution. However, no applicant may disregard his collegiate record and apply for admission only on a basis of his high school work. Not more than 64 semester hours of junior college work may be allowed for credit.

Students seeking admission with advanced standing must furnish complete transcripts for all work attempted beyond the eighth grade. A \$2 evaluation deposit must accompany the application for admission. This deposit will be refunded if the student enrolls at the next regular registration period.

**Special Students.** Persons over 21 years of age may be admitted on the basis of maturity, provided they present satisfactory evidence of good character and intelligence. Full matriculation will be granted only upon removal of all entrance deficiencies, and the completion of a full semester of satisfactory college work.

**Auditors.** Properly qualified persons may apply for admission to attend classes as auditors. Such students pay the same fees as those who take equivalent work for credit.

\* Grades of A or B.

## Registration

Registration date for new students for the fall semester of 1945-46 is September 17 and for the spring semester it is February 4. An application blank should be secured from the Registrar and filed, with complete transcripts of record, at least two weeks prior to registration date.

The college year is divided into fall and spring semesters of eighteen weeks each, followed by a summer session consisting of two terms of six weeks and three weeks, respectively. Students may enter at the beginning of either semester or either term of the summer session.

The summer session meets the needs of students who wish to secure supplemental credit or to shorten the time for completion of their college course, and of teachers in service.

## 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 the orientation program.
2. All entering students are required to take the College Aptitude Test. Exceptions may be made for graduate students and for those who register for five units or less.
3. All college transfer students who present less than a minimum of 15 units of college credit must take a High School Achievement Examination, and a standard English Examination in addition to the College Aptitude Test. Students whose tests indicate that they are not qualified for the regular English 1B must take English L1A or L1AA. Exceptions may be made for students transferring English credit from other colleges.
4. Passing the Fundamentals Test in reading, spelling, arithmetic and handwriting, and a Speech Test, are prerequisites for admission to upper division courses in teacher education curricula. These tests should be taken at the beginning of the second semester of the freshman year, in order that deficiencies, if any, may be made up before applying for admission to the upper division of teacher education curricula. Exceptions may be made for graduates of California State teacher education institutions who have been teachers in service.

## Late Registration

Students who register after the first week of the semester are subject to a limitation of program and must secure the approval of instructors for late admission to classes. After registration day a fee of \$1 is charged for late registration.

## Changes in Registration

Petitions for changes in program may be secured at the Registrar's office. A small fee is charged for changes in program after registration books are filed.

## Loans and Scholarships

Scholarships for both men and women have been made available through the efforts of alumni, patrons of the college, and civic organizations. Superiority in scholarship and worthiness from the point of view of need are the standards upon which selection is based. Scholarship aid is therefore restricted 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 have given evidence of ability to do satisfactory college work. Application for loans is made to the Committee on Loans and Scholarships through the office of the Dean of Men or Dean of Women.

## GENERAL REGULATIONS

### Officers for Consultation

- Concerning the housing and living arrangements of students, personal problems, etc.—The Dean of Women; The Dean of Men.
- Concerning the scheduling and arrangement for all student social affairs—The Dean of Women.
- Concerning study lists and personal problems of *two-year students*—Director of Guidance for Two-Year Students.
- Concerning admission, program of studies, credits, degree requirements, etc.—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.
- Concerning appointments to teaching positions and other types of full and part time employment—The Placement Secretary.
- Concerning admission to Teacher Education Curriculum, directed teaching, credential requirements, etc.—The Dean of Education.
- Concerning use of the buildings—The Dean of Women; The Dean of Men.
- Concerning entrance requirements and offerings at other institutions—The Registrar; The Dean of Liberal Arts; The Dean of Education.

### Classification

**Full time Students** are those who are registered in more than 5 units of work. They are expected to carry a minimum of 12 units unless excused.

**Limited Students** are those who, for acceptable reasons, have been permitted to register for 5 or fewer units of work.

**Adult Special Students** are mature students who have not satisfied all entrance requirements, but who have been permitted to register for such courses as their ability and preparation justify. Special students may also be limited students.

**Regular Students** are those who are qualified to enroll in curricula leading to the Bachelor of Arts degree.

**Regular-provisional Students** are those whose high school records are slightly deficient in recommended grades. They are permitted to enroll on trial for one semester in a regular curriculum. If they make a C average in 12 or more units they automatically attain regular status.

**Two-Year Students** are those who do not qualify for regular status because of deficiencies in high school scholarship, but who have been permitted to enroll in an adjustive curriculum. These students are not permitted to enroll in courses applying regularly toward the Bachelor of Arts degree except by permission of their adviser until they have earned regular status through satisfactory scholarship.

**Class.** Students who have completed 0 to 29 units of work are classified as freshmen; 30 to 59 units as sophomores; 60 to 89 units as juniors; and 90 or more as seniors.

### 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.

The grade E is recorded for work which is of low order but which may be made passable. If the work is raised to passing level by the close of the next semester, the grade is changed to D; otherwise it is changed automatically to F.

The grade I is recorded for work of high order but which is incomplete for an acceptable reason. To change an I to another grade, the work must be completed within the next semester; otherwise it is changed to F.

Grade points are assigned as follows: Grade A, 3 points per unit; B, 2 points per unit; C, 1 point per unit; D, no points; E, minus 1 point per unit; F, minus 1 point per unit. The number of grade points a student has earned in a subject is determined by multiplying the number of points he has received by the number of units allowed. The grade point average is determined by dividing the grade points earned by the number of units attempted. Courses in which the student received an I or Cr. or W are disregarded in computing grade point averages. A student must earn at least a C average in all work undertaken at the college to qualify for a diploma or a transcript of record with recommendation to another collegiate institution.

### Units of Work, and Study Lists Limits

A unit of credit represents one hour of lecture or recitation combined with two hours of preparation per week through one semester, or three hours of laboratory or field work in the case of laboratory credit.

Students are not ordinarily permitted to enroll for more than 16 units\* for credit toward graduation. This constitutes a normal semester's program. Certain exceptions to this rule exist. If during the preceding semester the student has carried at least 12 units\*: (1) if a grade point average of at least 1.5 was earned, 17 units\* may be carried for credit toward graduation, and (2) if a grade point average of 2.0 (B) was earned, 18 units\* may be carried.

Any course in which a passing grade is earned may be used in satisfying pattern requirements, even though credit for the course is in excess of the units which may be credited for graduation.

Exceptions to the above regulations may be secured only through a petition to the Scholarship Committee.

No student may register for less than 12 units without the approval of the Dean of Liberal Arts or the Dean of Education.

### Probation and Disqualification

**Probation.** Any student whose scholarship record shows a cumulative deficit of 12 or more grade points below a C average for all work undertaken in the college will be placed on probation. A limited student will be placed on probation if his cumulative deficit below a C average equals or exceeds the average number of units carried per semester. Probationary status may be continued provided that the student does not add further toward his grade point deficiency.

**Disqualification.** Any probational student whose scholarship falls below an average grade of C in any single semester is disqualified for further attendance at the college. A scholarship record below a D average for any single semester also disqualifies a student.

A disqualified student may be reinstated after an interval of one semester for reasons satisfactory to the Executive Committee of the Faculty. All applications for reinstatement must be in writing.

### Withdrawals from Class

Forms for withdrawal from class may be obtained at the Registrar's office. If a student withdraws from class during the first seven weeks of a semester, a grade of W will be recorded upon his permanent record for each class which he has dropped. If he withdraws during the remainder of the semester, either an I or an F will be recorded unless a grade of W is approved by the instructor and the proper dean. A grade of I automatically becomes an F unless the work is completed by the end of the next semester.

Students who withdraw from all classes during a semester must petition the Admissions Committee for readmission.

\* In addition to required physical education courses.

### Transcripts of Record

Students may secure one transcript of record without fee. Thereafter, each request for transcript should be accompanied by the fee of fifty cents. Once a student has matriculated in this college, transcripts from other schools will not be returned, or copies of them made. No fees are charged for transcripts required for military purposes.

Transcripts in the possession of students are to be regarded as unofficial records.

### Eligibility for Directed Teaching

No student shall be eligible for directed teaching (Education 116) who has not completed 75 units, been admitted to Teacher Education, and whose entire record, as well as his record for the preceding semester, does not average at least a 1.2 grade.

### The Honors Group

All students who at the end of the Sophomore year have attained a grade-point average of 2.5, and such others as have attained a high average in the department in which their Major is selected, and who have received the recommendation of that department and the consent of the Committee on Honors, may if they so elect, constitute an honors group, for special treatment in their Major subject.

Such students, so far as the facilities of the department and the best interests of the students under its charge allow, shall be treated as befits their individual needs and as their individual capacities warrant. They shall be eligible to enroll in honors or special study courses, although credit in such courses shall be limited to 5 units a semester. They shall not be held to regular attendance in the established courses of their departments if, in the opinion of the instructor, the course requirements can be met through special assignments and examinations or by satisfactory performance in the regular examinations in the course. With the consent of the major department, requirements concerning minors and specific courses or sequences in the major may be set aside. Each honor student shall be assigned to a member of his Major department for advice and direction.

Students in the honors group who fail to take advantage of the opportunities there offered may at the end of any semester be transferred by the department to the general course. Students in the general course who show unusual capacity, upon recommendation of the department and the Committee on Honors, may at the end of any semester, be transferred to the honors group if such transfer appears practicable.

*Students who wish to apply for entrance in the Honors Group may do so by filling out cards to be obtained from their major departments. The applications should be filed with the chairman of the major department not later than a week after registration opens. Units earned by students doing individual study under this plan will be recorded under the symbol 166 and will be subject to the formulated rules dealing with limitations of student load.*

### The Degree with Honors and with Distinction

Upon recommendation of the Committee on Honors, graduation with honors shall be granted to the upper 10 per cent of the graduating class. Each department shall determine which students it will recommend for Distinction in the major field at graduation, and report its recommendation to the Committee on Honors for transmission to the faculty.

### Examinations

No final examinations shall be given to individual students before the regular time. 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 first semester following that in which the incomplete was given. No exceptions shall be

made to this rule without the approval of an academic dean 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.

### Extension Courses

An extension program covering a wide range of offerings is made available each semester. Members of the regular college faculty and others expert in special fields instruct extension classes. The extension program is designed to serve the needs of San Diego and neighboring communities for courses on the college level that are not available on the campus, or that should be offered at times and places more convenient to special groups. Extension courses are considered the equivalent of campus courses and the amount of credit available to any one student in one semester through extension courses or a combination of campus and extension courses is subject to the same study-load limitations that apply to students regularly enrolled for campus courses. Fees for extension courses vary somewhat with the place where the instruction is offered, but will not exceed \$6 per unit for the year 1944-1945.

Information concerning extension offerings may be obtained on application to the Director of Extension Service.

The amount of credit for extension and correspondence courses acceptable in fulfillment of the requirements for the Bachelor of Arts 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 such courses as have been approved, and the total of such acceptable credit to 12 units.

## THE BACHELOR OF ARTS DEGREE

### General Requirements for the Bachelor of Arts Degree

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 120 units of college work, representing a four-year course, is required for the Bachelor of Arts degree. At least 30 units must be earned in this college, and not less than 24 of these residence units must ordinarily be taken with the rank of senior. Not fewer than 12 units of this work must be completed during a single semester; or in lieu of this at least 16 units must be completed in not less than two consecutive summer sessions. At least a C average in scholarship must be maintained in the major and in all work applied toward the degree.

**Credit Granted for Military Service.** Six units of elective credit will be granted to students who have enlisted in the armed services of this country upon the completion of the prescribed basic training program. Documentary evidence bearing the signature of the proper commanding officer must be filed before credit will be accorded to the student.

Nine additional units of credit will be granted to students who can document the fact that they have completed officer's training, have been granted a commission, and have been assigned to active military duty.

**Requirements for Degree May Be Completed in Three Years.** Although no reduction in course requirements or standards of work are contemplated, provision has been made whereby students may complete what normally constituted a four-year program in three years. Students may secure further information upon this point by addressing inquiries to the Registrar's Office.

### LOWER DIVISION

#### Subject Matter Requirements in the Lower Division

Physical Education .....	2 units
Health Education 1 or 2 .....	2 units
English .....	6 units
Psychology .....	3 units
*Foreign Language .....	10 units

Mathematics LA and LB, 4 units, or high school algebra and geometry

Social Sciences ..... 12 units

Natural Sciences ..... 12 units

**\*\*Year-course in foreign language or in mathematics, or in philosophy.**

(This year-course is an additional requirement to those listed above) ..... 6 units

**Electives to make total of 60 units.<sup>1</sup>**

\* Not required in the teacher education and general engineering curricula.

\*\*Not required in the teacher education curricula.

<sup>1</sup>Electives should include lower division preparation for the major. See pages 54-113. Requirements for the minor may be partially satisfied in the lower division. See page 19.

**Explanation of Lower Division Requirements**

**English.** This requirement may be satisfied either in the freshman year or in the sophomore year. Courses are to be chosen from the following: English L1A or L1AA, 1B or 2A, 2B, 2C, 2D, 2E, 2F, 2G, 50A, 50B, 52A, 52B, 56A, 56B.

**Psychology.** Psychology 1A.

**Foreign Languages.** At least 10 units in one foreign language are required in the lower division except that no language is required in teacher education and engineering. No degree credit is given for only the beginning college semester of a foreign language.

**HIGH SCHOOL COURSES**

The foreign language requirement may be met in part or in whole by high school work completed with grade of C or better, each year course being counted in satisfaction of 3 units of this requirement. Three years of foreign language in high school will satisfy the college requirement in foreign language. No foreign language credit is given for only one year of a high school course unless the grade is B or better or unless the course completed with C grade is continued in college. If two or more years have elapsed since the completion of a high school course in any foreign language the final year of the course may be repeated for college degree credit but not for additional credit in meeting the language requirement.

**Social Sciences.<sup>1</sup>** Twelve lower division units chosen from two or more departments are required in this field. All students must present credit for Social Science 1A or for an acceptable equivalent.

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 1A-1B,\* 54, 55; Economics 1A-1B,\* 18A-18B; Geography 2 or 10 B; History 4A-4B,\* 8A-8B\*; Political Science 1A-1B,\* 71A-71B\*; Social Science 1B; Sociology 50A-50B.\*

**HIGH SCHOOL COURSES**

Two semesters of fourth year high school courses in the fields of history, political science, sociology, and economics taken with grades of B or better may be used in satisfying 3 units of the social science requirement.

**Natural Sciences.<sup>1</sup>** Twelve lower division units chosen from courses representing each of the following groups are required:

- (a) Biology 1 or a year course in high school or college biology, botany, physiology or zoology.
- (b) Physical Science 1A or 1B or a year course in high school or college chemistry or physics.
- (c) Lower division courses to meet the natural science requirement must be taken from the following lists and must include one of the college or high school laboratory courses marked with an asterisk: Astronomy 1, 2, 9; Bacteriology 1\*; Biology 1, 10A-10B\*; Botany 2A,\* 2B,\* 4; Chemistry 1A,\* 1B,\* 2A-2B,\* 7-8\*; Geography 1 or 3 (only one course may be counted toward requirement); Geology 1A, 1B,\* 2A, 2B; Physical Science 1A, 1B; Physics 1A-1B,\* 2A-2B, 3A-3B,\* 1C-1D,\* 54; Physiology 1A, 1C\*; Zoology 1A,\* 1B,\* 8, 20.

**HIGH SCHOOL COURSES**

A maximum of one year (3 units) of courses in botany, chemistry,\* physics,\* physiology, zoology, and advanced biology taken in the senior year with grades not lower than B may be used in satisfying the 12 unit natural science requirement.

**Mathematics.** High school elementary algebra and high school plane geometry completed with at least C grades or a year course in Mathematics LA-LB.

<sup>1</sup> Teacher education students should follow carefully the curricular outlines to meet specific course requirements in this field.

**Additional Year Courses.** In addition to the foregoing minimum requirements in foreign language and mathematics, 6 units must be chosen from one of the following groups by all except teacher education students.

**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:** C, or D, or equivalent, and either 1, 3A, or 8. Students with the Commerce major may take Mathematics C, or equivalent, and Economics 2.

**Philosophy:** 3A-3B, 5A-5B.

**Lower Division Preparation for the Minor.** See description of requirements for liberal arts minors on page 20 and for teaching minors on page 22.

**Lower Division Preparation for the Major.** See description of requirements for teaching majors on page 21. Specific requirements for the majors in the liberal arts curricula are listed in connection with the descriptive list of courses in each major field (see pages 54-113).

**Limited Electives**

A total of not more than 12 units of limited and vocational courses listed below will be counted toward the A.B. degree in Liberal Arts (for limitation in Teacher Education see page 24). Courses in education are included in this list principally because the major emphasis in the liberal arts program is non-professional and non-technical. Art L7, L14A, L65A, L65B; Economics L10A-L10B, L15A, L15B, L16A, L16B, L129, L163; Education, all courses except those listed as available for credit toward a minor (see Education minor on page 20); English L1A, L1AA, L8; Health Education L151; Journalism L53A, L53B, L153A, L153B; Library Science L10; Mathematics LA, LB; Merchandising, all courses; Music, L1A, L2A, L3A, L6A, L7A, L16A-B-C-D, L17A-B-C-D, L18A-B-C-D, L28A-L28B, L116A-B-C-D, L117A-B-C-D, L118A-B-C-D; Physical Education, all courses beyond the requirements specified in the curricular patterns except 30, 51, 170; Secretarial training, all courses; all courses numbered L40 and L45 if grade is below B.

### Specific Upper Division 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, general engineering, geography, history, mathematics, music, physical science, physics, Romance languages, social science, speech arts, 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.

#### UPPER DIVISION

##### Subject Matter Requirements

Political Science 101	2 units
Minor (minimum in upper division courses)	6 units
Major (upper division courses)	24 units

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.

##### Explanation of Requirements

**Political Science 101.** Political Science 113 or 175A-175B or History 171A-171B or 173A-173B will be accepted as substitutes for this requirement.

**Minor.** Minors must be established in one of the following fields: anthropology, art, botany, chemistry, economics, education, English, foreign language, geography, geology, history, journalism, mathematics, music, philosophy, physics, political science, psychology, sociology, speech arts, and zoology.

*A minor consists of at least 12 units of work completed in one of the above fields of study. At least 6 of these units must be earned in upper division courses during junior or senior years. The entire requirement for a minor may be met with upper division courses provided these courses have no lower division prerequisites. Prerequisites for each course are listed among the course descriptions on pages 54 to 115.*

**Minor in Education.** A student who desires to satisfy the undergraduate requirements for the general secondary teaching credential will minor in education. He should include in his program a major in a subject or field of subjects usually taught in high school and a minor in the field of education. In order to conform to the usual university requirements, this minor should include Education 102A-102B (or Education 130, and Psychology 102), and Education 115A-115B. Consultation with the Dean of Education or the Dean of Liberal Arts is recommended.

**Majors.** The specific requirements for each major are listed at the beginning of each departmental division among the description of courses. (See pages 54 to 113.) 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.

**Professional and Preprofessional Courses.** See pages 37 to 48.

##### The General Major

The general liberal arts major of 36 upper division units must be chosen from three departments with not more than 15 units from any one department allowed. This comprehensive major may be arranged to include minor requirements.

The general major is planned for students who are preparing for law, journalism, library work, or for any other vocation requiring a background of general training. It is available also to certain students who want a cultural education and who can present satisfactory reasons for not specializing in any field. When the general major is not a part of a four-year curriculum published in the college bulletin the tentative program of the student should be planned in consultation with the Dean of Liberal Arts and approved, revised, or rejected by the chairmen of the departments represented in the major.

### Specific Upper Division Requirements for the Teacher Education Curricula

**Admission to the Teacher Education Curricula.** Admission to the college does not imply that the student will be admitted to the teacher education curriculum. No student intending to enroll in the teacher education curriculum may enroll in an upper division course in education before being admitted to teacher education. Any exception to this rule must have the written approval of the Dean of Education. Students who have been in regular attendance at the college should make application for admission to the teacher education curricula during the first semester of their sophomore year. The preliminary requirements which must be met before admission to teacher education curricula 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 or more of a given curriculum, or its equivalent, with a grade point average of 1.2 or better.

After the student has submitted evidence of having met the preliminary requirements in his application for admission to the teacher education curricula he will be interviewed by the members of a committee appointed by the faculty for this purpose. In the appraisal of applicants the committee gives careful consideration to the following factors established by the State Board of Education: intelligence, scholarship, professional aptitude, personality and character, speech and language usage, and many-sided interests.

**Transfer Students.** Students who have completed two or more semesters of work in another college, upon transferring to San Diego State College, should make application for admission to teacher education as soon as they enroll in the college. It will be advantageous for transfer students to present themselves for the necessary tests given during the orientation period preceding enrollment in the college.

**Advanced Standing in Teacher Education.** 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, evaluations are subject to revision in the light of such new requirements as may have been put into effect and with respect to deduction in credit in education courses.

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 Assistant Registrar (for those taken elsewhere) in order to be credited toward meeting degree requirements.

**Teaching Major Defined.** A teaching major consists of a minimum of 24 units in a field other than education, at least 12 of which must be in the upper division. A O

average in scholarship is required in all upper division courses in the field of the teaching major. A major for a special secondary credential varies from 24 to 40 units as specified in the requirements for the various curricula. Teaching majors may be established in the following fields: English, foreign languages, general sciences, mathematics and social sciences (anthropology, economics, geography, history, political science, sociology) and in the special secondary credential fields of art, business education, music, physical education, and speech arts.

**Teaching Major in English.** Candidates for the teaching major in the field of English are expected to show credit in English 1B or 1C and 9 elective units of lower division work and in 12 units of upper division work. This credit must include 3 units in American Literature (either lower or upper division) and 3 units in Shakespeare. Recommended: English 2D and 112.

**Teaching Major in General Science.** Candidates for a teaching major in the field of general science are required to include a college year course in a biological science, a year course in high school or college physics and a concentration of 12 units, at least 6 of which are upper division, in one major subject (botany, chemistry, physics, zoology). See definition of teaching majors.

**Teaching Major in Social Science.** Candidates for a teaching major in the field of the social sciences are required to include in their programs a year course in modern American history and a concentration of 12 units, at least 6 of which are upper division, in one major subject (anthropology, economics, geography, history, political science, sociology). See definition of teaching majors. The following courses may not be applied to the teaching major in the field of the social sciences; Economics 14A-14B, 18A-18B, 140, 160A-160B, 161, 162, 163, 164, 165; and all courses in merchandising.

**Teaching Minor Defined.** A teaching minor consists of 12 units in a given field, at least 6 of which must be in upper division courses. Teaching minors may be established in the following fields: art, business education, English, foreign language, general science, mathematics, music, social sciences (anthropology, economics, geography, history, political science, sociology), physical education, and speech arts.

**Teaching Minor in English.** Candidates for the teaching minor in English must show credit in English 1B and 3 elective units of lower division work; and in 6 elective units in upper division English. This credit must include 3 units in American literature, taken either in lower division or upper division. Credit in journalism and speech arts may not be used to fulfill the requirements for the English minor. Recommended: English 2D.

**Teaching Minor in Music.** Candidates for the teaching minor in music are required to take music aptitude tests at the time the minor is chosen and to enroll in at least one music activity each semester. In special cases this requirement may be waived by petition to the Music Department.

Applicants for music minors must maintain a grade average of C in all music courses. To Music L1A and L7A, required for the elementary credential, the following 12 units are added for the music minor. In the lower division, with the proper regard for course sequences, 6 units may be chosen from the following courses: Music 1B-1C-1D; L2A; L3A; 4A-4B; L6A, 8A-8B; L16; L17; L18; Aesthetics 1A-1B. In the upper division, not less than 6 units may be chosen from the following courses: Music 105A-105B; 106A; 107A; L116; L117; L118; 119A; 120A; 121A; Aesthetics 102A-102B.

**Teaching Minor in Physical Education.** Candidates for a teaching minor in physical education for women must show credit for Physical Education L1A, L1B, L1C, 51, L53, and 1 unit of sophomore activities and 6 units elected from Physical Education L157A, L157B, L161, and 170 in the upper division.

Candidates for a teaching minor in physical education for men must show credit for Physical Education L1A, L1B, L1C, L1D, L53, and L62A in the lower division; and 6 units elected from Physical Education L156A, L156B, L161, 170 or L190 in the upper division.

### Major and Minor Credential Requirements

1. **Kindergarten-Primary Credential:** Two teaching minors are required.
2. **The general elementary school credential:** Two teaching minors are required.
3. **The general junior high school credential:** A teaching major and a teaching minor in subjects taught in a high school are required. The combination of a special secondary credential with the junior high school credential requires the completion of another teaching major than that required for a special secondary credential; the units required for this additional major may be included in the 12 additional units required for the second credential.
4. **A special secondary credential:** The completion of the major in the special subject field (see detailed outlines of curricular patterns for credentials) and a teaching minor are required.
5. **Credit limitations:** A maximum of 40 units of credit in one subject matter field may be applied toward the requirements for the A.B. degree.

**Preparation for Graduate Work.** Students who take the A.B. degree with 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 major is advised to so arrange his electives as to complete the equivalent of the liberal arts major to avoid the necessity of making up an undergraduate deficiency.

**Political Science.** The course in Political Science 101 or its equivalent is required of all graduates of the college or those securing a teaching credential through the college. The following courses are accepted as equivalents: Political Science 113 or 175A-175B; History 171A-171B or 173A-173B.

**Upper Division Course Requirement.** 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.

**Teacher Education Curricula and Teaching Credentials.** The college offers curricula leading to the A.B. degree with authorization to recommend candidates for the following teaching credentials:

1. **Kindergarten-Primary Credential** authorizing the holder to teach in the kindergarten and in grades one, two and three of any elementary school in California.
2. **General Elementary School Credential** authorizing the holder to teach any or all subjects in all eight grades of any elementary school in California.
3. **General 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. It will be advantageous to the student to secure this credential in combination with the elementary school credential, one of the special secondary credentials, or in combination with additional course requirements in the teaching major and in education as a preparation for graduate work for the general secondary credential. Candidates for the latter type of combination should consult the Dean of Education regarding requirements.
4. **Special Secondary Credential in Art** authorizing the holder to teach art subjects in any grade of the public schools of California.
5. **Special Secondary Credential in Business Education** authorizing the holder to teach commercial subjects in any grade of the public schools of California.
6. **Special Secondary Credential in Music** authorizing the holder to teach music in any grade of the public schools of California.
7. **Special Secondary Credential in Physical Education** authorizing the holder to teach physical education in any grade of the public schools of California.

## 8. Special Secondary Credential in Speech Arts. See page 35.

9. 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, Volume XI, No. 2, June, 1942, *Regulations Governing Granting of Credentials for Public School Service in California*. At least one-half of the work required for this credential shall be done in San Diego State College if the college is to recommend the candidate for the credential. Further information will be furnished by the college upon request by the applicant.

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

A combination of the elementary school credential with the junior high school credential may be secured by completing the requirements for the elementary school credential and the following additional requirements: (a) a teaching major; (b) Education 100B; (c) a minimum of 3 units of practice teaching in a junior high school or the equivalent; (d) a course in Education 115B, *Secondary Education*; (e) a total minimum of 132 units.

A candidate for either the general elementary credential or the kindergarten-primary credential may secure the other credential subsequently or concurrently by taking 12 additional units. Four of these units shall be in directed teaching (Education 116) at the new level, 4 in methods at that level, and 4 as prescribed by the Dean of Education.

**Limited Electives.** Credit for limited and vocational courses will be allowed in fulfillment of the requirements for the A.B. degree whenever they are required in any credential pattern completed by the student. A maximum of 6 units of credit in the following courses may be allowed to fulfill the requirements of any other credential pattern only after the student has received permission from the Dean of Education: Art L7, L14A; Economics L10A, L10B, L15A, L15B, L16A, L16B, L65A, L65B, L129, L163; Engineering L22, L23; English L1A, L1AA, L8; Health Education L151; Journalism L53A, L53B, L153A, L153B; Library Science L10; Mathematics LA, LB; Merchandising, all courses; Music L1A, L2A, L3A, L6A, L7A, L16A-B-C-D, L17A-B-C-D, L18A-B-C-D, L28A-L28B, L116A-B-C-D, L117A-B-C-D, L118A-B-C-D; Physical Education, all activity courses beyond the requirements specified in curricular patterns; Secretarial Training, all courses; and all courses numbered L40 or L45 if grade is below a B.

## Curricula Leading to Teaching Credentials

All candidates in teacher education curricula should observe carefully the requirements for admission to teacher education and be prepared to meet them at the end of the sophomore year. Students in other colleges who contemplate transferring to San Diego State College should arrange their programs so as to meet the requirements of their particular curriculum as early as possible. See college calendar for dates when the fundamentals test will be given. See page 21 in this bulletin for requirements for admission to teacher training.

## A.B. Degree with Kindergarten-Primary Credential

Two teaching minors are required. See statement on page 22

FRESHMAN YEAR		Units
<b>First Semester—</b>		
Art 6A, Structure	-----	2
Biology 10A <sup>1</sup> , General Biology	-----	3
English L1A <sup>2</sup> , or L1AA <sup>2</sup> , or 1B <sup>3</sup> , Freshman English	-----	3
Physical Education, Freshman Activities <sup>7</sup>	-----	$\frac{1}{2}$
Health Education 1 or 2	-----	2
Music L28A, Piano (or equivalent by examination) <sup>8</sup>	-----	1
Elective to meet requirements in Nat. Sci., Soc. Sci., and minors <sup>3,4</sup>	-----	5
<b>Second Semester—</b>		
Biology 10B <sup>1</sup> , General Biology	-----	3
English 1B, or 2	-----	3
Music L1A, Musicianship—Fundamentals of Music	-----	3
Music L28B, Piano (or equivalent by examination) <sup>8</sup>	-----	1
Physical Education, Freshman Activities <sup>7</sup>	-----	$\frac{1}{2}$
Elective to meet requirements in Nat. Sci., Soc. Sci., and minors <sup>3,4</sup>	-----	5
		32
SOPHOMORE YEAR		
<b>First Semester—</b>		
Art 6B, Structure	-----	2
Speech Arts 1A, Fundamentals of Public Speaking	-----	3
Physical Education, Sophomore Activities <sup>7</sup>	-----	$\frac{1}{2}$
Geography 1, Elements (Natural Science)	-----	3
<b>Second Semester—</b>		
Physical Education L53, Physical Education in the Elementary School	-----	2 $\frac{1}{2}$
Geography 2, Regions (Social Science)	-----	3
<b>Either Semester—</b>		
Art 61A, Elementary Crafts	-----	2
Music L7A, Music Materials for the Elementary School	-----	3
Psychology 1A, General	-----	3
Social Science 1A	-----	3
Elective to meet requirements in Nat. Sci., Soc. Sci., and minors <sup>3,4,5</sup>	-----	6
		31

<sup>1</sup> Possible substitutions for the requirement in Biology 10A-10B:

- High school Biology (year course with laboratory work).
- Botany 2A-2B and Zoology 1A-1B—16 units.
- High school Botany and Zoology 1A-1B.
- High school Zoology and Botany 2A-2B.
- High school Botany and high school Zoology.
- Biology 1 and Physical Science 1A or 1B—6 units.

<sup>2</sup> Depending on result of Subject A test.

<sup>3</sup> See Subject Matter Requirements in the Lower Division for total requirements in English, Natural Sciences, Social Sciences and Mathematics. See page 17.

<sup>4</sup> Use these electives to meet requirements for minors if they are not English, General Science or Social Sciences.

<sup>5</sup> If 6 units in minor taken in freshman year, none needed in sophomore year.

<sup>6</sup> Candidates for an Elementary School Credential in combination with any other type of credential are required to do not less than 6 units of directed teaching in the elementary school.

<sup>7</sup> Folk Dancing and Rhythmic Skills are recommended for this credential.

<sup>8</sup> Piano may be taken at any time during the first three years. The requirement may be met by examination.

## JUNIOR YEAR

## First Semester—

	Units
Education 102B, Child Growth and Development.....	3
Education L147B, Education Practicum—Primary Level.....	12
Teaching of Art.....	1
Elementary Music Education.....	1
Elementary School Reading.....	2
Elementary Education Methods.....	3
Mental Hygiene.....	2
Story Telling and Speech.....	1
Directed Teaching.....	2
	12

## Second Semester—

Education L147A, Education Practicum—Kindergarten Level.....	10
Elementary Art Education.....	1
Elementary Music Education.....	1
English, Children's Literature.....	2
Kindergarten-Primary Education.....	4
Educational Psychology.....	2
	10

Education L116, Directed Teaching in Kindergarten (to be taken concurrently with Education L147A).....

29

## SENIOR YEAR

Education 102A, Measurement in Education.....	3
Education 115A, History and Philosophy of Education.....	3
Education L116, Directed Teaching in Primary Grades.....	3
Health Education 151.....	2
Elective (including two minors and political science requirement).....	17
	28

## SUMMARY

120

Art 6A-B, 61A.....	6
Education 102A-B, 115A, L116, L147A-B.....	38
English and Speech Arts.....	9
Health Education 1 or 2, and 151.....	4
Music L1A, L7A, L28A-B.....	8
Natural Sciences (including Biology 10A-B and Geography 1).....	12
Physical Education L1A-B-C, L53.....	4
Political Science 101 or substitute, see page 20.....	2
Psychology 1A.....	3
Social Sciences (including Geography 2).....	12
Elective (including two teaching minors).....	22
Total.....	120

## A.B. Degree With General Elementary School Credential

Two teaching minors are required, see page 22

## FRESHMAN YEAR

	Units
Art 6A, Structure.....	2
Biology 10A, <sup>1</sup> General Biology.....	3
English L1A, <sup>2</sup> or L1AA, <sup>2</sup> or 1B, <sup>2</sup> Freshman English.....	3
Geography 1, Elements (Natural Science).....	3
Physical Education, Freshman Activities.....	1
Health Education 1 or 2, Health and Social Adjustment.....	2
Electives <sup>3, 4</sup> .....	2
	30

## Second Semester—

Biology 10B, <sup>1</sup> General Biology.....	3
English 1B or 2D.....	3
Geography 2, Regions (Social Science).....	3
Music L1A, Musicianship—Fundamentals of Music.....	3
Physical Education, Freshman Activities.....	1
Electives <sup>3, 4</sup> .....	2
	30

## SOPHOMORE YEAR

Art 6B, Structure.....	2
English (selected from 1B, 2D, unless taken in freshman year, or from 52A, 52B, 56A, 56B).....	3
Physical Education, Sophomore Activities.....	1
	6

## Second Semester—

Physical Education L53—Physical Education in the Elementary School.....	2
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## Either Semester—

Art 61A, Elementary Crafts.....	2
Art 61B, Elementary Crafts.....	2
Music L7A, Music Materials for the Elementary Schools.....	3
Psychology 1A, General.....	3
Social Science 1A, Pol. Soc. and Econ. Problems.....	3
Laboratory Science unless Physics or Chemistry was taken in high school or Biology 10A-10B in freshman year.....	3-4
Electives to meet requirements in Natural Sciences, Social Sciences, and minors <sup>3, 4, 5</sup> .....	5-6
	30

## JUNIOR YEAR

Education 102A, Measurement in Education.....	3
Education L147B, Education Practicum—Lower Levels.....	12

## Second Semester—

Education 102B, Child Growth and Development.....	3
Education L148, Education Practicum—Upper Levels.....	12
	30

## SENIOR YEAR

Education L116, Directed Teaching <sup>6</sup> .....	6
--	---

## Either Semester—

Education 115A, History and Philosophy of Education.....	3
Electives including two minors and political science requirement (for the year).....	21
	30

<sup>1,2,3,4,5,6</sup> See footnotes for Kindergarten-Primary Credentials, page 25.

## SUMMARY

	Units
Art 6A, 6B, 61A, 61B	8
Education 102A-102B, 115A, L116, L147, L148	39
English	6
Health Education 1 or 2	2
Music L1A, L7A	5
Natural Sciences (incl. Biology 10A-10B and Geog. 1)	12
Physical Education L1A-B-C, L53	4
Political Science 101	2
Psychology 1A	3
Social Sciences (including Social Science 1A and Geography 2)	12
Electives, including two teaching minors	27

120

**A.B. Degree With General Junior High School Credential.** (See statements on page 21 about teaching majors and minors.) Students who expect to secure the Master of Arts Degree, or the general secondary credential, should complete 24 upper division units in the departmental major instead of the 12 upper division units required for this credential. See statement on page 23 regarding combinations of this with other credentials.

## First Semester—

Biology 10A, <sup>1</sup> General Biology	3
English L1A, <sup>2</sup> or L1AA, <sup>2</sup> or 1B <sup>2</sup>	3
Geography 1, Elements (Natural Science)	3
Physical Education, Freshman Activities	1
Health Education 1 or 2, Health and Social Adjustment	2
Electives, <sup>3</sup> includes major and minor <sup>4</sup>	3

## Second Semester—

Biology 10B, <sup>1</sup> General Biology	3
English 1B or 2D	3
Geography 2, Regions (Social Science)	3
Physical Education, Freshman Activities	1
Electives, <sup>3</sup> including major and minor <sup>4</sup>	6

30

## SOPHOMORE YEAR

## First Semester—

Physical Education, Sophomore Activities	1
Psychology 1A, General	3

## Second Semester—

Physical Education, Sophomore Activities	1
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## Either Semester—

Social Science 1A, Pol., Soc. and Econ. Problems	3
Laboratory Science unless Physics or Chemistry was taken in High School or Biology 10A-10B in Freshman year	3-4
Elective, <sup>3</sup> including major and minor <sup>5</sup> (for the year)	19-20

30

<sup>1</sup> Possible substitutions for the requirement in Biology 10A-10B:

- High school Biology (year course with laboratory work).
- High school Botany and Zoology 1A-1B.
- High School Zoology and Botany 2A-2B.
- High School Botany and high school Zoology.
- Biology 1 and Physical Science 1A or 1B—6 units.
- Botany 2A-2B and Zoology 1A-1B—16 units.

<sup>2</sup> Depending on result of Subject A test.

<sup>3</sup> See Subject Matter Requirements in the Lower Division, page 17, for total requirements in English, Natural Sciences, Social Sciences, and Mathematics.

<sup>4</sup> Unless minor is English, General Science or Social Science.

<sup>5</sup> If 6 units in minor taken in freshman year, none needed in sophomore year.

## JUNIOR YEAR

First Semester—	Units
Education L100A, <sup>6</sup> Methods and Materials of Instruction	3
Education 102A, Measurement in Education	3
Political Science 101, American Institution (or substitute)	2

## Second Semester—

Education L100B, Methods and Materials of Instruction	3
Education 102B, Child Growth and Development	3
Education L116, Directed Teaching	3

## Either Semester—

Health Education 151, Health Education	2
Electives, including major and minor (for the year)	11

## SENIOR YEAR

First Semester—	Units
Education 115A, History and Philosophy of Education	3
Education L116, Directed Teaching	3

## Second Semester—

Education 115B, Secondary Education	3
-------------------------------------	---

## Either Semester—

Electives, including major and minor <sup>7</sup> (for the year)	21
--	----

30

## SUMMARY

Education L100A <sup>6</sup> -L100B, 102A-102B, 115A-115B, L116	24
English	6
Health Education 1 or 2; 151	4
Natural Sciences (including Biology 10A-10B and Geog. 1)	12
Physical Education	2
Political Science 101	2
Psychology 1A	3
Social Sciences (including Social Science 1A and Geography 2)	12
Electives, including teaching major and minor	55

120

**A.B. Degree With Special Secondary 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	2
Art A, Freehand Drawing and Perspective <sup>8</sup>	3
Art 6A-6B, Structure	4
Art 14A, Lettering	2
Art 61A, 61B, Fine and Industrial Arts, Elementary Crafts	4
† English	6
Health Education 1 or 2, Health and Social Adjustment	2
† Natural Sciences (including laboratory course unless taken in high school)	9-12
Physical Education, Freshman and Sophomore Activities	2
Psychology 1A, General	3
† Social Sciences (including Social Science 1A)	9-12
Electives, including additional art for major and courses for teaching minor <sup>9</sup>	8-14

60

<sup>6</sup> Not required if student is meeting requirements for elementary credential also.

<sup>7</sup> If 6 units in minor taken in junior year, none needed in senior year.

<sup>8</sup> Not required if student has had a year of Freehand Drawing in high school and can pass a proficiency examination.

<sup>9</sup> Unless minor is English, General Science, or Social Science.

† See Subject Matter Requirements in the Lower Division, page 17.

## UPPER DIVISION

	Units
Aesthetics 150, Appreciation and History of Art	2
Art 106A-106B, Printmaking	4
Art 112A-112B, Organization	6
Art 116A, Advanced Painting	3
Art 152A (unless 52A was taken in lower division), Stage Design	0-2
Art 195, Home Decoration	2
Electives in U. D. Art	3-5
Education L100A, Methods and Materials of Instruction	3
Education L100B, Methods and Materials of Instruction	3
Education 102A, Measurement in Education	3
Education 102B, Child Growth and Development	3
Education 115B, Secondary Education	3
Education L116, Directed Teaching (4 units in special field)	6
Education L119, Art in the Elementary School	2
Political Science 101, American Institutions (or substitute)	2
Electives, including additional art and teaching minor	11-15
	60

## SUMMARY

Aesthetics 50 and 150	4
Art major	40 <sup>2</sup>
Education	23
English	6
Health Education 1 or 2	2
Natural Sciences	12
Physical Education	2
Political Science 101	2
Psychology 1A	3
Social Sciences (including Social Science 1A)	12
Electives, including teaching minor	14
	120

**A.B. Degree With Special Secondary 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.

## Accounting and Secretarial Subfields

LOWER DIVISION	Units
Economics 1A-1B, Principles	6
Economics 14A-14B, Accounting	6
English 1S, English in Business	3
Geography 10A-10B, Economic Geography	6
<sup>1</sup> Natural Sciences	9
Physical Education, Freshman and Sophomore Activities	2
Health Education 1 or 2, Health and Social Adjustment	2
Speech Arts 1A, Fundamentals of Public Speaking	3
Social Science 1A, Pol., Soc. and Econ. Problems	3
Psychology 1A, General	3
Secretarial Training, 1A, Business Mathematics	1
Secretarial Training L1A-L1B, Typewriting	6
Secretarial Training L5A-L5B, Stenography	10
	60

<sup>1</sup> Not required if student is meeting requirements for elementary credential also.

<sup>2</sup> Maximum credit allowable in art.

<sup>3</sup> See page 18. Students deficient in high school natural science will have to make up such deficiency in college. See Subject Matter Requirements in the Lower Division.

## UPPER DIVISION

	Units
Secretarial Training 3A, Office Methods and Appliances	3
Economics 18A-18B, Commercial Law	6
Economics 100, or 102 or 111 or 123	3
Economics 121, Business Administration	3
Upper Division Accounting	6
Education L100A-L100B, Methods and Materials of Ed.	6
Education 102A, Measurements in Education	3
Education 102B, Child Growth and Development	3
Education 115B, Secondary Education	3
Education L116, Directed Teaching	6
Special Methods Courses as prescribed by major department	4
Political Science 101, American Institutions (or substitute)	2
Minor	6
Electives	6
	60

**A.B. Degree With Special Secondary Credentials in Music.** Students intending to become applicants for this credential must show evidence of musical ability, before entering the course. They must be able to play artistically upon the piano, music of the grade of the simpler *Songs Without Words* of Mendelssohn or else possess a corresponding degree of proficiency in voice or an orchestral instrument. No credit is given to music majors for the basic courses of Music L1A and Music L7A, but if a deficiency exists in the field of general musicianship, the student will be required to take either or both of these courses without credit.

All music majors are required to enroll in two musical activities each semester. In special cases this requirement may be waived by petition to the Music Department. All students are required to pass examinations in applied music in order to receive credit. No credit is allowed to majors in voice or orchestral instruments for any work in piano which is below the level of artistic hymn playing.

Applicants for the Special Secondary Credential in Music must maintain a grade average of C or better in music courses.

All students majoring in music are required to pass a comprehensive examination in this field during the senior year.

This course leads to the A.B. degree with a Special Secondary Credential in Music which will authorize the holder to teach music in the elementary, junior and senior high schools of the State.

A maximum of 40 units in Music may be used toward the A.B. degree. Of these 40 units a maximum of 3 may come from the field of musical activities: band, choir, chorus, glee clubs and orchestra.

## FRESHMAN YEAR

First Semester—	Units
English L1A, <sup>1</sup> 1B, <sup>1</sup>	3
Health Education 1 or 2, Health and Social Adjustment	2
History 4A or 8A	3
Aesthetics 1A, Survey of Music	2
Music 1B, Music Reading and Ear Training	2
Music L18, Individual Study of Piano or Organ	1
Physical Education	$\frac{1}{2}$
	13 $\frac{1}{2}$
Second Semester—	
<sup>2</sup> English	3
Geography 1, Elements (Natural Science)	3
Social Science 1A, Contemporary Pol., Soc. and Econ. Problems	3
Aesthetics 1B, Survey of Music	2
Music 1C, Advanced Music Reading and Ear Training	2
Music L3A, Woodwind Instrument Class	1
Music L18B, Individual Study of Piano or Organ	1
Physical Education	$\frac{1}{2}$
	15 $\frac{1}{2}$

<sup>1</sup> Depending on result of Subject A test.

<sup>2</sup> See Lower Division Requirements on page 18.

SOPHOMORE YEAR	
<b>First Semester—</b>	<b>Units</b>
Music 1D, Advanced Music Reading and Ear Training	2
Music L2A, String Instrument Class	1
Music 4A, Elementary Harmony	3
Music L18c, Individual Study of Piano or Organ	1
*Natural Sciences	3
Geography 2, Regions (Social Science)	3
Physical Education	1
Elective	1

14½

<b>Second Semester—</b>	
Music 4B, Elementary Harmony	3
Music L6A, Individual Study of an Orchestral Instrument	1
Music L17, Individual Study of Voice	1
Music L18, Individual Study of Piano or Organ	1
Psychology 1A, General	3
*Natural Sciences	6
Physical Education	1

15½

## JUNIOR YEAR

<b>First Semester—</b>	
Music 105A, Advanced Harmony and Composition	3
Education L117A, Music in Elementary School	2
Education L145, Organization and Administration of Music Education	2
Education 102A, Measurement in Education	3
Education L100A, Methods and Materials of Instruction	3
Upper Division Minor	3

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<b>Second Semester—</b>	
Political Science 101, American Institutions (or substitute)	2-3
Music 105B, Advanced Harmony and Composition	3
Music L117A, Advanced Individual Study of Voice	1
Education L100B, Methods and Materials of Instruction	3
Education 102B, Child Growth and Development	3
Upper Division Minor	3

15-16

## SENIOR YEAR

<b>First Semester—</b>	
Music 107A, Form and Analysis	2
Music 119, Instrumental Conducting	1
Music L117B, Advanced Individual Study of Voice	1
Aesthetics 102A, History of Music	2
Education L116, Directed Teaching	6
**Music Activities	2

14

\* See Subject Matter Requirement in the Lower Division on page 18.

\*\* NOTE.—A maximum of 3 units is credited toward the Special Secondary Credential in Music for music activities carried on throughout the four year course. These activities: band, choir, glee clubs, chorus and orchestra are an integral part of the work of the course and each music major is expected to participate in at least two of these each semester unless excused by the Music Department.

Second Semester—		Units
Music 106A, Counterpoint		2
Music L117C, Advanced Individual Study of Voice		1
Music 120A, Vocal Conducting		1
Music 121A, Instrumentation		2
Aesthetics 102B, History of Music		2
Education 115B, Secondary Education		3
Education L116, Directed Teaching		3
**Music Activities		1

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## SUMMARY

Health Education 1 or 2	2
Aesthetics 1A, 1B, 102A, 102B	8
Education L100A, L100B, 102A, 102B, 115B, L116, L117, L145	28
English	6
Upper Division Minor	6
Natural Sciences (including Geography 1)	12
Music 1B, 1C, 1D, L2A, L3A, 4A, 4B, L6A, L17A-B-C-D, L18A-B-C-D, 105A, 105B, 106A, 107A, 119, 120A, 121A, Music Activities	40
Social Sciences (including Soc. Sci. 1A, Geog. 2, and Hist.)	12
Psychology 1A	3
Physical Education	2
Elective	1
	120

A.B. Degree With Special Secondary 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
Biology 10A-10B, General Biology (unless taken as a year course in high school with at least a grade of B)	
or	
Zoology 1A, General	4-6
†English	6
Health Education 1	2
†Natural Sciences	3 or 5

## Physical Education:

L1A-1B, L1C-1D	2
30, Emergencies	2
L53, Physical Education in the Elementary School	2½
L62A, L62B, Gymnastic Activities	4
L72, Principles	2
Sports and Athletics <sup>1</sup>	2
Psychology 1A, General	3
†Social Sciences, including Social Science 1A, Political, Social and Economic Problems	12
Speech Arts 1A, Fundamentals of Public Speaking	3
Zoology 8, Human Anatomy (or Zoology 108)	3
Electives, including courses to meet minor requirements <sup>2</sup>	7½

60

\*\* NOTE.—A maximum of 3 units is credited toward the Special Secondary Credential in Music for music activities carried on throughout the four year course. These activities: band, choir, glee clubs, chorus and orchestra are an integral part of the work of the course and each music major is expected to participate in at least two of these each semester unless excused by the Music Department.

† See Subject Matter Requirements in the Lower Division, page 17.

<sup>1</sup> Men majoring in Physical Education are requested to participate actively in at least one sport and two additional activities per year in order to secure adequate activity background for teaching.

<sup>2</sup> Unless minor is English, General Science, or Social Science.

UPPER DIVISION		Units
Education L100A-L100B, Methods and Materials of Instruction	6	
Education 102A, Measurement in Education	3	
Education 102B, Child Growth and Development	3	
Education 115B, Secondary Education	3	
Education L116, Directed Teaching	6	
Health Education 151	2	
Political Science 101, American Institutions (or substitute)	2	
Zoology 114A, Genetics	2	
Physical Education:		
L154, Organ. and Admin. of Physical Education	3	
L155, Applied Anatomy	3	
L156A-156B, Sports Methods	4	
161, Folk Dancing	2	
L169, Technique of Teaching Activities	2	
170, Recreational Leadership	2	
L190, Individual Program Adaptation	3	
Sports and athletics <sup>1</sup>	2	
Electives	12	
	60	

SUMMARY		Units
Education L100A-L100B, 102A-102B, 115B, L116	21	
English	6	
Health Education 1, 151	4	
Speech Arts 1A	3	
Natural Sciences (including Biology 10A-10B or substitute and Zoology 8)	12	
Physical Education teaching major	35½	
Political Science 101	2	
Psychology 1A	3	
Social Sciences (including Social Science 1A)	12	
Zoology 114A	2	
Electives, including minor	19½	
	120	

(A.B. Degree with Special Secondary Credential in P.E.)

### WOMEN

LOWER DIVISION		Units
Music 1A, Musicianship—Fundamentals of Music	3	
*English	6	
Health Education 2, Health and Social Adjustment	2	
*Natural Sciences (including Biology 10A-10B)	12	
Physical Education:		
L1A, Fundamental Skills	1½	
L1B, Folk Dancing	1½	
L1C, Rhythmic Skills	1½	
L5B, Archery	1½	
L6A, Badminton	1½	
L7A or 7B, Golf	1½	
L11B, Tennis	1½	
L53, Physical Education in the Elementary School	2½	
Health Education 51, First Aid and Safety Education	1	
Psychology 1A, General	3	
*Social Sciences (including Soc. Science 1A)	12	
Speech Arts	3	
Zoology 8, Human Anatomy	3	
Electives, including minor <sup>1</sup>	9	
	60	

\* See Subject Matter Requirements in the Lower Division, page 17.

<sup>1</sup> Men majoring in Physical Education are requested to participate actively in at least one sport and two additional activities per year in order to secure adequate activity background for teaching.

UPPER DIVISION		Units
Education L100A-L100B, Methods and Materials of Instruction	6	
Education 102A, Measurements in Education	3	
Education 102B, Child Growth and Development	3	
Education 115B, Secondary Education	3	
Education L116, Directed Teaching	6	
Health Education 151, Health Education	2	
Political Science 101, American Institutions (or substitute)	2	
Physical Education:		
L153, Principles and Administration of Secondary Physical Education	3	
L155, Applied Anatomy	3	
L157A-L157B, Sports Methods	4	
L160, Principles of Teaching Gymnastics	2	
L161, Folk Dancing	2	
L164A-L164B, Methods in Modern Dance	4	
L169, Technique of Teaching Activities	2	
170, Recreational Leadership	2	
L177, Individual Program Adaptations	2	
L185, Techniques of Individual Sports	1	
Electives, including minor	10	
	60	

SUMMARY		Units
Music 1A	3	
Education L100A-L100B, 102A-102B, 115B, L116	21	
English	6	
Health Education 2, 51, and 151	5	
<sup>1</sup> Natural Sciences (including Biology 10A-10B, and Zoology 8)	12	
Physical Education teaching major	31	
Political Science 101	2	
Psychology 1A	3	
<sup>1</sup> Social Sciences (including Social Science 1A)	12	
Speech Arts	3	
Electives, including a minor	22	
	120	

**A.B. Degree With a Major in Speech Arts.** The college is authorized to grant an A.B. degree with a major in Speech Arts. Upon the satisfactory completion of the following curriculum the college will recommend that the Division of Credentials of the State Department of Education grant its graduates the Special Secondary Credential in Speech Arts. A scholarship average of C or better is required in all Speech Arts courses.

LOWER DIVISION		Units
Speech Arts 1A-1B or 1C-1D or 60	6	
Speech Arts 55A-55B or 55C-55D	6	
Speech Arts 63A-63B, Verse Choir	1	
<sup>1</sup> Natural Sciences	12	
<sup>1</sup> Social Sciences (including Social Science 1A)	12	
Electives and Minor	8	
Psychology 1A, General	3	
Health Education 1 or 2, Health and Social Adjustment	2	
English L1A, 1B, or 1C and 3 units from 30A-30B, 52A-52B, 56A-56B	6	
Physical Education L1A, L1B, L1C and L3A or L11A	2	
Aesthetics 1A or 5	2	
	60	

<sup>1</sup> See lower division requirements, page 18.

## UPPER DIVISION

	Units
Health Education 151, Health Education.....	2
Education L100A-L100B, Methods and Materials of Instruction.....	6
Education 102A, Measurement in Education.....	3
Education 102B, Child Growth and Development.....	3
Education 115B, Secondary Education.....	3
Education L116, Directed Teaching.....	6
Political Science 101, American Institutions.....	2
Minor.....	6
Speech Arts 155A-155B or 156A-156B.....	6
Speech Arts 163.....	3
Speech Arts 150, Phonetics.....	2
Speech Arts Electives.....	9
Electives to include 6 units from P. E. L164A or L12A; English 152A-152B; Eng. 110, 116B, 117A-B; or upper division courses offered in both English and Speech Arts.....	8
	60

## SUMMARY

Aesthetics 1A or 5.....	2
Education L100A-L100B, 102A-102B, 115B, L116.....	21
English.....	6
Health Education.....	4
<sup>1</sup> Natural Sciences.....	12
Physical Education.....	2
Psychology 1A.....	3
<sup>1</sup> Social Sciences (including Social Science 1A).....	12
Speech Arts.....	33
Political Science 101, American Institutions (or substitute).....	2
Electives, including teaching minor.....	23
	120

**Special Credential in Correction of Speech Defects.** The credential is available to graduate students who have successfully completed two years of teaching in any field. Specialized courses are required for certification plus a total of 100 hours of clinical experience in the treatment of articulatory and nervous disorders of speech.

<sup>1</sup> See lower division requirements, page 18.

## PROFESSIONAL AND PREPROFESSIONAL CURRICULA

Professional and preprofessional courses, ranging in length from two years to three and four years of collegiate work, are offered. The following curricular outlines meet typical requirements for admission to professional schools of law, medicine, dentistry, nursing, pharmacy, optometry, social service, public service, journalism, agriculture, and engineering. The student should modify these suggested outlines of study whenever the peculiar requirements of the professional school of his choice makes it seem advisable for him to do so.

The degree curricula in liberal arts may be modified to include the course outlines which follow. For a complete statement of the requirements for the junior certificate and the degree see page 17 and following pages.

### Prelegal Curriculum

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.

The following curriculum meets 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. For the majority of prelegal students a general major with concentration in economics, as provided for in the following curriculum, furnishes the most effective preparation for later professional study in law and for later activities in the field of business. However, for some students a major, or at least strong minors, in English, history, or political science, may provide a suitable preparation.

The high school program should include the following subjects: elementary algebra, 1 unit (2 semester credits); plane geometry, 1 unit; intermediate algebra, 1 unit; foreign language, 3 units in one language or 2 units in each of two languages. Following is a recommended arrangement of courses:

	Units	
FRESHMAN YEAR		
Physical Education -----	1	1
Health Education 1 or 2 -----	2	2
*Foreign Languages (if needed to complete requirement) -----	0-5	0-5
*Natural Science -----	3-5	3-5
*English -----	3	3
Economics 14A-14B -----	3	3
Psychology 1A -----	3	3
Elective <sup>1</sup> -----	0-3	0-4
	15½	15½
SOPHOMORE YEAR		
Physical Education -----	1	1
*Additional Natural Science (if needed to meet requirement) -----	3	3
Economics 1A-1B -----	3	3
Philosophy 3A-3B, 5A-5B, or Mathematics 3A-3B -----	3	3
Political Science 1A-1B or 71A-71B -----	3	3
Elective <sup>1</sup> -----	3	6
	15½	15½

\* See lower division requirements, page 17.

<sup>1</sup> Recommended elective: History, 6 units, taken in the freshman or sophomore year.

JUNIOR YEAR		Units	
Economics 121	3	3	3
Economics 133	3	3	3
Economics Elective <sup>3</sup>	3	3	3
History 151A-151B or 175A-175B	3	3	3
Political Science 111 and 113 or 143A-143B	3	3	3
Sociology 105, 106	3	3	3
Elective <sup>3</sup>	3	3	3
	15	15	15
SENIOR YEAR		Units	
Economics 100A	3	3	3
Economics Electives <sup>3</sup>	3	3	3
History 111A-111B or 121A-121B	3	3	3
Political Science 175A-175B	3	3	3
Elective <sup>3</sup>	6	6	6
	15	15	15

### Preoptometry Curriculum

The high school program should include the following subjects: elementary algebra 1 (year) unit; plane geometry, 1 unit; algebraic theory, 1 unit; trigonometry,  $\frac{1}{2}$  unit; physics, 1 unit; chemistry, 1 unit; foreign language, 3 units. The following curriculum prepares for junior standing in university schools of optometry:

FRESHMAN YEAR		Units	
Physical Education	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
Health Education 1 or 2	2	2	2
*Foreign Language (if needed to complete requirements)	3	3	3
Physics 2A-2B	3	3	3
Physics 3A-3B	3	3	3
Psychology 1A	1	1	1
Speech Arts 1A-1B	3	3	3
Social Science 1A	3	3	3
Elective	3	3	3
	15 $\frac{1}{2}$	16 $\frac{1}{2}$	16 $\frac{1}{2}$
SOPHOMORE YEAR		Units	
Physical Education	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
Chemistry 1A-1B	5	5	5
Mathematics 3A-3B	3	3	3
*Social Science	3	3	3
Physiology 1A and 1C <sup>1</sup>	3	3	3
Elective	4	4	4
	15 $\frac{1}{2}$	16 $\frac{1}{2}$	16 $\frac{1}{2}$

### Premedical Curriculum

The entrance requirements of medical colleges ordinarily range from three to four years of premedical work. The lower division requirements of the Liberal Arts curricula include the general requirements of standard medical colleges and should therefore be met in full whether the curriculum extends over a period of three or of four years. However, a student who has definitely decided not to become a candidate for a degree in San Diego State College may substitute the lower division requirements of the institution to which he expects to transfer in place of the following courses marked with an asterisk. All plans for premedical work should include an arrangement of courses to meet the requirements of the medical college which the student expects to enter.

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.

<sup>1</sup> If not available, Zoology 20 may be substituted.

<sup>2</sup> To be chosen from the following list: Economics 100B, 111, 131, 135, 150.

<sup>3</sup> Recommended electives: English, philosophy, psychology, economics.

<sup>4</sup> See lower division requirements, page 17.

The high school program should include the following subjects: elementary algebra, 1 (year) unit; plane geometry, 1 unit; chemistry, 1 unit; physics, 1 unit; French or German, 3 units. Two units of Latin are recommended. Following is a recommended arrangement of courses:

FRESHMAN YEAR		Units	
Physical Education	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
Health Education	2	2	2
Chemistry 1A-1B	5	5	5
*English Composition	3	3	3
**French or German (if needed to meet requirement) <sup>2</sup>	0-5	0-5	0-5
Psychology 1A	3	3	3
Social Science 1A	3	3	3
**Elective	0-5	0-5	0-5
	15 $\frac{1}{2}$	16 $\frac{1}{2}$	16 $\frac{1}{2}$
SOPHOMORE YEAR		Units	
Physical Education	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
Zoology 1A-1B	4	4	4
Chemistry 7-8	3	3	3
**Social Science Year Course	3	3	3
English Composition	3	3	3
**Additional Year Course <sup>3</sup>	3	3	3
**Elective	3	3	3
	16 $\frac{1}{2}$	16 $\frac{1}{2}$	16 $\frac{1}{2}$

JUNIOR YEAR		Units	
Political Science 101	2	2	2
Physics 2A-2B	3	3	3
Physics 3A-3B	1	1	1
Chemistry 105	3	3	3
Zoology 100	3	3	3
Zoology 100D	1	1	1
Zoology 106	4	4	4
Electives	2	5	5
	15	15	15
SENIOR YEAR		Units	
Upper division requirements and electives for the major, the minors and the degree (see page 20)		15	15
		15	15

### Prenursing Curriculum

A student who plans to complete a curriculum in nursing leading to a degree and a certificate in nursing in another collegiate institution should ascertain the lower division (junior certificate) requirements of that institution. The lower division requirements of the institution to which the student will transfer may be substituted for the following courses marked with an asterisk wherever the requirements differ.

The high school program should include the following subjects: elementary algebra, 1 (year unit); plane geometry, 1 unit; chemistry, 1 unit; physics, 1 unit; French or German, 3 units; domestic science (foods), 1 unit; 2 units of Latin are recommended. The following is a recommended arrangement of courses:

FRESHMAN YEAR		Units	
Physical Education	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
Health Education	2	2	2
Chemistry 2A-2B	3	3	3
Psychology 1A	3	3	3
*English Composition	3	3	3
**French or German (if needed to complete requirement)	0-5	0-5	0-5
Social Science 1A	3	3	3
**Elective	0-6	0-5	0-5
	15 $\frac{1}{2}$	16 $\frac{1}{2}$	16 $\frac{1}{2}$
SOPHOMORE YEAR		Units	
Physical Education	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
Psychology 1B	3	3	3
Economics 1A-1B	3	3	3
Bacteriology 1	4	4	4
**Additional Year Course	3	3	3
Physiology 1A, 1C	5	5	5
Zoology 8	3	3	3
Elective	4	4	4
	16 $\frac{1}{2}$	15 $\frac{1}{2}$	15 $\frac{1}{2}$

<sup>1</sup> If not available, Zoology 20 may be substituted.

<sup>2</sup> German if the major is Chemistry.

<sup>3</sup> Mathematics 3A-3B or satisfactory substitute if the major is Chemistry.

<sup>4</sup> Chosen from English 1B and 2A, 2B, 2C, 2D, 2E, 2F.

<sup>5</sup> See lower division requirements, page 17.

### Predental Curriculum

Candidates for a degree in dentistry should ascertain the entrance requirements of the dental college to which they expect to transfer and should make whatever changes in the following typical requirements that may seem desirable in satisfying the requirements of the dental college.

The high school program should include the following subjects: elementary algebra, 1 (year) unit; plane geometry, 1 unit; chemistry, 1 unit; physics, 1 unit; foreign language, 3 units in one language.

The following arrangement of courses is recommended:

FRESHMAN YEAR		Units	SOPHOMORE YEAR		Units
Physical Education	-----	$\frac{1}{2}$ $\frac{1}{2}$	Physical Education	-----	$\frac{1}{2}$ $\frac{1}{2}$
Health Education	-----	2	Chemistry 7-8	-----	3 3
Chemistry 1A-1B	-----	5 5	Physics 2A-2B or Zoology	-----	3-4 3-4
*English	-----	3 3	1A-1B	-----	3 3
Psychology 1A	-----	3	**Social Science Year Course	-----	3 3
**Foreign language (if	-----	--	**Social Science 1A	-----	3 --
needed to complete require-	-----	--	**Additional Year Course	-----	3 3
ment)	-----	0-5 0-5	Elective	-----	-- 3
**Elective	-----	0-5 0-5			
		16 $\frac{1}{2}$ 15 $\frac{1}{2}$			15 $\frac{1}{2}$ 16 $\frac{1}{2}$

### Preagricultural Curricula

The high school program should include the following subjects: elementary algebra 1 (year) unit; plane geometry, 1 unit; algebraic theory, 1 unit; trigonometry,  $\frac{1}{2}$  unit; chemistry, 1 unit; physics, 1 unit; mechanical drawing 1 unit; foreign language, 3 units in one language.

Students should ascertain the lower division requirements of the agricultural college they expect to enter.

The following arrangement of courses is recommended:

#### Curriculum in Plant Science

FRESHMAN YEAR		Units
Physical Education	-----	$\frac{1}{2}$ $\frac{1}{2}$
Health Education	-----	2
Chemistry 1A-1B	-----	5 5
Botany 2A-2B	-----	4 4
Physics 2A-2B	-----	3 3
Elective <sup>1</sup>	-----	2 3
		16 $\frac{1}{2}$ 15 $\frac{1}{2}$
SOPHOMORE YEAR		Units
Physical Education	-----	$\frac{1}{2}$ $\frac{1}{2}$
Economics 1A-1B	-----	3 3
Chemistry 7-8	-----	3 3
Geology 1A or 2A	-----	3 --
Bacteriology 1	-----	3 4
Zoology 1A	-----	4 --
Elective <sup>1</sup>	-----	3 5
		16 $\frac{1}{2}$ 15 $\frac{1}{2}$

<sup>1</sup> Foreign language if not completed in high school.

<sup>2</sup> Chosen from English 1B and 2A, 2B, 2C, 2D, 2E, 2F.

\*\* See lower division requirements for junior standing (junior certificate) page 17.

### Curriculum in Animal Science

FRESHMAN YEAR		Units
Physical Education	-----	$\frac{1}{2}$ $\frac{1}{2}$
Health Education	-----	2
Chemistry 1A-1B <sup>1</sup>	-----	5 5
Zoology 1A-1B	-----	4 4
Physics 2A-2B	-----	3 3
Geology 2B	-----	-- 3
Elective <sup>2</sup>	-----	2 --
		16 $\frac{1}{2}$ 15 $\frac{1}{2}$
SOPHOMORE YEAR		Units
Physical Education	-----	$\frac{1}{2}$ $\frac{1}{2}$
Economics 1A-1B	-----	3 3
Chemistry 7-8	-----	3 3
Bacteriology 1	-----	4 --
Botany 2A	-----	4 --
Zoology 100	-----	-- 3
Zoology 20 or 8	-----	-- 3
Elective <sup>2</sup>	-----	2 3
		16 $\frac{1}{2}$ 15 $\frac{1}{2}$

### Curriculum in Forestry

FRESHMAN YEAR		Units
Physical Education	-----	$\frac{1}{2}$ $\frac{1}{2}$
Chemistry 1A-1B <sup>1</sup>	-----	5 5
Botany 2A-2B	-----	4 4
English 1B and 2*	-----	3 3
Mathematics 3A-3B	-----	3 3
		15 $\frac{1}{2}$ 15 $\frac{1}{2}$
SOPHOMORE YEAR		Units
Physical Education	-----	$\frac{1}{2}$ $\frac{1}{2}$
Physics 2A-2B, 3A-3B	-----	4 4
Engineering 1A-1B	-----	3 3
Economics 1A-1B	-----	3 3
Geology 2A	-----	3 --
Chemistry 7	-----	3 --
Elective <sup>2</sup>	-----	-- 6
		16 $\frac{1}{2}$ 16 $\frac{1}{2}$

### Preengineering Curriculum

This curriculum is intended for students planning an intensive specialization in particular branches of engineering.

The high school program should include the following subjects: elementary algebra, 1 (year) unit; plane geometry, 1 unit; algebraic theory, 1 unit; solid geometry,  $\frac{1}{2}$  unit; trigonometry,  $\frac{1}{2}$  unit; chemistry, 1 unit; physics, 1 unit; mechanical drawing, 1 unit.

Students should ascertain the requirements of the engineering college they expect to enter.

<sup>1</sup> See prerequisites, page 62.

<sup>2</sup> Foreign language if not completed in high school.

\* Chosen from English 2A, 2B, 2C, 2D, 2E, 2F or 2G.

## Mechanical, Electrical, Civil and Mining Engineering

FRESHMAN YEAR		Units	
Physical Education	-----	1½	1½
Health Education 1	-----	2	2
Mathematics 3A-3B	-----	3	3
Chemistry 1A-1B	-----	5	5
Physics 1A-1B	-----	3	3
†Geology 1A or elective	-----	4	—
Elective	-----	—	3
		15½	16½

## Mechanical and Electrical Engineering

SOPHOMORE YEAR		Units	
Engineering 1A	-----	3	—
Engineering 21	-----	3	—
Engineering 22	-----	—	3
Engineering 23	-----	—	2
Mathematics 4A-4B	-----	3	3
Mathematics 118 or 119	-----	—	3
Physical Education	-----	1½	1½
Physics 1C-1D	-----	3	3
Elective	-----	3	2
		15½	16½

## Civil Engineering

SOPHOMORE YEAR		Units	
Astronomy 3	-----	—	2
Engineering 1A-1B	-----	3	3
Engineering 21	-----	3	—
Engineering 23	-----	—	2
Mathematics 4A-4B	-----	3	3
Physical Education	-----	1½	1½
Physics 1C-1D	-----	3	3
*Elective	-----	3	3
		15½	16½

## Curriculum in General Engineering

A four-year curriculum is available at San Diego State College leading to the A.B. degree in General Engineering. The curriculum is designed to provide the student with the fundamentals of an engineering and technical education without intensive specialization. It is planned to provide considerable elective opportunities, which will enable the student to adapt the program to his particular needs, with emphasis on one branch of engineering training, science, or business.

All students with aptitude for professional engineering and the financial means are urged to complete the requirements for the degree in mechanical, electrical, or civil engineering in our state university or at some other institution having a standard engineering school. There is, however, an increasing need for college graduates in fields of engineering, engineering science, or business engineering, where an intensive specialized training is not necessary. Students with training in a general engineering curriculum may easily adapt their programs to provide preparation for work in various engineering fields, as the electrical, heating and ventilation, public utility, telephone, and aeronautical industries among many others. Preparation is also available for work in chemical engineering, engineering physics, and engineering economics. Students may also use this curriculum as an undergraduate preparation for additional work in certain graduate engineering colleges. Students who desire to prepare for teaching of engineering and allied subjects in the secondary schools and the junior col-

\* Certain upper division engineering courses may be chosen to advantage by properly qualified students.

† Geology 1A is required in the civil engineering curriculum.

leges may use this curriculum, along with certain courses in education, to satisfy the undergraduate requirements for the general secondary credential.

The curriculum is not a specialized sequence of course work in specific engineering fields. If such specialized training is desired in the engineering fields, transfer to various colleges offering such work is recommended after completion of the lower division.

The high school program should include the following subjects: elementary algebra, 1 (year) unit; plane geometry, 1 unit; algebraic theory, 1 unit; solid geometry, ½ unit; trigonometry, ½ unit; chemistry, 1 unit; physics, 1 unit; mechanical drawing, 1 unit.

## LOWER DIVISION

All college requirements for the A.B. degree must be met except foreign language.

FRESHMAN YEAR	Units	** SOPHOMORE YEAR	Units
Chemistry 1A-1B	10	English Composition	3
Physics 1A-1B	6	Physics 1C-1D	6
Mathematics 3A-3B	6	Mathematics 4A-4B	6
English Composition	3	Electives chosen from the following	9
Social Science 1A	3	Engineering 1A-1B	—
Health Education	2	Engineering 21	—
Physical Education	1	Engineering 22	—
Psychology 1A	3	Geology 1A	—
	34	Chemistry 7-8	—
		*Social Science	6
		Physical Education	1
			31

## UPPER DIVISION

During the first semester of his junior year the student must prepare and submit for approval of his advisors a tentative program for the remainder of his undergraduate work.

Complete lower division requirements. (See page 17.)

Political Science 101.

Complete the following major in General Engineering: a total of 36 upper division coordinated units in three departments chosen from the following list (not more than 15 units may be chosen from one department).

The organization of the program of each major student must follow a definite plan approved by the proper advisors. Additional courses will be added from time to time. Required of all students (20 units):

	Units
Engineering 100A-100B, Electrical Engineering	6
Engineering 105, Hydraulics	3
Engineering 123, Materials of Engineering Construction	2
Engineering 128 Heat Power Engineering	3
Physics 105A-105B, Analytical Mechanics	6
Electives: 16 units, of which at least 6 units must be chosen from one of the following departments: chemistry, geology, astronomy, mathematics, or economics.	
Chemistry 110A-110B, Physical	6
Chemistry 105A, Quantitative Analysis	3
Chemistry 112A-112B, Industrial Chemistry	6
Chemistry 144, Industrial Analysis	3
Physics 110A, Adv. Electricity	3
Physics 110B, Electromagnetism-electronics	3
Physics 107A-107B, Electrical Measurements	2
Physics 108, Modern Physics	3

\* Recommended Economics 1A-1B.

\*\* See lower division requirements, page 17.

Physics 112, Advanced Heat-Thermodynamics	3
Physics 112L, Heat-Pyrometry Lab.	1
Physics 114, Acoustics	3
Geology 100, Structural Geology	3
Geology 101, Problems in Geology	4
Astronomy 100, Navigation-Astronomy	3
Astronomy 107, Least Squares	3
Mathematics 118, Advanced Calculus	3
Mathematics 119, Differential Equations	3
Mathematics 124, Vector Analysis	3
Mathematics 140, Probability-Statistics	3
Economics 107, Credit and Credit Institutions	3
Economics 121, Business Administration	3
Economics 123, Principles of Marketing	3
Economics 131, Public Finance and Taxation	3
Economics 133, Corporation Finance	3
Economics 135, Money and Banking	3
Economics 140, Statistical Methods	3
Economics 150, Labor Problems and Industrial Relations	4
Economics 171, Transportation	3
Industrial Economics	3
(Economics 14A-14B recommended)	3

A student who desires to satisfy the undergraduate requirements for the general secondary teaching credential should include in his upper division work, in addition to the engineering major, certain courses in education which will partially satisfy the credential requirements. In order to conform to the usual university requirements this work should be chosen from Education 102A-102B and Education 115A-115B. Consultation with the Dean of Education or the Dean of Liberal Arts is recommended.

### Public Service Curricula—Public Administration

As the vocational demand for students of public administration is comparatively limited the student of public administration will do well to prepare himself also for a related field of work for which there is not only a cultural but also a vocational demand. The candidate for a public administrative position who is equipped for a career in a professional, scientific or technical field that is common to both public and private enterprise has a distinct advantage. The special courses in public administration listed in the following curriculum are supplementary courses designed for exploration and orientation. The curriculum as a whole provides for a major in economics, outlines a general preparation for the public service in social science fields and furnishes a basis for more highly specialized graduate courses in the field of public administration.

The high school program should include the following subjects: elementary algebra, 1 (year) unit; plane geometry, 1 unit; intermediate algebra, 1 unit; foreign language, 3 units in one language.

The following arrangement of courses is recommended:

FRESHMAN YEAR	Units	SOPHOMORE YEAR	Units
Physical Education	$\frac{1}{2}$ $\frac{1}{2}$	*English	3
Health Education 1 or 2	2	Physical Education	$\frac{1}{2}$ $\frac{1}{2}$
*English	3	*Additional Natural Science	
*Foreign Language (if needed to complete requirements)	0-5 0-5	(if needed to meet requirements)	3
Psychology 1A	3	*Additional year course	3
*Natural Science	3-5 3-5	Economics 1A-1B	3
Economics 14A-14B	3	Political Science 1A-1B or 71A-71B	3
Elective	0-5 0-4	Elective	4
	16 $\frac{1}{2}$ 15 $\frac{1}{2}$		16 $\frac{1}{2}$ 15 $\frac{1}{2}$

\* See lower division requirements, page 17.

JUNIOR YEAR	Units	SENIOR YEAR	Units
Economics 100A	3	Economics 150	3
Economics 140	3	Economics 107, 133, 135, 171	3
Economics 100B	3	Economics electives	3
Economics 131	3	Political Science 143A-143B	3
Political Science 175A-175B	3	Elective <sup>1</sup>	6
Elective <sup>1</sup>	6		15 15
	15 15		

### Public Service Curricula—Clerical and Fiscal Service

The curriculum in Clerical and Fiscal Service leads to the A.B. degree with a major in commerce. It outlines a course of training for clerical and clerical-executive service in accounting and auditing, budgeting, statistical work and miscellaneous financial and fiscal work.

The high school program should include the following subjects: elementary algebra, 1 (year) unit; plane geometry, 1 unit; intermediate algebra, 1 unit; foreign language, 3 units in one language.

FRESHMAN YEAR	Units	SOPHOMORE YEAR	Units
Physical Education	$\frac{1}{2}$ $\frac{1}{2}$	*English Composition	3
Health Education 1 or 2	2	Physical Education	$\frac{1}{2}$ $\frac{1}{2}$
*English Composition	3	*Additional Natural Science	
*Foreign Language (if needed to complete requirement of 10 units)	0-5 0-5	(if needed to meet requirements)	3
*Natural Science	3-5 3-5	Economics 1A-1B	3
Mathematics C and Economics 2	3 3	Economics 14A-14B	3
Psychology 1A	3	Political Science 1A-1B or 71A-71B	3
Elective	0-5 0-6	Elective <sup>2</sup>	4
	16 $\frac{1}{2}$ 15 $\frac{1}{2}$		16 $\frac{1}{2}$ 15 $\frac{1}{2}$

JUNIOR YEAR	Units	SENIOR YEAR	Units
Economics 121	3	Economics 161	3
Economics 131	3	Economics 167	3
Economics 140	3	Economics Elective	3
Economics 160A-160B	3	Political Science 143A-143B	3
Political Science 101	2	Elective <sup>3</sup>	9
Elective <sup>3</sup>	4		15 15
	15 15		

### Public Service Curricula—Social Work

The professional curriculum in social service prepares for admission to graduate work in recognized American schools of social work. This curriculum should be pursued by those who plan careers in Federal, State and local welfare work; social work in public schools including preparation for a teaching credential; family and children's private case work agencies; social settlement work; county probation work; child welfare agencies; statistical and investigational work in private and public agencies; work in public institutions for the defective and delinquent; medical social service and psychiatric social work in hospitals and clinics; executive positions in social work; and social work in numerous other organizations.

The lower division requirements of the Liberal Arts curricula include the general requirements of recognized professional schools of social work and should therefore

\* See lower division requirements, page 17.

<sup>1</sup> See minor requirements, page 20. Students who desire to prepare for a graduate major in political science should elect Political Science 111 and 113 and may satisfy requirements for a major in economics by substituting Political Science 143A-143B for elective courses in economics.

<sup>2</sup> Recommended electives: Economics 18A-18B and Secretarial Training 3A.

<sup>3</sup> See minor requirements, page 20.

ordinarily be met in full. However, a student who has definitely decided not to become a candidate for a degree in San Diego State College may substitute the lower division requirements of the institution to which he expects to transfer wherever the requirements differ.

A student who pursues a four-year curriculum in San Diego State College should major in Social Science and minor in Psychology.

The following subjects should be completed in high school: elementary algebra, 1 (year) unit; plane geometry, 1 unit; algebraic theory, 1 unit; foreign language, 3 units in one language.

Following is a recommended arrangement of courses:

FRESHMAN YEAR		Units	SOPHOMORE YEAR		Units
Physical Education	-----	$\frac{1}{2}$ $\frac{1}{2}$	Physical Education	-----	$\frac{1}{2}$ $\frac{1}{2}$
Health Education 1 or 2	-----	2	Economics 1A-1B	-----	3 3
Biology 10A-10B	-----	3 3	Political Science 1A-1B or 71A-71B	-----	3 3
*Foreign Language (if needed to complete requirement)	-----	0-5 0-5	*Additional Year Course	-----	3 3
Psychology 1A	-----	3 --	*Additional Natural Science (if needed to meet requirement)	-----	3 --
*Speech Arts 1A-1B or *English elective	-----	3 3	Sociology 50A	-----	3 --
Elective <sup>1</sup>	-----	1-6 2-7	Sociology 50B	-----	-- 3
		15 $\frac{1}{2}$ 15 $\frac{1}{2}$	Elective <sup>1</sup>	-----	-- 3
					15 $\frac{1}{2}$ 15 $\frac{1}{2}$
JUNIOR YEAR		Units	SENIOR YEAR		Units
Economics 100B or 131 or 150	-----	-- 3	Economics 140	-----	3 --
Sociology 105	-----	3 --	Sociology 197	-----	3 --
Sociology 109	-----	-- 3	Sociology Elective	-----	-- 3
Psychology 150	-----	3 --	Psychology 145	-----	3 --
Psychology 151	-----	-- 3	Political Science 143A-143B or restricted elective	-----	3 3
Zoology 114A	-----	2 --	Elective <sup>2</sup>	-----	3 9
Political Science 101	-----	2 --			15 15
Elective <sup>2</sup>	-----	5 6			
		15 15			

### Public Service Curricula—Inter-American Relations

The purpose of this curriculum is (1) to furnish a basis for a more intelligent and effective understanding of the opportunities and problems of international relations in the western hemisphere; (2) to provide facilities for a basic education and training for a business or professional career which involves international relations.

Competition for opportunities of service in international affairs is severe. The student who plans a career in this field should therefore organize his electives to provide for a concentration in some area of work in which there are greater vocational opportunities. Preparation for employment as a foreign representative of an American business organization implies concentration in economics. The student who pursues this curriculum as a guide for training for the foreign service in consular, vice consular, secretarial, and other public offices should include additional courses in foreign language, history, political science, geography, and economics to furnish more effective preparation for the comprehensive competitive examinations required for appointment to the Service and for entrance to the Foreign Officers Training School at Washington, D. C.

\* See lower division requirements, page 17.

<sup>1</sup> Recommended electives: Economics 14A-14B, 6 units; Psychology 4A, 3 units.

<sup>2</sup> Recommended electives: Anthropology 152, 3 units; Economics 131, 150, 3 units each; History 171A-171B, 6 units; Sociology 106, 108, 198, 3 units each.

See minor requirements and U. S. Constitution requirement, page 20.

The proper faculty adviser should be consulted for revisions and additions to this curriculum to meet individual needs and objectives.

The high school program should include the following subjects: algebra, 1 (year) unit; plane geometry, 1 unit; intermediate algebra, 1 unit; foreign language, 3 units in one language.

The following arrangement of courses is recommended:

FRESHMAN YEAR		Units	SOPHOMORE		Units
Physical Education	-----	$\frac{1}{2}$ $\frac{1}{2}$	Physical Education	-----	$\frac{1}{2}$ $\frac{1}{2}$
Health Education 1 or 2	-----	2 --	*Additional Natural Science (if needed to meet requirements)	-----	0-3 --
*English	-----	3 3	*Additional year course (foreign language)	-----	3 3
*Spanish	-----	0-5 0-5	Economics 1A-1B	-----	3 3
*Natural Science	-----	3-5 3-5	Political Science 1A-1B or 71A-71B	-----	3 3
History 8A-8B	-----	3 3	Geography 1 (Elements)	-----	3 --
Psychology 1A	-----	3 --	Elective	-----	0-3 6
Elective	-----	1-5 0-6			15 $\frac{1}{2}$ 15 $\frac{1}{2}$
		15 $\frac{1}{2}$ 15 $\frac{1}{2}$			
JUNIOR YEAR		Units	SENIOR YEAR		Units
Political Science 141	-----	3 --	Economics 195	-----	3 --
Political Science 142	-----	-- 3	Economics 198 (Special Study—Western Hemisphere)	-----	-- 3
History 173A-173B	-----	3 3	History 161	-----	-- 3
Spanish 104A-104B	-----	3 3	History 163	-----	3 --
Elective <sup>1</sup>	-----	6 6	Geography 116	-----	-- 3
		15 15	Geography 121	-----	3 --
			Elective <sup>1</sup>	-----	6 6
					15 15

### Public Service Curricula—Foreign Service

A curriculum of training for the foreign service in consular, vice consular, and other offices is available on request. This curriculum outlines preparation for competitive examinations required for appointment to the Service and for entrance to the Foreign Officers' Training School at Washington, D. C.

### Curriculum in Journalism

(Courses in journalism have been discontinued until further notice.)

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. Introductory training in the principles and practices of journalistic writing is offered only after a good foundation in correct speaking and writing of English has been laid.

Practical training in news reporting and editing for student publications and for the daily and weekly press is emphasized.

\* See lower division requirements, page 17.

<sup>1</sup> (a) Restricted electives: The social science major or the general major recommended. The social science major requires 24 units of upper division work, including a concentration of 12 units in one social science and 6 units in each of two others. See also minors requirement, page 20. The general major requires 36 units of upper division work in any three fields, subject to departmental approval. Not more than 15 units in any field will be counted as part of the major. Minors requirement may be included in the general major.

(b) Free electives—Recommended: Aesthetics 51 (Survey of Latin-American Art), Anthropology 151B (Middle American Indian), English 104 (Survey of Latin-American Literature).

The high school program should include the following subjects: elementary algebra, 1 (year) unit; plane geometry, 1 unit; foreign language, 3 units in one language; English, 4 units; natural science, 1 or 2 units in the junior or senior year.

Following is a recommended arrangement of courses:

FRESHMAN YEAR		Units	SOPHOMORE		Units
Physical Education	-----	$\frac{1}{2}$	Physical Education	-----	$\frac{1}{2}$
Health Education	-----	2	Economics 1A-1B or Political Science 1A-1B or 71A-71B	3	3
*English	-----	3	Journalism 51A-51B	3	3
History 4A-4B or 8A-8B or Political Science 1A-1B or 71A-71B	-----	3	*Philosophy 5A-5B or 3A-3B (if needed to complete additional year course requirement)	3	3
*Foreign Language (if needed to complete requirement)	-----	0-5	*Natural Science	-----	3
Journalism 10A-10B	-----	1	**Social Science 1A	-----	3
Psychology 1A	-----	3	*Elective	-----	3
Elective <sup>1</sup>	-----	0-5			
		15 $\frac{1}{2}$			15 $\frac{1}{2}$

JUNIOR YEAR		Units	SENIOR YEAR		Units
Major <sup>2</sup> (including English 112)	-----	9	Major <sup>3</sup>	-----	9
Journalism 151A-151B	-----	1	Journalism <sup>4</sup>	-----	2
Journalism <sup>4</sup>	-----	2	Journalism 199	-----	2
Elective	-----	3	Political Science 101 (if not included in the major)	-----	2
		15	Elective	-----	2
					15

\* See lower division requirements for junior standing, page 17.

\*\* Six units of Economics 1A-1B and 6 units of Political Science 1A-1B or 71A-71B may be substituted for Social Science 1A.

<sup>1</sup> Recommended electives: Aesthetics 1A-1B, 4 units; Aesthetics 5, 2 units; Anthropology 50A-50B, 6 units; Geography 2, 3 units; Sociology 50A-50B, 6 units; Secretarial Training, L2A, or equivalent; Speech Arts 1A, 3 units.

<sup>2</sup> Recommended electives: Journalism 153A-153B, 2 or more units. The social science major or the general major recommended. The social science major requires 24 units of upper division work, including a concentration of 12 units in one social science and 6 units in each of two others. See also minors requirement, Bulletin page 20. The general major requires 36 units of upper division work in any three fields, subject to departmental approval. Not more than 15 units in any field will be counted as part of the major. Minors requirement may be included in the general major. English and one or more social sciences are required for the general major in the curriculum in Journalism.

<sup>3</sup> Not more than 6 units of Journalism 153A-153B and L153A-L153B may be counted toward the A.B. degree and not more than 4 units of Journalism 153C-153D may be counted.

## TWO-YEAR COMPLETION CURRICULA

These curricula are organized for students who have not yet qualified for enrollment in a four-year curriculum leading to the Bachelor of Arts degree. Regularly qualified students who prefer a shorter completion course will take only such two-year courses as may be required in the specialized curricula they are following. Upon satisfactory completion of the requirements in these two-year curricula the student is granted a diploma. By maintaining a high grade of scholarship the student may secure the opportunity of transfer to a four-year program. Such transfers are made by action of a faculty committee after the student has completed one or more semesters in a two-year curriculum. Upon transfer the credits earned in most courses in the two-year program in which grades of A and B have been received are allowed to count toward the Bachelor of Arts degree.

Courses numbered L40 and L45 are not open for credit to students in a four-year curriculum.

The following special courses are designed for students enrolled in a two-year completion curriculum: Astronomy L40; Biology L40; Economics L45A-L45B; English L40A, L40B, L45, L46; Geography L40A, L40B; Geology L40; Health Education L40; Mathematics L40A, L40B; Physical Science L40; Psychology L45; Social Science L40, L45; Sociology L40; Speech Arts L40.

Any other course designated by the prefix "L" (e.g. Art L7) is regularly open to students enrolled in a two-year completion curriculum. See Limited Electives, page 19. The following courses are also regularly open to two-year students: Aesthetics 1A, 1B, 2; Art 6A, 6B, 8A, 8B, 11A, 11B, L14A, 14B, 52A, 61B, 94A, B; Economics 15A-15B, 16A-16B, 65A-65B; Health Education 1, 2; Mathematics C, D, E, S; Merchandising (all courses); Music 1B, 11A, 11B, 11C, 11D, 12A, 12B, 12C, 12D, 13A, 13B, 13C, 13D, 15A, 15B, 15C, 15D, 20A, 20B, 20C, 20D, 26A, 26B, 26C, 26D, 27A, 27B; Secretarial Training (all courses).

A two-year student may elect any other college lower division subject under guidance where his high school scholarship record, or his scores in the aptitude and achievement tests, or his college record indicates probable success in that field. He must, of course, meet all prerequisites for the course under consideration.

### Two-year Curriculum in Liberal Arts

FIRST YEAR		Units	Units	SECOND YEAR		Units	Units
		Sem. I	Sem. II			Sem. I	Sem. II
English L40A or L40B or L40C	-----	3	3	Speech Arts L40 or English L45	-----	3	--
**Physical Science L40 or equivalent	-----	--	3	Social Science (Economics L45A, Geography L40B, Merchandising L20, or Social Science Elective*)	-----	3	--
Social Science L40	-----	3	--	Social Science L45	-----	--	3
Sociology L40	-----	--	3	*Elective	-----	9	12
Health Education 1 or 2	-----	--	2	Physical Education	-----	$\frac{1}{2}$	$\frac{1}{2}$
Physical Education	-----	$\frac{1}{2}$	$\frac{1}{2}$				
Psychology L40	-----	3	--				
*Elective	-----	3	4				
		15 $\frac{1}{2}$	15 $\frac{1}{2}$			15 $\frac{1}{2}$	15 $\frac{1}{2}$

\* See foregoing list in italics.

\*\* Not less than 6 units of natural science must be completed in college.



## JUNIOR COLLEGE COMPLETION CURRICULA

In cooperation with the San Diego City Schools one specialized division of their Junior College program is maintained on this campus. This center endeavors to serve young people who, because of ill health, indefinite objectives, inadequate study habits or other reason, have achieved less in high school than they had hoped to do. Students admitted to this center frequently have no clearly defined vocational and educational objectives or they have set up goals which are too difficult to attain.

The program in this center has the following characteristics:

- Every course has been developed with the aim of meeting the needs of the type of student admitted. All courses are planned, therefore, to include materials of immediate interest to the student. The content and the procedures used are designed to help the student get answers to his questions about himself, about his plans, and about his understanding of and happy adjustment to the world about him.
- The program gives vocational help, but does not provide vocational courses. While the primary purpose is not vocational training, much of the work contributes toward this end. Both the guidance program and the courses of study are planned to help the student make his vocational adjustment.
- The program is concerned primarily with general education. The term "general education" is here used to designate those understandings, attitudes, and skills common to all adults who are to live effectively in American democracy.
- Guidance is the principal focus of the program. It attempts specifically to meet the needs of each student through a well coordinated system of group and individual guidance and a curriculum planned to aid in the adjustment of the individual to his world.
- The course is two years in length and upon its successful completion the degree of Associate in Arts is awarded by the San Diego City Board of Education.

No A.B. degree credit is given for these Junior College courses, although a student may qualify for admission to San Diego State College through a demonstration of strong scholarship.

## COURSES OF INSTRUCTION

*Figures in parentheses indicate the unit value of the course.*

Courses numbered from 1 to 99 are lower division (freshman or sophomore) courses; those numbered 100 and above are upper division (junior or senior) courses. The prefix "L" is used to denote courses which are classified as limited electives for students enrolled in the liberal arts curricula. See page 19. Students may not ordinarily apply more than a total of twelve units of credit, earned in courses so designated, toward the requirements for the bachelor of arts degree. The prefix "E" indicates courses which are offered through the Extension service, and "S" denotes courses which are available during the Summer Session.

*Freshmen are not admitted into upper division courses.*

*A sophomore may enroll in an upper division course for lower division credit provided he has earned an average grade of not less than 1.5 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 upper division course for upper division credit without the foregoing grade limitations provided the units earned in the upper division course or courses are in excess of the sixty units required in the lower division.*

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

*The semester in which courses are offered is designated as follows: (1) Fall; (2) Spring; (3) Fall and Spring; (4) Year course, beginning either Fall or Spring; (5) Year course. Courses designated as "Year course" begin in the Fall, but those given in the list below may be taken in the reverse order (i.e., the second semester of the course may be taken before the first semester) or the second semester may be taken alone. In the case of other year courses, students who have completed the equivalent of the first semester's work may seek permission from the instructor to take the second half of the course.*

### Year Courses Open to Registration in the Middle of the Year

Aesthetics 1A-1B	History 121A-121B
Aesthetics 102A-102B	History 146A-146B
Anthropology 1A-1B	History 151A-151B
Anthropology 151A-151B	History 156A-156B
Economics 160A-160B	History 171A-171B
English 52A-52B	History 173A-173B
English 56A-56B	Political Science 1A-1B
English 106A-106B	Political Science 71A-71B
English 107A-107B	Political Science 175A-175B
English 117A-117B	Spanish 101A-101B
French 101A-101B	Spanish 102A-102B
French 105A-105B	Spanish 104A-104B
French 107A-107B	Spanish 105A-105B
French 110A-110B	Spanish 110A-110B
French 111A-111B	Speech Arts 55A-55B
History 4A-4B	Speech Arts 55C-55D
History 8A-8B	Speech Arts 155A-155B
History 111A-111B	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 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.*

## 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 majors are required to complete additional assignments for full credit.

Year course (2-2)

## 5 Fundamentals of Art

Jackson

An illustrated lecture course involving a study of aesthetic meaning and its relation to the structure of art products. Designed to increase 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

A survey of aesthetics development as revealed in the painting, sculpture, architecture, and handicrafts from dawn of art to the Renaissance. Illustrated.

Fall (2)

## 51 Survey of Mexican Art

Jackson

A study of Mexican and Middle American Art from earliest time to present.

Fall (2)

## UPPER DIVISION COURSES

## 102A-102B History of Music

D. F. Smith

The various movements in the development of music as related to the other arts. The chronological development of the art of music, with particular emphasis on the larger works. Considerable attention is given to the works of modern composers. Many symphonic works are studied from the orchestral scores. Music majors are required to complete additional assignments for full credit. Prerequisite: Aesthetics 1A or 1B.

Year course (2-2)

## 150 Appreciation and History of Art

Jackson

The period from the Renaissance through the modern school, treated in the same manner as in Aesthetics 50.

Spring (2)

## ANTHROPOLOGY

Lower division preparation for the liberal arts major in social science with concentration in anthropology: Anthropology 50A-50B, Sociology 50A, 50B, Geography 1, 2. Recommended: Geology 1A-1B, Economics 1A-1B. See requirements for the social science major, page 107.

## LOWER DIVISION COURSES

## 1A-1B General Anthropology

Rogers

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

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.

Spring (3) (Not offered 1944-45)

## 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.

Fall (3) (Not offered in 1944-45)

## 56 Backgrounds of World Religions

Rogers

An introductory study of Judaism, Christianity, Islam, Buddhism and Shinto from the viewpoint of their anthropological development and their role as cultural forces. Concepts of Gods and spirits, rituals, ethical systems, and symbolism.

Spring (3)

## UPPER DIVISION COURSES

## 151A The North American Indian

Rogers

Pre-Columbian cultures of the North American Indian. The origin and migration of New World peoples. Industries, arts, crafts, social organization, religion and other phases of American Indian civilization.

Fall (3) (Not offered in 1944-45)

## 151B Indian Civilizations of Middle America

Rogers

The development of civilization in Pre-Columbian Mexico and Central America: Aztec, Mayan, and related cultures.

Spring (3)

## 152 Primitive Cultures (Ethnography)

Rogers

History and cultural development of primitive races of mankind. Consideration given to industries, arts, social organization, and religion of preliterate culture groups.

Fall (3) (Offered in 1944-45 and alternate years)

## 153 Primitive Religion

Rogers

Beliefs and ritual of primitive man. Magic and religion. Forms of animism and polytheism. Primitive mentality and the supernatural.

Spring (3) (Offered in 1944-45 and alternate years)

## 157 Primitive Myths and Rituals

Rogers

The folklore, mythology, and rituals of primitive cultures in the Eastern Mediterranean area. The early beliefs and classic myths of the Egyptians, Assyrians, Babylonians, and Greeks.

(Not offered 1944-45)

## ART

Many students, regardless of the field in which they may be majoring, recognize the need for an intelligent approach to the subject of art and art appreciation. However, due to the erroneous popular feeling that art is so specialized a subject as to require "talent," these students may refrain from enrolling in any art courses.

For students who desire a better understanding of art, but who do not hope to acquire any of the art skills, the following courses are recommended:

	Units
Aesthetics 5, Fundamentals of Art.....	2
Aesthetics 50, History and Appreciation of Art.....	2
Aesthetics 51, Survey of Mexican Art.....	2
Art 8A-8B, Appreciation of Costume and Home-furnishing.....	4

Other courses which involve certain skills but which are not out of reach of the ability of the average college student are:

Art 61B, Crafts .....	2
Art 6A, Art Structure .....	2
Art A, Freehand drawing.....	3
Art 94v, Costume design .....	2

For students who might wish to complete a minor in art after having met the lower division requirements from the preceding page, the following courses are recommended as not requiring any fundamental training in drawing and design:

Art 119, Ceramics	2
Art 152A, Stage Design	2
Aesthetics 150, History and Appreciation of Art	2

Candidates for a teaching credential in art should refer to the statement "Admission to Teacher Education" on page 21.

Lower division preparation for the liberal arts major in art: Aesthetics 5 or 51, and 50; Art A-B and 6A-6B, or the accepted equivalents, and four elective units in art.

Liberal arts major (upper division): Twenty-four upper division units. These shall include Art 112A, 115A-115B, 152A, 195, or the accepted equivalent; Aesthetics 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 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 54.

#### LOWER DIVISION COURSES

##### A-B Freehand Drawing

Jackson

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 (3-3)

##### 6A Structure

Patterson

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

Fall and Spring (2)

##### 6B Structure (continued)

Patterson

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

Fall and Spring (2)

##### L7 Line, Color and Display

Patterson

The principles of line, color and arrangement applied to store and window display. Study and observation of windows, color and materials used in display. Building models and practical problems in arranging colors, textures, and forms in windows to fit different kinds of merchandise.

Fall and Spring (2) (Not offered in 1944-45)

##### 8A-8B Appreciation of Costume and Home Furnishing

Hamann

8A A survey of the periods of costume and home furnishing from primitive man to the present time.

Fall (2)

8B Lectures, discussions, and demonstrations on the underlying principles of dress and home furnishing. (a) A study of the design, color, texture, fabric, and fashion in modern dress with emphasis on suitability to the figure, the personality and the occasion. (b) Line, form, color, texture, fabric, and lighting in relation to the home; the selection and arrangement of furniture, rugs, fabrics, pictures, etc., for all rooms of the home.

Spring (2)

##### 11A Industrial Design

Hamann

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

Fall (2)

##### 11B Advanced Industrial Design

Hamann

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

Spring (2)

##### L14A Lettering

Hamann

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

Fall (2)

##### 14B Posters and Commercial Art

Hamann

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

Spring (2)

##### 15A-15B Life Drawing

Jackson

Drawing from the nude model. Prerequisite: Art A-B.

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 and oil. Semester II: Landscape and more advanced composition in water color and oil. Prerequisite: Art A-B.

Year course, beginning either Fall or Spring (3-3)

##### 52A Stage Design

Patterson

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

Fall (2)

##### 52B Stage Costume (See 152B)

Patterson

Fall (2)

##### Art 61A Fine and Industrial Arts

Hamann

A foundation course which develops unification of work of the elementary grades through activities and experiences. These experiences grow out of environmental activities. They include study and working of clay, lumber and tools, textiles, and cardboard construction. Prerequisite: Art 6A.

Fall and Spring (2)

##### 61B Elementary Crafts

Hamann

Problems involving the application of design principles to various fields—pottery, textiles, weaving, metal work, wood-carving, and book-binding. Prerequisite: Art 6A.

Fall and Spring (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.

Spring (2)

##### 95 Home Decoration (See Art 195)

Patterson

## UPPER DIVISION COURSES

- 106A-106B Printmaking** Hamann  
Study of print crafts which includes the making of linoleum blocks, wood engravings, etchings and lithographs. Prerequisites: Art A, B, 6A.  
*Year course (2-2)*
- 106C Illustration** Hamann  
Same as 106A-B except that printmaking is applied to problems of book illustration. Prerequisites: Art A, B, 6A.  
*Spring (2) (Offered in 1942-43 and alternate years)*
- 112A-112B Organization** Jackson  
Imaginative organization of space by means of color, dark and light, perspective, and textures of various materials. Prerequisites: Art A-B, 6A-6B, and if possible 15A-15B or 106A.  
*Year course (3-3)*
- 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 (3-3)*
- 152A Stage Design** Patterson  
See Art 52A.
- 152B Stage Costume** Patterson  
Costume studied in relation to drama, opera and dance. Original designs for mood and character. Practical problems in designing costumes and accessories for college productions. Prerequisites: Art 6A, 52A or 152A.  
*Fall (2)*
- 194 Costume Design (See Art 94)** Patterson  
*Spring (2)*
- 195 Home Decoration** Patterson  
Lectures and designing in class, trips to art galleries, stores, factories and homes, studying how to recognize and choose the best in furniture, rugs, wall coverings, textiles and pottery as to design, color and materials. Actual experience in designing and arranging furnishings in homes and offices. Working with local stores and architects. Arrangement of flowers and objects for different types of rooms and occasions. Prerequisites: Art A, 6A.  
*Spring (2)*

## ASTRONOMY

*Lower division preparation in Astronomy desirable for advanced work: Astronomy 1, 2, 3, and 9; Mathematics 3A-3B, 4A-4B; Physics 1A-1B and 1C-1D; a reading knowledge of French and German desirable.*

## LOWER DIVISION COURSES

- 1 Descriptive Astronomy** Watson  
A cultural course planned to develop an appreciation of astronomy with special emphasis on the solar system. Only calculations of an elementary nature are used. Especial attention given to the methods and instruments by means of which astronomical knowledge has been gained. A six-inch John Byrne refractor and an eight-inch

reflecting telescope are available for observation. Prerequisites: Elementary algebra and plane geometry.  
*Fall (3)*

**2 Modern Astronomy**

A study of sidereal astronomy and astrophysics in the light of modern research, especially photographic and spectrographic. Prerequisite: Astronomy 1 and a knowledge of physics or permission of the instructor.

*Spring (3) (Not offered in 1944-45)*

**3 Surveyor's Course in Practical Astronomy**

The principles of spherical astronomy adapted to the needs of engineering students. Computation and observation. Prerequisites: Surveying 1A or permission of the instructor. Astronomy 1 and 9 desirable.

*Spring (2) (Not offered in 1944-45)*

**9 Practice in Observing**

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 six-inch telescope. Prerequisite: Astronomy 1 or registration in Astronomy 1 or permission of the instructor.

*(Not offered in 1944-45)*

**12 Elementary Navigation**

A study of compass corrections, drift problems, time, line of position, use of celestial coordinates, Bowditch Tables, etc. A few class hours at the close of the term are devoted to the use of tables such as Ageton, Dreisonstok and H. O. 214 for the solution of astronomical triangle. Offered if demand is sufficient. Prerequisite: Astronomy 1 or permission of instructor.

*Spring (2) (Not offered in 1944-45)*

## UPPER DIVISION COURSES

**100 Special Problems**

Admission by consent of instructor. Credit and hours to be arranged in each case. Open to students who have completed three units in astronomy.

*Fall and Spring (1 or 2) (Not offered in 1944-45)*

**105 Historic Development of Astronomy**

A study of the more important problems and astronomical concepts in the light of their historical development. Particular attention is given to the biography and contributions of the more important astronomers, such as, Galileo, Kepler, Newton, Herschel, and Bessel.

*Spring (3) (Not offered in 1944-45)*

**107 Method of Least Squares and Computing Practices**

Fundamental principles and processes and applications in the fields of astronomy, physics, and engineering.

*Spring (3) (Not offered in 1944-45)*

## TWO-YEAR COURSE

**L40 Elementary Astronomy**

Watson

A survey course planned to acquaint the student with the more important facts pertaining to both the solar system and to the stars. The first part of the course is devoted to the study of the earth as an astronomical body and to the other planets. The latter part is devoted to a study of the sun and stars. *Open only to students enrolled in a two-year curriculum.*

*Spring (3)*

## BIOLOGICAL SCIENCES

The courses offered in Biological Sciences are listed below. Anatomy, see Zoology, page 113; Physiology, page 103; and Zoology, page 113.

## BACTERIOLOGY

## LOWER DIVISION COURSES

## 1 General Bacteriology

Harvey

An introduction to bacteriology. Effects of physical and chemical agencies upon bacteria; biochemical activities of bacteria; microscopic examination and cultivation of bacteria; the bacteria of air, water, soil, milk and dairy products, other foods; industrial applications. Introduction to disease-producing bacteria. Required of pre-nursing students. Two hours of lecture and six hours of laboratory per week. Prerequisite: Chemistry 1A or 2A.

Fall (4)

## 199 Special Problems

Harvey

Work other than is outlined in the regular courses. Admission only by consent of the instructor with whom the work is to be done. Credit and hours to be arranged in each case. Open to students who have completed at least fifteen units of work in the department (including courses in Bacteriology and Chemistry) with grades of A or B.

Fall or Spring (1 or 2)

## BIOLOGY

## LOWER DIVISION COURSES

## 1 Survey of Biology

Crouch

A survey of life science, stressing the development of modern concepts in the fields of plant and animal science, bacteriology, genetics, and physiology. Emphasis is placed on the relationships of biology to modern life and the application of scientific analysis to every day problems. Three lectures and one hour of demonstration and discussion per week. Not open to students with credit for Biology 10A-10B, Zoology 1A-1B, or Botany 2A-2B.

Fall (3)

## 10A-10B General Biology

Johnson

A year course in life science, more extensive than "Biology 1." Continues throughout the year and includes a three-hour laboratory period, and two hours of lectures per week. Designed for those who do not expect to specialize in zoology or botany; not open for credit to students who have taken Zoology 1A, Biology 1, or Botany 2A. Students who have taken 10A-10B may elect Zoology 1B or Botany 2A, 2B for credit.

Year Course (3-3) Begins in Fall only

## LA Mathematics of Solutions and Dosage

Johnson

Arithmetic review with computing of dosage, percentage of solutions, apothecaries weights and graph making. Two hours per week.

Fall (1)

## UPPER DIVISION COURSE

## 123 Economic Biology

Harwood

Study of the uses of plants and animals to man and the ways in which they injure him and his possessions. Consideration is also given to general methods of control and conservation. Prerequisites: Zoology 1A, Biology 1, or Biology 10B.

Fall (2)

## TWO YEAR COURSE

## L40 Man and His Biological World

Crouch

A survey of the general field of biology with emphasis on the role of biological science in the welfare of man and his associates, consisting of three lectures and one demonstration period per week. Not open to students who have credit in high school biology, zoology, or botany. Open only to students enrolled in a two year curriculum.

Spring (3)

## BOTANY

Lower division preparation for advanced work in botany: Botany 2A, 2B, 4, and Chemistry 1A, 1B, 8. Recommended: German, French, and elementary courses in other biological sciences.

## LOWER DIVISION COURSES

## 2A General Botany

Harvey

Fundamentals of structure and general behavior of seed plants. Two lectures or recitations and six hours of laboratory per week.

Fall (4)

## 2B General Botany

Harvey

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

Spring (4)

## 4 California Plants

Harvey

Classification and ecology of representative orders of 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)

## 5 Cultivated Trees and Shrubs

Harvey

Recognition of the common cultivated trees and shrubs of the San Diego region. Trips to local parks and private gardens. Three hours per week laboratory or field work.

Fall (1) (Not offered in 1944-45)

## UPPER DIVISION COURSES

## 102 Plant Geography

Harvey

Lectures and field work on the principles of geographical distribution of plants. Prerequisite: Botany 2A-2B, or 4, or equivalent.

Fall (2) (Offered in 1945-46 and alternate years)

## 104 Plant Taxonomy

Harvey

Identification, classification and distribution of representative orders of flowering plants. One hour of lecture and six hours per week of laboratory and field work. Prerequisites: Botany 2A-2B, or 4.

Spring (3) (Offered in 1945-46 and alternate years)

## 199 Special Problems

The Staff

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

Fall and Spring (1 or 2)

## CHEMISTRY

Lower division preparation for the liberal arts major in chemistry: Chemistry 1A-1B with an average grade of C or better, Chemistry 7-8, Physics 2A-2B and 3A-3B 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 certain other colleges and there work for a degree with a major in chemistry, are advised to take Physics 1A-1B-1C-1D and Mathematics 3A-3B-4A-4B 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-105B, 110A-110B and 111A-111B. The choice of related minors and the organization of the course of the major student must follow a definite plan approved by the department.

For requirements for liberal arts major in physical science, see page 100.

## BIOLOGICAL SCIENCES

The courses offered in Biological Sciences are listed below. Anatomy, see Zoology, page 113; Physiology, page 103; and Zoology, page 113.

## BACTERIOLOGY

## LOWER DIVISION COURSES

## 1 General Bacteriology

Harvey

An introduction to bacteriology. Effects of physical and chemical agencies upon bacteria; biochemical activities of bacteria; microscopic examination and cultivation of bacteria; the bacteria of air, water, soil, milk and dairy products, other foods; industrial applications. Introduction to disease-producing bacteria. Required of pre-nursing students. Two hours of lecture and six hours of laboratory per week. Prerequisite: Chemistry 1A or 2A.

Fall (4)

## 199 Special Problems

Harvey

Work other than is outlined in the regular courses. Admission only by consent of the instructor with whom the work is to be done. Credit and hours to be arranged in each case. Open to students who have completed at least fifteen units of work in the department (including courses in Bacteriology and Chemistry) with grades of A or B.

Fall or Spring (1 or 2)

## BIOLOGY

## LOWER DIVISION COURSES

## 1 Survey of Biology

Crouch

A survey of life science, stressing the development of modern concepts in the fields of plant and animal science, bacteriology, genetics, and physiology. Emphasis is placed on the relationships of biology to modern life and the application of scientific analysis to every day problems. Three lectures and one hour of demonstration and discussion per week. Not open to students with credit for Biology 10A-10B, Zoology 1A-1B, or Botany 2A-2B.

Fall (3)

## 10A-10B General Biology

Johnson

A year course in life science, more extensive than "Biology 1." Continues throughout the year and includes a three-hour laboratory period, and two hours of lectures per week. Designed for those who do not expect to specialize in zoology or botany; not open for credit to students who have taken Zoology 1A, Biology 1, or Botany 2A. Students who have taken 10A-10B may elect Zoology 1B or Botany 2A, 2B for credit.

Year Course (3-3) Begins in Fall only

## LA Mathematics of Solutions and Dosage

Johnson

Arithmetic review with computing of dosage, percentage of solutions, apothecaries weights and graph making. Two hours per week.

Fall (1)

## UPPER DIVISION COURSE

## 123 Economic Biology

Harwood

Study of the uses of plants and animals to man and the ways in which they injure him and his possessions. Consideration is also given to general methods of control and conservation. Prerequisites: Zoology 1A, Biology 1, or Biology 10B.

Fall (2)

## TWO YEAR COURSE

## L40 Man and His Biological World

Crouch

A survey of the general field of biology with emphasis on the role of biological science in the welfare of man and his associates, consisting of three lectures and one demonstration period per week. Not open to students who have credit in high school biology, zoology, or botany. Open only to students enrolled in a two year curriculum.

Spring (3)

## BOTANY

Lower division preparation for advanced work in botany: Botany 2A, 2B, 4, and Chemistry 1A, 1B, 8. Recommended: German, French, and elementary courses in other biological sciences.

## LOWER DIVISION COURSES

## 2A General Botany

Harvey

Fundamentals of structure and general behavior of seed plants. Two lectures or recitations and six hours of laboratory per week.

Fall (4)

## 2B General Botany

Harvey

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

Spring (4)

## 4 California Plants

Harvey

Classification and ecology of representative orders of 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)

## 5 Cultivated Trees and Shrubs

Harvey

Recognition of the common cultivated trees and shrubs of the San Diego region. Trips to local parks and private gardens. Three hours per week laboratory or field work.

Fall (1) (Not offered in 1944-45)

## UPPER DIVISION COURSES

## 102 Plant Geography

Harvey

Lectures and field work on the principles of geographical distribution of plants. Prerequisite: Botany 2A-2B, or 4, or equivalent.

Fall (2) (Offered in 1945-46 and alternate years)

## 104 Plant Taxonomy

Harvey

Identification, classification and distribution of representative orders of flowering plants. One hour of lecture and six hours per week of laboratory and field work. Prerequisites: Botany 2A-2B, or 4.

Spring (3) (Offered in 1945-46 and alternate years)

## 199 Special Problems

The Staff

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

Fall and Spring (1 or 2)

## CHEMISTRY

Lower division preparation for the liberal arts major in chemistry: Chemistry 1A-1B with an average grade of C or better, Chemistry 7-8, Physics 2A-2B and 3A-3B 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 certain other colleges and there work for a degree with a major in chemistry, are advised to take Physics 1A-1B-1C-1D and Mathematics 3A-3B-4A-4B 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-105B, 110A-110B and 111A-111B. The choice of related minors and the organization of the course of the major student must follow a definite plan approved by the department.

For requirements for liberal arts major in physical science, see page 100.

## LOWER DIVISION COURSES

**1A-1B General Chemistry**

Messner

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

Year course (5-5)

**2A-2B General Chemistry**

Ross

A general course for those not intending to take advanced courses in chemistry. The work in the first semester stresses inorganic chemistry and fundamental principles; that of the second semester covers an introduction to organic and biochemistry. Emphasis placed on applications of chemistry to everyday life. Two lectures and one laboratory period per week. Required of pre-nursing students and recommended for those desiring chemistry as part of a liberal education.

Year course (3-3)

**7-8 Organic Chemistry**

Ross

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

Year course (3-3)

## UPPER DIVISION COURSES

**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)

**105B Advanced Quantitative Analysis**

Messner

Advanced work in the theory and practice of volumetric, gravimetric and electroanalysis. One lecture and two laboratory periods per week. Prerequisite: Chemistry 105A.

Spring (3) (Not offered in 1944-45)

**110A-110B Physical Chemistry**

Lectures and problems on theoretical principles of chemistry. Prerequisites: Physics 1A-1B or 2A-2B, a knowledge of calculus and Chemistry 105A which may be taken concurrently. With the approval of the instructor, advanced courses in physics may be substituted for Chemistry 105A.

Year course (3-3) (Not offered in 1944-45)

**111A-111B Physical Chemistry—Laboratory**

Physico-chemical problems and measurements. Two laboratory periods per week. Prerequisites: Credit or registration in Chemistry 110A-110B.

Year course (2-2) (Not offered in 1944-45)

**112A-112B Industrial Analysis**

A laboratory course including the analysis of fuels, petroleum products, water, and gas. Prerequisite: Chemistry 105A which may be taken concurrently.

(3-3) (Not offered in 1944-45)

**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 7, 8.

Spring (3) (Offered in 1944-45 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 7-8.

Fall (2) (Not offered in 1944-45)

**123-124 Organic Preparations**

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.

Beginning either Fall or Spring (1 to 5—1 to 5) (Not offered in 1944-45)

**125 History of Chemistry**

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 7, 8.

Fall (2) (Not offered in 1944-45)

**127 Advanced Inorganic Chemistry**

Ross

A detailed study of the Periodic Table. Discussion of complex inorganic compounds and oxidation-reduction potentials. Prerequisite: Chemistry 1A-1B and upper division standing.

Fall (2) (Offered in 1944-45 and alternate years)

**144 Industrial Chemistry**

Industrial stoichiometry, flow sheets, flow of fluids and unit processes. Lectures, problems, and reports. Prerequisites: Chemistry 1A-1B, Physics 1A-1B or 2A-2B.

Spring (3) (Not offered in 1944-45)

**199 Special Problems**

Instructors of the Department

Supervised individual work in specialized branches of chemistry. 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) (Not offered in 1944-45)

## COMMERCE

(See Economics and Commerce, below)

## ECONOMICS AND COMMERCE

The department provides an opportunity for the student to choose between a major in economics and a major in commerce in satisfying the requirements for the Bachelor of Arts degree.

**Economics.** Lower division preparation for the liberal arts major in economics and for the junior certificate: Economics 1A-1B, 14A-14B and at least one of the following: Political Science 1A-1B or 71A-71B; History 4A-4B, 8A-8B; Psychology 1A-1B; Sociology 50A-50B; Anthropology 1A-1B. Recommended: Economics 18A-18B, Geography 10A-10B.

**Liberal arts major in economics,** 24 upper division units required as follows: Economics 100A, 140, and 100B or 111, with 9 or more additional units selected from Economics 100B, 107, 111, 125, 131, 133, 135, 150, 171, and 195. Electives: Six or more additional upper division units in economics. Political Science 143A-143B may be substituted for elective units in economics.

**Commerce.** Candidates for a teaching credential in business education should refer to the statement "Admission to Teacher Education Curricula" on page 21 and to the curriculum for the A.B. degree with a special credential in Business Education on pages 30 to 31.

Lower division preparation for the liberal arts major in commerce and for the junior certificate: Economics 1A-1B, 14A-14B, 18A-18B; English 1B, 2; Geography 10A-10B, Mathematics C, or equivalent, and Economics 2; History 4A-4B or 8A-8B or Political Science 1A-1B or 71A-71B.

Liberal arts major in commerce, 24 upper division units required as follows: Economics 111, 121, 140, with 12 or more units additional chosen in one of the following groups:  
A. Accounting: Economics 160A-160B, 161, 162.

B. Banking and Finance Economics 133, 135 and 6 units selected from Economics 107, 131, 134, 137.

C. Business Administration: 6 units selected from Economics 123, 125, 137, 142, 150. Electives: 9 or more additional upper division units in economics.

#### LOWER DIVISION COURSES

##### 1A-1B Principles of Economics

Cameron

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

Year course (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.

Spring (3)

##### 14A-14B Accounting

Wright

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 books for different kinds of businesses; organizations, reorganizations, dissolutions, and consolidations, etc., keeping in view the best modern accounting practice. Five hours lecture and laboratory.

Year course (3-3)

##### 18A-18B Commercial Law

The leading and fundamental principles of business law. Simple cases showing the actual application of the principles to commercial and business transactions, rather than the development of those principles. The 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

##### 100A Modern Economic Thought

Cameron

Review of schools of economic thought in the light of recent economic theory with special reference to value and distribution. Special attention is given to the marginal utility theory of value, to the contributions of the institutional economists, and to the work of statisticians in the development of economic theory. Prerequisite: Economics 1A-1B.

Fall (3)

##### 100B Modern Economic Thought

A problem course. Subjects include price theory; distribution with particular emphasis on income; effects of various kinds and degrees of competition and regulation; war economy and government planning. Recommended: Economics 100A.

Spring (3) (Not offered in 1944-45)

##### 103 The Economics of War and Post-War Recovery and Reconstruction

A. G. Peterson

I, Backgrounds of the Present War; II, The Requirements of War Economy; III, International Recovery and Reconstruction; IV, National Recovery and Reconstruction.

Spring (3)

##### 107 Credit and Credit Institutions

A study of the economics of credit, its cost, and the agencies supplying credit. Special attention is given to the growth of government credit agencies and their place in modern economic society. Prerequisite: Economics 1A-1B. Recommended: Economics 100.

Spring (3) (Not offered in 1944-45)

##### 111 Economic History of the United States

Wright

A comprehensive survey of American economic development and of national legislation in the field of industry.

Spring (3)

##### 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 Principles of Marketing

A survey of the fundamental principles and methods of marketing. Intended as a basic training for students interested in the economics of advertising, sales management, retailing, and foreign trade, as well as for those wishing a knowledge of the existing market structure. Subjects covered include price policies, distribution methods, finance, risk, market information, and governmental regulation. Prerequisite: Economics 1A-1B.

Spring (3) (Offered 1945-46 and alternate years)

##### 125 General Insurance—Principles and Practice

Economic theory of risk, its extent and importance to both the individual and business; transfer of risk; distribution and prevention of loss; types of insurance carriers; problems of rate making; the insurance contract; coverages; special forms of life, fire, marine and casualty insurance; state supervision.

Fall (3) (Not offered in 1944-45)

##### 127 Life Insurance—Principles and Practice

A study of social and individual values involved in the institution of life insurance. The student is then directed to the types of life insurance companies and associations, home office and agency organization, types of contracts, surrender value, policy loans and extended insurance, surplus and dividend policies, reserves, group, industrial and social insurance, and state supervision.

Fall (3) (Not offered in 1944-45)

##### 128 Land Economics

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) (Not offered in 1944-45)

**131 Public Finance and Taxation****A. G. Peterson**

Principles and practice of taxation, public expenditures, and financial administration. Economic effects of public expenditure, indebtedness, and taxation. Prerequisite: Economics 1A-1B.

*Spring (3) (Not offered in 1944-45)*

**133 Corporation Finance****Cameron**

The corporate form of organization, instruments of long-time finance, methods of raising capital, efficient financial management, the financing of reorganizations, and governmental control. Prerequisite: Economics 1A-1B.

*Fall (3)*

**134 Investments****Cameron**

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

*Spring (3)*

**135 Money and Banking****Cameron**

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.

*Spring (3)*

**137 Credits and Collections****Cameron**

The credit man and his work, including the instruments with which he works, sources of credit information, the technique of his department, collection methods, legislation for the protection of debtor and creditor, and credit insurance.

*Fall (3) (Not offered in 1944-45)*

**140 Statistical Methods**

The nature and uses of statistical method in the social sciences. Practice in tabular and graphic presentation of data; analysis of frequency and time series; index number construction and study of correlation techniques. Prerequisite: Mathematics A and D, or equivalent.

*Fall (3)*

**142 Business Fluctuations and Business Forecasting**

Fundamental factors in business cycles are analyzed and cycle theories are examined. Study of current business conditions begins early in the course and develops into practical application of forecasting methods to both business and other data. Prerequisite: Economics 140.

*Spring (3) (Not offered in 1944-45)*

**150 Labor Problems and Industrial Relations****A. G. Peterson**

A discussion of employment, hours, wages, working conditions, insurance, pensions, workmen's compensation, labor organizations and labor legislation. Organization of personnel functions; selective devices, training and safety programs, compensation plans, morale.

*Spring (4) (Offered in 1945-46 and alternate years)*

**160A-160B Advanced Accounting****Wright**

An intensive study of the corporation, its accounting and financial problems; a thorough study of the balance sheet; depreciation; factory accounting, etc. Under practical accounting an endeavor is made to design, construct, and operate sets of books to meet the needs of different conditions and kinds of businesses. Six hours lecture and laboratory. Prerequisite: Economics 14A-14B.

*Year course (3-3) (Offered in 1944-45 and 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: Economics 14A-14B.

*Fall (3) (Offered in 1945-46 and alternate years)*

**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) (Offered in 1945-46 and alternate years)*

**164 Income Tax Procedure****Wright**

A consideration of the problems arising from the Federal income tax. The problems are approached from the point of view of the taxpayer who desires to determine the exact application of the law to the interests he represents as well as from the accounting point of view. No knowledge of accounting procedure is necessary.

*Fall (3) (Not offered in 1944-45)*

**165A-165B Auditing****Wright**

The fundamental principles of accepted procedures of auditing and related types of accounting engagements.

*Year course (3-3) (Not offered in 1944-45)*

**166 Honors Course****The Staff**

See page 15.

*Fall (3) or Spring (3)*

**167 Governmental Accounting****Wright**

A comparative study of accounting systems used by municipalities, counties, and the state of California; detailed comparisons with commercial practice; procedures in handling budget accounts, appropriations, and encumbrances; subsidiary records; cost records; internal checks; auditing.

*Spring (3) (Not offered in 1944-45)*

**171 Transportation****Cameron**

The development of railway transportation; railroad financing; rates and rate making; governmental regulation; government operation of railroads during the war; recent development of motor and air transportation; current problems in public utilities. Prerequisite: Economics 1A-1B.

*Fall (3) (Offered on demand)*

**195 International Economic Relations****A. G. Peterson**

A brief treatment of certain geographical, sociological, and legal phases of international relations followed by a study of the commercial and industrial basis of world economy touching upon a number of special problems involved. An introductory study of materials covering the processes, principles, and policies of international trade. The course concerns itself primarily with the economic basis of international relations, but political aspects are almost constantly taken into account in recognition of the fact that international relations are frequently political in form but economic in content.

*(Offered in the summer session)*

**198 Investigation and Report****A. G. Peterson**

Designed to stimulate independent study and investigation; to furnish guidance in the collection, organization, and presentation of factual material; to improve the technique of term reports.

*Fall and Spring (1-3)*

**TWO-YEAR COURSES****L15A-L15B Elementary Accounting****Watenpugh**

An introductory course in the fundamental principles of accounting; recording business transactions; opening and closing books of different kinds of business in accordance with modern accounting practice; accounting theory combined with actual prac-

tice. Balance sheet; profit and loss statements; accounts; book of entry, etc. Planned for students entering accounting work who must confine their preparation to one or two years. Open only to students enrolled in a two-year curriculum.

*Year course (3-3)*

#### L16A-L16B Secretarial Accounting

Watenpaugh

A course in secretarial accounting covering the fundamental principles of accounting and the application of these principles to the accounting work required by one employed in a secretarial capacity. Open only to students enrolled in a two-year curriculum.

*Year course (3-3)*

#### L45A-L45B Business Economics

Cameron

A basic course in the general principles of business economics and the application of these principles to current problems of man's economic life. A coordinated description of economic conditions, circumstances and forces which are of general significance throughout the business world. The development of theory as an interpretation of and guide to practice. Emphasis placed on actual business and financial operations and matters of everyday business experience which may serve as guides for individual conduct and the development of social policy. Human wants and their satisfaction; organization and purpose of business; risks and insurance; how prices are determined; money, credit and banking; taxation; principles of consumption; government and business; wealth, value, capital, rent, interest profits; etc. Not open to freshmen. Open only to students enrolled in a two-year curriculum.

*Year course (3-3)*

#### L65A-L65B Record Keeping

Watenpaugh

An advanced course in the application of accounting theory and principles to accounting practice; the technical arrangement of accounting forms, records and reports found in business; advanced theory. Opportunity afforded students through the use of practice sets, etc. to secure practice in applying principles to actual work done in business. Prerequisite: Accounting 15A-15B or 16A-16B or Economics 14A-14B. Open only to students enrolled in a two-year curriculum.

*Year course (3-3)*

### COMPARATIVE LITERATURE

Requirements for the minor in Comparative and General Literature: (1) a minimum of twelve units of work must be completed in courses offered by the department, at least six of which must be in upper division courses; (2) the work to be taken should be arranged in consultation with an instructor selected by the department.

#### LOWER DIVISION COURSES

##### 52A-52B Types of World Literature

Adams

For a description of this course, see English 52A-52B.

*Year course (3-3)*

#### UPPER DIVISION COURSES

##### 101A Modern Continental Fiction

Dickhaut

For description, see English 101A.

*Spring (3) (Offered in 1944-45 and alternate years)*

##### 104 Latin-American Literature in English

Phillips

A study of the principal writers of the Latin-American countries, with lectures in English and reading in English transactions. Class reports on collateral reading. Spanish credit will be given to those who wish to do the requisite reading in Spanish.

*Spring (3) (Offered in 1943-44 and alternate years)*

##### 115 The Bible as Literature

Kennedy

For description, see English 115.

*Fall (3) (Not offered in 1944-45)*

#### 140 Masterpieces of French Literature

E. M. Brown

A cultural course designed to be given in introduction to the great French works from the Song of Roland through Cyrano de Bergerac, with emphasis on the 16th, 17th, 18th and 19th century authors. The contributions to world thinking of Rabelais, Montaigne, Moliere, Racine, Descartes, Pascal, Montesquieu, Voltaire, Rousseau, Hugo, Balzac, Flaubert, Maupassant, Zola, will be studied through lectures and outside readings.

*Fall (3) (Offered in 1945-46 and alternate years)*

#### 142 German Literature in English

Walker

Masterpieces of German literature from the 18th and early 19th centuries. English translations read. No knowledge of German required.

*Spring (3) (Offered in 1944-45 and alternate years)*

#### 144 Spanish Literature in English

A study of the principal Spanish writers, emphasizing the 17th and 19th centuries and stressing the relationships between Spanish and other European literature. All lectures, collateral reading and reports in English.

*Fall (3) (Not offered in 1944-45)*

#### 152A Survey of Drama: Comedy

For description, see English 152A.

*Fall (3) (Not offered in 1944-45)*

#### 152B Survey of Drama: Tragedy

For description, see English 152B.

*Spring (3) (Not offered in 1944-45 and alternate years)*

#### 157 Primitive Myths and Rituals

Rogers

For description, see Anthropology 157.

*Spring (3) (Offered in 1945-46 and alternate years)*

### EDUCATION

#### UPPER DIVISION COURSES

##### L100A Methods and Materials of Instruction

Deputy

A course required of all candidates for the junior high and all special secondary credentials. It deals with general methods of instruction and the organization and functions of the secondary school curriculum. Candidates for a combination of either a junior high or a special secondary with an elementary credential may substitute the work of the elementary practicums for this course, but not vice versa. Prerequisite: junior standing.

*Fall and Spring (3)*

##### L100B Methods and Materials of Instruction

Tinsley and major subject instructors

The course deals with specific methods and materials in the field of the teaching major or minor.

Subject sections in L100B are as follows:

Semester offered

Ed. L100B-A, Methods in Art	Both
Ed. L100B-B, Methods in Bookkeeping	Fall
Ed. L100B-BE, Methods in Bus. Educ.	Spring
Ed. L100B-E, Methods in English	Spring
Ed. L100B-L, Romance Language Methods	Spring 1946
Ed. L100B-MA, Mathematics	Fall
Ed. L100B-ME, Methods in Merchandising	Spring
Ed. L100B-MU, Methods in Music	Fall, 1945
Ed. L100B-PE, Methods in Phys. Ed. (Men)	Both
Ed. L100B-PE, Methods in Phys. Ed. (Women)	Both
Ed. L100B-SC, Methods in Science	Spring
Ed. L100B-SA, Methods in Speech Arts	Fall
Ed. L100B-ST, Methods in Stenography	Fall
Ed. L100B-S.SC, Methods in Social Sci.	Both
Ed. L100B-T, Methods in Typing	Spring



**LS130 Educational Psychology**

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 learning, remembering and forgetting, fatigue in learning, and the transfer of training. Prerequisite: Psychology 1A.

Summer (3)

**L145 Organization and Administration of Music Education**

L. D. Smith

Theory of the general principles of music administration; correlation of music with the various subjects in the public schools; music tests; creative work.

Fall (2) (Offered in 1944-45 and alternate years)

**L147A Education Practicum (Kindergarten-Primary)**

I. Hammack, Hunt, Madden, Patterson

The course is a continuation of L147B. It is a study of kindergarten education and must be accompanied by directed teaching in the kindergarten. The course includes elementary art education (1), elementary music education (1), children's literature (2), kindergarten-primary education (4), and educational psychology (2). Prerequisite, L147B.

Fall and Spring (10)

**L147B Education Practicum**

Bacon, E. Hammack, I. Hammack, Hunt, Madden, Redit

This course is required of all students who expect to receive a credential which will qualify them to teach in the kindergarten or in the elementary school. Students should take the course during the next semester after admission to Teacher Training, which is usually the first semester of the junior year. Registration is strictly limited to small groups.

Education Practicum is a unified course which deals with the interpretation and intelligent application of theory and practice in elementary education. The child and accumulated knowledge are studied as one affects the other. The psychology of learning is interpreted while the college student is immediately associated with the experiencing of children. For two or three hours each day classes are held in which the psychology and philosophy of education are studied and analyzed as systems of knowledge and concurrently interpreted in reference to the actual teaching participation to which the student is assigned for one hour daily. The course includes elementary art education (1), elementary music education (1), speech education (1), mental hygiene (2), elementary school reading (2), elementary education methods (3), and directed teaching (2).

The course is taught by college instructors who are in direct contact with the Campus Elementary School.

Fall and Spring (12)

**L148 Education Practicum**

Brydegaard, Corbett, Hunt, Madden, Patterson, Schwob, B. Stone

The course is a continuation of Ed. L147B and is required of all students who are candidates for the general elementary credential. An extended analysis is made of the psychology of education in various fields and application is made through directed teaching in grades 4 to 7. The course includes elementary art education (1), elementary music education (1), elementary health education (2), educational psychology L147B.

Fall and Spring (12)

**LE170 Administration of a Visual Instruction Program**

The service program of a visual instruction center is studied as a collecting, selecting, organizing and distributing center for classroom illustrative materials; a teacher training and advisory bureau in the technique and correct use of visual aids; a photographic production laboratory for making current and local illustrative materials for the 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 school film productions and for instructing teachers and students in the art of photography and appreciation of photoplays.

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

Fall and Spring (2)

**LS175A Administration and Supervision of an Elementary School**

Summer (3)

**LS175B City School Administration**

Summer (2-3)

**L176 Speech Arts in the Secondary School (See Education L100B)**

Jones

Organization and conduct of junior high and high school speech activities.

Fall (2)

**L199 Educational Problems**

Education Staff  
(Dean of Education in charge)

A course for senior students in residence and enrolled in teacher training who have shown ability to work independently on educational problems. The problem can be chosen only after consultation with a staff member. Admission by consent of the staff. Credit and hours to be arranged.

Summer (1-3)

**ENGINEERING**

(For curriculum in engineering see pages 42-44.)

**LOWER DIVISION****1A-1B Plane Surveying**

Gleason

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

Year course (3-3)

**S3 Summer Class in Surveying**

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

Summer (3)

**21 Descriptive Geometry**

Walling

Fundamental principles of descriptive geometry and their application to problems of engineering. Lectures and drafting. Prerequisites: One year of mechanical drawing, and sophomore standing.

Fall (3)

**22 Machine Drawing**

Walling

Design and drawing of simple machine parts with emphasis upon the production of standard drawings. Lectures and drafting. Prerequisite: Engineering 21, Mathematics 3A-3B.

Spring (3)

**23 Materials of Construction**

Walling

Manufacturing processes, structural properties and adaptability of the principle materials used in engineering. Lectures; Prerequisite: Sophomore standing.

Spring (2)

**100A-100B Elements of Electrical Engineering**

Theory and characteristics of electrical equipment with emphasis on industrial applications.

**100A** Direct current circuits, generators and motors. Introduction to alternating current circuits.

**100B** Alternating current circuits, transformers, alternators, induction on synchronous motors, conversion apparatus and transmission lines. Lectures and problems. Prerequisites: Mathematics 4A, Physics 1C or permission of the instructor.

*Year course (3-3) (Offered in 1944-45 if demand is sufficient)*

**105 Hydraulics**

A general course in hydraulics including the fundamental principles of hydrostatics and hydrodynamics applied to the flow of water through orifices, over weirs, through pipes and canals. Lectures and problems. Prerequisites: Mathematics 4A, Physics 1C. Recommended: Physics 105A-105B.

*Spring (3) (Not offered 1944-45)*

**123 Materials of Construction**

Essentially the same as Engineering 23 except that students will be expected to investigate more fully some particular material or process and prepare a written report upon it. Prerequisites: Chemistry 1B, Junior standing.

*Spring (2)*

**128 Elements of Heat Power Engineering**

Fundamental consideration of fuels, combustion, steam, boilers, furnaces, chimneys, steam engines, steam turbines and auxiliaries, internal combustion engines. Lectures and Problems. Prerequisites: Mathematics 4A, Physics 1B.

*Fall (3) (Not offered 1944-45)*

**ENGLISH**

*Lower division preparation for the liberal arts major in English: at least 12 units of work, including 1B, 56A, 56B. Upper division requirements for the liberal arts major: (1) at least 2 1/2 units in upper division English courses, including 18 units from the following: 112, 116A, 116B, 117A, 117B, 118A, 118B, 119, 121, 126, 151, 160; (2) selection arrangement of courses under the supervision of an adviser appointed by the English department; (3) a reading knowledge of one of the languages taught in the College: French, German, Italian, Latin, Spanish. (By "reading knowledge" is meant two full years of lower division work, or the equivalent. Further work in one of these languages, in upper division courses, is highly recommended.)*

**LOWER DIVISION COURSES****L1A Subject A: English Composition**

The elements of composition, including drill in grammar and usage; exercises in vocabulary building and careful reading; theme writing. Credit in this course is equivalent to passing the English A Examination, and admits to English 2 courses.

*Fall and Spring (3)*

**L1AA Reading Efficiency and Vocabulary Extension**

Special drill in reading for comprehension; vocabulary building; practice in elementary composition. Systematic, progressive, and intensive training and practice in effective reading and methods of study. This course may be substituted for English L1A.

*Fall and Spring (3)*

**1B-2 First-Year Reading and Composition**

The first half year 1B, is composition, with exposition stressed. The second half year may be chosen from any section of English 2, which is a continuation of composition, but is primarily reading and the analysis of literature and is open to students who have completed either 1B or L1A. By completing 1B and a section of 2, the student earns six units of college composition.

Students may elect more than one section of English 2.

Walling

Walling

Walling

Walling

**1B Composition**

Exposition is stressed. Prerequisite: satisfactory Subject A test. *Not open to students who have taken English L1A or L1AA.*

*Fall and Spring (3)*

**2A Argumentation**

A study of the underlying principles of, and of the methods involved in, writing designed to secure agreement or favorable consideration, together with much practice in both shorter and longer forms of such writing.

*Spring (3) (Not offered in 1944-45)*

**2B Biography**

Composition, stressing personal narrative and informal essay. Reading from field or biography and memoirs.

*Fall and Spring (3)*

**2C Periodical Literature**

Composition stressing article writing of varied types. Reading from current periodical literature.

*Fall and Spring (3)*

**2D Foundations of the Language**

An elementary course in English linguistics designed to make more significant the native language through a study of the elements which have gone into the composition of its vocabulary.

*Fall and Spring (3) (Not offered in 1944-45)*

**2E Modern Drama**

Composition based upon the reading of recent plays and dramatic criticism.

*Spring (3)*

**2F Short Story Writing**

A practical course in writing, including a study of short story technique and markets, and the writing of complete short stories.

*Spring (3) (Not offered in 1944-45)*

**2G Freshman Literature**

An introduction to literature of various types in modern European and American culture, with composition.

*Fall and Spring (3)*

**L8 English in Business**

Theory and practice of business correspondence. Business letters as applied salesmanship; problems in writing credit and collection letters, applications for employment, ship; problems in writing credit and collection letters, applications for employment, as adjustment letters, and sales letters. Prerequisite: English L1A or equivalent, as indicated by Subject A Examination, or record from college. This course is planned for students in Secretarial Training; units obtained in it cannot be used to meet English requirements in other fields.

*Fall and Spring (3)*

**10 Recreational Reading**

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)*

**50A-50B Survey of American Literature**

Semester I: A survey of American literature from its beginnings to 1860. Semester II: American literature from 1860 to the present. Lectures, discussions, and reports.

*Year Course (3-3)*

The Staff

F. L. Johnson

Dickhaut

F. L. Johnson

Keeney

Amsden

The Staff

Kennedy

**52A-52B Types of World Literature**

Adams

A chronological survey from Homer to modern times. The first semester stresses the classical epic and tragedy. The second semester, beginning with the Renaissance, stresses prose fiction, the drama, and the essay.

*Year course (3-3)*

**56A-56B Survey of English Literature**

Keeney

The study of some important works of English literature from the Anglo-Saxon period through the Victorian age, with emphasis upon the literary history of each period.

*Year course (3-3)*

## UPPER DIVISION COURSES

**101A Modern Continental Fiction**

Dickhaut

A survey of leading French, Russian, Scandinavian, Italian, and German novelists and short story writers, from Tolstoy and his associates to the present day.

*Spring (3) (Offered in 1944-45 and alternate years)*

**101B Modern British Fiction**

Dickhaut

The novel and short story, especially of the last quarter of a century.

*Spring (3) (Offered in 1945-46 and alternate years)*

**104 Latin-American Literature in English**

Phillips

A survey of the literature of the Latin-American countries, with lectures in English and reading in English translations. Class reports on collateral reading. Spanish credit will be given to those who wish to do the requisite reading in Spanish.

*Spring (3) (Offered in 1945-46 and alternate years)*

**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 of college composition. Either semester may be taken first.

*Fall, Spring (3-3) (Offered in 1945-46 and alternate years)*

**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 (3-3) (Offered in 1944-45 and alternate years)*

**110 Recreational Reading**

Dickhaut

An advanced course in the group reading of modern drama, poetry and fiction.

*Fall and Spring (1 or 2)*

**112 The English Language**

An inductive historical approach to basic aspects of the language. The course includes an analysis of English sounds, grammar, and syntax, beginning with Modern English and going back through Early Modern, Middle, and Old English.

*Fall (3) (Not offered in 1944-45)*

**113 American English**

The rise of American English; its peculiarities in pronunciation, grammar, and vocabulary; slang, regional and cultural differences.

*Spring (3) (Offered in 1945-46 and alternate years)*

**115 The English Bible as Literature**

Kennedy

A study of the narrative, poetry, and prophecy of the King James version of the Bible. Readings, reports, lectures, and discussions.

*Fall (3) (Not offered in 1944-45)*

**116A The Age of Elizabeth**

Poetry and prose, exclusive of the drama.

*Spring (3) (Not offered in 1944-45)*

F. L. Johnson

**116B The Elizabethan Drama**

Principal contemporaries of Shakespeare.

*Spring (3) (Offered in 1945-46 and alternate years)*

F. L. Johnson

**117A-117B Shakespeare**

A chronological survey. The first semester gives special emphasis to the histories and comedies; the second, to tragedy and the dramatic romances.

*Year course (3-3)*

Keeney

**118A The Age of Swift and Pope**

A study of the literature of the first half of the eighteenth century, with special emphasis on social satire of Swift, Pope, Addison, Steele, Gay and Prior.

*Spring (3) (Offered in 1945-46 and alternate years)*

Keeney

**118B The Age of Johnson**

A study of Johnson and his circle as representative of their age, together with a study of Burns, Blake, and others as forerunners of the age of Romanticism.

*Spring (3) (Offered in 1944-45 and alternate years)*

Trail

**119 The Romantic Period: Poetry**

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.

*Fall (3) (Offered in 1945-46 and alternate years)*

Trail

**121 The Victorian Period: Poetry**

A study of Tennyson and Browning and their contemporaries and successors, relating English poetry to nineteenth century life and thought.

*Fall (3) (Offered in 1944-45 and alternate years)*

Dickhaut

**126 Nineteenth Century British Prose**

Romantic and mid-Victorian prose writers, including Coleridge, Hazlitt, Lamb, DeQuincey, Carlyle, Landor, Macaulay, Mill and Thackeray.

*Fall (3) (Offered in 1944-45 and alternate years)*

Dickhaut

**127 Modern British Prose**

Late nineteenth and early twentieth century essays of Arnold, Galsworthy, Huxley, Newman, Pater, Ruskin, Shaw, Stevenson, Wells, and others.

*Fall (3) (Offered in 1945-46 and alternate years)*

Adams

**130A American Literature: to 1900**

A survey of literary movements in the United States to the late nineteenth century, with a study of the chief writers. Not open to students who have credit in English 50A.

*Fall (3)*

Kennedy

**132 The Frontier and American Literature**

A survey of the influence of the frontier upon American literature from colonial days to the present. Studies in source materials, biographies, and representative writers such as Irving, Cooper, Harte, and Mark Twain.

*Fall (3) (Offered in 1944-45 and alternate years)*

Adams

**133 American Fiction**

The outstanding writers of novels and short stories, from Cooper to Norris.

*Spring (3) (Offered in 1944-45 and alternate years)*

**134 American Literature: 1900 to the present** Kennedy  
A survey of American literature since 1900 with emphasis upon contemporary poetry, fiction and drama. Not open to students with credit in English 50B.  
*Spring (3)*

**143 The Novel** Kennedy  
History of the English novel from the beginnings to Hardy. Extensive reading of novels with reports. Lectures and discussions.  
*Fall (3) (Offered in 1945-46 and alternate years)*

**151 Chaucer** Keeney  
The study of Chaucer's works, and a consideration of the social and literary backgrounds of the fourteenth century.  
*Fall (3)*

**152A Survey of Drama: Comedy**  
Studies in the field of comedy, based on selected readings from the works of Continental, English, and American dramatists. Lectures, discussions, and reports on reading.  
*Fall (3) (Not offered in 1944-45)*

**152B Survey of Drama: Tragedy**  
Procedure as in 152A, with selections taken from the field of tragedy.  
*Spring (3) (Not offered in 1944-45)*

**160 The Age of Milton** Adams  
Emphasis is put upon the work of Milton.  
*Spring (3) (Offered in 1945-46 and alternate years)*

**166 Honors Course** The Staff  
Special study. Open to members of the Honors Group in English (See page 21.)  
*Fall and Spring (1 to 5-1 to 5)*

**167 Research: Advanced Honors Course** The Staff  
Special study. Open to mature, specially qualified students, graduates, teachers of English literature, and others who have demonstrated marked aptitude for intensive research in the field of English literature.  
*Fall and Spring (3-5)*

**Comparative Literature.** For other courses in literature, offered by members of the English Department and other departments, see Comparative Literature, page 68.

## TWO-YEAR COURSES

**L40A Beginning Composition** The Two-Year Staff  
The elements of composition, including drill in grammar and usage; exercises in vocabulary building and careful reading; theme writing. Open only to Two-Year students.  
*Fall and Spring (3)*

**L40B Freshman English** The Two-Year Staff  
Composition stressing exposition. Reading from essays and articles. Prerequisites: Satisfactory Subject A test. Open only to Two-Year students.  
*Fall and Spring (3)*

**L40C Freshman Literature** The Two-Year Staff  
Literature, mainly contemporary, is read for its thoughts and ideas, especially in relation to human problems and their solution. Practice in writing is continued. Prerequisite: One semester of Freshman English. Required of all Two-Year students;  
*open only to Two-Year students.*  
*Fall and Spring (3)*

**L45 Sophomore English: Biography** The Two-Year Staff  
Composition stressing personal narrative and informal essay. Reading from field of biography and memoirs. Prerequisite: English L40A or L40B, and English L40C. Open only to Two-Year students.  
*Fall (3)*

**L46 Sophomore English Contemporary Literature** The Two-Year Staff  
Study of contemporary literature, with emphasis on various forms, such as the novel, poetry, drama, etc., as used by the principal writers of the twentieth century world. The main objective of the course is to give students a background for the major portion of their reading beyond college. Open only to Two-Year students.  
*Spring (3)*

## FOREIGN LANGUAGES

The courses offered in foreign languages are listed below. See pages listed after each subject for a more complete description of the offerings under that designation. French, see below; General Language, page 80; German, page 83; Italian, page 86; Latin, page 87; and Spanish, page 109.

As a background for advanced work in Romance languages, students are advised to include in their electives as many as possible of the following courses: Geography 118, History 121A, 121B, 147, Aesthetics 50 or 150; English 52A, 52B, 56A, 56B, 101, 118A, 119, 143.

## FRENCH

Lower division preparation for the liberal arts major in French: French A-B-C-D; either German A-B or Spanish A-B; History 4A-4B.

Liberal arts major in 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 department. At least a C average in upper division major courses.

## LOWER DIVISION COURSES

**A-B Elementary** L. P. Brown, Phillips  
Intensive study of French grammar and syntax; daily written work discussed in class; reading with oral discussion and class drill in conversational idiom and pronunciation; reading with oral discussion and class drill in conversational idiom and pronunciation. Credit not given for résumé; 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 two units of work in French A. Those who have had two years of French in high school should register for four units of work in French B.  
*Year course (5-5)*

**C-D Intermediate Reading** E. M. Brown, Phillips  
Reading and composition; study of standard prose as a basis for class work, collateral reading with résumés and written reports in French; dictation. Individual conferences. Prerequisite: French B or three years of high school French, or its equivalent. Students with four years of high school French should register for French D.  
*Year course (3-3)*

**SC Scientific Reading** L. P. Brown  
Reading taken from the fields of chemistry, physics, medicine, zoology, biology, etc. Outside readings of books and periodicals. Oral and written reports. Prerequisite: French B or equivalent.  
*Fall (2) (Offered in 1944-45 if demand is sufficient)*

## 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)*

**105A-105B Modern French Drama****E. M. Brown**

Plays of Musset, Scribe, Augier, Dumas fils, Pailleron, Brieux, Hervieux, Maeterlinck, Rostand, and others read and discussed as to subject matter and technique. Outside reading and reports. Prerequisite: French D, or its equivalent, with grade of C.

*Year course (3-3) (Offered in 1945-46)*

**107A-107B Eighteenth Century Literature****L. P. Brown**

The works of Montesquieu, Voltaire, Rousseau, the Encyclopédistes, and others. Prerequisite: French D, or its equivalent, with a grade of C.

*Year course (3-3)*

**110A-11B Modern French Novel****E. M. Brown**

The French novel from Victor Hugo to the present day, including such authors as: Hugo, Dumas, Stendhal, Balzac, Flaubert, Loti, Anatole France, Bourget, Bordeaux, Bazin, Barrè, Romain Rolland, A. Gide, Marcel Proust, and others. Class and outside reading and reports. Prerequisite: French D, or its equivalent, with grade of C.

*Year course (3-3) (Offered in 1947-48)*

**111A-111B Seventeenth Century Dramatic Literature****E. M. Brown**

Reading in class of plays of Molière, Corneille, and Racine. Outside readings and lectures on the background of the seventeenth century in France. Prerequisite: French D or its equivalent, with a grade of C.

*Year course (3-3) (Offered in 1946-47)*

**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)*

**GENERAL LANGUAGE****LOWER DIVISION COURSE****A Latin and Greek Word Derivation****L. P. Brown**

A general and elementary course in philology. A study of Latin and Greek roots of most frequent occurrence in English, and of the English words derived from them.

*Fall (2)*

**GEOGRAPHY**

*Lower division preparation for the liberal arts major in geography: Geography 1, 2, 3, and Geology 1A-1B. Recommended: A reading knowledge of French or German.*

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

**LOWER DIVISION COURSES****1 Introduction to Geography: Physical Elements****The Staff**

The nature of maps, weather and climates of the world; natural vegetation; land forms and their associated soils, with reference to their climatic relationships; the seas and their coasts. One all-day field trip. Open to all students who have not taken Geography 10A-10B. *This course is classified as a natural science.*

*Fall and Spring (3)*

**2 Introduction to Geography: Natural and Cultural Regions****The Staff**

The regional differentiation of the world by human activity; areal bases of economy and nationality. Prerequisite: Geography 1.

*Fall and Spring (3)*

**3 Elementary Meteorology****Blake**

An elementary study of the earth's atmosphere and changes in it which produce our weather and influence human affairs. Special attention given to local conditions, instruments, and records. Aeronautical meteorology stressed in the fall semester. *This course is classified as a natural science.*

*Fall (3)*

**4 Map reading and Map Interpretation****Post**

Representation of geographic data by means of maps. Interpretation of projections, scales, symbols, land forms, and culture from topographic maps; measurements of cultural data on maps. Prerequisite: Geography 1.

*Fall (2)*

**10A-10B Economic Geography****Post**

Beginning course in economic geography limited to students in commerce and prospective economics majors. Not open to students who have had Geography 1 and 2. *This course may serve as prerequisite to upper division geography courses.*

*Fall and Spring (3-3) (Not offered in 1944-45)*

**UPPER DIVISION COURSES****112 Geography of California****Storm**

The physiographic regions of California and the cultural landscapes developed by the successive cultural groups. Prerequisite: Geography 1.

*Spring (3) (Not offered in 1944-45)*

**116 Geography of Latin America****Post**

The natural regions of Latin America; their occupational condition and historical evolution. Prerequisite: Geography 1.

*Spring (3)*

**117 Geography of Northern and Eastern Europe****Post**

A study of the cultural development of the countries of northern and eastern Europe in relation to physical background and historical evolution. Prerequisite: Geography 1.

*Fall (3) (Not offered in 1944-45)*

**118 Geography of the Mediterranean Area****Post**

A study of the cultural development of the countries of Southern Europe, Western Asia, and North Africa in relation to physical background and resources. Prerequisite: Geography 1.

*Spring (3)*

**121 Geography of North America****Storm**

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

*Fall (3)*

**124 Geography of Asia****Storm**

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

*Spring (3)*

**135 Geography of the San Diego Area****Storm**

Directed individual urban and rural field work in the San Diego area; the mapping of a small area and making its geographic interpretations. Prerequisites: Geography 1 and 2.

*Fall (3) (Not offered in 1944-45)*

**141 Economic Geography****Storm**

A survey of the raw materials of world trade; their production and distribution as related to major geographic regions of the world. Prerequisite: Geography 1.

*Fall (3)*

**166 Honors Course****The Staff**

To be arranged after consultation with the chairman of the department. (See page 15.)

*Fall and Spring (Credit to be arranged)*

## Two-Year Course

## L40A-L40B Introduction to Geography

The Staff

An introductory descriptive course designed to acquaint students with the general features of the various regions of the world. Presents the climatic regions of the world with a description of what man has done with the resources of each. Develops a background for the interpretation of world problems and world happenings. One all-day field trip in L40A. *Open only to students enrolled in a two-year curriculum.*  
*Year course (3-3)*

## GEOLOGY

*Department requirement in Geology for liberal arts major in Physical Science includes in addition to Geology 1A-1B, the completion of: Chemistry 1A-1B, Mathematics 3A; Physics 1A-1B-1C-1D or 2A-2B; 3A-3B. Students preparing for advanced work in Geology may substitute Engineering 21 for Mathematics 3A. Geology 2A may be substituted for Geology 1A in department prerequisite requirements provided the additional necessary unit of laboratory work is completed.*

*French or German, Engineering 1A-1B and Geology 21A-21B are recommended.*

## LOWER DIVISION COURSES

## 1A Physical

Brooks

The composition, origin, and distribution of earth materials, and their modification through mechanical and chemical processes of change. Three lectures and one three-hour laboratory period weekly with related field study during the semester. (Not open to students who have had Geology 2A except for one unit upon the completion of the laboratory section.)

*Fall (4)*

## 1B Historical

Brooks

Theories of earth origin, and the evolutionary history of the earth as traced through rock and fossil records. Consideration of the Paleontologic Sequence. Three lectures and one three-hour laboratory period weekly, with arrangement for field study and conference during the semester. Prerequisite: Geology 1A or equivalent.

*Spring (4)*

## 2A General

Brooks

Similar to Geology 1A but *without* laboratory. Open to all students except physical science majors or those already presenting credit in Geology 1A. Two lectures and one demonstration and discussion hour weekly.

*Fall (3)*

## 2B Physiography

Brooks

A study of the land forms of the United States and their physiographic history as illustrative of universal geologic conditions. Two lectures and one discussion hour weekly. Prerequisite: Geology 1A or 2A.

*Spring (3)*

## 21A-21B Mineralogy

Brooks

Study of the common minerals and rocks. Use of the blowpipe and simple chemical reagents but with emphasis upon sight determination. Prerequisite: Geology 1A and high school chemistry, or equivalents.

*Year course (3-3) (Offered in 1944-45 and alternate years if demand is sufficient)*

## UPPER DIVISION COURSES

## 100 Structural Geology

Brooks

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

*Fall (3) (Offered in 1944-45 and alternate years if demand is sufficient)*

## 101 Geologic Problems

Brooks

Reconnaissance of adjacent areas with elementary mapping; or directed reading and group discussion of California Geology; or selection and preparation of materials for the museum collections. Prerequisite: Geology 1A-1B. Registration subject to approval of instructor.

*Fall and Spring (1-4)*

## TWO-YEAR COURSE

## L40 General Geology

An elementary course dealing with those processes of nature by which the surface of the earth is built up, deformed and torn down. A study of the natural history and occurrence of the common rocks and minerals.

*Open only to students enrolled in a two-year curriculum.*

*Fall and Spring (3)*

## GERMAN

## LOWER DIVISION COURSES

## A-B Elementary

H. K. Walker

Pronunciation, reading and grammar, with practice in simple conversation, narration and description, both oral and written. Credit not given for German A unless followed by German B. Students who have had one year of German in high school should register for two units of work in German A. Those who have had two years of German in high school should register for four units of work in German B.

*Year course (5-5)*

## C-D Intermediate Review and Reading

H. K. Walker

Reading and composition; study of standard prose as basis for class work; collateral reading with written reports; German conversation, with the texts read as a basis; dictation. Prerequisite: German B or two years of high school German, or its equivalent. Students with credit for three years high school German, or its equivalent, should enter German C.

*Year course (3-3)*

## SC-SD Scientific Reading

Messner

Fall semester. Readings in scientific reader on chemistry, physics, etc.: occasional written reports on scientific subjects read outside of class; sight reading. Spring semester. Readings in special scientific or technical works; weekly written reports required; sight reading. Prerequisite: German SC-German B with a grade of C or two years of high school German; German SD-German SC, German C, with a grade of C, or three years of high school German.

*Year course (3-3) (Not offered in 1944-45)*

## HEALTH AND PHYSICAL EDUCATION

*(See Physical Education)*

## HEALTH EDUCATION

## LOWER DIVISION

C. E. Peterson

## 1 Health and Social Adjustment (Men)

An informational course in personal and community hygiene. A study of social hygiene and the hygienic principles of living. Speakers from the 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)*

B. I. Stone

## 2 Health and Social Adjustment (Women)

An informational course, reviewing the principles underlying the improvement of personal health, and the solution of practical problems of young women and prospective homemakers. Lectures by specialists in the various fields serve to enrich the course. Required of all freshmen who are candidates for junior standing or the degree.

*Fall and Spring (2)*

**51 Safety Education**

Prevention of accidents: practical application of first aid methods leading to American Red Cross First Aid Certificate. Formerly listed in bulletin as Physical Education 51.

*Fall (1) (Not offered in 1944-45)*

**61A Nutrition****Dustin**

The purpose of this course is to consider health maintenance through food selection from the modern scientific viewpoint. Consideration is given to the fundamentals of an adequate diet from the basis of the known dietary essentials and of the disorders which result from the deprivation of these factors. Diets for special needs are also planned. Recommended for premedical, pre dental, pre nursing, and sociology majors. Red Cross Nutrition Certificate is granted upon course completion.

*Spring (2)*

**61B Nutrition—Laboratory****Dustin**

A basic course in food preparation which includes the study of typical food selection and preparation methods which best conserve the essential food flavors and nutrients. Class meets once a week and is open only to students who have registered in Nutrition 61A.

*Spring (1)*

**90 Physiology of Reproduction****Huff**

A course consisting of a series of lectures and discussion dealing with normal and abnormal physiology and anatomy of reproduction, facts and frauds in sex hygiene, and related topics. Prerequisite: Health Education 2.

*Fall and Spring (Women) (1)*

## UPPER DIVISION

**L151 Health Education (Education 147-148)****B. I. Stone**

A course for teacher-education students which includes the study of the diseases, common physical defects, and health indices of school children; the detection and control of communicable diseases which may appear in the school; and the elements which underlie a health education program. Methods of presenting personal and group health to children of different ages. Hygiene of the schoolroom, such as seating, lighting, and ventilation.

*Fall and Spring (2)*

## TWO-YEAR COURSES

**L40A Nutrition****Dustin**

A course based on the study of how to make healthful food choices from the modern scientific viewpoint. Consideration is given to the meaning and indications of adequate nutrition and to food in its relationship to the maintenance of well-being. Red Cross Nutrition Certificate is granted upon course completion. Open only to students enrolled in a two-year curriculum.

*Fall (2)*

**L40B Nutrition-Laboratory****Dustin**

A practical course in the selection and preparation of typical foods. Emphasis is placed on the conservation of essential food flavors and nutrients. Class meets once a week and is open only to students who have registered in Nutrition L40A.

*Fall (1)*

## HISTORY

*Lower division preparation for the liberal arts major in history: History 4A-4B or 8A-8B, and either Political Science 1A-1B, 71A-71B or Economics 1A-1B. Both history courses are recommended for students planning to major in history. No student shall enroll in more than one lower division history course during a semester.*

*Upper division requirements for the liberal arts major: At least twenty-four units in upper division courses in history, to be arranged in consultation with the chairman of the department. A reading knowledge of at least one foreign language is expected of history majors.*

*The history minor: from twelve to eighteen units of work in history is recommended. At least half the work should be chosen from upper division courses.*

## LOWER DIVISION COURSES

**Nasatir****4A-4B History of Modern Europe**

Development of European society and institutions from about 1500 A.D.

*Year course (3-3)*

**Nasatir****8A-8B History of the Americas**

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 international contest for the continents, the wars for independence, the development of the American republics, and their relations with each other and with the rest of the world. Based on H. E. Bolton's "Syllabus of the History of the Americas."

*Year course (3-3)*

## UPPER DIVISION COURSES

**111A-111B Ancient History**

Semester I—Social, economic, political and cultural development of the Greek states, with emphasis upon the growth of democracy, attempts at federal union and imperialism, Hellenism.

Semester II—Roman history to the beginning of the medieval period; discussions of Roman imperialism and the main constitutional, economic, social and religious developments in the republic and empire.

*Year course (3-3) (Offered in 1945-46 and alternate years)*

**Nasatir****121A-121B Medieval History**

General survey of European political and cultural development between 500 and 1500 A.D., with special attention to intellectual tendencies and the development of institutions which culminated in the emergence of modern Europe after 1500.

*Year course (3-3) (Offered in 1944-45 and alternate years)*

**143 The French Revolution and Napoleonic Era**

An intensive study of the revolutionary period in Europe from 1789 to 1815.

*Fall (3)*

**144 Europe Since the World War**

Developments in Europe from 1919 to the present.

*Spring (3)*

**146A-146B Diplomatic History of Europe Since 1648**

A course centering around the four major European treaties, their background, drafting and results. First semester, the Treaties of Westphalia, Utrecht and Vienna. Second semester, the Treaty of Versailles.

*Year course (3-3) (Not offered in 1944-45)*

**147 History of Modern France**

Intensive survey of the political and social development of France under the Third Republic, 1870 to the present. International and colonial problems of modern France will also be considered.

*Fall (3) (Not offered in 1944-45)*

**148 History of Modern Germany**

Political, social and economic development of Germany after 1870, the Empire and Republic. German post-war problems, imperialism, and the establishment of the Third Reich will receive special attention.

*Spring (3) (Not offered in 1944-45)*

**151A-151B England Since the Norman Conquest****Nasatir**

A survey of political and constitutional development in England since 1066, stressing the transition from medieval to modern England, Tudor despotism, the struggle for self-government under the Stuarts, the rise and development of present-day political and social institutions.

*Year course (3-3)*

**156A-156B History of British Expansion****Nasatir**

A study of the growth, development, and break-up of the older overseas empire: the beginnings of the newer empire after 1783; the rise, federation, and imperial relations of the British Commonwealth of Nations; the crown colony system; India under British rule; and British expansion in Africa and the Pacific; development of British mandates.

*Year course (3-3)*

**161 South America Since Independence****Nasatir**

The republics of South America. Attention directed to the development of nationality in South America, the struggles for political stability, the exploitation of resources, diplomatic and commercial relations with the United States, and other international problems of South America. Survey of present-day conditions, political, economic, and social.

*Spring (3)*

**163 Mexico and the Caribbean Countries****Nasatir**

Same plan in general as outlined in History 161. Special attention to the relations of the United States with these countries, and to the recent developments in Mexico.

*Fall (3)*

**171A-171B The Rise of the American Nation****Leonard**

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) (Offered in 1944-45 and alternate years)*

**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) (Offered in 1945-46 and alternate years)*

**199 Special Courses for Advanced Students****Leonard**

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)*

**ITALIAN****A-B Elementary****Phillips**

Intensive study of Italian grammar and syntax, with daily written work; class drill in conversational idiom and pronunciation; reading of works by contemporary writers. Credit not given for Italian A unless followed by Italian B. Students who have had one year of Italian in high school should register for Italian A. Those having two years in high school should register for Italian B.

*Year course (5-5) (Not offered in 1944-45)*

**JOURNALISM**

Courses in journalism will not be given during the school year 1944-45. The courses listed represent the normal program of the college, and will be taught when the demand again becomes normal.

*For the curriculum in journalism see page 47.*

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

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

**LOWER DIVISION COURSES****10A-10B Contemporary Press**

Development of the American newspaper; comparison of American and foreign newspaper practices; display and treatment of news; press associations. Prerequisite to Journalism 51A-51B; open to general enrollment.

*Fall and Spring (1-1)*

**51A-51B News Gathering and Reporting**

Study of news sources and types; practice in news and feature writing; newspaper organization; excursions and special lectures. Course planned for freshmen as a prerequisite to positions on all college publications.

*Year course (3-3)*

**L53A-L53B Applied Journalism**

Practice and projects in reporting news and feature stories and in other editorial work on *The Aztec*, *El Palenque*, *Del Sudoeste*. Students not enrolled in 51A-51B are required to take L53C-L53D.

*Fall and Spring (1 to 3; 1 to 3)*

**L53C-L53D Newswriting Problems**

Techniques in meeting problems of reporters and editors on publications with emphasis upon work of class members on *The Aztec*, *El Palenque*, *Del Sudoeste*.

**UPPER DIVISION COURSES****151A-151B Newspaper Editing**

Study and practice in the editorial, headline writing and editing of newspaper copy; management of publications. Projects in newspaper and magazine work. Required of all upper division students who take L153A-L153B for credit.

*Fall and Spring (1-1)*

**L153A-L153B Advanced Journalism Practice**

Editing of student publications and direction of personnel in editorial projects. Prerequisite: 51A-51B (may be waived by instructor). 151A-151B must be taken concurrently with this course.

*Fall and Spring (1 to 3; 1 to 3)*

NOTE.—Not more than six units in all will be given for Journalism practice on student publications.

**153C-153D Newspaper Practices**

Work on community publications, including county newspapers, under direction of the instructor.

*Fall and Spring (2)*

**199 Special Course for Advanced Students**

Open to seniors with sufficient journalistic background to satisfy the instructor.

*Spring (2)*

**LATIN****L. P. Brown****C-D Intermediate**

Readings from Latin writers. First semester: Caesar. Second semester: Cicero and Ovid. Prerequisite: Two years of high school Latin or the equivalent.

*Year course (3-3) (Not offered in 1944-45)*

## LIBRARY SCIENCE

## L10 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 decimal classification, the card catalog, periodical indexes, and the most important reference books, together with some instruction in the preparation of bibliographies. The course will be a requirement of those students added to the library's staff of student assistants, although it will not prepare the student to become a librarian.

Fall and Spring (2)

## MATHEMATICS

Lower division preparation for the liberal arts major in mathematics: *Mathematics 3A, 3B, 4A, and 8 with an average grade of C or better. Two or more of the following are recommended: Astronomy 1, Economics 1A-1B, 2, Engineering 21, French A-B, German A-B, Physics 1A-1B or 2A-2B, Surveying 1A.*

Liberal arts major (upper division): *Twenty-four units including at least eighteen in upper division mathematics, the others being selected from Astronomy 107, Chemistry 111A-111B, 144, Physics 105A-105B, 112 and other approved courses. The major should be arranged in consultation with the chairman of the department and completed with a grade of C or better.*

## LOWER DIVISION COURSES

## LA-LB Basic Mathematics

Livingston

This is a wartime emergency course, primarily for those who have not had the high school course in plane geometry. It stresses arithmetic, informal geometry, simple algebra and very elementary numerical trigonometry, with applications. For the present it meets the minimum lower division requirement in elementary algebra and geometry. There is no prerequisite beyond junior high school mathematics. The class meets three times per week.

Year Course (2-2)

## C Intermediate Algebra

Gleason

The course begins with an extensive review of elementary algebra. Topics covered include quadratic equations, simultaneous equations, ratio and proportion, variation, arithmetic and geometric progressions, binomial expansion and logarithms. It is equivalent to the second year-course in high school algebra. Students who have credit for high school algebra but without a recommending grade may earn two units of college credit if they carry the course with grade of C or better. Prerequisite: Elementary Algebra and Geometry or Mathematics LA-LB.

Fall and Spring (4)

## D Trigonometry

Roughly equivalent to the high school course in plane trigonometry but with more attention than is often given to those aspects needed in analytic geometry and calculus. Numerical trigonometry is stressed with application to science and industry. A brief introduction to the solution of right spherical trigonometry is included. Students who have credit for plane trigonometry in high school but without a recommending grade may earn two units of college credit if they carry the course with grade of C or better. Prerequisites: Intermediate algebra with recommending grade in at least one semester.

Fall and Spring (3)

## E Solid Geometry

A course in intuitive solid geometry with much attention to the calculation of surfaces and volumes for the simpler solids and for certain others used in industry. Prerequisite: Intermediate algebra, with recommended grade for at least one semester.

Fall (2)

## S Slide Rule

Theory and use of the slide rule. Practice in performing the fundamental operations of arithmetic. Some attention is given to more involved computations. Prerequisites: Intermediate algebra and either trigonometry or solid geometry. The class meets twice a week.

Fall and Spring (1)

## 1 Introduction to Analysis

Livingston

A general course in calculus and related topics, primarily for students of social and biological sciences who do not have time for the longer courses in analytic geometry and calculus. Not available to students who have credit for Mathematics 3B. With Mathematics C taken in high school or college, this meets the "Additional Year Course" requirement for the lower division. Prerequisites: Elementary algebra and geometry, and intermediate algebra, with satisfactory grades.

Fall and Spring (3)

## 3A-3B Analytic Geometry and Calculus

Walling

Analytic geometry, differential calculus, and an introduction to integral calculus. Credit is allowed for 3A taken alone if desired. Prerequisites: Elementary algebra and geometry, intermediate algebra, and trigonometry, with satisfactory grades. Students whose preparation is deficient either in quality or quantity should enroll in the appropriate remedial course.

Year course (3-3)

## 4A-4B Solid Analytic Geometry and Calculus

Livingston

Integration, applications of integration, infinite series; solid analytic geometry, partial differentiation, and multiple integrals. Credit is allowed for 4A alone if desired. Prerequisites: Mathematics 3A-3B. Solid geometry is recommended; also college algebra, before 4B.

Year course (3-3)

## 8 College Algebra

Gleason

Complex numbers, determinants, and other selected topics. Prerequisites: Trigonometry and either Mathematics 1 or 3A.

Spring (3)

## 15 Spherical Trigonometry and Navigation

Livingston

Essentials of spherical trigonometry with applications to certain problems in navigation, particularly to those of middle latitude sailing, great circle sailing, and the determination of latitude and longitude. Prerequisites: Intermediate algebra, plane trigonometry, and some knowledge of the geometry of the sphere.

Fall and Spring (3)

## UPPER DIVISION COURSES

## 102 Selected Topics in Algebra

Topics supplementary to those considered in Mathematics 8 and 111. Prerequisites: Mathematics 3A-3B and 8.

(Offered as needed)

## 104 History of Mathematics

Gleason

History of mathematics down to early modern times. Prerequisite: Mathematics 3A-3B, or 3A and 1.

Fall (3) (Offered in 1945-46 and alternate years)

## 105 College Geometry

Livingston

An extension of the high school course in plane geometry, dealing largely with triangles and circles. Several new procedures, including inversion, are introduced. Prerequisite: Mathematics 3A-3B, or 3A and 1.

Fall (3) (Offered in 1944-45 and alternate years)

## 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: Mathematics 3A-3B or 3A and 1.

Fall (3) (Offered in 1945-46 and alternate years)

**111 Higher Algebra**

Livingston

Theory of algebraic equations, and other topics. Prerequisites: Mathematics 3A-3B, and 8.

*Spring (3) (Offered in 1945-46 and alternate years)*

**112 Introduction to Higher Analytic Geometry**

Gleason

Coordinates, transformations, properties of loci. Prerequisites: Mathematics 3A-3B, 4A, and 8.

*Spring (3) (Offered in 1945-46 and alternate years)*

**117 Intermediate Calculus**

Livingston

Essentially the same as Mathematics 4B with additional special work for advanced students. Prerequisites: Mathematics 3A, 3B, and 4A. Credit not allowed for both 4B and 117.

*Spring (3)*

**118 Advanced Calculus**

Livingston

Selected topics in advanced calculus, exclusive of differential equations. Prerequisite: Mathematics 4A-4B, or 4A with 4B taken concurrently.

*Spring (3) (Offered in 1944-45 and in alternate years)*

**119 Differential Equations**

Gleason

Ordinary differential equations of first and second order, with applications. Prerequisite: Mathematics 4A-4B (4B concurrently if desired).

*Spring (2) (Offered in 1945-46 and alternate years)*

**124 Vector Analysis**

Addition, subtraction, multiplication, differentiation, and integration of vectors, with applications in geometry, mechanics, and mathematical physics. Some attention is given to divergence, gradient, and curl. Prerequisites: Mathematics 4A (4A concurrently if desired).

*Spring (3) (Offered occasionally)*

**140 Probability and Statistics**

Gleason

Statistical theory and method from the mathematical standpoint; applications in social and natural science. Prerequisites: Mathematics 4A and 8, or 4A-4B.

*Fall (3) (Offered in 1944-45 and alternate years)*

**199 Special Study**

The Staff

Study of materials mainly supplementary to the courses listed above. Prerequisites: Average grade of B or better in at least 12 units beginning with Mathematics 3A.

*Fall and Spring (1 or 2, each semester)*

**TWO-YEAR COURSE****L40 Computational Mathematics**

Basic work in arithmetic, informal geometry, elementary algebra, and simple trigonometry. The chief emphasis is placed on computation. Not open for credit to students who already have credit in elementary geometry, whether taken in high school or in college. Open only to students enrolled in a two-year curriculum.

*Fall and Spring (3)*

**MERCHANDISING****L20 Consumer Problems**

Growing importance of consumption as a field for study; consumer incomes in the United States; consumption and business cycles; bases of consumer choice-making; practical problems of buying food, clothing, shelter, transportation, insurance, etc.; family budgeting; a survey of the methods by which products reach the consumer; market structure and functions seen from the consumer's point of view.

*Fall (3) (Not offered in 1944-45)*

**L24 Principles of Merchandising**

A study of retail stores, emphasizing the problems of store managers and merchandising executives; store location, organization, personnel, sales promotion, buying and handling of merchandise, inventory, turnover, and control methods. Changing conditions in retailing, problems of profitable operation under present conditions.

*Spring (3) (Not offered in 1944-45)*

**L25 Principles of Salesmanship**

Theoretical and psychological backgrounds of salesmanship, newer concepts of selling; the selling of ideas and services; steps in a sale; attention, interest, desire, closing; the development of clientele and of good will; the personal factor in salesmanship.

*Fall (3) (Not offered in 1944-45)*

**MUSIC**

Candidates for a teaching credential in music should refer to the statement "Admission to Teacher Education Curricula" on page 21 and to the other degree requirements on that page and those following. The curriculum for the A.B. Degree with a Special Secondary Credential in Music is on page 31.

Lower division preparation for the liberal arts major in music: Music 1B-1C-1D; 4A-4B; 4 units of Applied Music (study of voice or orchestral instrument); Aesthetics 1A-1B.

Liberal arts major (upper division): twenty-four upper division units. These shall include Music 105A-105B; 106A; 107A; 119; 120; 121; 4 units of Applied Music; Aesthetics 102A-102B; and 4 units of music activity credit (Music 111, 112, 113, 115, or 130).

At least a C average in upper division music courses is necessary. It is recommended that students in meeting degree requirements and in choosing free electives, select from the following courses: English 56A-56B; French A-B; German A-B; History 4A-4B; 146A-B; Physics 2A-2B.

**LOWER DIVISION COURSES**

L. D. Smith

**L1A Musicianship—Fundamentals of Music**

The elements of music; scale construction; elementary music theory; drill in music reading both with syllables and with words; ear training, elementary music dictation. Basic course for all general elementary credential students. Music majors receive no credit.

*Fall and Spring (3)*

L. D. Smith

**1B Musicianship—Music Reading and Ear Training**

Tonal and rhythmic dictation; rhythmic writing; sight singing. Basic course for majors and minors. Text—Smith and Krone: Fundamentals of Musicianship Book I. Prerequisite: Music 1A, or the equivalent. Students not able to pass the departmental entrance examination in the fundamentals of music will take 1A without credit in preparation for this course.

*Fall and Spring (2)*

L. D. Smith

**1C-1D Musicianship—Advanced Music Reading and Ear Training**  
Tonal work in minor keys; modal scales; dissonant triads and seventh chords; interval feeling in all chords; rhythmic progression and elementary forms; rhythmic, melodic and harmonic dictation. Prerequisite: Music 1B.

*Year course (2-2)*

Leib

**L2A String Instruments**

Beginner's class in violin, viola, cello and string bass. Required of all music majors working for a Special Secondary credential unless this orchestral section is the major or minor field.

*Fall and Spring (1)*

**L3A Woodwind Instruments****Leib**

Beginner's class in oboe, clarinet, flute and bassoon. Required of all music majors working for a Special Secondary credential unless this orchestral section is the major or minor field.

*Fall and Spring (1)*

**4A-4B Elementary Harmony****Springston**

Scale construction, intervals, by-tones and diatonic harmonies. Transposition and original composition in the simpler forms. Text—Alchin: Applied Harmony Vol. I. Prerequisite: Music 1A-1B, or the equivalent, and at least one year of piano study.

*Year course (3-3)*

**L6A Brass Instruments****Leib**

Beginner's class in trumpet, French horn, baritone, trombone and tuba. Required of all music majors working for a Special Secondary credential unless this orchestral section is the major or minor field.

*Fall and Spring (1)*

**L7A Music Materials for the Elementary School****L. D. Smith**

Study of the song material in the state music texts and in the supplementary texts. Appreciation materials applicable to the elementary school. Required course for all general elementary credential students. Prerequisite: Music 1A.

*Fall and Spring (3)*

**11A-B-C-D Women's Glee Club—Treble Clef****L. D. Smith**

Entrance upon examination.

*Fall and Spring (½-½)*

**12A-B-C-D Men's Glee Club****Springston**

Entrance upon examination.

*Fall and Spring (½-½)*

**13A-B-C-D Orchestra****Leib**

Permission of the conductor required for membership.

*Fall and Spring (1-1)*

**15A-B-C-D A Cappella Choir**

Entrance upon examination.

*Fall and Spring (½-½) (Not offered 1944-45)*

**\*L16A-L16B-L16C-L16D Individual Study of an Orchestral Instrument**

*Fall and Spring (1-1)*

**\*L17A-L17B-L17C-L17D Individual Study of Voice**

*Fall and Spring (1-1)*

**\*L18A-L18B-L18C-L18D Individual Study of Piano or Organ**

Prerequisite: The ability to play artistically hymns and folk songs of the type found in the Golden Book of Favorite Songs.

*Fall and Spring (1-1)*

**20A-B-C-D Chorus****Leib**

Open to anyone interested in singing standard choral works. No examination required.

*Fall and Spring (½-½)*

**26A-B-C-D Band****Leib**

Permission of the conductor required for membership.

*Fall and Spring (½-½) (Not offered 1944-45)*

\* See page 94, conditions under which credit may be given for music study under private instructors.

**27A-27B Music for Enjoyment****Springston**

A course designed for students with little or no musical background. Lectures and discussions as a basis for intelligent listening to concerts, radio programs, and class presentation of recorded music. Not open to music majors and minors.

*Year course (1-1) (Not offered 1944-45)*

**L28A-L28B Piano****Springston**

Fundamental playing and reading technics for the pianoforte. Emphasis upon playing by ear, and the development of interpretative ability. For beginners only. No credit for music majors and minors.

*Year course (1-1)*

**29A-B Class Voice**

A class for beginners in the vocal field taking up the problems of breath control, tone placement, articulation and enunciation. Frequent performance before class required. Limited to 15.

*Year course (1-1) (Not offered 1944-45)*

**30A-B Chamber Music****Leib**

String and woodwind ensembles. The consent of the instructor necessary for admission to class.

*Year course (1-1)*

## UPPER DIVISION COURSES

**102A-102B History of Music****L. D. Smith**

The various movements in the development of music as related to the other arts. The chronological development of the art of music, with particular emphasis on the larger works. Considerable attention is given to the works of modern composers. Many symphonic works are studied from the orchestral scores. Music majors are required to complete additional assignments for full credit. Prerequisite: Aesthetics 1A or 1B.

*Year course (2-2)*

**105A-105B Advanced Harmony and Composition****Springston**

Study of the possible types of modulation and chromatic harmonies; continuation of harmonic analysis and original composition. Text Alchin: Applied Harmony Vol. II. Prerequisite: Music 4A-4B.

*Year course (3-3)*

**106A Counterpoint****Springston**

Study of the five species of counterpoint with much practice in writing in such forms. Application of contrapuntal style to modern composition. Prerequisite: Music 4A-4B.

*Fall (2)*

**107A Form and Analysis****Springston**

Aural and visual analysis of music forms through a consideration of structure, harmonic content, and style. Prerequisite: Music 105A-105B.

*Spring (2)*

**111A-B-C-D Women's Glee Club—Treble Clef****L. D. Smith**

Entrance upon examination.

*Fall and Spring (½-½) (A maximum of 2 units in glee club may be counted toward the A.B. degree)*

**112A-B-C-D Men's Glee Club****Springston**

Entrance by examination.

*Fall and Spring (½-½) (A maximum of 2 units in glee club may be counted toward the A.B. degree)*

**113A-B-C-D Orchestra**

Leib

Permission of the conductor required for membership.

*Fall and Spring (1-1) (A maximum of 4 units in orchestra may be counted toward the A.B. degree)***115A-B-C-D A Cappella Choir**

Entrance by examination.

*Fall and Spring (1-1) (A maximum of 2 units in A Cappella choir may be counted toward the A.B. degree) (Not offered 1944-45)***\*L116A-L116B-L116C-L116D Advanced Individual Study of an Orchestral Instrument***Fall and Spring (1-1)***\*L117A-L117B-L117C-L117D Advanced Individual Study of Voice***Fall and Spring (1-1)***\*L118A-L118B-L118C-L118D Advanced Individual Study of Piano or Organ***Fall and Spring (1-1)***119A Instrumental Conducting**

Leib

Conducting and reading of orchestral scores.

*Fall and Spring (1)***120A Vocal Conducting**

Leib

The theory of vocal conducting together with practical experience gained from directing the college chorus. Prerequisite: Music majors with senior standing.

*Fall and Spring (1)***121A Instrumentation**

Leib

Arranging of music for full orchestra. Selected works of pupils to be performed by standard orchestras.

*Fall and Spring (2)***126A-B-C-D Band**

Leib

Permission of the conductor required for membership.

*Fall and Spring (1-1) (A maximum of 4 units in band may be counted toward the A.B. degree) (Not offered 1944-45)***130A-130B Chamber Music**

Leib

String quintet and woodwind ensembles only. Permission of the instructor necessary for class membership.

*Year course (1-1)***CONDITIONS UNDER WHICH CREDIT MAY BE GIVEN FOR MUSIC STUDY UNDER PRIVATE INSTRUCTORS**

Credit may be allowed for private instruction in music under the following conditions:

1. The applicant for such credit must be a regularly enrolled student in the music department of the college.
2. The instructor giving such private work must be approved by the Music Department. All private work and the names of all such teachers must be registered in the office of the music department chairman at the beginning of the semester.
3. In the case of first semester private study, a placement examination conducted by the music department faculty at the beginning of the semester will show the status of the student at the beginning of his work.
4. Evidence that the standards of the Music Department have been met will be shown by an examination conducted by the music department faculty at the end of the semester.

\* See page 94, conditions under which credit may be given for music study under private instructors.

**PHILOSOPHY****LOWER DIVISION COURSES****Philosophy 3A, 3B The History of Thought**

Steinmetz

A study of the basic ideas of Western Civilization in their historical development. The making of the modern mind as revealed in the development of philosophy and in the relations between philosophy and science, art and religion. The history of ideas against the social and political backgrounds from which they came. Prerequisite: Sophomore standing, or permission of instructor.

*Fall, Spring (3, 3)***5A Introduction to Philosophy**

Steinmetz

The recurring problems of philosophy and the making of the modern mind. Prerequisite: Sophomore standing, or permission of instructor.

*Fall (3)***5B Knowledge and Society**

Steinmetz

Scientific method and the persistent topics of philosophy in their bearing upon the social problems of the day. Prerequisite: Philosophy 5A, save under unusual circumstances.

*Spring (3)***8 Social Philosophies**

Steinmetz

The story of man's speculation regarding his "right" organization, the assumptions, analogies, and economics determining his temporary conclusions: James I. Hobbes, Rousseau, Locke, Jefferson, Kropotkin, Mill, Marx, Mussolini, Dewey, Pius XI, Hoover, Roosevelt, etc.

*Spring (3) (1944-45 and alternate years)***UPPER DIVISION COURSES****120 Reflective Thinking (Logic)**

Steinmetz

Analysis of fallacies, and the logic of argument and proof; also examination of reflective procedures in various fields of knowledge, and review of some psychological descriptions of thought. Prerequisites: Psychology 1A and Philosophy 5A.

*Fall (3)***130 Conduct (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)***PHYSICAL EDUCATION****Men's Department**

Candidates for a teaching credential in physical education should refer to the statement "Admission to Teacher Education Curricula" on page 21. For the teacher education curriculum in physical education see page 33.

**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 to his needs. Individual Adapted Activity sections to fit the special needs of the individual student are included. The content of the required two years is planned to give each student an opportunity to participate in those sports which have carry-over value into after life in addition to body building exercises and endurance training. Opportunity is given all students to take part in the regular competitive sports program.

Intercollegiate sports may be taken in addition to required lower division courses. A maximum of one unit in sports in one semester may be counted toward the A.B. degree.

**1A-1B Freshman Activity***Year course, beginning either Fall or Spring (1-1)*

**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 a portion of the class hour.

**Sports**

- L2A-L2B-L2C-L2D Golf Spring ( $\frac{1}{2}$ )  
 L3A-L3B-L3C-L3D Track Spring ( $\frac{1}{2}$ )  
 L4A-L4B-L4C-L4D Baseball Spring ( $\frac{1}{2}$ )  
 L5A-L5B-L5C-L5D Basketball Spring ( $\frac{1}{2}$ )  
 L6A-L6B-L6C-L6D Tennis Spring ( $\frac{1}{2}$ )  
 L7A-L7B-L7C-L7D Boxing Spring ( $\frac{1}{2}$ )  
 L8A-L8B-L8C-L8D Wrestling Spring ( $\frac{1}{2}$ )  
 L9A-L9B-L9C-L9D Cross Country Fall ( $\frac{1}{2}$ )  
 L10A-L10B-L10C-L10D Swimming Spring ( $\frac{1}{2}$ )  
 L11A-L11B-L11C-L11D Fencing ( $\frac{1}{2}$ )  
 L13A-L13B-L13C-L13D American football Fall ( $\frac{1}{2}$ )  
 L13X-L13Y-L13Z Spring football Spring ( $\frac{1}{2}$ )  
 L14A-L14B-L14C-L14D Gymnastics ( $\frac{1}{2}$ )  
 L15A-L15B-L15C-L15D Badminton Spring ( $\frac{1}{2}$ )

Any of above sports will be offered only if demand is sufficient.

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

**30 Emergencies**

The accepted procedure in meeting the emergencies which daily arise in schoolroom, play or athletic field, beach, mountains, or any of the many places where the physical director is called on for first aid. Special attention given to the arrangement of the apparatus and the activities so that many of the most common accidents are prevented or minimized. Course content qualifies for Red Cross Certificate.

Fall (2)

**L53 Physical Education in the Elementary School**

Schwob

The content of the State program in physical education forms the basis of the course. Two lectures, two one-hour laboratory periods per week. May be taken as a substitute for 1D.

Required of all candidates for the elementary school credential and the special credential in physical education.

Fall and Spring (2 $\frac{1}{2}$ )

**L62A Gymnastic Activities**

C. E. Peterson

Theoretical and practical work in marching, free exercises, and light and heavy apparatus. Emphasis on progression and method of presenting material. The simplest and most explanatory terminology.

Fall (2) (Offered in 1945-46 and alternate years)

**L62B Gymnastic Activities**

C. E. Peterson

Acquisition of proficiency in the performance of a great group of gymnastic stunts always popular in the gymnasium and on the playground. Work of the recreational or self-interesting type rather than the formal. Tumbling, stunts, and pyramid-building given chief attention, although games of low organizations are also considered.

Spring (2) (Offered in 1945-46 and alternate years)

**172 Principles of Physical Education**

Cultivation of a favorable attitude for a professional study of physical education. Ideals and aims of physical education and the relation of physical education to school and society stressed.

Fall (2)

**UPPER DIVISION COURSES****L154 Organization and Administration of Secondary Physical Education**

Study of general and specific problems that confront physical education departments in junior and senior high schools and in colleges. Prerequisite: Physical Education 172. Spring (3) (Offered in 1945-46)

**L155 Applied Anatomy and Kinesiology**

A scientific analysis of the structure, function and relationship of the organs, bony cavities, bones and joints of the skeletal, muscular, nervous and circulatory systems. In addition, the student will apply the results of the analysis in the selection of activities in relation to mechanical strength and durability as influenced by anatomical factors. Prerequisite: Zoology 20, or 108.

Spring (3) (Offered in 1945-46 and alternate years)

**L156A Sports Methods**

Different theories and methods of teaching the more highly organized sports: basketball and baseball.

Fall (2) (Offered in 1944-45 and alternate years)

C. E. Peterson

**L156B Sports Methods**

Methods of teaching those sports most adaptable to the intramural and recreational programs: golf, handball, soccer, speedball, volley ball, badminton, archery, tennis, swimming, track, etc.

Spring (2) (Offered in 1944-45 and alternate years)

Schwob

**161 Folk Dancing**

Practice in folk and clog dancing. Methods of presentation, study of costumes and customs related to the dance. Notebooks required. Open to all upper division men and women.

Spring (2) (Offered in 1945-46 and alternate years)

**L169A Technique of Teaching Activities**

Directed leadership in activities. A course preliminary to practice teaching in which students are given opportunity to develop teaching techniques in an orderly, detailed, directed, and supervised experience. Requirements include the handling of classes, construction of tests, lesson plans and preparation of a syllabus. One hour of lecture, and two hours of laboratory per unit. Recommended that it be taken in the junior year. Prerequisite: Admission to teacher training.

Fall (2)

**L169B Technique of Teaching Activities**

Continuation of directed leadership in activities as in L169A. Individual study will include conferences with instructor regarding class program, compilation of working bibliography, planned reading, school visitation, and preparation for practice teaching. Conferences and two hours of laboratory required. Prerequisite: Physical Education L169A.

Spring (1)

Shafer

**L170 Recreational Leadership**

Fundamentals of recreational leadership developed by instruction in club and camp activities, the study of school recreational needs and facilities, and of civic recreation. Open to all upper division men and women. Recommended to students interested in social service.

Spring (2) (Offered in 1944-45 and alternate years)

**L180 Theory of Coaching Football**

Methods of coaching football. Details of teaching individual fundamentals, offensive and defensive team play, strategy, and conditioning of athletes. Two hours of lecture and three hours of laboratory.

*Spring (2) (Not offered in 1944-45)*

**L190 Individual Program Adaptation**

An introductory course dealing with the analysis and evaluation of aims, techniques, and procedures in the preventive and corrective physical education program. Special emphasis will be given to such problems as survey of the situation, recognition of divergencies, selecting and assigning of students, instructional programs, motivation, follow-up, teacher limitations, and public relations. Prerequisite: P. E. 155, Zoology 20, and senior standing.

*Fall (3) (Not offered in 1944-45)*

**WOMEN'S DEPARTMENT**

Candidates for a teaching credential in physical education should refer to the statement "Admission to Teacher Education Curricula" on page 21, and to the outline for the A.B. Degree with Special Credential in Physical Education on pages 34 and 35.

**LOWER DIVISION COURSES**

Two hours of directed physical activity are required throughout the freshman and sophomore years. Freshman students may choose courses from the following, L1A, L1B, L1C. Sophomore students may choose from all activity courses offered.

**1A Fundamental Skills**

Practice in efficient fundamental body movements.

Schwob

*Fall and Spring (½)*

**1B Folk Dancing**

*Fall and Spring (½)*

Schwob

**1C Team Sports**

(All three are required of all women candidates for the special credential in physical education.)

Shafer

*Fall and Spring (½)*

Sophomores may elect from the following:

Physical Education Staff

**L2A-L2B Folk Dancing**

*Fall and Spring (½)*

**L3A-L3B-L3C-L3D Modern Dance**

*(Not offered in 1944-45)*

**L4A-L4B Social Dancing—for men and women**

*(Not offered in 1944-45)*

**L5A-L5B Archery**

*Fall and Spring (½)*

**L6A-L6B Badminton**

*Fall and Spring (½)*

**L7A-L7B Golf**

*Fall and Spring (½)*

**L11A-L11B Tennis**

*Fall and Spring (½)*

**L12A-L12B Advanced Modern Dance.** Laboratory experiments in advanced choreography and percussion accompaniment. For men and women. Prerequisites: 1C and 3A for women, 1C for men.

*Fall and Spring (1-1) (Not offered in 1944-45)*

*Any of the above activities may be taken for additional credit.*

**L53 Physical Education in the Elementary School**

Schwob

The content of the State program in physical education forms the basis of the course. Two lectures, two one-hour laboratory periods per week. Required of all candidates for the elementary school credential and the special credential in physical education in the sophomore year. Junior college transferees only may take this course in their junior year.

*Spring (2½)*

**Sports**

1. The individual activities, tennis, golf, archery, badminton and dancing are offered through the year. Candidates for the special credential in physical education select one as a major activity and two others as minors. Skills in the activities thus selected must be maintained as prerequisite to the senior course, Physical Education L185. (See page 100.)

2. The Women'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.

**UPPER DIVISION COURSES**

Open to all Women. Required of women candidates for the special credential in physical education.

**L153 Principles and Administration of Secondary Physical Education**

Schwob

A study of the significant influences shaping the trend of physical education, past and present. The philosophy and principles of physical education and its relation to general education. Administrative problems applied to the secondary school situation.

*Fall (3) (Offered in 1944-45 and alternate years)*

**L155 Applied Anatomy and Kinesiology**

A scientific analysis of the structure, function and relationship of the organs, bony cavities, bones and joints of the skeletal, muscular, nervous and circulatory systems. In addition the student will apply the results of the analysis in the selection of activities in relation to mechanical strength and durability as influenced by anatomical factors. Prerequisite: Zoology 20 or 8.

*Spring (3) (Offered in 1945-46 and alternate years)*

Shafer

**L157A-L157B Sports Methods**

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)*

Schwob

**L160 Principles of Teaching Gymnastics**

Gymnastic materials and methods followed by practice in teaching marching, gymnastics and use of apparatus.

*Fall (2) (Offered in 1944-45 and alternate years)*

Schwob

**161 Folk Dancing**

Practice in folk and clog dancing. Methods of presentation, study of costumes and customs related to the dance. Notebooks required. Open to all upper division men and women.

*Spring (2) (Not offered in 1944-45) Open to men and women*

**L164A-L164B Methods in Modern Dance**

Laboratory experiments in advanced choreography and percussion accompaniment. Historical survey and practical experience in production techniques and teaching methods. Two activity periods and one lecture per week. For men and women. Prerequisites same as for L12A.

*Year course (2-2) (Not offered in 1944-45)*

**L169 Technique of Teaching Activities**

Observation, lesson planning and teaching in college classes.

*Fall and Spring (3)*

Schwob

**170. Recreational Leadership**

Fundamentals of recreational leadership developed by instruction in club and camp activities, the study of school recreational needs and facilities, and of civic recreation. Open to all upper division men and women. Recommended to students interested in the recreational aspects of social service.

*Spring (2) (Offered in 1944-45 and alternate years)*

Shafer

**L177 Individual Program Adaptations**

Adjustments of the physical education program to the physical needs and capacities of individuals; problems concerning protective and preventive measures which are not highly specialized corrective phases.

*Spring (2) (Offered in 1944-45 and alternate years)*

Schwob

**L185 Technique of Individual Sports**

A course summarizing rules, teaching methods, and individual playing ability. A required senior course. Can not be taken until all requirements regarding sports and games have been fulfilled. (See page 99.)

*Fall (1)*

Shafer

**PHYSICAL SCIENCES**

The courses offered in the Physical Sciences are listed below. See pages listed after each subject for a more complete description of the offering under that designation. Astronomy, see page 58; Chemistry, page 61; Geology, page 82; Physical Science, page 100; and Physics, page 101.

**PHYSICAL SCIENCE**

*Lower division preparation for the liberal arts major in physical science and for the junior certificate: Fulfillment of the department requirements for upper division work in at least two of the following sciences: Astronomy, chemistry, geology, and physics. Recommended: A reading knowledge of French and German.*

*Liberal arts major (upper division) in physical science, required: 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.*

**LOWER DIVISION COURSE****1A Introduction to Physical Science**

A survey course dealing with the nature of man's physical universe. Emphasis will be upon materials chosen from topics in astronomy and physics to show the nature and development of the scientific method and man's use of energy. Not open to students who have had high school or college physics and astronomy. May be taken with or without plans to continue with 1B.

*Spring (3)*

Watson

**1B Introduction to Physical Science**

A continuation of Physical Science 1A. Emphasis will be upon units chosen from geology and chemistry to show the origins of natural materials and their use by man in the modern world. Not open to students who have had high school or college chemistry and geology. May be taken with or without credit in Physical Science 1A.

*Spring (3) (Not offered in 1944-45)*

Watson

**10 Elementary Photography**

This course seeks to provide an elementary knowledge of dark room techniques and the theory of photography including printing, enlarging, and developing. Two lectures and one three-hour laboratory required each week.

*Fall and Spring (3) (Not offered in 1944-45)*

**TWO-YEAR COURSE****L40 Man and His Physical World**

A brief survey of the nature of the scientific method and of selected topics in physical science. Materials will be chosen from physics, chemistry, astronomy, and geology in order to give some background for an understanding of the relations of physical science to modern life. Not open to students who have had both high school or college physics and chemistry or either of these subjects together with either astronomy or geology.

*Open only to students enrolled in a two-year curriculum.*

*Fall (3)*

Watson

**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 3A-3B and 4A-4B, or their equivalents. Recommended: A reading knowledge of French and German. A maximum of 12 units of lower division physics may be applied toward the degree.*

*Liberal arts major (upper division) in physics, required: Twenty-four units of upper division work in physics including Physics 105A-105B and 110A-110B. Six of the twenty-four units may be elected in related subjects and deviations from these requirements may be made on consultation with the chairman of the department.*

**LOWER DIVISION COURSES****1A-1B Mechanics and Heat**

Mechanics, properties of matter, and heat. A development of the fundamental ideas which underlie the subject of physics, and the application of them in the discussion of practical problems. Lectures, text assignments, problem sets, and experimental laboratory work. Two lectures, 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)*

Ross

**1C-1D Electricity, Magnetism, Sound, and Light**

A continuation of Physics 1A-1B for students in the sophomore year. Two lectures and one laboratory period each week.

*Year course (3-3)*

Baird

**2A-2B General**

Properties of matter, mechanics, heat, sound, light, electricity, and magnetism. A nonengineering course. Lectures, demonstrations, and discussions. Prerequisite: Two years of high school mathematics.

*Year course (3-3)*

Baird

**3A-3B Physical Measurements**

Laboratory work in mechanics, properties of matter, heat, sound, light, electricity, and magnetism. Usually taken in conjunction with Physics 2A-2B.

*Year course (1-1)*

Baird

**UPPER DIVISION COURSES****\*105A-105B Analytical Mechanics**

Treatment of fundamental principles of statics, kinematics and dynamics of particles and rigid bodies. Prerequisites: Physics 1A-1B or 2A-2B and a working knowledge of calculus.

*Year course (3-3) (Offered in 1944-45 and alternate years)*

Baird

**\*106 Optics**

A review of reflection, refraction and dispersion, with applications to optical instruments, followed by a survey of phenomena indicative of the physical nature of light: interference, diffraction, polarization, and spectral radiation. Prerequisite: Eight units in physics.

*Fall (3) (Offered in 1944-45 and alternate years)*

**106L Optical Measurements**

Baird

Laboratory work to accompany Physics 106.

*Fall (1) (Offered in 1944-45 and alternate years)***107A-107B Electrical Measurements**

Baird

Laboratory work designed to accompany Physics 110A-110B. Emphasis placed on the theory and use of electrical measuring instruments.

*Year course (1 or 2 units for the year) (Offered in 1945-46 and alternate years)***\*108 Modern Physics**

Baird

An introduction to physical investigations of the last half-century. Atomic structure and quantum theory in the light of high-vacuum phenomena, series in optical spectra, natural and induced radioactivity, and allied subjects. Prerequisite: Eight units in physics.

*Spring (3) (Offered in 1944-45 and alternate years)***108L Modern Physics Laboratory**

Baird

Laboratory, to accompany Physics 108.

*Spring (1) (Offered in 1944-45 and alternate years)***110A Introduction to Electricity and Electromagnetism**

Baird

Elements of the mathematical theory of electrostatics, of magnetostatics and magnetism, and of steady and varying currents. Students are encouraged to accompany the course with 1 unit of laboratory work. Prerequisites: Eight units in physics, and Mathematics 3A-3B.

*Fall (3) (Offered in 1945-46 and alternate years)***110B Principles of Electromagnetism and Electronics**

Baird

A more complete study and an extension of the material surveyed in Physics 110A, illustrated with practical applications. Prerequisites: Physics 110A and consent of the instructor.

*Spring (3) (Offered in 1945-46 and alternate years)***112 Advanced Heat and Thermodynamics**

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) (Not offered in 1944-45)***112L Advanced Heat Laboratory**

Laboratory work in thermal expansion, specific heat, heat of combustion, radiation and other related topics in advanced heat. Designed to accompany Physics 112.

*Spring (1) (Not offered in 1944-45)***113L Pyrometry Laboratory**

Laboratory work in the calibration and use of various temperature measuring devices. Prerequisite: Eight units in physics.

*Spring (1) (Not offered in 1944-45)***114 Sound Waves and Acoustics**

A study of wave motion and its applications to the production, transmission and reception of sound. Architectural acoustics, speech and hearing, acoustical and musical instruments. Prerequisite: Eight units in physics.

*Fall (3) (Not offered in 1944-45)***114L Advanced Sound Laboratory**

Laboratory work in the problems of wave motion, standing waves, velocity of sound in various media, diffraction and interference, of sound. Designed to accompany Physics 114.

*Fall (1) (Not offered in 1944-45)*

\* Will be offered if there is sufficient demand.

**115L Applied Acoustical Measurements**

Laboratory work in various practical applications of acoustics. Directional and frequency characteristics of loudspeakers and microphones. Architectural acoustics. Prerequisite: Eight units in physics.

*Fall (1) (Not offered in 1944-45)***199 Special Study**

Baird

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)***PHYSIOLOGY****LOWER DIVISION COURSES****1A Human Physiology**

Crouch

A lecture course considering the functions of the human body. Prerequisites: Elementary chemistry and high school or college biology or zoology. Three hours of lecture per week. Credit reduced to 2 units, for students having credit for Zoology 20.

*Spring (3)***1C Human Physiology**

Crouch

A study of the human functions through laboratory experiments and demonstrations. Prerequisites: Physiology 1A completed or in progress. Six hours of laboratory per week.

*Spring (2)***POLITICAL SCIENCE**

*The minor in political science: from twelve to eighteen units of work is recommended. At least half the work should be chosen from upper division courses.*

*It is suggested that students who expect to major in political science plan their lower division work to include both Political Science 1A-1B and 71A-71B, and either Economics 1A-1B or History 4A-4B.*

**LOWER DIVISION COURSES****1A-1B Comparative Government**

Leonard

A comparative study of typical governments. Semester I: England, France, and Switzerland. Semester II: Italy, Germany, Russia, and Japan.

*Year course (3-3)***71A-71B American Government and Politics**

71A—Governmental organization in the United States; the federal system, organization, powers and functions of the legislative, executive and judicial branches of the national government, and the expansion of its activities.

71B—Development of the means of 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.

This course is not open to freshmen.

*Year course (3-3) (Not offered in 1944-45)***UPPER DIVISION COURSES****101 American Institutions**

Leonard

A study of the principles of the Constitution of the United States, and a survey of the political and social institutions which have developed under it.

*All candidates for the bachelor's degree are required by State law to secure credit in this course, unless they have completed one of the following courses: History 171A-171B, 173A-173B, Political Science 113, 175A-175B. This course is offered only in the fall semester.*

Enrollment is limited to students of junior or senior standing, except with the consent of the instructor.

*Fall (2)*

**111 Theory of the State**

The nature of the State, its organization and activities, and its relation to the individual and to other states. Special attention will be given to recent developments in the field of political thought.

*Fall (3)*

**113 American Political Ideals**

Underlying theories and principles of American governmental policy.

*Spring (3) (Offered in 1944-45 and alternate years)*

**133A-133B Principles of International Law**

This course is concerned with the function of law in the international community. The historical development of the theory and rules of international law, the application of international law in international relations and the application of international law in national courts will be studied.

*Year course (3-3) (Not offered in 1944-45)*

**136A-136B Problems of the Pacific Area**

Particular emphasis during the first semester on the development through the 19th Century of the governmental problems of the Far East, both internal and international. The second semester will be devoted to a consideration of the 20th Century aspects of these problems.

*Year course (3-3) (Not offered 1944-45)*

**141 Theories of International Relations**

The development of ideas concerning international relations from ancient through modern times. Theories of nationalism, imperialism, internationalism, and cosmopolitanism will be reviewed and their validity considered in the light of modern experience.

*Fall (3) (Not offered in 1944-45)*

**142 International Organization**

Prewar attempts at international organization, the effect of the World War on ideas of international relationships, postwar attempts at organization. Special attention will be given to the organization and development of the League of Nations, its machinery, accomplishments and failures, and to national attitudes toward cooperation since the war.

*Spring (3) (Not offered in 1944-45)*

**143A-143B Principles of Public Administration in the United States**

A study of the development of executive agencies in the American federal government and the relationship between these agencies and the changes in American concepts concerning the proper field of governmental activity.

*Year course (3-3) (Offered in 1945-46 and alternate years)*

**175A-175B—American Constitutional Development**

A study of the work of the Convention of 1787, and of significant phases of American constitutional law.

*Year course (3-3)*

**PSYCHOLOGY**

*Lower division preparation in psychology for advanced work. Recommended: Psychology 1A-1B, Zoology 1A-1B or Biological Science 10A-10B, Philosophy 3A-3B or 5A-5B, Mathematics 8, a language and some physics, anthropology and sociology.*

**LOWER DIVISION COURSES****1A General**

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.

*Fall and Spring (3)*

Leonard

Leonard

Staff

**1B General Applied**

A continuation of general psychology designed to familiarize the student with (1) elementary statistical methods and (2) fields of applied psychology and possibly (3) some one topic (not included in upper division courses) in which he pursues an independent experimental approach if judged advisable or for additional unit. Prerequisite: Psychology 1A. Required for advanced study.

*Fall and Spring (3)*

**4A Applied**

Applications of psychology to problems of the individual in learning, making social adjustments, choosing a vocation, developing desirable personal traits, and achieving success and happiness. Surveys of psychology as applied in education, music, art, speaking, writing, law and medicine. Prerequisite: Psychology 1A. Recommended: Psychology 1B.

*Fall (3) (Not offered in 1944-45)*

**4B Psychology Applied in Business**

Applications of psychology to a wide range of problems encountered by 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 consumer research. Prerequisite: Psychology 1AB or equivalent.

*Spring (3) (Offered in 1945-46 and alternate years)*

**4C Psychology in Industry**

Study of time, motion, lighting, fatigue; selection, placing, training, evaluating personnel; industrial interviewing, counseling, adjusting for morale and efficiency; direct observation, visiting speakers, and chance for specialization allowed. Prerequisite: 1A-1B or equivalent.

*Spring (3) (Offered in 1944-45 and alternate years)*

**UPPER DIVISION COURSES****102A Genetic: Child**

This course represents the main effort of the psychology department to provide an orientation toward parenthood. The course has been developed in recognition of the need for the establishment of parental-domestic adjustment through the study of child growth and development from the prenatal period to adolescence and through common knowledge by parents of relevant material in genetics and child psychology; emphasis is practical.

*Fall (3) (Not offered in 1944-45)*

**102B Genetic: Adolescence**

Survey of the wealth of knowledge in physiology, sociology, and psychology recently made available to parents and professional workers with youth just before, during, and after puberty.

*Spring (3) (Not offered in 1944-45)*

**118 Mental Hygiene**

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

*Spring (3) (Not offered in 1944-45)*

**145 Social Psychology**

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.

*Fall (3) (1945-46)*

Steinmetz

Steinmetz

Steinmetz

**150 Abnormal Psychology**

Steinmetz

The relation of psychology to the psycho-neuroses and insanity; the appearance of abnormal traits in incipient stages of mental disturbances. Methods of diagnosis and early treatment.

Fall (3) (Offered in 1944-45 and alternate years)

**151 Clinical Psychology**

Steinmetz

A study of diagnostic individual tests, the interview, and especially personality tests, and of psychotherapeutic principles, for intensive study of personality and face-to-face judgment. Specialization is determined by individual needs.

Spring (3)

**160 Experimental Psychology of Learning**

Introduction to instrumental and comparative psychology and to methods of research in the development of behavior theory. Prerequisite: 5 units of other work in the department and consent of the instructor; required of those seeking a major.

Fall (3) (Not offered in 1944-45)

**TWO-YEAR COURSE****L40 Psychology and Life**

Perry

An elementary survey of normal adult psychology, focused upon psychological principles in relation to life situations. Open only to students enrolled in a two-year curriculum.

Fall and Spring (3)

**SECRETARIAL TRAINING****LA Business Mathematics**

A practical course in the mathematics of business. A thorough study of interest, compound interest, discount, amortization tables, insurance rates, etc.

Fall and Spring (1) (No credit will be counted toward A.B. degree requirements, except in the curricula leading to the Business Education Credential)

**L1A-L1B Typewriting**

Amsden

A rapid development of a thorough command of a keyboard by the touch method. The acquisition of speed and the artistic arrangement of typewritten material with special reference to commercial forms, tabulation and billing; specifications, legal forms, and preparation of manuscripts; transcription, mimeographing, etc. Eight hours lecture and laboratory practice.

Year course (3-3) (No credit will be counted toward A.B. degree requirements except in the curricula leading to the Business Education credential)

**L2A Typewriting**

Amsden

A short course designed for those not wishing to enter the business office but desiring a knowledge of the use of the typewriter. Five hours laboratory practice.

Spring (2)

**L3A Office Methods and Appliances**

Wright

Practice and principles of office management, including organization, arrangement and operation. Study and use of modern office appliances such as the multigraph, mimeograph, filing devices, calculating and bookkeeping machines. Prerequisite: Secretarial Training 1A or its equivalent.

Fall (3) (No credit will be counted toward A.B. degree requirements except in the curricula leading to the Business Education Credential)

**L5A-L5B 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)

**L6A-L6B Advanced Stenography**

Amsden

Development of speed in writing and transcription. Advanced dictation on letter forms, legal forms, speeches, and literary and technical material.

Year course 3-3

English in Business (See English, page 75)

**SOCIAL SCIENCES**

The courses offered in the Social Sciences are listed below. See pages listed after each subject for a more complete description of the offerings under that designation. Anthropology, see page 54; Economics and Commerce, page 63; Geography, page 80; History, page 84; Political Science, page 103; Social Science, page 107; and Sociology, page 108.

**SOCIAL SCIENCE**

Lower division preparation for the liberal arts major in social science: Fulfillment of the departmental requirements for upper division work in at least three of the following sciences: Anthropology, economics, geography, history, political science, sociology. Liberal arts major (upper division) in social science, required: Twenty-four units of upper division work including a concentration of twelve upper division units in one of the following fields and six units in each of two others: Anthropology, economics, geography, history, political science, sociology.

This major is available only to students who are preparing for graduate work in anthropology, political science, or sociology, and to those enrolled in certain preprofessional and other curricula. Official approval for candidacy for a degree with a social science major must be obtained from the dean of liberal arts.

**LOWER DIVISION COURSES****1A Contemporary Political, Social and Economic Problems**

A. G. Peterson

An analysis of major problems of the present day with reference to the conditions out of which they arise and with regard to their essential unity and interrelationships. Particular attention to implications of the war and post-war problems. An attempt to introduce the student to sound methods of approach in dealing with these problems.

Fall and Spring (3)

**1B American Trends Since 1918**

Main currents of American life since the World War. Stress on immediate background of modern institutions. Aims to familiarize students with the major events which have occurred during the lifetime of the present college generation.

Fall and Spring (3) (Not offered in 1944-45)

**TWO-YEAR COURSES****L40 Contemporary Problems**

Barnhart

A survey of the major political, social, and economic forces in modern American life. Chief problems are analyzed in relation to their setting, and students are given sound methods of approach in dealing with them. Open only to students enrolled in a two-year curriculum.

Fall (3)

**L45 American Democracy**

Barnhart

The structure and function of government, as it relates to individual Americans. Special emphasis on popular participation through voting, political parties, pressure groups, and public opinion. Prerequisite: Sophomore Standing. Open only to students enrolled in a two-year curriculum.

Spring (3)

## SOCIOLOGY

*Lower division preparation for the liberal arts major in social science with concentration in sociology: Sociology 50A, 50B; Economics 1A-1B and one of the following year courses: Anthropology 50A-50B, Political Science 1A-1B, 71A-71B. See requirements for the social science major, page 107.*

## LOWER DIVISION COURSES

**50A Introduction to Sociology** Barnhart  
A study of modern social problems recognizing the geographic, economic, psychological, and sociological factors involved. Emphasis is on a scientific method of approach. An evaluation of various causes and solutions of problems is made.

*Fall (3)*

**50B General Sociology** Barnhart  
A course in general sociology for upper division students. The development and use of the concepts of sociological analysis, such as human nature, the effects of isolation and social contacts upon the development of personality; social interaction; social processes; social forces; social control; collective behavior; and social progress.

*Spring (3)*

**55 Marriage and Family Life** Perry  
A psychological and sociological approach to the study of marriage and the family. Some of the topics considered are: relation of courtship to marriage; emotional maturity and marriage; eugenic aspects of marriage; college marriages; harmony in modern marriage; economic adjustment in marriage, parenthood. Prerequisite: Health Education 1 or 2; a biological science and Psychology 1A recommended. Not open to Freshmen.

*Fall (3)*

**105 Social Pathology** Barnhart  
A study of the alleged abnormal phenomena in society; family disorganization and personal demoralization; pathology of individual and group relationships and of economic, social, and cultural relationships.

*Fall (3)*

**106 Criminology and Penology** Barnhart  
The extent and characteristics of crime; consideration of physical, mental, economic, and sociological causes of crime; study of methods of penal discipline, prison labor, parole, and probation; programs of prevention.

*Spring (3) (Offered in 1944-45 and alternate years)*

**108 The Family** Barnhart  
History of marriage and family as a social institution. Effects of various economic and social factors on the modern family; higher education and the birth rate; married women in industry and professions; causes of desertion and divorce and their sociological effects. Not open to students who have credit for Sociology 55.

*Spring (3) (Offered in 1945-46 and alternate years)*

**109 Fields of Social Work** Barnhart  
A survey of the nature of social work and the various kinds of social work which are found in modern urban life. The student is familiarized with the various social agencies in the community, their problems and methods of work, by readings and field trips. Volunteer social work in some social agency recommended.

*Spring (3)*

**126 Social Reform Movements**  
A study of organized efforts to change social institutions in the United States since 1865. Emphasis given to backgrounds, objectives, techniques, and relationship to democracy of each movement.

*Fall (3) (Not offered in 1944-45)*

## 197 Urban Sociology

A study of the structure and function of the modern city; types of neighborhoods; forms of recreation; social forces in a metropolitan area; types of urban personalities and groups; rural-urban conflicts of culture. Practical field studies required.

*Fall (3)*

## TWO-YEAR COURSE

## L45 Marriage and the Family

The purpose of this course is to prepare young people for successful marriage and family life. The development of the personality through family relationships, the choice of a life partner, and the social and economic factors involved in the establishment of a home, are given special emphasis. The importance of the family as a unit in larger social groupings is stressed, and both psychological and material factors which affect the welfare of family members are brought to the student's attention. *Open only to students enrolled in a two-year curriculum.* Prerequisite: Sophomore standing.

*Spring (3)*

## SPANISH

*Lower division preparation for the liberal arts 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, of which at least eighteen must be in Spanish, and of which a maximum of six may be in related subjects, arranged in consultation with the chairman of the department. At least a C average in upper division major courses.*

## LOWER DIVISION COURSES

## A-B Elementary

Intensive study of Spanish grammar and syntax, with daily written work; class drill in conversational idiom and pronunciation; reading with oral discussion and résumé; 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 two units of work in Spanish A. Those who have had two years of Spanish in high school should register for four units of work in Spanish B.

*Year course (5-5)*

## C-D Intermediate Spanish

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

*Year course (3-3) (Not offered in 1944-45)*

## 50 Spanish Commercial Correspondence

A one-semester intermediate course in Spanish composition, directed along the line of commercial correspondence. A practical course, with translation of real business letters, and supplementary reading in Spanish on commercial subjects. Prerequisite: three or four years of high school Spanish, or completion of Spanish C or D.

*Fall (3)*

## UPPER DIVISION COURSES

## 101A-101B Conversation and Composition

Prerequisite: Spanish D, or its equivalent, with grade of C.

*Year course (3-3) (Offered in 1945-46)*

**102A-102B Introduction to Spanish Classics****L. P. Brown**

Reading from several types of classical literature. Lazarillo de Tormes and other novels of Roguery; selections from Don Quixote, and the Cien Mejores Poesias Castellanas; one drama each from the works of Lope de Vega, Calderon, Alarcon, and Moreto; collateral reading and reports. Prerequisite: A grade of C in Spanish D or permission from the instructor.

*Year course (3-3) (Offered in 1946-47)*

**104A-104B Spanish-American Literature****Phillips**

Reading from representative Spanish-American authors during the colonial, revolutionary and modern periods. Lectures, class reading, collateral reading and reports. Prerequisite: A grade of C in Spanish D or permission from the instructor.

*Year course (3-3)*

*See also English 104, Latin-American Literature in English, which may be taken for Spanish credit.*

**105A-105B Modern Spanish Drama****L. P. Brown**

The development of the drama of Spain from the beginning of the nineteenth century to the present time. Prerequisite: A grade of C in Spanish D or permission from the instructor.

*Year course (3-3) (Offered in 1947-48)*

**110A-110B Novel and Short Story in Spain****L. P. Brown**

The development of the novel and short story in Spain from 1830 to the present time. Prerequisite: A grade of C in Spanish D or permission from the instructor.

*Year course (3-3) (Offered in 1945-46)*

**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)*

**SPEECH ARTS**

*Lower division preparation of the Liberal Arts major in Speech Arts: At least 18 units of lower division courses in Speech Arts, including 1A, 1B, and six units chosen from 55A, 55B, 55C, 55D. Recommended: Aesthetics 1A, 1B, 50; Art 52A, 94.*

*Upper division requirements for the Liberal Arts major in Speech Arts: At least 18 units in upper division courses in Speech Arts, including 150, 163A, and six units from 155A, 155B, 156A, 156B. Also required: six units from English 112, 113, 117A, 117B, 152A, 152B. Recommended: English 110, 116B; French 105A, 105B; Physical Education 164A, 164B; Spanish 105A.*

*Candidates for the teaching credentials in Speech Arts should refer to "Admission to Teacher Education Curricula" on page 21 or to the note regarding the Special Credential in Speech Arts on page 35.*

**LOWER DIVISION COURSES****1A Fundamentals of Public Speaking****F. L. Johnson**

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) (Not offered in 1944-45)*

**1C Oral Interpretation****Jones**

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 in English literature.

*Fall (3) (Not offered in 1944-45)*

**1D Advanced Interpretation****Jones**

Emphasis placed on stage poise and grace with adequate attention given to variations in the presentation of literary selections. Much opportunity is provided for individual and group creative work. No prerequisite. Class limited.

*Spring (3)*

**20 Corrective Speech**

Corrective laboratory training prescribed on the basis of vocalization tests made on Electro-Vox Recording Machine. Required of education majors who fail to meet speech requirements test. Private clinical assistance given to stutterers and lisps.

*Fall and Spring (1) (9 weeks' course) (Not offered in 1944-45)*

**55A-55B Dramatic Production****Jones**

A course for first and second year students in which, through participation, they acquire an understanding of certain dramatic periods and types studied in English literature. Individual and group expression coordinated and developed in production of scenes, acts, and plays—a fundamental drama course emphasizing modern trends. No prerequisite.

*Year course (3-3) (Offered in 1945-46 and alternate years)*

**55C-55D Dramatic Expression****Jones**

A course to help students realize and develop their creative abilities for expressing life and character through acting and writing. History, technique and theory of various dramatic forms studied, created and presented through workshop methods. A fundamental course planned for students desiring specialized training in drama or writing. Prerequisite: Consent of instructor.

*Year course (3-3) (Offered in 1944-45 and alternate years)*

**60 Augmentation and Debate**

Obtaining and organizing of evidence and the construction and use of the brief; study and discussion of current issues; the presentation of formal and informal debates. Attention to intramural and intercollegiate debating.

*Spring (3) (Not offered in 1944-45)*

**61A-61B-61C-61D Intercollegiate Debate**

*Year course, each year (1) (Not offered in 1944-45)*

**63A-B-C-D Verse Choir****Jones**

Participation in verse speaking chorus to develop quality, range of tone, and ability in dramatic visualization of poetry. Required for speech arts credential.

*Fall and Spring (1-1)*

**102 Organized Discussion**

Consideration of the symposium, the panel, the open forum, the business session, and varieties of conference speaking. Emphasis upon organization and presentation. Attention to parliamentary procedure for informal groups.

*Fall (3) (Not offered in 1944-45)*

**108 Art of Interpretation**

Analysis of various types of literature. Material chosen will emphasize the finer techniques of oral expression to develop the imagination, the emotional power, reading skill and platform deportment in its varied phases. Prerequisite: One year of College Speech or equivalent.

*Spring (3) (Not offered in 1944-45)*

110 Recreational Reading Dickhaut  
See English, page 76.

112 History of the English Language  
See English, page 76.

113 American English  
See English, page 76.

116B The Elizabethan Drama F. L. Johnson  
See English, page 77.

117A-117B Shakespeare F. L. Johnson  
See English, page 77.

150 Phonetics  
Auditory and kinaesthetic analysis of the sounds of the English language. Valuable as a corrective course in pronunciation and articulation. Required of speech majors and those seeking Speech Correction Credential.

Fall (2) (Not offered in 1944-45)

152A Survey of Drama: Comedy  
See English, page 78.

152B Survey of Drama: Tragedy  
See English, page 78.

155A-155B Advanced Dramatic Expression Jones  
For upper division students training for leadership in different fields as well as drama. More advanced forms of dramatic expression studied; creative abilities in interpretation, writing, acting, and stagecraft developed in relation to various subjects and activities conducted through individual research projects, group discussion and participation. Original work encouraged. Prerequisite: A fundamental drama course.

Year course (3-3) (Offered in 1945-46 and alternate years)

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

Year course (3-3) (Offered in 1944-45 and alternate years)

157A-157B Radio Production Jones  
Preparation and production of radio plays and various types of radio material.

Fall and Spring (3-3)

163A Rhythm, Pantomime and Choric Verse Jones  
A course combining bodily movement with group speaking. Presents the fundamentals of rhythm and pantomime in different forms of dramatic expression.

Spring (3) (Offered in 1945-46 and alternate years)

163B Advanced Rhythm, Pantomime and Choric Verse Jones  
Continuation of above.

Spring (3) (Offered in 1944-45 and alternate years)

175 Major Speech Disorders  
Clinical survey of newest methods of speech correction with special emphasis given to stammering and cleft-palate speech. One of required courses for Special Corrective Credential.

Spring (3) (Not offered in 1944-45)

## TWO-YEAR COURSE

### L40 Fundamentals of Public Speaking

Training in fundamental processes of oral expression; practice in organization and presentation of material; emphasis upon speech in daily situations, including public discussion, conversation, recitation, extemporaneous speaking, and short speeches for special occasions. Open only to students enrolled in a two-year curriculum.

Fall and Spring (3) (Not offered in 1944-45)

## ZOOLOGY

Lower division preparation for the liberal arts major in zoology: Zoology 1A, 1B, and high school chemistry, Chemistry 1A-1B or 2A-2B. Recommended: German or French, Botany 2A, 2B, 4.

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 the major subject and six in related courses in botany, chemistry, physics, physiology or bacteriology.

Students preparing to teach science in the junior high school should try to include courses in zoology, botany, physiology, bacteriology, physics, chemistry (at least high school chemistry). Courses designed to help the student get acquainted with wild life of the region should be included. Recommended: Botany 4, 104, 102; Zoology 112, 113A, 113B, 113C, 121.

## LOWER DIVISION COURSES

### 1A General Zoology

Harwood

An introduction to animal biology dealing with structure, functions, and evolution of animal life. Laboratory work supplementing the lectures and based on the study and observation of living and preserved material (frogs and invertebrates). Valuable to the general student as well as to the biology specialist, acquainting him with the fundamental facts and theories of biology as they pertain to animal life. Two lectures or recitations and six hours of laboratory per week. Students who have credit for Biology 10A-10B receive no credit for Zoology 1A but receive credit for Zoology 1B.

Fall (4)

### 1B General Zoology

Harwood

A continuation of 1A. The structure, relationships, and classification of the chordates. Two lectures and six hours of laboratory per week. Prerequisite: Zoology 1A or Biology 10B.

Spring (4)

### 4 Microtechnique

M. E. Johnson

Introduction to methods of preparation of tissues for microscopic study. Six hours of laboratory per week. Prerequisite: elementary chemistry.

Spring (2)

### 8 Human Anatomy

Crouch

A study of human structure through the use of models, prepared dissections and microscopic slides. Prerequisite: high school biology, Biology 10A, 1, or Zoology 1A. Two hours of lecture and three hours of laboratory per week. Required of prenursing students. Not open to premedical students. Credit reduced to 2 units if student has credit for Zoology 20.

Fall (3)

### 20 Human Anatomy and Physiology

Crouch

An elementary course in human anatomy and physiology. Prerequisite: High school biology, or Biology 1 or 10A or Zoology 1A. Lectures three hours per week. Credit reduced to 2 units if student has credit for Zoology 8 or Physiology 1A.

Fall and Spring (3)

## UPPER DIVISION COURSES

**100 Embryology****M. E. Johnson**

The development of vertebrates as illustrated by the frog, chick, and pig. Three hours of laboratory and three hours of lecture and quiz per week. Prerequisite: Zoology 1B or Biology 10B.

*Spring (4)***100D Microtechnique****M. E. Johnson**

Introduction to methods of preparation of tissues for microscopic study. Three hours of laboratory per week. Prerequisite: elementary chemistry and embryology completed or in process.

*Spring (1)***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 Biology 10B.

*Fall (4)***108 Human Anatomy****Crouch**

Lectures and laboratory work of Human Anatomy 8 with an additional hour of seminar each week. Open only to upper division students by special arrangement.

*Fall (3)***112 Marine Invertebrates****M. E. Johnson**

Identification and study of behavior and life histories of invertebrates of the San Diego region. Frequent collecting trips to the beaches required. Prerequisite: Zoology 1A or Biology 10B. One hour of lecture and six hours of laboratory or field work per week.

*Fall (3) (Offered in 1945-46 and alternate years)***113A Taxonomy and Natural History of the Mammals****Harwood**

Frequent field trips and the identification of museum material. Three hours of laboratory per week.

*Spring (1) (Offered in 1944-45 and alternate years)***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 of laboratory, or field excursions. Prerequisite: Zoology 1B or Biology 10B.

*Spring (3) (Offered in 1944-45 and alternate years)***114A Genetics****Harwood**

General introductory course designed to acquaint the student with the fundamental principles of heredity and variation. Special attention given to the Mendelian interpretations of the facts of inheritance. Two lectures per week.

*Fall (2)***114B Evolution****M. E. Johnson**

The development of theories of evolution. Two lectures or discussion periods per week.

*Spring (2)***121 General Entomology****Harwood**

The classification, life history, structure, and physiology of insects. Prerequisite: Zoology 1A or Biology 10B. Two hours of lecture and six hours of laboratory per week.

*Spring (3)***122 Systematic Entomology****Harwood**

Classification of insects with especial emphasis on a group of insects of the student's choice. To be taken with or to follow 121. May be repeated for credit but with a total of not more than 2 units. Three to six hours of laboratory work each week.

*Spring (1 or 2)***124 Scientific Illustration****Johnson**

Instruction and practice in various methods used to illustrate scientific publications. Recommended course in preparation for this one: Art A-B.

*Fall (2)***126 Medical Entomology****Harwood**

The role of insects and other arthropods in transmission and causation of human diseases. Three hours of laboratory and one hour of lecture per week. Prerequisite: Zoology 1A or Biology 10B.

*Fall (3) (Offered in 1945-46 and alternate years)***130 Readings in Biology****Harwood**

Reading from a suggested bibliography with informal class discussion of topics. Subjects discussed will include history of biology, biological principles, ecology, economic zoology, zoogeography, breeding habits, animal behavior.

*Spring (2) (Offered in 1945-46 and alternate years)***199 Special Study****The Staff**

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

*Fall and Spring (1 or 2)*

## DIRECTORY

(1944-45)

- HEPNER, WALTER R.**-----President  
A.B., 1913, M.A., 1916, Ed.D., 1937, University of Southern California. At San Diego State College since 1935.
- ADAMS, JOHN R.**-----Professor of English  
A.B., 1920, A.M., 1922, University of Michigan; Ph.D., 1940, University of Southern California. At San Diego State College since 1928.
- †ALCORN, MARVIN DOUGLAS**-----Assistant Professor of Education;  
Director of Teacher Placement  
A.B., 1925, Southwestern College; A.M., 1931, Teachers College, Columbia University; Ed.D., 1942, University of Southern California. At San Diego State College since 1941.
- \*ALLEN, HAROLD BYRON**-----Assistant Professor of English  
A.B., 1924, Kalamazoo College; A.M., 1928, Ph.D., 1940, University of Michigan. At San Diego State College since 1940.
- AMSDEN, GEORGIA C.**-----Associate Professor of Commerce  
Diploma, Gregg School, Chicago. At San Diego State College since 1925.
- AULT, JESSE W.**-----Dean of Education, Professor of Education  
B.S., B.Pd., 1910, Valparaiso University; M.A., 1925, University of South Dakota. One year graduate study since 1925 at Claremont Colleges and University of Southern California. At San Diego State College since 1925.
- BACON, GUINIVERE KOTTER (Mrs. George)**-----Supervisor of Student Teaching;  
Associate Professor of Education  
B.S., Utah Agricultural College; M.A., Stanford University. One year graduate study since 1926 at Stanford University, Teachers College of Columbia University, University of Southern California, and University of California at Los Angeles. At San Diego State College since 1928.
- BAIRD, OSCAR**-----Professor of Physics  
B.A., 1910, University of Wisconsin; M.A., 1924, University of California. Three years graduate study since 1924 at University of Minnesota, University of California, University of Southern California, University of Oregon. At San Diego State College since 1921.
- \*BAKER, CLIFFORD HENRY, JR.**-----Instructor in Spanish and French  
B.A., 1933, San Diego State College; M.A., 1935, University of California. Two years graduate study since 1935 at University of California. At San Diego State College since 1937.
- BARNHART, KENNETH EDWIN**-----Associate Professor of Sociology  
A.B., 1915, Southwestern University; A.M., 1920; Southern Methodist University; Ph.D., 1924, University of Chicago. At San Diego State College since 1939.
- \*BENNETT, MURIEL**-----Instructor in Physical Education  
B.A., Pomona College; M.A., Claremont Colleges. One-half year graduate study since 1936 at Claremont Colleges and University of California at Los Angeles. At San Diego State College since 1936.
- BLAKE, DEAN**-----Instructor in Meteorology  
Meteorologist, U. S. Weather Bureau. At San Diego State College since 1927.
- †BROMLEY, J. PHILIP**-----Assistant Professor of Commerce  
B.S., 1934, M.S., 1936, University of Southern California. One year graduate study since 1936 at University of Southern California, Columbia University, and Texas Agricultural and Mechanical College. At San Diego State College since 1936.

† On military leave  
\* On leave

- BROOKS, BAYLOR**-----Assistant Professor of Geology  
B.A., 1928, Stanford University. Two years graduate study since 1928 at University of Arizona and Stanford University. At San Diego State College since 1931.
- BROWN, ELIZABETH (Mrs. Leslie P.)**-----Associate Professor of French  
Ph.B., M.A., Ph.D., University of Chicago. At San Diego State College since 1926.
- BROWN, LESLIE PARKER**-----Professor of Spanish and French  
B.A., 1912, Yale College; M.A., 1913, Harvard University; Ph.D., 1935, University of Southern California. At San Diego State College since 1922.
- †CALLAND, LEO BLAKELY**-----Associate Professor of Physical Education  
B.A., 1923, University of Southern California; M.S., 1931, University of Idaho. One year graduate study since 1931 at University of Southern California. At San Diego State College since 1935.
- CAMERON, ROY ERNEST**-----Professor of Economics  
A.B., 1922, Ph.D., 1929, University of California. At San Diego State College since 1929.
- CORBETT, KATHERINE E.**-----Supervisor of Student Teaching;  
Associate Professor of Education  
B.Pd., Michigan State College; B.S., M.A., Teachers' College, Columbia University. At San Diego State College since 1921.
- CROUCH, JAMES ENSIGN**-----Professor of Biology  
B.S., 1930, M.S., 1931, Cornell University; Ph.D., 1939, University of Southern California. At San Diego State College since 1932.
- †DARSIE, MARVIN LLOYD, JR.**-----Instructor in Biology  
A.B., 1934, University of California at Los Angeles; Ph.D., 1939, Stanford University. At San Diego State College since 1939.
- DEPUTY, ERBY CHESTER**-----Professor of Education  
B.A., 1922, University of Denver; M.A., 1926, Ph.D., 1929, Columbia University. At San Diego State College since 1931.
- DICKHAUT, FLORENCE LILLIAN SMITH (Mrs. Charles A.)**-----Professor of English  
B.A., Northwestern University; M.A., University of Chicago. At San Diego State College since 1917.
- \*\*DUSTIN, GERTRUDE LORRAINE**-----Instructor in Psychology and  
Home Economics  
B.S., Teachers College, Columbia University; M.S., University of Southern California. At San Diego Junior College since 1941.
- †EUBANK, JOHN F.**-----Assistant Professor of Physical Education  
B.S., 1933, M.S., 1937, Ed.B., 1937, Ed.M., 1939, State College of Washington. At San Diego State College since 1942.
- GLEASON, JOHN MORTIMER**-----Assistant Professor of Mathematics  
B.A., 1929, University of California at Los Angeles; M.A., 1930, University of California. One and a half years graduate study since 1930 at University of Southern California, University of California at Los Angeles and Claremont Colleges. At San Diego State College since 1930.
- HAMANN, ILSE HEDWIG**-----Assistant Professor of Art  
B.E., University of California at Los Angeles. M.A., Columbia University. At San Diego State College since 1934.
- HAMMACK, EDITH CHASTAIN**-----Supervisor of Student Teaching  
Associate Professor of Education  
B.A., San Jose State College. At San Diego State College since 1911.
- HAMMACK, ISABELLA STEWARD**-----Supervisor of Student Teaching;  
Assistant Professor of Education  
B.A., M.A., University of California. One-half year graduate study since 1929 at University of California. At San Diego State College since 1936.

† On military leave  
\*\* Junior college

- HARVEY, DOROTHY R. (Mrs. F. A.)**-----Assistant Professor of Botany  
B.A., San Diego State College; M.A., University of Southern California. One year graduate study since 1928 at University of Southern California and University of Chicago. At San Diego State College since 1924.
- HARWOOD, ROBERT DANIEL**-----Professor of Zoology  
A.B., 1920, Pomona College; Ph.D., 1928, Cornell University. At San Diego State College since 1928.
- \*HOUSER, LOWELL D.**-----Instructor in Art  
Diploma, 1924, Chicago Art Institute. Five years' special study since 1924 in Mexico, Yucatan, Haiti, and New York City. At San Diego State College since 1938.
- HUFF, GEORGE D.**-----Associate Professor of Health and Hygiene  
M.D., 1924, University of Texas. At San Diego State College since 1939.
- HUNT, MARGARET B. (Mrs. E. J.)**-----Supervisor of Student Teaching;  
Instructor in Music  
B.S., M.A., Teachers College, Columbia University. One-half year graduate study since 1935 at Teachers College, Columbia University, and Michigan State College. At San Diego State College since 1940.
- JACKSON, EVERETT GEE**-----Professor of Art  
B.A., 1930, San Diego State College. Three years special study in Mexico. M.A., 1939, University of Southern California. At San Diego State College since 1930.
- JOHNSON, FRANK LOUIS**-----Assistant Professor in English  
B.A., 1928, M.A., 1929, University of Minnesota; Ph.D., 1934, University of Wisconsin. At San Diego State College since 1939.
- JOHNSON, MYRTLE**-----Professor of Biology  
B.S., M.S., Ph.D., University of California. At San Diego State College since 1921.
- JONES, SYBIL ELIZA**-----Assistant Professor of Speech Arts  
B.L., M.L., University of California. Two years special study since 1907. At San Diego State College since 1925.
- †JORDAN, HARRY JOHN**-----Professor of Commerce  
B.A., 1926, Washburn College; M.B.A., 1930, Harvard School of Business Administration; Ph.D., 1936, Northwestern University. At San Diego State College since 1939.
- KEENEY, JOSEPH SUMNER**-----Associate Professor of English  
B.A., 1921, Yale College; M.A., 1928, Ph.D., 1933, University of California. At San Diego State College since 1933.
- KELLY, GENEVIEVE**-----Assistant Professor of Sociology  
B.A., University of California; M. A., Columbia University. At San Diego State College since 1924.
- KENNEDY, CHESTER BARRETT**-----Assistant Professor of English  
B.A., 1927, Chico State College; M.A., 1939, Stanford University. Two and one-half years graduate study since 1928 at Stanford University and the University of California. At San Diego State College since 1937.
- LEIB, JULIUS**-----Assistant Professor of Music  
Three years special study at Leipzig Conservatory. At San Diego State College since 1938.
- LEONARD, CHARLES B.**-----Professor of History  
B.A., 1921, M.A., 1922, Ph.D., 1929, University of California. At San Diego State College since 1921.
- \*LESLEY, LEWIS B.**-----Professor of History  
B.A., 1920, Stanford University; M.A., 1923, Ph.D., 1933, University of California. At San Diego State College since 1924.

† On military leave  
\* On leave

- LIVINGSTON, GEORGE ROBERT**-----Professor of Mathematics  
B.S., 1910, M.A., 1922, University of California. One year graduate study since 1922 at University of California and University of California at Los Angeles. At San Diego State College since 1921.
- †LUCIO, WILLIAM HOWARD**-----Supervisor of Student Teaching;  
Assistant Professor of Education  
A.B., 1934, M.A., 1937, University of California. Three years graduate study since 1934 at University of California. At San Diego State College since 1939.
- MADDEN, RICHARD**-----Principal of Campus Elementary School;  
Professor of Education  
B.A., 1926, Nebraska (Peru) State Teachers College; M.A., 1930, Ph.D., 1931, Columbia University. At San Diego State College since 1939.
- \*MEAD, HUNTER**-----Assistant Professor of Philosophy and Psychology  
B.A., 1930, Pomona College; M.A., 1933, Claremont Colleges; Ph.D., 1936, University of Southern California. At San Diego State College since 1941.
- MENDENHALL, MARY**-----Dean of Women; Professor of Educational Guidance  
B.A., University of Colorado; M.A., University of Southern California; Ph.D., Yale University. At San Diego State College since 1939.
- MESSNER, ELMER ALLEN**-----Assistant Professor of Chemistry  
B.A., 1927, M.A., 1928, Stanford University. Two years graduate study since 1928 at Technische Hochschule, Breslau, Germany. At San Diego State College since 1931.
- †MOE, CHESNEY R.**-----Associate Professor of Physics  
B.A., 1929, M.A., 1931, Stanford University; Ph.D., 1941, University of Southern California. At San Diego State College since 1931.
- NASATIR, ABRAHAM PHINEAS**-----Professor of History  
B.A., 1921, M.A., 1922, Ph.D., 1926, University of California. At San Diego State College since 1928.
- \*NICHOLS, AMBROSE R., JR.**-----Instructor in Chemistry  
B.S., 1935, University of California; Ph.D., 1939, University of Wisconsin. At San Diego State College since 1939.
- NORDAHL, MARGUERITE ANNA**-----Supervisor of Student Teaching;  
Assistant Professor of Education  
B.A., San Diego State College; M.A., Claremont Colleges. At San Diego State College since 1936.
- †OSBORN, CLARENCE G.**-----Associate Professor of History and Political Science  
B.A., 1926, M.A., 1927, Ph.D., 1935, Stanford University. At San Diego State College since 1937.
- PATTERSON, LENA E.**-----Professor of Art  
A.B., B.S., Ohio University. M.A., Columbia University. One year graduate study since 1918 in Berlin, Vienna, Paris, London. At San Diego State College since 1933.
- †PEASE, ESTHER ELIZABETH**-----Assistant Professor of Physical Education  
B.A., University of California at Los Angeles. One year graduate study at University of California at Los Angeles, University of Southern California, and Mills College and one year European study in the dance since 1931. At San Diego State College since 1939.
- †PEIFFER, HERBERT C., JR.**-----Instructor in Psychology and Speech Arts  
A.B., 1928, University of California at Los Angeles; M.A., 1931, Ph.D., 1939, Stanford University. Appointed Junior College 1937. At San Diego State College since 1941.
- PERRY, FAY V. (Mrs. J. M.)**-----Director of Guidance for Two-Year Students;  
Assistant Professor of Sociology  
B.A., San Diego State College; M.A., University of Southern California. Two years graduate study since 1931 at University of Southern California and Stanford University. Appointed Junior College 1936. At San Diego State College since 1940.

† On military leave  
\* On leave

- PETERSON, ARTHUR G.-----Dean of Liberal Arts; Professor of Economics  
B.A., 1912, College of the Pacific; M.A., 1926, Stanford University. Two years graduate study since 1926 at Stanford University, University of Washington, and University of Southern California. At San Diego State College since 1921.
- PETERSON, CHARLES E.-----Dean of Men; Professor of Physical Education  
A.B., 1928, San Diego State College; M.A., 1937, Claremont Colleges. At San Diego State College since 1921.
- †PFAFF, PAUL LEWIS-----Associate Professor of Speech Arts  
B.A., 1929, Stanford University; M.A., 1937, University of Southern California. Two years study since 1937 at University of Southern California. At San Diego State College since 1931.
- PHILLIPS, WALTER THOMAS-----Associate Professor of Spanish and French  
B.A., 1925, University of Washington; M.A., 1926, Stanford University. Graduate study at Institute of French Education, National University of Mexico; Ph.D., 1943, University of Southern California. At San Diego State College since 1927.
- POST, LAUREN CHESTER-----Associate Professor of Geography  
A.B., 1924, M.A., 1931, Ph.D., 1937, University of California. At San Diego State College since 1937.
- REDIT, EDITH ESTHER-----Supervisor of Student Teaching;  
Assistant Professor of Education  
B.A., M.A., University of California. At San Diego State College since 1938.
- \*RICHARDSON, ROBERT WILLIAM-----Assistant Professor of Geography  
B.A., 1930, University of California. Three years graduate study since 1930 at University of California. At San Diego State College since 1939.
- †ROBINSON, DUDLEY HUGH-----Professor of Chemistry  
B.A., 1927, Louisiana State University; M.S., 1932, University of Iowa; Ph.D., 1942, University of Southern California. At San Diego State College since 1928.
- ROGERS, SPENCER LEE-----Director of Extension Service;  
Associate Professor of Anthropology  
B.A., 1927, San Diego State College; M.A., 1930, Claremont Colleges; Ph.D., 1937, University of Southern California. At San Diego State College since 1930.
- ROSS, MELVYN K.-----Instructor in Physics and Chemistry  
A.B., 1939, San Diego State College; M.S., 1942, University of Southern California. At San Diego State College since 1942 (Laboratory Assistant 1939-1942).
- SCHWOB, MARION LYON (Mrs. W. E.)-----Associate Professor of  
Physical Education  
B.A., University of Iowa; M.S., University of Southern California. At San Diego State College since 1934.
- SHAFER, FLORENCE I.-----Assistant Professor of Physical Education  
B.A., University of California; M.S., University of Southern California. At San Diego State College since 1933.
- †SMITH, CHARLES ROBERTS-----Assistant Professor of Physical Education  
B.A., 1931, San Diego State College. One year graduate study since 1931 at University of Southern California. At San Diego State College since 1933.
- †SMITH, CLIFFORD EDWARD-----Associate Professor of Astronomy  
B.A., 1923, Carleton College; M.A., 1926, Swarthmore College; Ph.D., 1936, University of California. At San Diego State College since 1937.
- \*SMITH, DEANE FRANKLIN-----Assistant Professor of Music  
B.Mus., 1931, M.Mus., 1939, Northwestern University. At San Diego State College since 1939.
- SMITH, LEILA DEBORAH-----Professor of Music  
A.B., Oberlin College; M.Mus., Oberlin Conservatory; M.A., Columbia University. One-half year study since 1926 at Stanford University and Northwestern University. At San Diego State College since 1922.

† On military leave  
\* On leave

- \*SOULÉ, ELINOR-----Supervisor of Student Teaching; Instructor in Art  
B.A., San Diego State College; M.A., Teachers College, Columbia University. At San Diego State College since 1940.
- SPRINGSTON, CHRISTINE-----Associate Professor of Music  
B.A., B.M., University of Redlands; M.A., University of Washington. Diplôme d'exécution, Conservatoire Americain, Fontainebleau, France. At San Diego State College since 1930.
- STEINMETZ, HARRY CHARLES-----Associate Professor of Psychology  
B.A., 1924, M.A., 1927, University of California. Two years graduate study since 1927 at Stanford University, University of California, and Purdue University. At San Diego State College since 1930.
- STONE, BERENICE IRENE-----Medical Examiner; Associate Professor  
of Health and Hygiene  
B.S., M.D., University of Wisconsin. At San Diego State College since 1936.
- STONE, JOHN PAUL-----Head Librarian; Associate Professor of Library Science  
B.S., 1926, Northwest Missouri State Teachers College; B.S., 1929, M.S., 1930, University of Illinois. Three years graduate study since 1926 at University of Chicago and University of Illinois. At San Diego State College since 1930.
- STORM, ALVENA (Mrs. Eugene)-----Associate Professor of Geography  
A.B., A.M., University of California. At San Diego State College since 1926.
- †SWANSON, CHARLES EDMUND-----Instructor in English (Journalism)  
B.A., 1941, San Diego State College. At San Diego State College since 1938.
- TRAIL, MABEL COY-----Assistant Professor of English  
B.A., Parsons College; M.A., State University of Iowa. Two years graduate study since 1927 at University of Southern California. Appointed Junior College 1935. At San Diego State College since 1940.
- WALKER, HILDE KRAMER (Mrs.)-----Assistant Professor of German  
B.A., M.A., Northwestern University. At San Diego State College since 1931.
- WALLING, CURTIS R.-----Assistant Professor of Mathematics and Engineering  
B.A., 1925, E.E., 1926, Stanford University. One and a half years graduate study since 1926 at Stanford University and University of Southern California. At San Diego State College since 1931.
- \*WALTON, LEWIS FLETCHER-----Instructor in Mathematics  
B.S., 1929, M.S., 1931, Emory University; Ph.D., 1940, University of California. At San Diego State College since 1939.
- WATENPAUGH, FRANK M.-----Assistant Professor of Commerce  
A.B., 1916, Pomona College, M.A., 1931, University of Southern California. Two years graduate study since 1931 at University of Southern California and University of Oregon. Appointed Junior College 1935. At San Diego State College since 1940.
- WATSON, DONALD R.-----Assistant Professor of Physical Science  
Acting Registrar and Director of Student Personnel  
B.A., 1924, B.S., 1925, M.A., 1927, Ed.D., 1940, University of Southern California. At San Diego State College since 1939.
- WRIGHT, WILLIAM H.-----Associate Professor of Commerce  
B.S., 1917, M.A., 1928, University of California, Ph.D., 1943, University of Southern California. At San Diego State College since 1921.
- †WURFEL, SEYMOUR WALTER-----Instructor in Law  
B.A., 1927, Pomona College; LL.B., 1930, Harvard University. At San Diego State College since 1938.
- †YOUNG, CARL HAVEN-----Assistant Professor of Physical Education  
B.A., 1925, Pomona College; M.A., 1935, University of Southern California. Two years graduate study since 1935 at Stanford University. At San Diego State College since 1939.

† On military leave  
\* On leave

### SAN DIEGO JUNIOR COLLEGE FACULTY

HEPNER, WALTER R.-----Principal  
 WATSON, DONALD R.-----Chairman  
 DUSTIN, GERTRUDE LORRAINE-----Counseling, Psychology and Home Economics  
 †GREER, THOMAS H.-----Social Science

#### AFFILIATED CITY SCHOOLS

HELEN K. SYLVESTER, Principal-----Euclid School  
 RALPH F. TROGE, Principal-----Woodrow Wilson Junior High School  
 FLOYD A. JOHNSON, Principal-----Herbert Hoover High School

#### SPECIAL LECTURERS

PHILIP K. ALLEN, M.D.	FRED PYLE
JOHN CARROLL, Ph.D.	ALFREDA ROOKE, B.S.
VIOLA ERLANGER, M.D.	SAUL RUBY, M.D.
W. H. GEISTWEIT, JR., M.D.	LOUIS STRAHLMANN, M.D.
GEO. D. HUFF, M.D.	R. H. SUNDBERG, M.D.
IRENE MANNING, B.S.	WM. P. THIEN
JAMES A. MAY, M.D.	MICHAEL WALCH
H. G. MERRILL, M.D.	CHESTER WEBBER, D.D.S.
ANITA MÜHL, M.D., Ph.D.	MARTHA WELPTON, M.D.

#### MEDICAL STAFF

†O. S. HARBAUGH, M.D.-----Medical Examiner for Men  
 RICHARD PECK, M.D.-----Acting Medical Examiner for Men  
 BERENICE I. STONE, M.D.-----  
 -----Medical Examiner for Women and Campus Elementary School  
 MARILYNN M. FENWICK, R.N.-----Nurse

#### LIBRARY STAFF

JOHN PAUL STONE, M.S. in Library Science-----Head Librarian  
 \*MARGARET HELEN DEMORAY, A.B. and Certificate in Librarianship-----  
 -----Senior Librarian  
 LULU GERMANN, B.S.-----Senior Librarian  
 ANITA M. GILLET-----Typist-Clerk  
 NETTIE L. HAGAR-----Secretary to Librarian  
 GERALDINE K. HAYNES, A.B., B.S.-----Senior Librarian  
 GENEVIEVE KELLY, A.M.-----Senior Librarian  
 ELSIE L. ROY, A.B.-----Senior Librarian  
 HARRIET B. STOVALL-----  
 -----Senior Librarian in Charge of Campus Elementary School Library  
 † WINIFRED SMITH-----Library Clerk

\* On leave.

† On leave for military service.

### ADMINISTRATIVE OFFICE STAFF

EVADNE T. DEARDORF-----Assistant Registrar  
 STELLA LOUISE DIBOLL, A.B.-----Recorder  
 FAYE GUNNELL-----Secretary to Employment-Placement Office  
 † TIMOTHY HALLAHAN, A.B.-----Property Clerk  
 BILLIE LOUISE RAINEY, A.B.-----Secretary to the Registrar  
 MIRIAM E. MOORE-----Secretary to Dean of Education and Dean of Liberal Arts  
 CONSTANCE KING, B.S.-----Secretary to Dean of Women  
 FAY LANDWEER, A.B.-----Secretary to Dean of Men and Director of Extension  
 HELEN M. NORRIS-----Secretary to Two-year and Junior College Offices  
 DONALD G. PARKER-----Senior Account Clerk  
 † KATHERINE M. PYLE, A.B.-----Assistant to the Comptroller  
 † MILDRED ANN ROBERTSON, A.B.-----Secretary to Employment-Placement Office  
 FLORENCE SCHNEIDER-----PBX Operator and Receptionist  
 FLORENCE WIGGINS-----Secretary of the Campus Elementary School

#### MAINTENANCE STAFF

C. L. FISK-----Supervisor of Buildings and Grounds  
 WILLIAM DUNS-----Head Gardener  
 MYRLEN SOUTHWORTH-----Engineer

† On military leave.

# INDEX

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