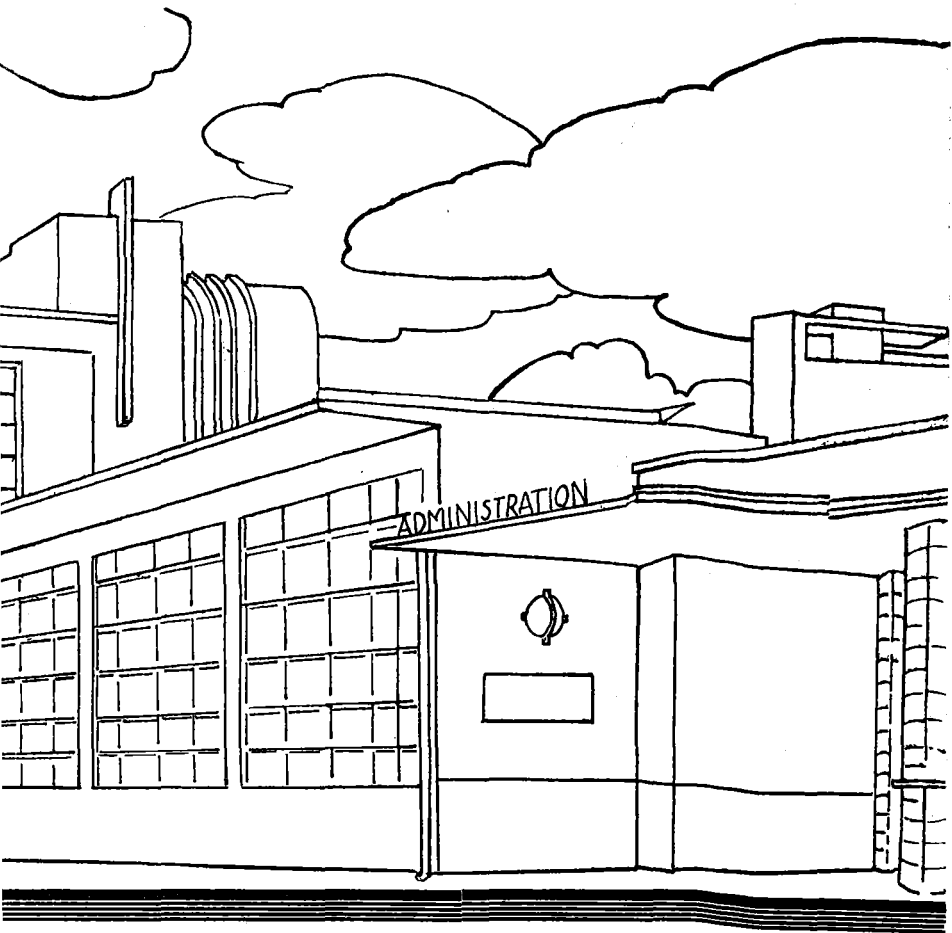


J. W. Myers

College of the Sequoias

Visalia, California

Catalogue 1949-1950



4/14/70 - 3 (11.1.1.1)

Price 5 - 0

COLLEGE OF THE SEQUOIAS
LIBRARY

College of the Sequoias
Catalogue 1949-1950

Published by
BOARD OF TRUSTEES
Visalia-Tulare Junior College District
VISALIA, CALIFORNIA

May, 1949

TABLE OF CONTENTS

	Page
College Calender for 1949-1950	4
Board of Trustees	5
Officers of Administration	5
Faculty	5
General Information	7
Organization and Administration	7
Counseling and Guidance	8
Curricula	8
Student Organizations	9
Student Activities	10
Veterans' Education	10
Expenses	11
Student Health Service	11
Living Accomodations	11
Employment	11
Library	12
Loans, Scholarships, and Awards	12
Scholarship Honors	13
General Regulations	13
Admission	13
Matriculation Deficiencies	13
Registration	14
Amount of Work	14
Placement Tests	14
Physical Education Requirements	14
Conduct	14
Attendance	15
Leave of Absence	15
Withdrawals from Course or College	15
Units and Grade Points	16
Grades	16
Requirements for Graduation	16
Plan One	17
Plan Two	17

Lower Division Requirements in California Colleges and Universities	18
University of California (Berkeley and Los Angeles)	19
Stanford University	20
University of Southern California	21
California State Colleges, (Fresno, San Jose, Chico, San Diego, San Francisco and Humboldt)	22
Suggested Programs in Specified Fields of Study	23
Agriculture	23
Building Trades	25
Commerce	26
Dentistry, Medicine, and Pharmacy	29
Nurses' Training	31
Pre-Nursing Curricula	31
Police Training	33
Description of Courses	35
Agriculture	35
Art	37
Commerce	38
Engineering	43
English	44
Speech Arts	46
Foreign Languages	47
Home Economics	49
Hygiene	52
Library Science	52
Mathematics	52
Music	55
Philosophy	57
Photography	57
Physical Education	58
Police Training	60
Psychology	61
Science	62
Social Science	69
Trades and Industries	72

CALENDER 1949-1950

First Semester

September 12, 1949 — January 27, 1950

September 6	- - - -	Placement tests
September 6—10	- - -	Student conferences with college counselors
September 8	- - -	General faculty meeting
September 12	- - -	Registration—all new students
September 13	- - -	Registration—all former students
September 14	- - -	Class instruction begins
October 19—21	- - -	Teachers' Institute
October 24	- - -	Last day to drop courses without penalty
November 11	- - - -	Armistice Day
November 24, 25	- - -	Thanksgiving holiday
December 18 — January 2	- - -	Christmas holiday
January 23—26	- - -	Semester examinations
January 27	- - -	End of autumn semester

Second Semester

January 30, 1950 — June 9, 1950

January 21	- - - -	Placement tests
January 26, 27	- - -	Counseling of new students
January 30	- - -	Registration of all students
January 31	- - -	Class instruction begins
February 22	- - -	Washington's Birthday
March 10	- - -	Last day to drop courses without penalty
April 3 — 7	- - - -	Easter vacation
May 30	- - - -	Memorial Day
June 5 — 9	- - - -	Semester examinations
June 9	- - -	End of spring semester
June 11	- - - -	Commencement

BOARD OF TRUSTEES

Emmett W. Paregien, President

Neven L. Burrell

W. Leland Swall

Harry K. Williams

Fred B. Carroll, Clerk

ADMINISTRATION

IVAN C. CROOKSHANKS, M. A., Superintendent

L. J. WILLIAMS, M. S., Director of Curriculum

ETHEL WALLACE BRYANT, A. B.
Dean of Women

WILLIAM T. HALSTEAD, M. A.
Dean of Men

FACULTY

A. E. Bryant, M. A.	- - -	Science
Ethel Wallace Bryant, A. B.	- - -	English
Vera Charpentier, M. A.	- - -	French
William R. Cleveland, M. S.	- - -	Science
Maurice Corbett, A. B.	- - -	Speech, Drama
William E. Cunningham, A. M.	Science, Photography	
George J. Faul, M. A.	- Chairman, Testing and Counseling	
Harold L. Fischer, M. A.	- - -	Social Science
Lorene C. Frazier, B. M.	- - -	Registrar
Irving Fritz, A. B.	- - - -	Music
Joseph A. Guarisco	- - -	Building Trades
Helen S. Halstead, A. B.	- - -	Mathematics
William T. Halstead, M. A.	- - -	Social Science
Richard O. Hankey, A. B.	- - -	Police Training
John S. Hansen, M. A.	- - -	Journalism, Speech

Edward E. Hayden	-	-	-	Mechanics
J. Radolph Hutchings, M. A.	-	-	-	Spanish
Faye S. Jasmann, M. S.	-	-	-	Physical Education
Bruce F. Jensen, B. S.	-	-	-	Agriculture
Robert P. Jensen, M. S.	-	-	-	Engineering Drawing
Erwin Jost, A. B.	-	-	-	German, English
Fred V. Knight, B. S.	-	-	-	Agriculture
Natalie Lapike, A. B.	-	-	-	Librarian
William C. McKinney, A. B.	-	-	-	Social Science
Robert F. Maley, M. A.	-	-	-	English
Karl W. Mitchell, A. B.	-	-	-	Commerce
Thomas Murray, Ph. D.	-	-	-	English
Dorothy Myers, M. S.	-	-	-	Commerce
Bernard C. Nygren, A. B.	-	-	-	Physical Education
Donald C. Raney, M. A.	-	-	-	Science
Howard L. Raphael, A. B.	-	-	-	Mathematics, Science
William A. Reid, A. B.	-	-	-	Science
Raymond M. Rodgers, B. S.	-	-	-	Agriculture
Robert V. Rodgers, A. B.	-	-	-	Psychology
Alice G. Rouleau, M. A.	-	-	-	Art
Alvin Runyon	-	-	-	Agriculture
Eugene P. Speck, B. S.	-	-	-	Agriculture
Elizabeth M. Stewart, M. A.	-	-	-	Counselor
Spencer R. Strader, B. S.	-	-	-	Agriculture
Frank E. Tweed, A. B.	-	-	-	Music
Sue E. Weston, A. B.	-	-	-	Home Economics
P. F. Wilhelmsen, A. B.	-	-	-	Physical Education
C. Wesley York, A. B.	-	-	-	Engineering, Mathematics
To be appointed	-	-	-	English
To be appointed	-	-	-	Commerce
To be appointed	-	-	-	Nurse

General Information

The college was established by the Visalia Union High School Board of Trustees as Visalia Junior College in 1925, and offered the first post-high school instruction to students of this area beginning September, 1926. College classes were housed in the Visalia Union High School plant until September, 1940. At that time the college moved to its own fifty acre campus southwest of Visalia where new buildings had been completed. Remodeled buildings from Minter Field provide a cafeteria, student union, guidance center, and classrooms.

On January 18, 1949 the voters of the Tulare Union High School District and the Visalia Union High School District elected to organize the areas in those two high school districts into a junior college district. During the spring the students voted on a name for the newly formed junior college district. From the names suggested by the students, the board of trustees chose the name College of the Sequoias.

College of the Sequoias, as it will now be called, serves an area of more than three thousand square miles in the heart of the San Joaquin Valley. Its offerings include an educational program for students who plan to continue their education at a university or state college, or who desire further general education, as well as terminal courses for specific occupations. The college provides counseling service for all students with special emphasis on vocational problems.

Future plans call for expansion in the vocational fields which now include practical agriculture on the school farm, home economics, building trades, peace officer training, business education and numerous short term courses for those needing "refresher" work before entering an occupation.

College of the Sequoias with its strategic location, its excellent buildings and facilities, together with a well qualified staff, will continue to serve the youth of this area. Constructive suggestions from students and patrons are always welcome.

COUNSELING AND GUIDANCE

Counseling and guidance are important aspects of the College program. The counselors and the deans constitute the regular counseling staff. All faculty members participate as advisers, and students are encouraged to consult them on problems concerning their courses.

Specialized counseling services are available at the Student Personnel office. The purpose of these services is to give students guidance in personal problems and counseling in vocational and educational fields. Professionally trained counselors use modern scientific personnel methods in assisting students to analyze their aptitudes, interests, abilities and personality traits. Up-to-date information about vocational training and opportunities is available. The College invites parents who are interested to visit the Student Personnel office and become acquainted with its activities.

CURRICULA

Junior college students may be classified into two major groups: those students who are planning to continue their education in four-year colleges or universities and those students who expect to enter some occupation either before or after graduation from the junior college. Hence, the curricula are designed to meet the needs of the students in both groups.

To aid the student in selecting a curriculum best suited to his major interests, his needs, and his capacities, the College provides the services of trained vocational and personal counselors.

The degree of Associate in Arts will be granted to the student who completes satisfactorily a two-year course in the field of terminal or general education. Terminal courses, numbered 50 to 100, are offered for students who plan to complete only a two-year program of work. The purpose of these courses is twofold: (1) cultural courses designed for students who wish to complete a general education in the junior college and to assume immediately their place as active citizens of the community, (2) semi-professional or vocational courses designed for students who wish to enter the business and industrial world after finishing their junior college studies.

The degree of Associate in Arts will be granted to the student who completes satisfactorily a prescribed course of study at this College in which he has accomplished the lower division requirements for the college or university to which he plans to transfer. Students eligible to enter such an institution as freshmen should be able to complete a junior college course in two years, which covers lower division requirements and gives them junior standing. In most instances, such students may transfer to a university at the end of any semester provided their scholarship average for all work undertaken has been of "C" grade or higher.

STUDENT ORGANIZATIONS

The Associated Students of College of the Sequoias is the official student organization. Upon payment of activity fee at registration each semester, the student receives a student body card which entitles him to participate in the activities of the organization. The associated students sponsor all activities which concern the student body as a whole, including athletics, publications, social affairs, and assembly programs. Students not only may participate in the activities of the college but may attend all home league games and contests and all social affairs given by the associated students. All students receive the College newspaper, The Campus, throughout the year and if they are registered for both semesters, they receive the annual, The Tartar, without extra charge.

The business of the associated students is carried on by the Executive Board, the members of which are elected by the students.

A number of organizations offer opportunity to the students to associate with groups encouraging special interests and organized extra-curricular activity. These are: Associated Women Students, Associated Men Students, San-Soucis (French Club), German Club, Spanish Club, Student Christian Association, Newman Club, Inter-Varsity Fellowship, Varsity Club, Commerce Club, Radio Club, Photography Club, Pre-Nurses, Club, International Relations Club, Home Economics Club, Chess Club, Peds (Women Physical Education majors), Creme o' Tartars (Sophomore Women's Club), Tartar Twirlers (Square Dance Club), Allied Arts Club, Beta Phi Gamma (honorary journal-

istic fraternity), Delta Psi Omega (national honorary dramatics fraternity), and Alpha Gamma Sigma Scholarship Honor Society.

STUDENT ACTIVITIES

Student activities of the College include student government, organized athletics, dramatics, publications, music, social affairs, and club meetings.

Every student is urged to affiliate with at least one extra-curricular student group.

Athletics: College of the Sequoias is a member of the Central California Junior College Association and has representatives and teams for each athletic activity sponsored by that association. In addition, a strong intra-mural program is maintained.

Dramatics: The new Experimental Theatre offers the students interested in dramatics an excellent opportunity to participate in the various plays presented throughout the year. Outstanding three-act and one-act plays are selected for presentation. The dramatics class also sponsors an annual one-act play tournament for the high schools of this area.

Publications: the College sends out a weekly news letter to approximately 75 newspapers, radio stations, and high schools in this area and sponsors a weekly newspaper, The Campus, and an annual, The Tartar. In addition, the Speech Department, through the class in radio, sponsors a daily campus broadcast of College of the Sequoias' news and interesting news from other colleges.

Social Affairs: Student body social affairs, under the direction of the social committee, consist of dances, parties, barbecue suppers, picnics and luncheon meetings.

Music: Glee Club, Mixed Chorus, Quartettes, Trios, Soloists, Band and Orchestra furnish music for assemblies and special occasions.

VETERANS' EDUCATION

The Veterans Administration has approved the College of the Sequoias as "an educational training facility" for veterans. Those veterans who are eligible to obtain free education under the G. I. Bill of Rights (Public Law 346) or under Vocational Rehabilitation (Public Law 16) should consult with the Dean of Men regarding procedures.

EXPENSES

No tuition is charged. An activity fee of six dollars, is payable each semester at the time of registration.

There are no laboratory, gymnasium, library, locker, or shop fees.

Text books and stationery will cost approximately twenty dollars a semester. New and used text books and essential stationery supplies may be purchased on the campus at the Associated Students' Store.

STUDENT HEALTH SERVICE

A public health nurse holds office hours in the gymnasium. Students desiring advice on health problems are free to consult her whenever they desire. The students are urged to make use of this service.

First aid is available at all times.

LIVING ACCOMODATIONS

A list of available living quarters for students who are away from home is on file in the Deans' offices. Students are required to have such living accommodations approved by the Dean concerned before they make final arrangements. Living in apartments, excepting in the case of married students, is not encouraged by the College.

A veterans' housing project has been set up on the campus. Here married veterans or small groups of single veterans can be accomodated.

EMPLOYMENT

The College recognizes that one of the tests of its program is the success with which students, graduates and former students meet the requirements of employers. The College has centralized its placement services in the Student Personnel Office. Here all students who are interested in part-time or full-time employment may file special application forms for work. Every effort is made to place students in jobs for which they will be best suited in terms of interest, aptitudes and past work experience. The College considers that satisfactory part-time work experience is an important part of the vocational adjustment of students, and the Student Personnel Office, whenever possible, places applicants where the experience will be most beneficial.

Students who wish to work in private homes for

room and board should consult the Dean of Women or the Dean of Men. No definite arrangements may be made by correspondence since a personal interview is always necessary.

LIBRARY

A carefully selected and well-rounded book collection meets the present demands of the curricula and recreational reading needs. Adequate financial support insures continued growth and the maintenance of high library standards. The library subscribes to the leading current periodicals and important metropolitan newspapers.

At the request of instructors, books in demand are placed on reserve for period and overnight use. The book collection is supplemented by loans from the State library.

LOANS, SCHOLARSHIPS, AND AWARDS

Small temporary loans are available for College students. Applications should be made directly to the Dean of Women.

A substantial sum has been made available as a loan fund for students who need financial assistance to complete their education at an institution of higher learning. A requirement is that the applicant have completed at least one year's work at College of the Sequoias or two-years' work if this College offers a satisfactory two-year curriculum for the student's major.

Application for such loans should be made through the Dean of Women or the Dean of Men to the trustees of the Fund.

A faculty committee encourages students of unusual academic ability who desire to apply for scholarships to four-year colleges and universities, and assists them in making such applications.

Five local organizations generously make available scholarship awards to College of the Sequoias students of superior scholarship, good character, and definite objectives who wish to continue their advanced studies in a senior college or university or specialized school. Awards are made on a competitive basis by a committee selected by the organization granting the award.

These organizations are: Sequoia Branch (Visalia) of the American Association of University Wo-

men; Soroptomist Club of Visalia; Sigma Chapter, Delta Kappa Gamma National Honor Society for Women; Tulare County Medical Auxiliary; Regent Graduate Section, Sequoia Branch, American Association of University Women.

SCHOLARSHIP HONORS

At the end of each semester, grade point averages are computed to determine the students with thirty or more grade points. This scholastic record entitles the student to temporary membership in Alpha Gamma Sigma, California Junior College Honor Society. If he attains this distinction three of four semesters, he becomes a permanent member and is presented with a pin, a certificate, and may be graduated with honors.

GENERAL REGULATIONS

Admission

Graduates of any high school may be admitted to this College, and such other persons over eighteen years of age as may be approved for admission by the Director.

Applicants for admission should secure personnel data blanks from the office of the registrar. Registration may not be completed until such blanks have been filled out and returned to the registrar. Transcripts of high school records should be on file in this office sufficiently early to be evaluated by registration day.

Students from institutions of collegiate rank may be admitted with advanced standing upon the presentation of transcripts from such institutions subject to approval of the administration of College of the Sequoias.

Matriculation Deficiencies

In the case of an applicant not eligible for clear admission to a standard college or university at the time of his entrance to junior college, deficiencies in both subject and grade requirements for such admission may be removed in the junior college.

The College offers, in addition to the regular courses, intensive one-semester courses in both first-year algebra and plane geometry which carry no transfer credit.

Repetition of a college course for the purpose of removing a grade deficiency is permissible only in a case where the student has received a grade below "C".

Registration

Students are urged to register on the specified days, for late registration retards the progress not only of the student himself but of every class to which he may be admitted.

Only under extraordinary circumstances will registration be permitted after the end of the second week of class work.

It is essential that a transcript of the student's high school record be on file in the office of the Registrar before registration day.

Amount of Work

The normal requirement for a College schedule comprises sixteen units of work. No student will be granted credit in excess of seventeen and a half units a semester, except in the case of a student of proved ability who needs additional units to complete required work for graduation.

Placement Tests

Placement tests are given in May, September and February of each year in English, shorthand, and type-writing.

For those who wish to take courses in English or speech, the English test is given to determine the placement of the student in the various English courses. A "C" grade in the test is required for admission to the basic courses, such as English 1a, English 10a, Speech 1a and Commerce 60b.

For those who have had previous training in either shorthand, typewriting, or both, tests are given to determine the placement of the students in the various shorthand and typewriting classes.

Physical Education Requirements

All students carrying over eight units of work and under twenty five years of age are required by an act of the state legislature to enroll in the regularly prescribed courses in physical education for four semesters.

Conduct

Students are expected to set and observe among

themselves a proper standard of conduct. Failure to show such respect for order, morality, and personal honor as is expected of good citizens may be sufficient cause for removal from the College.

Attendance

Regularity of attendance is fundamental to satisfactory progress in the College. The financial support of the school is based upon the average daily attendance of the students. Every student, therefore, should assume the responsibility of regular attendance, not only because he can work more effectively, but also because his attendance assures the financial support which enables the institution to provide better facilities for all students.

Registration and enrollment in classes in this College pre-suppose that recitations, lectures, and laboratory sessions will be attended regularly. Attendance is a matter between the instructor and the student. If continued absence requires disciplinary action, the matter will be brought to the attention of the Dean of Men or the Dean of Women.

Leave of Absence

Students finding it necessary to be absent for one week or more are instructed to file with the proper dean a request for a leave of absence stating the reason for the absence. Favorable action upon the request will insure an opportunity to make up the classes missed without loss of credit. No leaves of absence will, however, relieve the student from the necessity of completing all the work of each course to the satisfaction of the instructor.

Absences to represent the school will be officially excused if students present to their instructors, in advance, requests for each absence filled out on the proper forms and signed by the Dean concerned.

Withdrawals from Course or College

Students desiring to withdraw from a course or from College should complete and file the proper request with the Dean. Requests filed before the end of the sixth week of the semester will enable the student to withdraw without prejudice to his standing. After this period a student may be permitted to drop a course without prejudice, only under such circumstances as

are considered by the Administration to be beyond the student's control.

At this time he will receive "W" in the course if his work is satisfactory, "F" if his work is unsatisfactory.

Units and Grade Points

All College work is measured in terms of both quantity and quality. The measure of quantity is the unit and the measure of quality is the grade point.

High school courses for which credit was received in high school may be repeated as remedial work in College for improvement in grade, but no College credit will be granted for such work.

For purposes of graduation or transfer to other collegiate institutions, it is necessary for the student to obtain the same number of grade points as units for all work accomplished, which is the equivalent of a "C" average.

Grade points will be awarded as follows: Grade A, three points per unit; B, two; C, one; D, none.

Grades

A, B, C and D are passing grades, corresponding to excellent, good, average, and barely passed; F, failure. An incomplete (inc.) grade will be given only with the special approval of the Dean. This approval will be given only in cases of illness or other circumstances beyond the student's control and will indicate that the student is entitled to all grade points upon satisfactory completion of assignments within the first six weeks of continued attendance.

It is understood that instructors' grades when handed in, are final and not subject to change by reason of revision of judgment on the part of the instructor.

REQUIREMENTS FOR GRADUATION

Introduction

Students preparing for graduation from College of the Sequoias should follow one of the two plans outlined below. The degree of Associate in Arts is conferred upon graduates who complete either plan. Plan One is designed for students who do not intend to continue formal collegiate instruction beyond the junior college, while Plan Two is designed for students who

desire to be transferred later with junior standing to a four-year college or university.

PLAN ONE

The degree of Associate in Arts is conferred under Plan One on all students who shall have completed satisfactorily ("C" average) a two-year junior college course of 64 semester units including:

1. Two units in physical education.
2. Two units in hygiene.
3. Four units in history of the United States, including the study of American institutions and ideals.
4. Any six units of English or speech or any combination. An exception to this is made for students majoring in Building Trades where a three-unit course in English fulfills the necessary requirements. Students majoring in Commerce are required to complete four courses in English (9 to 12 units).
5. A major consisting of at least 20 units in a specified field of study.

This latter requirement may be met by the completion of twenty units of work in any of the following fields:

GROUP	I.	Liberal Arts
GROUP	II.	Social Science
GROUP	III.	Science and Mathematics
GROUP	IV.	Art and Music
GROUP	V.	Foreign Language
GROUP	VI.	Pre-Nursing
GROUP	VII.	Mechanics
GROUP	VIII.	Commerce
GROUP	IX.	Engineering
GROUP	X.	Building Trades
GROUP	XI.	Police Training
GROUP	XII.	Agriculture
GROUP	XIII.	Home Economics

PLAN TWO

The degree of Associate in Arts is conferred under Plan Two on those students who expect to continue in upper division work in a standard four-year college or university, who shall have completed satisfactorily ("C" average) a two-year junior college course of 64

semester units, including:

1. Two units in physical education.
2. Two units in hygiene.
3. Four units in the history of the United States including a study of American institutions and ideals.
4. Six units in English - except for engineering majors transferring to the University of California or other institutions requiring only three units of English in lower division.
5. The completion of the lower division requirements and major requirements of the University of California or of any other college or university where upper division work will be continued.

Courses completed in high school may be accepted as partial or complete fulfillment of certain departmental requirements as to subject matter, provided that such work shall not reduce the amount of work (64 units) required for the diploma and shall be limited to those subjects accepted by the particular college.

In order to assist the student to plan his course, the lower division requirements for certain colleges have been set down. It is highly desirable that the student decide on his major subject as early as possible, so that the required lower division preparation for the major can be met. Such requirements in each department of the college or university are set forth in the College Catalogue, a copy of which is on file in the College library or which may be easily obtained by writing to the Registrar of the institution in which the student is interested.

LOWER DIVISION REQUIREMENTS IN CALIFORNIA COLLEGES AND UNIVERSITIES

Three principal kinds of requirements must be met in order for a student to attain full junior standing at the University of California or other institutions maintaining equivalent standards to which he may expect to transfer. These are:

1. The removal of all matriculation (entrance) deficiencies.
2. The completion of the specific requirements for junior standing in the proposed senior college.
3. The completion of the lower division prerequi-

sites for the upper division major and minors. These vary according to the majors and minors selected and also according to the institution in which the student expects to enroll. All students expecting to transfer to some other college or university should consult the catalogue of such institution regarding specific requirements for upper division standing. It is highly desirable that every student decide upon a major as early as possible after entering the junior college. The junior standing requirements of some of California's colleges and universities are here presented.

University of California at Berkeley and at
Los Angeles

LETTERS AND SCIENCE

The degree of Associate in Arts will be granted on the completion of not less than 60 units of college work with "C" average, and the fulfillment of the following general and specific requirements:

- A. General University Requirements.
Subject A or its equivalent
Hygiene, two units
Physical Education—Los Angeles
- B. Foreign Languages.
At least 16 units in not more than two languages, with not less than 4 units in any one language. The first two years of high school work in a foreign language will be counted in satisfaction of 4 units of this requirement and each year thereafter as 4 units.
- C. Mathematics.
Elementary algebra and plane geometry. If these subjects have not been completed in high school, or if they were completed with grade of "D", they must be taken in the junior college without college transfer credit.
- D. Natural Science.
At least twelve units chosen from the following list:
High school physics*, 3 units (1 high school credit).
High school chemistry*, 3 units (1 high school credit).
Bacteriology 1*

Chemistry 1a*-1b*, 8
 Geology 1a-1b
 Geography 1
 Physics 1a*-1b*, 1c*, 1d*, 2a-2b, 3a*-3b*
 Physiology 1a, 1c*
 Zoology 1a*, 1b*, 10
 Botany 1a*-1b*, 12
 Paleontology 1

The student must include among the courses taken in satisfaction of the requirement in natural science at least one course in laboratory science. Such courses are marked with an asterisk.

E. Additional—A sequence (of 5 or 6 units) in subjects of college level, in each of four of the following six groups, one of which may be postponed to the upper division:

1. English 1a-1b, Speech 1a-1b.
2. Foreign Language (additional to B.) This may be satisfied by two years of high school work, provided the language be Latin.
3. Mathematics. Any two of the following courses: Mathematics C or high school trigonometry, 2, 3a, 3b.
4. Social Sciences: History 4a-4b, History 8a-8b. Economics 1a-1b, Geography 1a-1b (if not included in requirement D), Political Science 1a-1b, Psychology 1a-1b.
5. Philosophy 6a-6b, Philosophy 10a-10b.
6. Fine Arts. English 5a-5b.

Stanford University

The work of the lower division at Stanford University is divided into three groups of studies. All students are required to take at least ten semester units (fifteen quarter units) in each of these three groups during the first two college years.

Group I Arts and Letters:

- (a) The completion in the lower division of a second year reading course of a foreign language, or of a more advanced foreign language course.
- (b) Subject A or its equivalent
- (c) English 1a-1b
- (d) Electives to make up a total of ten units

in this group if the above requirements have not totaled that number.

Group II Natural Science; Mathematics:

- (a) A year course in a laboratory science during the first year.
 1. Biological science for those who have completed a year of high school physics or chemistry only.
 2. Physics or chemistry for those who have completed a high school year of biological science only.
 3. Biological science and physics or chemistry for those who have completed neither in high school.
- (b) Electives to make up a total of ten units in this group.

Group III Social Science:

- (a) First year: Twelve quarter units in History of Western Civilization.
- (b) Second year: Nine quarter units in sociology, economics, political science, history, psychology, philosophy, or combination of these.

The maximum allowance for work in junior colleges is two years of university credit (sixty semester units or ninety quarter units), exclusive of physical education. Although credit is not given for physical education at Stanford University, it is required during the first two years.

University of Southern California

The first two years in the College of Letters, Arts and Sciences are devoted to general education and certain lower division subjects required of all students who are candidates for the bachelor's degree. In general, these requirements are as follows:

- A. English, 6 units.
- B. Art Appreciation or Music Appreciation, 2 units.
- C. Foreign Languages, 12 units.

Twelve units in a single language. Each year of high school work in the language offered may count as the equivalent of three units toward the fulfillment of this requirement provided all work in the language is taken in proper sequence. No high school work may count, however,

toward the total units required for graduation.

General Studies, 13 units

1. Man and Civilization, 6 units. (History 4a-4b)
2. American Civilization and Institutions, 4 units. (History 1a-1b)
3. Three units to be selected from:
 - a. Problems of Human Behavior, 3 units
 - b. Problems of Human Values, 3 unitsStudents who transfer with 60 units of advanced standing may substitute 3 units of psychology for "a" or 3 units of philosophy for "b".
4. Literature, 4 units
5. Physical Education, 4 units; Health Education, 2 units.
6. Science, 11 units.

Courses may be chosen from the following offered at College of the Sequoias: Bacteriology 1; Botany 1a-1b; Chemistry 1a-1b; Geology 1a-1b; Physics 1a-1b; or 2a-2b plus 3a-3b; Zoology 1a-1b.

At least one complete course with laboratory must be passed either in high school or college. Each high school unit of physics or chemistry may count as three college semester units toward this requirement, but not toward the total units required for graduation.

California State Colleges

There are several variations in the lower division requirements in the state colleges. The student should consult the major department requirements in the catalogue of the particular college which he intends to enter.

Fresno State College

The curriculum leading to the A. B. Degree and the General Elementary Credential at Fresno State College includes:

- A. English and Speech, 12 units.
English A, English 1a, Speech 21, and 6 units of English and Speech electives.
- B. Foreign Language, 6-8 units.
Two years of one foreign language in high school or one year of a foreign language in college.

- C. Mathematics.
Elementary algebra and plane geometry. If not completed in high school these courses must be taken in college.
Mathematics 10, 3 units.
- D. Science, 12 units. 4 units may be postponed to upper division.
A laboratory science is required.
- E. Social Science, 12 units. 4 units may be postponed to upper division.
History 4a-4b or History 8a-8b, History 1a-1b.
Geography 1a-1b.
- F. Psychology 1a, 3 units.
- G. Music 9a-9b, 5 units.
- H. Art 6a, 2 units.
- I. Physical Education and Hygiene, 5 units.
- J. Electives to make up 64 units.

San Jose State College

The curriculum leading to the A. B. Degree and the General Elementary Credential at San Jose State college includes:

- A. English and Speech, 12 semester units.
- B. Natural Science, 12 semester units.
- C. Social Science, 12 semester units.
- D. Physical Education, 2 semester units.
- E. General Psychology, 6 semester units.
- F. Music Appreciation, 2 semester units.
- G. Art Appreciation, 2 semester units.
- H. Art (Public School), 4 semester units.

SUGGESTED PROGRAMS IN SPECIFIED FIELDS OF STUDY

AGRICULTURE

Instruction is offered to students in three major divisions; plant science, animal science and agricultural mechanics. Courses are designed to fit those students who wish to enter farming or go into jobs requiring practical agricultural training. All courses in this department are of a terminal vocational nature.

A one hundred and sixty acre farm is available for demonstration and laboratory work where units in dairy cattle, beef cattle, sheep, swine and poultry will be maintained. Along with the animal units will be supporting forage crops including alfalfa, ladino clover,

cereal crops, and milo. Field crops, deciduous trees, and vines are also to be grown for laboratory use by the students.

For students desiring to transfer to the University of California at Davis or to California Polytechnic School for degree work in agriculture, the basic science courses may be taken at College of the Sequoias to fulfill requirements and the practical courses in agriculture taken as electives.

The following suggested two-year program will lead to graduation from the terminal course in Agriculture and the Associate in Arts degree:

Suggested Program in Agriculture

Animal Science - First Year

First Semester	Units	Second Semester	Units
English 51 or Speech ...	3	English 52 or Speech	3
Chemistry 50	3	Hygiene 1	2
Psychology 25	1	Agriculture 51 or 56	3
Agriculture 51 or 56	3	Agriculture 99b	1
Agriculture 99a	1	Agriculture 70	3
Agriculture 60	3	Agriculture 72	1
Agriculture 76	2	Physical Education	1/2
Physical Educaion	1/2	Electives	3
	16 1/2		16 1/2

Animal Science - Second Year

First Semester	Units	Second Semester	Units
History 1a	2	History 1b	2
Agriculture 90	3	Agriculture 91	2
Agriculture 99c	1	Agriculture 99d	1
Agriculture 51 or 56 ...	3	Agriculture 51 or 56 ...	3
Agriculture 87	3	Agriculture 84	2
Agriculture 64	2	Agriculture 65	3
Agriculture 75	2	Agriculture 73	1
Physical Education	1/2	Physical Education	1/2
	16 1/2	Electives	2
			16 1/2

Plant Science - First Year

First Semester	Units	Second Semester	Units
English 51 or Speech	3	English 52 or Speech	3
Chemistry 50	3	Hygiene 1	2
Psychology 25	1	Agriculture 51 or 56	3

Agriculture 51 or 56	3	Agriculture 99b	1
Agriculture 99a	1	Agriculture 88	3
Agriculture 86	3	Physical Education	½
Physical Education	½	Electives	3
Elective	2		
	<hr/>		<hr/>
	16½		15½

Plant Science - Second Year

First Semester	Units	Second Semester	Units
History 1a	2	History 1b	2
Agriculture 90	3	Agriculture 91	2
Agriculture 99c	1	Agriculture 99d	1
Agriculture 51 or 56	3	Agriculture 51 or 56	3
Agriculture 87	3	Agriculture 84	2
Agriculture 83	3	Agriculture 85	4
Physical Education	½	Physical Education	½
		Electives	2
	<hr/>		<hr/>
	15½		16½

BUILDING TRADES

A training curriculum in the building trades has been set up as an integral unit of the regular two-year junior college program. Manipulative instruction in carpentry, wiring, plastering, painting, plumbing, and concrete under the supervision of master craftsmen is given to approved students. Manipulative training is given each year on one major project, such as a residence.

Trade technical class instruction is given in fundamental and advanced construction procedures, in blueprint reading, in estimating and contracting procedure, and in structural stresses and strains including simple truss designs. Trade related subjects, including drafting, mathematics, English, accounting, business law, job ethics, economics, History 1a-1b, physical education, hygiene etc., are required as a part of the training.

Upon the recommendation of the school, credit toward the completion of an apprenticeship in the specific trade studied is given by the California Division of Apprenticeship Standards and the local Trade Unions on the basis of a minimum of one month of apprenticeship credit for each school month completed.

Building Trades Program

First Year

First Semester	Units	Second Semester	Units
Building Trades 55A	10	Building Trades 55B ...	10
Trade Drawing 51A	3	Trade Drawing 51B	3
History 1A	2	History 1B	2
Psychology 25	1	Physical Education	½
Physical Education	½		
	16½		15½

Second Year

First Semester	Units	Second Semester	Units
Building Trades 56A ...	10	Building Trades 56B ...	10
*Commerce 63A	3	Hygiene I	2
**English 51, 52 or 1A ...	3	Electives	3
Physical Education	½	Physical Education	½
	16½		15½

*Electives may be substituted for Commerce 63a if the student has completed a bookkeeping course in high school.

**The English course will be determined by the score in the English placement test.

COMMERCE

Instruction is offered to students in three major divisions of business education: Accounting, Stenography and Merchandising. General background courses are strongly recommended as they provide a better understanding of modern business. It is advisable for students to follow as closely as possible suggested courses in these major fields.

All regular students in the Commerce Department are required to take an English or speech course each semester. Commerce 60a and Commerce 60b are acceptable toward this requirement.

An effort is made to encourage students to work to capacity and to progress as rapidly as is consistent with the high standards which are required. In order to do this effectively, students who have had previous training in shorthand and typewriting are registered in classes according to their placement test scores. Those who have not had previous training in these subjects are not required to take the tests and must register in elementary classes.

Refresher courses are offered in shorthand, typewriting, office machines, and allied subjects for the purpose of fitting those who have had previous training but have not been employed recently, to accept clerical positions or to prepare for state or federal civil service examinations.

Suggested Program in Accounting

First Year			
First Semester	Units	Second Semester	Units
Commerce 63a (Accounting)	3	Commerce 63b (Accounting)	3
*Commerce (Typewriting)	2	*Commerce (Typewriting)	2
Economics 1a	3	Economics 1b	3
English or Commerce 60a	3	English or Commerce 60b	2-3
History 1a	2	History 1b	2
Physical Education ...	1/2	Physical Education ...	1/2
Psychology 25	1	Psychology 25	1
Electives	1	Electives	4-3
	15 1/2		16 1/2

Second Year			
First Semester	Units	Second Semester	Units
Commerce 64a (Accounting)	3	Commerce 64b (Accounting)	3
Speech or English	3-2	Speech or English	3-2
Commerce 68a (Office Machines)	2	Commerce 68b (Office Machines)	2
Psychology 51a or 1a ...	3	Psychology 51b or 1b ...	3
Hygiene	2	Commerce 71 (Filing)	1
Commerce 79 (Spelling)	1	Physical Education	1/2
Physical Education	1/2	Electives	3-4
Electives	2-3		15 1/2
	16 1/2		

Students who are preparing to qualify for Certified Public Accountants under the California Accountancy Act should include in their programs:

Mathematics 2 (Mathematics of Finance)

Commerce 18 (Commercial Law)

Suggested Two-Year Program in Stenography

First Year			
First Semester	Units	Second Semester	Units
*Commerce— (Shorthand)	5	*Commerce— (Shorthand)	5
*Commerce— (Typewriting)	2	*Commerce— (Typewriting)	2
Commerce 69	3	History 1b	2
English <i>Composition</i>	3-2	English	3-2
Physical Education	1/2	Hygiene	2
History 1a	2	Physical Education	1/2
Psychology 25	1	Electives	1-2
Electives	1		
	16 1/2		15 1/2

Second Year			
First Semester	Units	Second Semester	Units
Commerce 70a (Shorthand)	5	Commerce 70b— (Shorthand)	5
Commerce 55a (Transcription)	2	Commerce 55b— (Transcription)	2
Commerce 60b— (Writing for Business) 3		English or Speech	2-3
Commerce 68a (Office Machines)	2	Commerce 78b— (Secretarial Practice) 3	
Commerce 78a— (Secretarial Practice) 3		Physical Education	1/2
Commerce 71-(Filing)	1	Electives	3-2
Physical Education	1/2		
	16 1/2		15 1/2

Suggested One-Year Program in Stenography

First Semester	Units	Second Semester	Units
*Commerce— (Shorthand)	5	*Commerce— (Shorthand)	5
*Commerce— (Typewriting)	2	*Commerce— (Typewriting)	2
Commerce 60a, English or Speech	3	Commerce 60b, English, or Speech	3
Commerce 78a (Secretarial Practice) 3		Commerce 78b— (Secretarial Practice) 3	
Commerce 68a (Office Machines)	2	Commerce 68b— (Office Machines)	2
		Commerce 71—	

Physical Education	..... 1/2	(Filing)	..... 1
Psychology 25	..... 1	Physical Education	..... 1/2
	<u>16 1/2</u>		<u>16 1/2</u>

*Specific course to be determined by the score of the student on the shorthand and typewriting placement tests.

Suggested Program in Merchandising to be announced September 1949.

Dentistry, Medicine, and Pharmacy

The following curricula lead to junior college graduation under Plan II with Associate in Arts degree and lower division requirements accomplished for dentistry, medicine and pharmacy.

If the student has not completed his high school prerequisites for these courses as outlined below, extra time in junior college or elsewhere will be required for making up his deficiencies.

DENTISTRY

Suggested Program

First Year

First Semester	Units	Second Semester	Units
English 1a	..... 3	English 1b	..... 3
Chemistry 1a	..... 5	Chemistry 1b	..... 5
Zoology 1a	..... 4	Zoology 1b	..... 4
Foreign Language	..... 4	Foreign Language	..... 4
Psychology 25	..... 1	Physical Education	..... 1/2
Physical Education	..... 1/2		
	<u>17 1/2</u>		<u>16 1/2</u>

Second Year

First Semester	Units	Second Semester	Units
Chemistry 8	..... 3	Chemistry 5	..... 3
Physics 2a	..... 3	Physics 2b	..... 3
Physics 3a	..... 1	Physics 3b	..... 1
Mathematics C	..... 3	Hygiene	..... 2
Social Science 1a	..... 3	Social Science 1b	..... 3
Psychology 1a	..... 3	Psychology 1b	..... 3
History 1a	..... 2	History 1b	..... 2
Physical Education	..... 1/2	Physical Education	..... 1/2
	<u>18 1/2</u>		<u>17 1/2</u>

MEDICINE

Suggested Program

First Year

First Semester	Units	Second Semester	Units
English 1a or Speech 1a	3	English 1b or Speech 1b	3
Chemistry 1a	5	Chemistry 1b	5
Foreign Language	4	Foreign Language	4
History 1a	2	History 1b	2
Hygiene	2	Physical Education	½
Psychology 25	1	Elective	2
Physical Education	½		
	17½		16½

Second Year

First Semester	Units	Second Semester	Units
Zoology 1a	4	Zoology 1b	4
Foreign Language	4	Foreign Language	4
Psychology 1a	3	Psychology 1b	3
Physical Education	½	Physical Education	½
Electives	5	Electives	5
	16½		16½

PHARMACY

Suggested Program

First Year

First Semester	Units	Second Semester	Units
English 1a	3	English 1b	3
Chemistry 1a	5	Chemistry 1b	5
Zoology 1a	4	Zoology 1b	4
Mathematics D	3	Mathematics C	3
Psychology 25	1	Hygiene	2
Physical Education	½	Physical Education	½
	16½		17½

Second Year

First Semester	Units	Second Semester	Units
Anatomy 1a	4	Botany 12	4
Physics 2a	3	Physiology 1a	3
Physics 3a	1	Physiology 1c	1
Chemistry 8	3	Physics 2b	3
Chemistry 9	3	Physics 3b	1
		Chemistry 5	3

History 1a	2	History 1b	2
Physical Education	1/2	Physical Education	1/2
	<hr/>		<hr/>
	16 1/2		17 1/2

NURSES' TRAINING

Students may obtain nursing education either in (a) hospitals operated by universities (University of California or Stanford) or (b) hospital training schools. For admission to the former, the student must obtain regular junior standing in the university to which transfer is desired and also complete certain pre-nursing courses. The Bachelor of Science degree may be obtained by completing an additional year of university study after the student has received the Registered Nurse Certificate. For admission to hospital training schools, the student is advised to complete at least thirty units of a college pre-nursing course with a "C" average.

According to a ruling by the California State Board of Nurse Examiners, the course in schools of nursing is one of thirty-six months. An applicant must be at least eighteen years of age, a high school graduate and have completed satisfactorily a course in general chemistry. In addition, most schools are now requiring at least a year of college work for entrance, while two years are recommended. This preparation should include science, psychology and English.

For details of hospital school requirements, students are urged to visit schools of nursing and to make their choice before enrolling in college courses. Many hospital schools have specific subject requirements which must be met.

PRE-NURSING CURRICULA

Universities and University Hospital Training Schools

This curriculum leads to a Bachelor of Science degree and a Certificate of Nursing.

Suggested Program

First Year

First Semester	Units	Second Semester	Units
Chemistry 1a	5	Chemistry 1b	5

Second Year

First Semester	Units	Second Semester	Units
English 10a	3	Hygiene	2
Sociology 3	3	Psychology 1a or 1b	3
Psychology 51 or 1a	3	Law Enforcement 52	2
Law Enforcement 51	2	Law Enforcement 53	4
Law Enforcement 55	3	Law Enforcement 54	2
Physical Education	½	Physical Education	½
Electives	2	Electives	2
	16½		15½

Description of Courses

AGRICULTURE

AGRICULTURE 50a-50b—VETERANS AGRICULTURE (12-12)

This course consists of four hours of lecture, two hours of field instruction, and forty hours of work on a supervised farming program per week.

AGRICULTURE 51 — FARM MACHINERY (3)

A course in the operation, care and repair of farm machinery with demonstrations and laboratory work on tillage, planting, and harvesting machinery.

AGRICULTURE 56a-56b — FARM STRUCTURES (3-3)

A course in designing, planning, and building the various types of farm buildings necessary to the agricultural enterprises of the San Joaquin Valley.

AGRICULTURE 58a-58b — FARM MECHANICS (3-3)

The repair, maintenance, design, and construction of farm machinery and equipment.

AGRICULTURE 60 — ELEMENTS OF DAIRYING (3)

A survey of the field of dairying. Study of approved management and feeding practices in the San Joaquin Valley.

AGRICULTURE 62 — DAIRY SELECTION (2)

A course in the selection of dairy cattle. Comparative judging. A study of dairy form in relation to function.

AGRICULTURE 64 — DAIRY MANAGEMENT (2)

A study of the feeding and management of dairy cattle, record keeping, developing a herd, and raising replacement stock.

AGRICULTURE 65 — FEEDS AND FEEDING (3)

A study of the constituents of feeds, the digestive system, and the compiling of rations for livestock.

AGRICULTURE 70 — TYPES AND BREEDS OF LIVESTOCK (3)

A general course in the selection, breeding, feeding, and management of swine, beef, and sheep.

AGRICULTURE 72 — LIVESTOCK SELECTION (1)

The practice of selection of dairy cattle, swine, beef and sheep.

AGRICULTURE 73a-73b — LIVESTOCK SKILLS (1-1)

Laboratory period to develop skills necessary for management of a livestock ranch.

AGRICULTURE 74 — FITTING AND SHOWING (1)

A course in methods of fitting and showing cattle, sheep, and hogs for sale exhibition.

AGRICULTURE 75 — BEEF PRODUCTION (2)

A study of market beef production. Selection of breeding stock, feeders, and equipment. Care and management of the herd.

AGRICULTURE 76 — SWINE PRODUCTION (2)

A study of market swine production. Selection of breeding stock, feeders and equipment. Care and management of the herd.

AGRICULTURE 83 — FIELD CROPS (3)

A study of the common field crops such as cotton, sugar beets, potatoes, and field beans. Varieties, soils, pest control, harvesting, etc.

AGRICULTURE 84 — FORAGE CROPS (2)

A study of the common forage crops: alfalfa, permanent pastures, silages, etc.

AGRICULTURE 85 — DECIDUOUS FRUITS (4)

A study of the production and management practices including budding, grafting, planting, irrigation, and pruning of the common tree fruits of the San Joaquin Valley

AGRICULTURE 86 — VITICULTURE (3)

A study of cultural practices necessary to grape production.

AGRICULTURE 87 — SOILS (3)

Study of values and management of different type soils.

AGRICULTURE 88 — CITRUS FRUITS (3)

A study of the cultural practices necessary to citrus production.

AGRICULTURE 90 — FARM MANAGEMENT (3)

A study of prices, economic trends, budgets, credit, and choice of enterprises.

AGRICULTURE 91 — FARM ACCOUNTING (2)

A study of farm record keeping and analysis, including, inventories, production records, feed records, tax records, financial records, and annual statements.

AGRICULTURE 99a-99b-99c-99d — SUPERVISED FARM PROGRAM (1 or 2)

Open to students taking two or more courses in agriculture. The care and records of a home supervised farming program.

ART

ART 6a — ART STRUCTURE (2)

A basic course in art with the primary purpose of familiarizing the student with the elements and principles used in art through the study of historic examples from all countries and periods. Creative imagination and judgment are stimulated through problems involving various media.

ART 6b — COLOR AND DESIGN (2).

Systems of color and their application. Decorative arrangements in line, form, and color.

ART 7a — FREEHAND DRAWING (2).

Freehand and perspective drawing.

ART 7b — FIGURE DRAWING (2).

Drawing from models—human, animal, etc.

ART 7c — PEN AND BRUSH LETTERING (1).

A study of types of alphabets and poster making.

ART 7d — LAYOUT (1)

Poster technique layout, newspaper and book advertising arrangement.

Prerequisite: Art 7a. Art 6a-6b recommended.

placed upon building vocational shorthand vocabularies. The objective of this course is a shorthand dictation speed of 120 words per minute.

Commerce 55a-55b must be taken concurrently.

Prerequisite: A satisfactory score in the shorthand and typewriting placement tests.

COMMERCE 71 — PRINCIPLES OF FILING (1).

A course covering the basic rules and procedures of filing. Individual practice filing equipment allows actual practice in arranging records according to alphabetic, geographic, numeric, and subject methods of filing.

This course is recommended for accounting, as well as secretarial majors.

76a-6 ✓ COMMERCE 76a-76b — MERCHANDISING (3-3)

A study of retailing from the point of view of retailers and of consumers. Designed to equip the student with the fundamentals of retailing, and with information necessary for intelligent buying. Attention is focused on store operation, advertising, selling of goods, and services, textiles, and retail credit.

COMMERCE 78a-78b — SECRETARIAL PRACTICE (3-3).

8 ✓
A required course for secretarial majors designed to acquaint the student with those duties, traits, and knowledges required of the secretary on the job. Special emphasis is placed on the status of secretarial work and its relation to office organization; personality development; problems of business etiquette; advice on how to obtain a position and methods of obtaining promotion to higher positions. During the year, work will be given involving the operation of the Dictaphone, Ditto, Mimeograph, and Mimeoscope.

COMMERCE 79 — SPELLING (1).

9
A course intended to build the student's interest in words as such; to help him spell them, to pronounce them, to use them in contexts, and to understand them.

COMMERCE 80a-80b — SHORTHAND REPORTING (3-3).

Advanced course in shorthand speed building designed to develop dictation speed to 160 words per minute on tests of lengthy duration.

in his mastery of words to special attention to spelling

The Gregg Shorthand Court Reporting materials are used as a basis for the course.

Prerequisite: Commerce 70a-70b or its equivalent.

ENGINEERING

ARCHITECTURE 1a-1b — ARCHITECTURAL DRAWING (3-3).

Six hours per week.

The preparation of a complete set of plans for a wood frame house from preliminary sketches. A study of materials of construction, specifications, estimating costs, and the California State Building Code.

Prerequisite: Mechanical Drawing.

ARCHITECTURE 51a-51b — TRADE DRAWING (3-3)

Five hours per week.

A practical course in drawing for the building trades including the fundamentals of mechanical drawing; introduction to architectural drafting and blue print reading; details; symbols, and specifications.

ENGINEERING 1a-1b — PLANE SURVEYING (3-3)

Two hours lecture and three hours field work per week .

Fundamental principles and practice in methods of land and route surveying. Designed for engineering majors.

Prerequisites: High school trigonometry or Mathematics C and Mechanical Drawing; These may be taken concurrently with Engineering 1a.

ENGINEERING 8 — MATERIALS OF ENGINEERING CONSTRUCTION (2)

Two hours lecture per week.

Structural properties and adaptability of various materials.

ENGINEERING 22 — ENGINEERING DRAWING (2)

Six hours per week.

Geometric constructions; freehand pictorials; theory of orthogonal projection; simple auxiliaries; sectioning; fasteners; dimensioning; simple working

drawings.

Prerequisite: Engineering 52 or one year of high school mechanical drawing.

ENGINEERING 23—DESCRIPTIVE GEOMETRY (3)

Six hours per week.

The fundamental principles of descriptive geometry and their application to the solution of three-dimensional problems arising in the various branches of engineering.

Prerequisite: Engineering 22 and either high school geometry or Mathematics G.

ENGINEERING 24 — ADVANCED ENGINEERING DRAWING (3)

Six hours per week.

Cams and gears; detail and assembly drawings of machine parts; freehand sketching; structural detailing; piping layouts; application of American Standards in drafting room practice, tolerances, classes of fit and machining specifications.

Prerequisites: Engineering 22 and 23.

ENGINEERING 52 — MECHANICAL DRAWING (3)

Five hours per week.

An elementary course in the fundamentals of mechanical drawing and modern drafting practice; lettering, geometric drawing, orthographic projection, pictorial representation and blueprinting.

Prerequisite: None.

ENGLISH

A. Composition and Literature

ENGLISH 1a — FIRST-YEAR READING AND COMPOSITION (3).

This course is designed to provide training in intelligent interpretation and in correct and effective expression, oral and written, through analysis and discussion of expository types of literature, especially the essay and biography, and the writing of themes. Organization of material, clarity and directness of style, and idiomatic correctness are stressed. Experience in the preparation of a formal research paper is included.

Prerequisite: A grade of "C" or better in the English Placement Test or in English 51.

ENGLISH 1b — FIRST-YEAR READING AND COMPOSITION (3).

The purpose of this course is to improve the student's powers of analysis and expression, and to cultivate his appreciation of literary values, through a critical study of selected plays, poems, short stories and a novel. Oral discussion and written composition are continued.

Prerequisite: English 1a.

ENGLISH 5a-5b — HISTORY OF ENGLISH LITERATURE (3-3).

This course covers the history of English literature from the Anglo-Saxon period to the present, emphasizing the study of social and historical backgrounds and literary movements, with illustrative readings from literary masterpieces, lectures and discussions.

Prerequisite: English 1a-1b.

ENGLISH 8 — DIRECT READING (2).

The object of this course is to encourage recreational reading. It is designed to help students to read more rapidly and with better comprehension, to stimulate the student who has not read much to develop a taste for reading, and to develop in all a discriminating sense in the choice of books.

ENGLISH 10a-10b — ELEMENTARY JOURNALISM (3-3).

A course offering instruction and practice in news writing, feature writing, head writing, proof reading, copy reading, and page makeup. Members of the class write material for the Campus and the Tartar.

Prerequisite: Satisfactory score in English placement test or English 51.

ENGLISH 11a-11b — PROJECT JOURNALISM (1-1).

A laboratory course for project journalism. Includes individual assignments and practice as copy-editors, and make-up editors on campus publications.

Prerequisite: English 10a-10b.

ENGLISH 14a-14b — CREATIVE WRITING (2-2).

The purpose of this course is to provide instruction and experience in the writing of short stories, feature articles, verse, and short plays. The study of various forms and the analysis of professional methods are liberally supplemented by workshop discussions of the student's own creations. During the course each member of the class is encouraged to specialize in the type of writing in which he is most interested.

Prerequisite: English 1a or permission of the instructor. English 14a should precede English 14b.

ENGLISH 51 — GRAMMAR AND COMPOSITION (3).

This course includes drill in mechanics, diction, grammar, punctuation, and spelling, as well as practice in writing sentences, paragraphs, and themes. It is intended primarily for those students who fall below the median score in the English Placement Test.

Prerequisite: None.

ENGLISH 52—ESSENTIALS IN READING AND WRITING (3).

This course is planned to assist the student in increasing his ability to read rapidly and understandingly, to write clearly, concisely, and correctly.

Prerequisite: English 51.

B. Speech Arts

SPEECH 1a-1b—FUNDAMENTALS OF SPEECH (3-3).

This course is concerned primarily with training in meeting practical speech situations. The work of the first semester concentrates on such fundamentals as techniques of finding and organizing speech materials, effective use of the voice in communication, and good platform manners. In the second semester, the student receives training in the preparation and delivery of various types of speeches.

Prerequisite: A grade of "C" or better in the English Placement Test or in English 51.

SPEECH 21 — VOICE (3).

This course is designed for the student who wishes to improve his speaking voice. It includes the theory

of voice production, phonetics, and interpretation, as well as drill for improvement of enunciation, tone quality, fluency, and interpretation.

Prerequisite: None.

SPEECH 33a-33b — PLAY PRODUCTION (2-2).

The work of the course comprises a study of the technique of acting and directing, and practical experience in the production of plays.

Prerequisite: A grade of "C" or better in the English Placement Test, or the consent of the instructor.

SPEECH 34a-34b—ADVANCED PLAY PRODUCTION (2-2).

A course designed for advanced drama students. Actual experience in acting, directing, and producing short and long plays for public presentation in the College Experimental Theatre and Montgomery Auditorium.

Prerequisite: Speech 33a-33b or permission of instructor.

SPEECH 40 — RADIO SPEECH (2).

This is a laboratory course in microphone technique, in which voice control, diction, and radio announcing are studied. It is intended especially for speech majors and for students who wish experience in radio announcing.

Prerequisite: None.

SPEECH 51a-51b — PRACTICAL SPEECH (3-3).

This course is arranged for those students who intend to go directly into homemaking or business upon the completion of their junior college work. Stress is placed upon the development of poise and self-confidence, right use of the voice, and parliamentary procedure for meetings of clubs, etc.

Prerequisite: For Speech 51a: None.

For Speech 51b: Speech 51a.

FOREIGN LANGUAGES

FRENCH 1a — ELEMENTARY FRENCH (4).

The essentials of grammar as a basis for reading, speaking, and writing correctly the French language; reading of simple French stories; practice in conversation.

Corresponds to first two years of high school French.

FRENCH 1b — (4).

Continuation of French 1a.

Prerequisite: French 1a or two years of high school French.

FRENCH 1c — INTERMEDIATE FRENCH (4).

Grammatical review and composition. Reading and interpretation of typical French writers as Moliere, Maupassant, Daudet, Hugo.

Prerequisite: French 1a-1b or three years of high school French.

FRENCH 1d — (4).

Continuation of French 1c.

Prerequisite: French 1c or four years of high school French.

FRENCH 25a-25b — (3-3).

Advanced grammar, composition, and conversation. Reading and reports conducted entirely in French.

Prerequisite: French 1d or its equivalent.

GERMAN 1a — ELEMENTARY GERMAN (4).

Pronunciation, essentials of grammar, and progressive reading.

Corresponds to first two years of high school German.

Prerequisite: None.

GERMAN 1b — (4).

Continuation of German 1a.

Prerequisite: German 1a or two years of high school German.

GERMAN 1c — INTERMEDIATE GERMAN (4).

Grammar review, written composition, extensive reading, and conversation.

Prerequisite: German 1b or three years of high school German.

GERMAN 1d — (4).

Continuation of German 1c.

Prerequisite: German 1c or four years of high school German.

SPANISH 1a — ELEMENTARY SPANISH (4).

The elements of grammar; pronunciation; simple conversation; acquisition of basic reading vocabulary.

Corresponds to first two years of high school Spanish.

SPANISH 1b — (4).

Continuation of Spanish 1a. More extensive reading; review of verb forms; idioms stressed; review of grammar and pronunciation; conversation.

Prerequisite: Spanish 1a or two years of high school Spanish.

SPANISH 1c — INTERMEDIATE SPANISH (4).

A thorough review of the principles of elementary Spanish; extensive reading; emphasis on comprehension of both oral and written subject matter.

Prerequisite: Spanish 1b or three years of high school Spanish.

SPANISH 1d — (4).

Continuation of Spanish 1c. Reading of representative Spanish and Spanish-American authors.

Prerequisite: Spanish 1c or four years of high school Spanish.

SPANISH 25a-25b — (3-3).

Advanced grammar, composition, conversation, and reading.

Prerequisite: Spanish 1d or its equivalent.

HOME ECONOMICS

HOME ECONOMICS 10a — FOODS (3).

A study of the relationship between food composition, nutrition and health; basic principles of food preparation to conserve nutritive values; development of the ability to plan, prepare, and serve meals which are attractive, adequate for health, and within different income levels.

HOME ECONOMICS 10b — FOODS (3).

A continuation of 10a, with application of principles to more complicated techniques of food selection and preparation. Special meal service is included.

HOME ECONOMICS 12a — CLOTHING (3).

Fundamentals of clothing selection as applied to

the individual for suitability in color, design, needs, and economic status. Selection, use, and alternation of commercial patterns.

Fundamental techniques of clothing construction.

HOME ECONOMICS 12b — CLOTHING (3).

Continuation of 12a with more advanced problems, including some original design and tailoring techniques.

HOME ECONOMICS 50a — FOOD PLANNING AND PREPARATION (3).

Food requirements for the family; fundamentals of food selection to meet the needs of the individual and to fit the family budget; practice in meal planning, marketing, preparation, and serving the family group.

Prerequisite: None.

HOME ECONOMICS 50b — ADVANCED FOOD STUDY (3).

Advanced study in the nutritional needs of the individual. Special emphasis on feeding of children; practice in marketing, planning, and serving meals, including meals for special occasions.

Prerequisite: Home Economics 50a or its equivalent. Chemistry 55 or its equivalent recommended.

HOME ECONOMICS 51a — CLOTHING AND TEXTILES (3).

Basic facts concerning common textiles necessary to develop skill in the selection of clothing and household fabrics. Fundamental clothing construction techniques. Selection, use, and alteration of commercial patterns.

Prerequisite: None.

HOME ECONOMICS 51b — ADVANCED CLOTHING CONSTRUCTION (3).

Continuation of Home Economics 51a with emphasis on the application of the principles of color and design to clothing and home furnishings. Alterations of patterns; making of basic pattern; advanced construction and tailoring techniques; study of clothing costs and the clothing budget.

Prerequisite: Home Economics 51a or its equivalent. Art 6a-6b recommended.

HOME ECONOMICS 52 — CLOTHING, RENOVATION, AND ALTERATION (2).

A course designed for home makers, and for vocational preparation in the merchandising and alteration fields of ready-to-wear departments.

Major problems in altering ready-to-wear garments and the renovation and re-styling of material from garments that have lost their usefulness.

Prerequisite: None. Home Economics 51a recommended.

HOME ECONOMICS 53 — HOME MANAGEMENT (2).

Housekeeping techniques. Budgeting time and money; purchase, use, and care of household equipment and furnishings; care of clothing; organization of work for efficiency and comfort; effect of children in the home. Field trips, lectures, demonstrations, and practice.

Prerequisite: None.

HOME ECONOMICS 55 — HOME NURSING (2).

A course designed to give instruction and practice in the routine care of a patient in the home; bed making; bathing the patient in bed; taking pulse and temperature; following the doctor's orders and keeping a chart; preparing trays; making simple gadgets for a patient's comfort. A study of contagious diseases and their control. Maternity care.

Prerequisite: None.

HOME ECONOMICS 57 — CHILD CARE AND TRAINING (2).

A course in prenatal care and care of the very young child. Feeding and clothing the infant and child to school age; making a layette and self-help garments for the child. The place of stories, toys, and play in child development. Making of toys at home.

HOME ECONOMICS 58—HOME CRAFTS (1 or 2)

A course designed to develop skills in crafts useful for hobbies and for home making. Instruction in major needle arts; knitting, rug making, fabric decoration, making of draperies, slip covers, etc.

Prerequisite: None.

NUTRITION 1 — ELEMENTS OF NUTRITION (3)

A course planned to meet the laboratory nutrition courses for nurses. Includes a study of the composition and function of foods, and the food requirements of the normal infant and adult, the principles of gaining and reducing diets, and laboratory work in cookery and planning and computing diets.

ART 20 — COSTUME DESIGN (2).

See Art.

ART 21 — HOME PLANNING (2).

See Art.

HYGIENE

HYGIENE 1 — MEN (2).

A general course including the facts necessary for intelligent maintenance of physical and mental health; an interpretation of life processes; a study of the principal body systems and of the hygiene and first aid associated with each.

HYGIENE 2 — WOMEN (2).

A general course in health for personal use; effect of exercise and fatigue; balanced diet; means of avoiding infections; habits contributing to physical and mental well being; essentials in first aid.

LIBRARY SCIENCE

LIBRARY SCIENCE 50a-50b — (1 or 2).

A course of training in the use of books and libraries for students who wish to learn how to use libraries with greater efficiency, and for those who are interested in librarianship as a vocation. Two or four practice periods per week.

MATHEMATICS

MATHEMATICS D — INTERMEDIATE ALGEBRA (3).

Rapid review of elementary algebra; exponents; radicals; progressions; quadratic equations; system of equations; logarithms; the binomial theorem.

Prerequisite: One year of high school algebra. This course is not open to students who have received

credit for two years of high school algebra.

MATHEMATICS 1 — COLLEGE ALGEBRA (3).

Mathematical induction; determination; permutations and combination; probability; partial fraction; higher equations; theory of equations.

Prerequisites: One and one-half years of algebra in high school, or Mathematics D.

MATHEMATICS 2 — MATHEMATICS OF FINANCE (3).

A study of graphs, logarithms, statistics, interest, annuities, life insurance, amortization, sinking funds, valuation of bonds, and depreciation.

Prerequisite: Two years of high school algebra or Mathematics D.

MATHEMATICS 3a — ANALYTIC GEOMETRY (3).

The plotting of curves, loci, geometry of the straight line, circle parabola, ellipse, hyperbola, transformation of co-ordinates; polar co-ordinates; parametric representation.

Prerequisites: Two years of high school algebra or Mathematics D; plain geometry; plane trigonometry.

MATHEMATICS 3b — DIFFERENTIAL CALCULUS (3).

Differentiation of algebraic and transcendental functions; maxima and minima problems, radius of curvature; special stress on parametric representation and polar co-ordinates.

Prerequisites: Mathematics 3a.

MATHEMATICS 4a — INTEGRAL CALCULUS (3).

The integration of algebraic and transcendental functions; the areas and volumes of plane figures in polar and Cartesian co-ordinates; physical applications of work, pressure, attraction, and center of gravity.

Prerequisites: Mathematics 3a-3b.

MATHEMATICS 4b — THE CALCULUS CONTINUED (3).

A review of space geometry; partial differentiation, multiple integrals and their applications; infinite

series.

Prerequisite: Mathematics 4a.

MATHEMATICS 10 — MATHEMATICS FOR ELEMENTARY TEACHERS (3)

Work and tests covering the operation of arithmetic; fundamental concepts; unit plan of organization of subject matter; analysis of skills and difficulties.

Prerequisite: Elementary algebra, or may be taken concurrently

MATHEMATICS 19a — VECTORS AND ALLIED TOPICS (2).

A course which includes nomographs determinants, hyperbolic functions, vector addition, vector dot and cross products, with their applications.

Should be taken concurrently with Mathematics 4a.

Prerequisite Mathematics 3b.

MATHEMATICS 19b — ELEMENTARY DIFFERENTIAL EQUATIONS (2).

A study of the differential equation of the first order and first degree, first order and higher degree, applications, total differential equation, linear differential equations, integration in series, partial differential equations of first and higher order.

Should be taken concurrently with Mathematics 4b.

Prerequisite: Mathematics 19a.

MATHEMATICS 20 — SLIDE RULE (2).

Adjustment, operation, and the theory of the slide rule; computation rules, graphical methods, interpolation, logarithms.

MATHEMATICS C — TRIGONOMETRY (3).

Trigonometric functions of any angle; logarithms; solution of triangles; trigonometric equations.

Prerequisites: One and one-half years of high school algebra and plane geometry.

MATHEMATICS G — SOLID GEOMETRY (2).

A study of points and lines in space and the properties of regular solids.

Prerequisite: Plane geometry.

MATHEMATICS 51—ELEMENTARY ALGEBRA (3).

An intensive one-semester course in elementary algebra covering fundamental operations, linear equations, factoring, graphing, exponents and radicals. This course is given for students who are deficient in high school algebra.

Prerequisite: None.

MATHEMATICS 52 — PLANE GEOMETRY (3).

An intensive one-semester course in the elements of plane geometry covering rectilinear figures, the circle, similar figures, ratio and proportion, and areas of plain figures. This course is given for students who are deficient in high school geometry.

Prerequisite: Elementary algebra.

MUSIC

MUSIC 1a-1b-1c-1d—WOMEN'S GLEE CLUB (1-1-1-1)

The study and production of choral music, especial attention being given to diction, phrasing, and intonation. The best choral literature will be studied and performed.

MUSIC 2a-2b — INSTRUMENTAL ENSEMBLE (*-1)

The study and performance of instrumental solos, duets, trios, and quartettes.

Prerequisite: Permission of instructor.

MUSIC 4a-4b — MUSICIANSHIP (2-2)

Ear training and sight singing. Simple rhythmic notation; scales, intervals, triads; melodies in major mode, emphasizing the tendency of tones individually and their significance in groups; music reading of material containing simple tonal relations and simple rhythmic designs; scales, intervals, and triads; phrasing and general principles of musical interpretation.

MUSIC 6a-6b-6c-6d — MEN'S GLEE CLUB (1-1-1-1)

The study and production of choral music, especial attention being given to diction, phrasing, and intonation.

MUSIC 8a-8b-8c-8d — COLLEGE CHOIR (1-1-1-1)

A study of the best choral literature for mixed

voices, with emphasis on tone production, enunciation, dynamics, and precision and sincerity of ensemble interpretation. Both accompanied and a cappella experience. Public appearances. Open to all college students, after preliminary examination, upon consent of the instructor.

MUSIC 9a-9b — ELEMENTARY MUSIC METHODS (3-2)

A basic course for Kindergarten-Primary and General Elementary credentials. Development of voice, basic theoretical facts, sight-singing, rhythmic, and tonal dictation.

MUSIC 10 — MUSIC APPRECIATION (2)

A course designed to broaden the student's acquaintance with good music and to develop discriminative listening. Class discussion of music heard over the radio, in recordings, in concert, and in motion pictures. Brief survey of the historical development of music with particular stress upon romantic, modern, and contemporary music. Development of the symphony orchestra and the opera are studied.

MUSIC 12a-12b — MUSIC HISTORY (3-3)

The first semester follows the development of music from ancient times through the classic period. The second semester includes the romantic and modern periods. Record illustrations and class discussion.

MUSIC 14a-14b — ELEMENTARY HARMONY (3-3)

Intervals in scale relation, chord structure, cadences, four-part harmonization of melodies by section and phrase; by tones, simple treatment of tonic, dominant, subdominant, supertonic, submediant harmonies. Rhythmic principles governing harmonization. Keyboard practice.

Prerequisite: None.

MUSIC 16a-16b — ADVANCED HARMONY (3-3)

A continuation of Music 14a-14b, including common chord modulation to near keys, chromatic harmony and suspensions.

Prerequisites: Music 14a-14b or permission of instructor.

MUSIC 17a-17b — ELEMENTARY BAND (2-2)

MUSIC 18a-18b — INTERMEDIATE PIANO (2-2)

MUSIC 19a19b — ADVANCED PIANO (2-2)

Individual work in piano, stressing the fundamental principles of correct and intelligent playing. Provision for individual development according to individual needs.

Placement in these three courses is determined by previous preparation.

MUSIC 50a-50b — ELEMENTARY ORCHESTRA (1 or 2)

A course for beginners in all instruments.

MUSIC 51a-51b—ADVANCED ORCHESTRA (1-1)

A course for students selected by instructor for advanced instruction with the concert orchestra.

MUSIC 52a-52b — ELEMENTARY BAND (1-1)

A course for beginners in all instruments excepting strings.

MUSIC 53a-53b — ADVANCED BAND (1-1)

A course for students selected by instructor for advanced instruction with the concert band.

PHILOSOPHY

PHILOSOPHY 6a-6b — INTRODUCTION TO PHILOSOPHY (3-3).

This course in philosophy is presented by types or typical world views. It attacks the fundamental problems by acquainting the student with representative thinkers and major philosophical systems, and aims to make the subject as practical as possible.

Prerequisite: None.

PHILOSOPHY 10a-10b — HISTORY OF PHILOSOPHY (3-3).

This is a course in the history of philosophy, chronologically considered, treating of the major philosophers from the pre-Socratics to the Scientific Era.

Prerequisite: None.

PHOTOGRAPHY

PHOTOGRAPHY 51 — (2 or 3)

A course designed to give the beginner a knowledge of the basic fundamentals of the photographic

process. The work begins with instruction and practical experience in picture-taking, preparation of formulas, developing, printing, and enlarging. The advanced techniques of retouching, toning, and coloring; paper negative process; infrared and color photography round out the course.

Prerequisite: None.

PHYSICAL EDUCATION

A wide range of activities adapted to the various needs, interests, and capacities of the students is offered. Two units of physical education activities are required for graduation. Not more than one unit in activities may be earned in any one semester. All regular students, under twenty five years of age, are required to participate in the physical education class for at least two periods each week.

Students majoring in Health and Physical Education or Recreation are encouraged to study carefully the course requirements in the college or university to which they expect to transfer in order that they may complete the proper lower division requirements in the junior college.

PHYSICAL EDUCATION — GENERAL ACTIVITY ($\frac{1}{2}$ - $\frac{1}{2}$).

1. Archery (Men and Women).
2. Badminton (Men and Women).
3. Bowling (Men and Women).
4. Boxing (Men).
5. Dancing (Men and Women): folk, modern, social.
6. Fencing (Men).
7. Golf (Men and Women).
8. Recreation Activities (Men): group games in touch football, volleyball, soccer, softball, basketball.
9. Swimming (Men and Women).
10. Team Sports (Women).
11. Tennis (Men and Women).
12. Tumbling (Men).
13. Weight Lifting (Men).
14. Wrestling (Men).

No general activity course may be repeated. An advanced course will be offered to the fourth semester student.

PHYSICAL EDUCATION — COMPETITIVE PROGRAM (1½-1½)

Team: For students who excel in athletic ability and wish to participate in the inter-collegiate program competing against other junior colleges within the Central California Conference. These students participating in this program are also expected to work toward demonstrating minimum ability in at least one activity in any one of the six recreational groups which is not a duplicate of their team activities. Students planning to enter this program are advised to plan their regular schedules so as to be available for a minimum of ten hours per week during the season of each competitive sport entered.

Basketball, football, baseball, tennis, and track.

PHYSICAL EDUCATION 20 — SKILL AND ANALYSIS OF TEAM SPORTS (3).

Two lecture hours and two laboratory hours per week.

A course for women in the analytic study of skills, team tactics, rules, testing methods, officiating, development of skills in softball, volleyball, basketball, hockey, speedball and soccer.

PHYSICAL EDUCATION 21—SKILLS AND ANALYSIS OF INDIVIDUAL AND DUAL SPORTS (3).

Two lecture hours and two laboratory hours per week.

A course for women in the analytic study of skills, organization, fundamentals, facilities, techniques, and tournaments; development of skills in badminton, archery, golf, bowling, tennis, and swimming.

PHYSICAL EDUCATION 22 — SKILLS AND ANALYSIS OF RHYTHMIC FORMS (2).

One lecture hour and two laboratory hours per week.

A course for women in the analytic study of fundamental and traditional steps of folk, social, tap, and modern dance; experience in movement, rhythms, and body mechanics; general elements of composition, musical form, and structure in relation to the dance form.

Prerequisite: Modern dance.

PHYSICAL EDUCATION 23—SOCIAL RECREATION (2).

One lecture hour and two laboratory hours per week.

A course for women in a practical study of the selection and organization of activities acceptable for use in home, organization, and community for any age group; analysis and practice of leadership.

POLICE TRAINING

LAW ENFORCEMENT 50 — LAW (VEHICLE CODE) (2).

A non-technical presentation of law pertaining to automobiles. In addition to the rules of the road, a study is made of the causes and responsibilities in connection with accidents. The course is based on the California Vehicle Code.

LAW ENFORCEMENT 51—CRIMINAL LAW (2).

A survey of criminal procedure from apprehension to conviction with reference to the Penal Code of California. Arrests with and without a warrant; information; functions of the grand jury; coroner's inquest; procedures at the trial.

LAW ENFORCEMENT 52 — LAW OF ARRESTS (2).

A study of the rights and duties of officers, citizens, and prisoners; serving of warrants; extradition proceedings.

LAW ENFORCEMENT 53 — CRIMINAL INVESTIGATION (4).

Three hours lecture and three hours laboratory per week.

A study of the fundamental principles and problems of an investigator. Resources and techniques of searchers; observation; surveillance and interrogation.

LAW ENFORCEMENT 54 — RULES OF EVIDENCE (2).

A study of the methods of obtaining evidence; of presenting evidence in court; elemental rules of evidence; weight and value of various types of evidence.

LAW ENFORCEMENT 55 — POLICE RECORDS AND REPORTS (3).

A study of the structure and functions of the pol-

ice record system from administration aspect; complaint records; criminal files; cross index techniques; modus operandi system; report writing; description of property; collateral police records; police statistical method and prediction of significant trends.

LAW ENFORCEMENT 56—CRIMINAL IDENTIFICATION (3).

Theory and practice in the study of fingerprints, description of persons, and modus operandi in its application to individual characteristics.

POLITICAL SCIENCE 10a-10b — GENERAL ADMINISTRATION OF JUSTICE (3-3).

See Social Science.

SOCIOLOGY 3 — JUVENILE DELINQUENCY (3).

See Social Science.

PSYCHOLOGY

PSYCHOLOGY 1a — GENERAL PSYCHOLOGY (3).

A first course in psychology covering the fundamentals of human behavior; values and problems of psychology; understanding of man in his environment, including such topics as: learning, memory, intelligence, thinking, personality, and individual differences.

Prerequisites: None.

PSYCHOLOGY 1b — GENERAL PSYCHOLOGY (3).

A second course in psychology, to be taken after 1a. A more intensive study of topics such as: physiological foundations, experimental procedures, personality conflicts, mental hygiene, and fields of psychology. Especially for students planning further professional study such as the medical arts and education.

Prerequisites: Psychology 1a with a grade of "C" or better, or with instructor's approval. It is strongly recommended that a student have previous or concurrent study in anatomy, physiology, or zoology.

PSYCHOLOGY 25 — PSYCHOLOGY OF PERSONAL ADJUSTMENT (1).

A required course for all entering freshmen. Adjustment to the school, family, and friends; study

habits and use of the library; mental health for everyday living; choosing the right vocation; techniques in getting a job; educational planning; personal records. Psychological tests will be administered and will be interpreted through individual counseling.

Prerequisite: None.

PSYCHOLOGY 27 — PSYCHOLOGY OF VOCATIONAL ADJUSTMENT (2).

The purpose of this course is to acquaint the student with occupational trends and vocational opportunities through planned study in order to provide a realistic foundation for vocational selection and planning. Vocational analysis and evaluation of self through inventories and aptitude tests. Study of job securing techniques including letters of application and personal interview. Interviews with local business men.

Prerequisite: None.

PSYCHOLOGY 51 — PRACTICAL PSYCHOLOGY (3).

A course designed to emphasize the practical application of psychology in everyday life. Investigation of the factors involved in human behavior. Personality, intelligence, learning and memory, social relations, emotional conflicts, vocational and marital adjustment are some of the things to be considered. Recommended for terminal students instead of Psych. 1a. Open to students who receive grade below "C" in Psych. 1a.

Prerequisite: None.

PSYCHOLOGY 59 — STUDENT GOVERNMENT AND LEADERSHIP (1).

A required course for members of the Executive Board of the Associated Students and all club presidents for the study of the Constitution of the Associated Students; parliamentary procedures; organization; publicity; finance; development of leadership qualities.

SCIENCE

ANATOMY 1a — HUMAN ANATOMY (4).

Three hours lecture and three hours laboratory per week.

A study of the body first as an integrated whole,

followed by a consideration of the organ systems in succession with enough histology to make the study of gross structures more meaningful. Designed to meet the requirements for prenursing courses and as a cultural course in human biology.

Prerequisite: None. High school biology and chemistry are recommended.

BACTERIOLOGY 1 — GENERAL BACTERIOLOGY (4 or 5).

Three hours lecture and three or six hours laboratory per week.

A course designed to give the student the fundamentals of bacterial life, and to develop scientific and bacteriological technique.

The lectures cover: history, morphology, biochemical activities, effects of physical and chemical agents, and an introduction to infection and disease.

The laboratory exercises deal with the morphology and the physiology of bacteria.

Prerequisite: Chemistry 1a.

BACTERIOLOGY 60 — (4).

Three hours lecture and three hours laboratory per week.

A course designed to give the prenursing student an understanding of the principles of bacteriology, including, disinfection, immunity, and the specific agents of disease.

Prerequisite: None. High school chemistry and a biological science recommended.

BIOLOGY 1a-1b — GENERAL BIOLOGY (4-4).

Three hours lecture and six hours laboratory per week.

A practical course designed to enrich the cultural background of the student as well as furnish a satisfactory biological foundation in any field requiring a general knowledge of life phenomena. An attempt is made to emphasize those biological principles which have applications in everyday experiences.

Course 1a, animal biology; 1b, plant biology.

Prerequisite: None.

BOTANY 1a-1b — GENERAL BOTANY (4-4)

Two hours lecture and six hours laboratory per

week.

An introductory study of the basic principles of plant morphology, taxonomy, ecology, physiology, heredity, and evolution.

Prerequisite: None.

BOTANY 12 — SURVEY OF BOTANY (4).

Three hours lecture and three hours laboratory per week.

A one-semester survey of the field of botany covering the structure, functions, and classifications of plants. This course is intended for agriculture students taking a terminal course and for prepharmacy students.

CHEMISTRY 1a-1b — GENERAL CHEMISTRY (5-5).

Three hours lecture and six hours laboratory per week.

A study of the fundamental theories and laws of chemistry, the applications of mathematics to chemistry, and an introduction to laboratory qualitative analysis. This is a basic course for those intending to enter the professional fields which require chemistry as a foundation course.

Prerequisite: High school chemistry or permission of the instructor.

CHEMISTRY 5 — QUANTITATIVE ANALYSIS (3).

One hour lecture, one hour recitation, six hours laboratory per week.

An introductory course in the fundamental principles of quantitative analysis with a theoretical treatment of the laws and theories which apply, and general instructions in various methods of gravimetric and volumetric analysis. For students interested in medicine, clinical work, petroleum, or chemical industries in general.

Prerequisite: Chemistry 1b with a grade of "C" or better.

CHEMISTRY 8 — ORGANIC CHEMISTRY (3).

Three hours lecture per week.

A study of the fundamental theories and laws of the chemistry of the aliphatic and aromatic carbon

compounds. Designed primarily for majors in: pre-medicine, pre-dentistry, related biological fields, and engineering.

Prerequisite: Chemistry 1a or 1b with a grade of "C" or better.

CHEMISTRY 9 — ORGANIC CHEMISTRY (3).

One hour lecture and six hours laboratory per week.

A study of the properties and reaction of the common types of carbon compounds. Designed as the laboratory for Chemistry 8.

Prerequisite: Chemistry 8: or Chemistry 8 may be taken concurrently.

CHEMISTRY 50 — CHEMISTRY FOR AGRICULTURE (3).

Three hours lecture per week.

An introduction to elementary chemistry as applied daily in agriculture, including chemicals, elements and reactions found in agriculture. Formulae of fertilizers, insecticides, etc., will be studied.

Prerequisite: None.

CHEMISTRY 53 — GENERAL CHEMISTRY (4).

Three hours lecture and three hours laboratory per week.

A introductory course in the principles, resources, and applications of general chemistry. Organic chemistry and other topics of interest to pre-nursing students are stressed.

Prerequisite: None.

CHEMISTRY 54 — ELEMENTARY CHEMISTRY (4).

Three hours lecture and three hours laboratory per week.

An introduction to the theories, laws, and concepts of chemistry. Practical application of chemistry in daily living will be stressed. The course is primarily for those desiring an elementary course in chemistry before taking Chemistry 1a. Also suitable for students who, not having high school chemistry, desire a knowledge of some practical aspects of chemistry.

Prerequisite: None.

GEOLOGY 1a — PHYSICAL GEOLOGY (3).

Three hours lecture per week.

A consideration of the composition and structure of the earth and internal and external processes which modify the crust and surface. Dynamical and structural geology. Lectures, recitations, laboratory, and field trips.

Prerequisite: None. Chemistry recommended.

GEOLOGY 1b — HISTORICAL GEOLOGY (3).

Three hours lecture per week.

A study of the geologic history of the earth, as shown by the changing patterns of land and sea and by the succession of fauna and flora. Conferences, lectures, and occasional field trips.

Prerequisite: Geology 1a. Biology recommended.

METEOROLOGY 1—THE PHYSICAL BASIS OF WEATHER (3).

Three hours lecture per week.

A study of the atmospheric temperature, pressure, humidity, stability; condensation of moisture, clouds, fog, precipitation; air movements, cyclones; air masses and frontal analysis; weather maps and sequences; meteorological instruments.

Prerequisite: None.

PALEONTOLOGY 1—ELEMENTARY PALEONTOLOGY (3).

Three hours lecture per week.

A discussion of the principles on which the history of life is based. Illustrations of development taken from certain groups of animals for which the fossil record is essentially complete. Occasional field trips.

Prerequisite: None. Biology 1a or Geology 1a recommended.

PHYSICS 1a-1b — GENERAL PHYSICS (3-3).

Three hours lecture and three hours laboratory per week.

Fundamental treatment of the general principles of physics, including mechanics, heat, hydraulics, hydrostatics, and properties of matter.

Prerequisite: None. High school physics or high school chemistry recommended.

PHYSICS 1c — GENERAL PHYSICS (3).

Three hours lecture and three hours laboratory per week.

A study of the fundamentals of electricity and magnetism.

Prerequisite: Physics 1a-1b.

PHYSICS 1d - GENERAL PHYSICS (3).

Three hours lecture and three hours laboratory per week.

A course covering the fundamentals of wave motion, sound, and light.

Prerequisite: Physics 1c.

PHYSICS 2a-2b — GENERAL PHYSICS (3-3).

Three hours lecture per week.

A survey course in physics covering properties of matter, mechanics, heat, sound, light, electricity, and magnetism. Required for premedical students. May be taken by other students as an elective to satisfy science requirements.

Prerequisite: Trigonometry or Math. C.

PHYSICS 3a-3b — GENERAL PHYSICS LABORATORY (1-1).

One three-hour laboratory each week in which the students may work out experiments dealing with the phases of physics covered in Physics 2a-2b. Should be taken concurrently with Physics 2a-2b.

PHYSICS 20 — RADIO COMMUNICATION (3).

An elementary course covering the fundamentals of alternating and direct current electricity, vacuum tubes, oscillators and amplifiers, design of radio broadcast and receiving equipment. Qualified students will be allowed to operate a short wave transmitter.

Prerequisite: None.

PHYSICS 23a-23b—ELEMENTARY RADIO LABORATORY (1-1) or (2-2)

Three or six hours laboratory per week.

Laboratory time to be devoted to practice in International Telegraph Code, construction of radio equipment, or simple radio tests and measurements.

Prerequisite: Physics 20 or permission of instructor.

PHYSICS 50a—ELEMENTARY RADIO PHYSICS (3).

An elementary course in the fundamentals of radio

receiving and transmitting equipment intended for those students who have an avocational interest in radio and electronics.

PHYSICS 50b—ELEMENTARY RADIO PHYSICS (1 or 2) .

A laboratory course in which students work on their own radio projects; practice of the International Morse Code; construction for radio equipment; radio repair work.

PHYSICS 53a-53b — ELEMENTARY PHYSICS (3-3).

Three hours lecture and three hours laboratory per week.

A survey of physics with application to industry and modern life.

Prerequisite: None.

PHYSIOLOGY 1a — INTRODUCTORY PHYSIOLOGY (3).

Three hours lecture per week.

A survey of the systems of the body and their functions. Special emphasis is placed upon the functional inter-relationships of the neuro-muscular, circulatory, respiratory, digestive, and endocrine systems. This course will satisfy the requirements of pre-nursing and physical education majors, and of a general cultural course in life science.

Prerequisite: None. Anatomy 1a is recommended.

PHYSIOLOGY 1c — INTRODUCTORY PHYSIOLOGY LABORATORY (1 or 2).

Three or six hours laboratory per week.

A course covering experimental phases of the lecture material. The experiments cover nerve-muscle preparation, and recordings, sensory apparatus, blood pressures and clinical blood examinations, respiration, chemistry of food, urinalysis, etc.

Prerequisite: Physiology 1a, or Physiology 1a may be taken concurrently.

Note: Students should check the requirements of the college to which they intend to transfer before signing up for less than 2 units of laboratory.

ZOOLOGY 1a-1b — GENERAL ZOOLOGY (4-4).

Two hours lecture and six hours laboratory per

week.

An introductory study of the basic principles of animal morphology, taxonomy, ecology, physiology, embryology, heredity, and evolution. This course satisfies the zoology requirements of pre-medicine, dentistry, agriculture, etc.

Prerequisite: None.

ZOOLOGY 10 — GENERAL ZOOLOGY (3).

Three hours lecture per week.

An introductory study of the basic principles of biology as illustrated on both plants and animals. Open to those students who have not had Botany 1a-1b, Biology 1a-1b, Zoology 1a-1b, Anatomy 1a or Physiology 1a-1c.

Prerequisite: None.

SOCIAL SCIENCE

POLITICAL SCIENCE 1a-1b — COMPARATIVE GOVERNMENTS (3-3).

An introduction to the study of the various major governments of the world, elementary principles of political science, and the forces behind political processes.

POLITICAL SCIENCE 10a-10b—GENERAL ADMINISTRATION OF JUSTICE (3-3).

A study of the purpose, function, and brief history of the agencies dealing with the administration of justice. Discussion of crime, the criminal, traffic, and vice as social and police problems. A survey of criminal laws and procedure; function of the courts; prosecuting and defense attorneys; correctional and penal institutions; probation and parole; American and foreign police systems.

ECONOMICS 1a-1b — PRINCIPLES OF ECONOMICS (3-3).

An introduction to the fundamental principles of economics. This is a brief study of the problems involving the production, exchange, and use of wealth designed to give the student an approach to the economic issues of the present, and an understanding of modern social problems.

GEOGRAPHY 1a-1b — GENERAL GEOGRAPHY (3-3).

A study of the interrelation between man and his natural environment with emphasis on discovering the potentialities of various regions for human habitation. The first semester emphasizes the elements of geography such as climate, land forms, soils, map interpretation, etc. The second semester is concerned with the regional distribution of environmental features in patterns on the earth's surface.

GEOGRAPHY 5a-5b—ECONOMIC GEOGRAPHY (3-3).

A study of man's use of the natural resources of the earth. The first semester is concerned specifically with man's agricultural, fishing and hunting occupation. The second semester investigates man's mining, manufacturing, trade and transportation, recreational, and residential occupation.

HISTORY 1a-1b — AMERICAN HISTORY AND INSTITUTIONS (2-2).

A survey of the development of American economic, political, and social institutions.

This course fulfills all state requirements in American history and government.

HISTORY 4a-4b — HISTORY OF WESTERN EUROPE (3-3).

The evolution of western civilization from antiquity to the contemporary scene. The course presents a general perspective through a consideration of the development of religious, political, intellectual, and economic institutions. The aim is to lay a foundation for the understanding of contemporary problems.

Prerequisite for History 4a: None

History 4a is a prerequisite to 4b for freshmen.

HISTORY 8a-8b—HISTORY OF THE AMERICAS (3-3).

A general survey of the history of North, Central, and South America. Emphasis the first semester is on the European inheritance, colonial development, and international rivalry. The second semester is devoted to the wars of independence, the development of the American nations, and their interrelations during the nineteenth and twentieth centuries.

SOCIOLOGY 1a-1b — INTRODUCTION TO SOCIOLOGY (3-3).

An introductory course in the development of human institutions, the organization of society, and the problems arising from group relationships in a changing society.

SOCIOLOGY 3 — JUVENILE DELINQUENCY (3).

Character, extent, and causes of juvenile delinquency; social diagnosis and case study; case work approach; modern methods of treatment and prevention; police techniques employed in the repression of delinquency; organization and consolidation of community resources in preventing delinquency.

TRADES AND INDUSTRIES

a. Building Trades

BUILDING TRADES 55a-55b — ELEMENTARY CARPENTRY (10-10).

An introductory course in the care and use of tools, blueprint reading, material estimating, bearing capacities of different types of soil, laying out buildings, foundation form, construction, framing. The student will be required to apply theory and techniques in his practice work on a project.

BUILDING TRADES 56a-56b — ADVANCED CARPENTRY (10-10).

A continuation of Building Trades 55a-55b. The course covers roof framing, exterior trim, interior trim, staircase construction, and cabinet work.

TRADE DRAWING 51a-51b See Engineering.

b. Mechanics

MECHANICS 60a-60b — ELEMENTARY WELDING (3-3).

Through lecture, demonstration and practice, the student acquires in this course a knowledge of metals and types of construction essential to metalurgy, welding, and welding procedures, and develops ability to test welds and recognize defects.

MECHANICS 61a-61b — ADVANCED WELDING (3-3).

Through projects the student develops the ability

to recognize different metals and to select the correct welding procedure for each metal; to set up and operate all kinds of welding equipment; to secure perfect fusion and penetration; to test welds and to recognize defects. The study of the theory of metallurgy and welding procedures is continued.

MECHANICS 62a-62b — ELEMENTARY SHEET METAL (3-3).

An introductory course in pattern drawing and layout work. Elementary construction of units required in heating and ventilating.

MECHANICS 63a- 63b — ADVANCED SHEET METAL (3-3).

A study of the theory and practice in sheet metal pattern development; forming rectangular, circular and conical objects; use of all bench and floor machines; rasing and stretching metals; fabrication of jobs; methods used in handling alloyed copper, aluminum and stainless steel sheets; planning and estimating.

This work is essential in the two-year vocational course preparing for direct entrance into industry.

Prerequisite: Mechanics 52a-52b.

MECHANICS 64a-64b — ELEMENTARY MECHANICS (3-3).

This course includes the simple operations performed by the general mechanic — bench work, methods of laying out or drawing on metal, simple cylinder turning and screw cutting, drilling, planing, and taper work.

MECHANICS 65a-65b — ADVANCED MECHANICS (3-3).

This course develops skill in students who have already had basic training in machine tool operation, pattern making layout, molding and casting.

Prerequisite. Mechanics 54a-54b or two years of high school machine shop.