Acknowledgements

Catalog designed by students in the Technical Graphics Program at Glendale Community College under the direction of Samuel S. Anslyn, Associate Professor of Technical Graphics.

Eiji Fukumoto, Illustrations
Jorge Flores, Layout
Jon Truelson, Special Camera Effects
Photo Sources, Robert Thomsen, Professor of Art
Glendale Community College
Founded 1927
A Public Community College offering instruction in the areas of General Education, Pre-Professional Training, Occupational, and Technical Education

Catalog 1974-1975

1500 N. VERDUGO ROAD
GLENDALE, CALIFORNIA 91208
(213) 240-1000
Glendale Community College

Glendale Community College was founded in 1927 to serve the needs of the people in the Glendale Union High School District which included La Crescenta, Glendale City, and Tujunga School Districts. The school was founded as Glendale Junior College and from 1927 to 1929 conducted classes in the buildings of Glendale Union High School at Broadway and Verdugo in the City of Glendale. In 1929 the junior college moved to the Harvard School plant of the Glendale Union High School District where it remained until 1937. In this year a new plant, part of the present one, was completed and occupied. The year before, in 1936, the Glendale Junior College District was dissolved as such and became a part of the new Glendale Unified School District. The name of the school was changed to Glendale College in 1944. On July 1, 1970 Glendale College became a part of the Glendale Junior College District. On April 20, 1971 the Board of Education adopted a resolution changing the District name to Glendale Community College District.

In 1936 twenty-five acres were acquired for the present site of the College. The Campus now consists of 119 acres and thirteen permanent buildings. It is beautifully located on the slopes of the San Rafael Mountains overlooking the valleys in the Glendale area. An enlarged Women's Physical Education Building and a new Library were completed in the fall of 1967.

Glendale Community College has a day enrollment of about 3800 and an extended day enrollment of over 2100. In addition the College administers an adult education program which contacts about 7000 students each year.
Board of Education

Sheldon S. Baker
Warren H. Hart
John C. Hedlund
Carl Raggio
John T. Rohowits

Superintendent

Burtis E. Taylor

Glendale Community College
Administration

John A. Grande: President — Assistant Superintendent
Ivan L. Jones: Administrative Dean — Instruction
John A. Davitt: Administrative Dean — Student Personnel
David C. Leek: Administrative Dean — Continuing Education
Harry L. Beck: Dean — Admissions and Records
Harold B. Cochrane: Dean — Guidance and Counseling
Thomas S. Ryan: Dean — Occupational Education
J. Walter Smith: Dean — Student Activities
Charles C. Wheelock: Dean — Adult Education, Community Services and Summer Session
Mrs. Barbara N. McGuire: Adult Education, Coordinator
Parent Education and Home Arts
# Table of Contents

Administration ........................................ 5
College Calendar ........................................... 7
General Information ......................................... 12
Educational Philosophy ................................. 12
Accreditation, Advisory Committees .................. 14
Summer Term .................................................. 16
Transfer to Four-year Colleges and Universities .... 19
Veteran Education .......................................... 20
Student Services ........................................... 21
Employment .................................................. 21
Scholarships ............................................... 22
Student Government and Activities .................. 28
Orientation of New Students ............................ 29
Admission, Counseling and Registration ............... 31
Admission and Residence Requirements ............... 31
Guidance and Counseling ................................ 34
Eligibility for Courses .................................... 35
Registration .................................................... 36
Scholastic Information and Regulations ............... 38
Unit Limitations, Scholarship Standards .............. 38
Grades, Grade Points, and Grade Point Average .... 39
Attendance and Punctuality ............................... 43
Withdrawal from Class or College ................. 43
Final Examinations ......................................... 44
Graduation Requirements ............................... 45
Curriculums ................................................... 47
Certificate Programs ...................................... 48
Transfer Programs ......................................... 61
Course Descriptions ...................................... 90
General Education Requirements .................... 189
Faculty ........................................................ 220
Index .......................................................... 236
College Calendar 1974-1975

1974

March 1  Last day for International Students to complete admission requirements for Semester I.
May 24  PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m.*
May 27  Legal Holiday (Memorial Day)
June 8   PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m.*
June 10  Final examinations begin for Semester II.
June 14  PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m.*
June 18-20 Summer Session Registration
June 21  End of Semester II.
June 24  Summer Session Begins
July 4   Legal Holiday (Independence Day)
July 5   PRE-REGISTRATION EXAMINATIONS, 1:00 p.m.-4:00 p.m.*
July 26  PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m.*
August 2 Summer Session Ends (six week)
August 16 Summer Session Ends (nine week)
August 19-Sept. 11 REGISTRATION—SEMESTER I
     August 26  PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m.*
September 2 Legal Holiday (Labor Day)
September 9 Legal Holiday (Admission Day)
September 10 PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m.*
September 13 ADMISSION APPLICATIONS MUST BE ON FILE IN THE OFFICE OF ADMISSIONS AND RECORDS FOR SEMESTER I.
September 16 Class Instruction begins for Semester I.
September 16-19 Late Registration
September 19 Last day to add classes without special permission.
  October 1 Last day for International Students to complete admission requirements for Semester II.
  October 4 Last day to add classes.
  October 25 Last day to drop first quarter classes without possible penalty.
November 11 Legal Holiday (Veterans' Day)
November 12-14 Registration for second quarter classes.
November 15 Last day of first quarter classes and Mid-Semester Grade Deficiency Report due.
November 18 Second quarter classes begin.
November 28-29 Thanksgiving Vacation
December 6  Last day to drop a semester class without possible penalty (see Catalog statement on Withdrawal from Class or College). Last day students may apply to take a course on a Credit-No Credit basis.

Dec. 23-Jan. 3  Christmas Vacation

December 26  PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m. *
*All Pre-registration Examinations will be held in the Auditorium Building unless otherwise noted.

1975

January 1  Legal Holiday

January 6-29  REGISTRATION—SEMESTER II

January 10  Last day to drop second quarter classes without possible penalty. PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m. *

January 17  Last day of Class Instruction for Semester I.
Last day to withdraw from semester classes.

Jan. 20-31  Final Examinations for Semester I.

January 27  PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m. *

January 28  ADMISSION APPLICATIONS MUST BE ON FILE IN THE OFFICE OF ADMISSIONS AND RECORDS FOR SEMESTER II.

January 31  End of Semester I
End of second quarter classes.

February 3  Class Instruction begins for Semester II.

February 3-6  Late Registration

February 6  Last day to add classes.

February 12  Legal Holiday (Lincoln's Birthday)

February 17  Legal Holiday (Washington's Birthday)

February 21  Last date to add classes without special permission.

March 3  Last day for International Students to complete admission requirements for Semester I.

March 14  Last day to drop first quarter classes without possible penalty.

March 24-28  Spring Vacation

April 7-10  Registration for second quarter classes.

April 11  Last day of Class Instruction for first quarter classes and Mid-Semester Grade Deficiency Report due.

April 14  Begin second quarter classes.

April 25  Last day to drop a semester class without possible penalty (see Catalog statement on Withdrawal from Class or College). Last day students may apply to take a course on a Credit-No Credit basis.

May 2  LAST DAY TO PETITION FOR GRADUATION.

May 23  PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m. *
Last day to drop second quarter classes without possible penalty.
May 30  Legal Holiday (Memorial Day)
June 6   Last day of Class Instruction for Semester II.
         Last day to withdraw from Semester classes.
June 7   PRE-REGISTRATION EXAMINATIONS. 8:30 a.m.-11:30 a.m.*
June 9   Final Examinations begin for Semester II.
June 13  PRE-REGISTRATION EXAMINATIONS. 8:30 a.m.-11:30 a.m.*
June 15  Baccalaureate and Commencement Exercises.
June 20  End of Semester II.
         End of second quarter classes.
June 23  Summer Session begins.
July 3   PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m.
July 25  PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m.*
August 1 Summer Session Ends

* All Pre-registration Examinations will be held in the Auditorium Building unless otherwise noted.
General Information

Educational Philosophy
Glendale Community College, as a public community college, is concerned with its students' growth as individuals and as responsible citizens in a democratic society. Its students and faculty share an unremitting concern for identifying their educational goals and for selecting and implementing experiences which will consummate those goals. Together they explore literature, the arts, scientific learning and technology, philosophy, history, and the sociological patterns of mankind with a view to evolving values, appreciations, and life styles which are appropriate to today's world. Students and faculty determine cooperatively the tools of learning, skills, and knowledge they require for further learning, enjoyment, self-governance, or economic activity and seek their acquisition through many media: lectures, books, discussions, library research, experimentation, programmed materials, and various audio-visual aids. This philosophy is basic to the development of the total Glendale Community College program.

Specific Objectives
The educational offerings of Glendale Community College, including the Continuing Education Division, intended to fulfill the stated philosophy, may be grouped into ten categories which are not to be considered mutually exclusive:

Guidance and Counseling. A guidance and counseling program assists students in becoming integrated, self-reliant citizens, personally, socially, and vocationally. To this end counselors encourage students to make thoughtful, independent decisions in achieving their educational and vocational objectives, including consideration for transfer, the Associate in Arts Degree, Certificate Programs, and specialized training.

Education beyond the high school level for vocational competence. Programs of varying lengths provide training in a number of occupational fields in business and industry. Courses offered in these programs serve three groups of people: those training for entry-level positions, those preparing for advancement, and those seeking retraining when old job requirements are replaced by new ones or when updated skills are required to re-enter the employment market. The College recommends for these students a balance of technical and general education.

Education for meeting the lower division requirements of a university or a four-year college in a student's particular field. The College offers many courses which are equivalent to those available in the freshman and sophomore years at the University of California, the California State University and Colleges, and other colleges and universities in the United States. A student with a satisfactory high school and community college record will receive full credit for all college and university type work completed in Glendale Community College provided he has met the specific requirements of the college or university to which he transfers.

Remedial education. A student with specific learning problems or with grade or subject deficiencies in his high school record has an opportunity to make up such deficiencies and to enter upon a program leading to an A.A. degree and, if desired, to upper division standing at a four-year institution.
Refresher education. Any member of the community finding it necessary to review certain academic studies will have the opportunity to refresh as well as to update his knowledge in any of the classes offered at Glendale Community College.

Continuing Education. Persons unable to attend regular day classes can enroll in Extended Day (primarily late afternoon or evening) college credit courses leading to the Associate in Arts Degree and Certificates of Completion in a variety of vocational fields. General cultural courses aim at meeting the needs of those who desire personal improvement or satisfaction of intellectual curiosity. A variety of non-credit classes, short-term classes, and lecture series designed to meet the interests and needs of adults in the community, are offered both during the day and in the evening under the Adult Education Program.

General education for all members of the community. The College offers wide and varied curriculums designed to promote the following objectives:

a. Development in such skills as reading, writing, speaking, listening, computing, and organizing information,
b. Knowledge of the cultural heritage as the accumulated record of the wisdom of mankind,
c. Training in critical thinking as exemplified in drawing sound conclusions from premises, making relevant judgments, and discriminating among values,
d. Appreciation for aesthetic expression through learning about the creative arts,
e. Foundation in knowledge, attitudes, and skills necessary for vocational success,
f. Cultivation of habits which are essential to physical and emotional well-being,
g. Growth in the understanding of values, critically interpreted, as a basis for personal identity and integrity,
h. Appreciation for excellence and creativity as major values,
i. Additional preparation for family and citizenship responsibilities,
j. Development of an awareness of the influence of such problems as population growth, pollution, and drug abuse on the quality of life,
k. Development of skills and appreciation for athletic and recreational activities.

Community Service. Students and faculty cooperate to present programs of value to members of the community.

The program is structured to accomplish the following:

a. To encourage community involvement as a total college effort,
b. Foster a coordinated attack on community problems by all community elements,
c. Stimulate discussion and interchange among community service practitioners,
d. Work closely with existing organizations committed to community education and services.

Education for Leisure-time Activities. The College encourages students to develop special skills and appreciations for the creative use of leisure time.
Preparation for the future. The College urges students to become more sensitive to the present world crises created by the proliferation of people and by the increasing demands of peoples and nations upon environmental resources. Students learn to approach these crises through the combined methods of the humanities, social and natural sciences, and co-curricular programs.

Accreditation

Glendale Community College is fully accredited by the Western Association of Schools and Colleges, and approved under the regulations of the California State Department of Education and the California Community Colleges.

Advisory Committees

The Advisory Committee procedure is widely used as a method of bringing members of the College and community into a cooperative working situation so that the offerings of the College will meet needs of the community as seen by people charged with specific community responsibilities.

Air Force ROTC

Through arrangements with the University of Southern California two-, three-, and four-year Air Force Reserve Officers Training Corps (AFROTC) programs are available to all qualified students at Glendale Community College. Academic units earned in this program are counted as elective credits toward graduation. Successful completion of the AFROTC program leads to a commission as a Second Lieutenant in the Air Force Reserve. Two-, three-, and four-year scholarships are available to qualified students on a competitive basis. Four-year scholarships must be applied for before December 31 in the year prior to entering college. All scholarship recipients receive full tuition, required fees and books, and $100 a month. All qualified male students are provided 36-½ hours of flying training during their final year in the program. For additional information contact the Department of Aerospace Studies (AFROTC) at the University of Southern California, Los Angeles, California 90007, telephone (213) 746-2670 or 2671.

Continuing Education

The Continuing Education services of Glendale Community College include two programs primarily designed for adults in the community: Extended Day and Adult Education. Late afternoon and evening Extended Day college credit classes are provided by the Extended Day Division of Glendale Community College. Many of these courses parallel day courses in prerequisites, content, time devoted to preparation of assignments, and examinations. In addition there are programs in such areas as police science, supervision, and real estate. The regular facilities of the College, including the library, bookstore, auditorium, laboratories, and shops, are available to Extended Day students. Attendance, registration and withdrawal rules, probation and dismissal regulations, scholarship standards, and requirements for graduation with the Associate in Arts Degree are the same as for the day college.

The teaching staff is made up of persons highly qualified to instruct these classes. Many of the Extended Day faculty also teach on the regular day staff of Glendale Community College as well as other colleges and the Glendale Unified School District schools. Business, professional, and industrial persons of the community who have obtained proper teaching credentials also give the benefit of their knowledge and skills to the students.
Specialized guidance and counseling, in addition to advisement through instructional contacts in classes, are available through the Guidance and Counseling Office on certain evenings. Counseling appointments may be arranged by telephone, 240-1000, extension 294.

Any adult who complies with established registration procedures may enroll in Extended Day classes. Placement Examinations are required for enrollment in certain courses in English, social sciences, and speech. Pre-registration Examinations are given by the College in April, May, June, July, August, September, December, and January. Prior to the opening of each semester these will be given in the evening on dates to be announced. An adult who is not a high school graduate may petition for transfer of college credits to fulfill high school graduation requirements.

No tuition is charged at Glendale Community College for students whose legal residence is in California; however, students pay for books and personal supplies. A non-resident tuition fee is charged students whose legal residence is outside California. A tuition fee is paid by adults taking non-credit courses not exempted by state regulations.

A Separate Program of Non-Credit Adult Education Courses

A Separate Program of Non-credit Adult Education Courses also provides educational opportunities for those seeking personal and occupational improvements. Adult non-credit courses include business and distributive education, clothing, pre-school parent education, English, naturalization, basic education, history, government, Spanish, German, biology, mathematics, music, parent education, and physical science. Other courses may be developed to meet the special needs of those desiring general interest studies. Classes are scheduled at various locations throughout the school district.

Included in its program is the opportunity to earn a high school diploma. The minimum requirements for a high school diploma from the Glendale Unified School District (grades 9-12) are as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English (9, 10, 11)</td>
<td>(30 sem. hrs.) 3 cr.</td>
</tr>
<tr>
<td>Mathematics (9 or higher)</td>
<td>(10 sem. hrs.) 1 cr.</td>
</tr>
<tr>
<td>World History (Modern)</td>
<td>(10 sem. hrs.) 1 cr.</td>
</tr>
<tr>
<td>Lab. Science (10 or higher)</td>
<td>(10 sem. hrs.) 1 cr.</td>
</tr>
<tr>
<td>American History (11)</td>
<td>(10 sem. hrs.) 1 cr.</td>
</tr>
<tr>
<td>American Government (12)</td>
<td>(5 sem. hrs.) ½ cr.</td>
</tr>
<tr>
<td>Major sequence (other than English and History)</td>
<td>(35 sem. hrs.) 3½ cr.</td>
</tr>
<tr>
<td>Elective (including First Aid and Driver Education)</td>
<td>(50 sem. hrs.) 5 cr.</td>
</tr>
<tr>
<td>TOTAL</td>
<td>(160 sem. hrs.) 16 cr.</td>
</tr>
</tbody>
</table>

A minimum of 1½ credits (15 sem. hrs.) must be completed in residence, at least ½ credit (5 sem. hrs.) of which shall be completed during the semester in which the diploma is issued. Courses completed in the high schools of Glendale Unified School District and courses completed at Glendale Community College may be counted as courses completed in residence.

Further Sources of High School Credits

(1) High school credits, applicable toward a diploma of high school graduation, may be earned by completing courses offered in the Glendale Adult Education program. High school elective credits may be earned by completing courses offered by the Adult Education Department of the
Glendale Community College District; however, students who desire such credit should consult with an evening adult counselor to be sure that such credits will satisfy graduation requirements and must make this fact known to the instructor at the time of enrollment. Where there is no designation of credit allowance, credit may be earned at the rate of ½ credit (5 sem. hrs.) for a class that meets once a week, or 1 credit (10 sem. hrs.) for a class that meets twice per week.

(2) Credits toward a diploma of high school graduation may be earned in other accredited secondary schools and transferred to the Glendale Adult Education Division. No credit will be allowed for correspondence or extension courses where the examinations have not been monitored or proctored by acceptable school officials or teachers.

(3) Credits may be granted for work achievement having educational value provided the individual has been employed for a year or longer by the same employer in an activity which could be considered equivalent to, or parallel to, some high school subject; and original letters from the employer are submitted verifying the dates and length of employment, detailing the nature of the work performed, and rating the quality of the work completed. Not more than four credits (40 sem. hrs.) of work achievement credit may be counted toward high school graduation.

(4) Credits may be granted for regular training courses completed at a military base during a term of military service, based on the recommendations of the American Council on Education, and for approved courses completed with the United States Armed Forces Institute.

(5) Credits earned at Glendale Community College or at any other accredited college may be converted into high school credits by petition at the rate of three college units for one high school credit (10 sem. hrs.).

(6) Credits may be granted according to the results of the General Education Development Tests (G.E.D.) taken by those who qualify. See special statement below. Neither college nor high school courses that have a content the same as, or are of a lower level than, courses already taken and passed in the same subject area may be taken for high school credit. If there is any question regarding the acceptability of a course, the student is to confer with a counselor or the Dean of Adult Education.

High School credits may not be earned through repetition of a subject for which credit has been granted previously.

G.E.D. Testing

Adults, 19 years of age or older, may register for the General Educational Development test in the Adult Education Office at Glendale High School. The G.E.D. Test is designed to measure the equivalence of educational achievement in a person and favorable results reduce considerably the number of courses required for a high school diploma. The test is given by appointment after registration has been completed at the Adult Education Office, Room B-117, Glendale High School, from 6 p.m. to 9 p.m. Monday through Thursday. Further information may be obtained by calling 242-0318 or 240-1000, ext. 261.

Summer Term

The summer term will begin June 24, 1974 and end August 2, 1974. Students enrolling for work may complete four to six units of college credit during the six weeks. Courses will be offered in all fields in which there is sufficient demand. Summer term circulars may be requested by telephone. (240-1000)
Handicapped Students

Students who have an occupational goal as their program objective but who have some health impairment which interferes with their scholastic attainment are eligible for assistance through the “enabler” for handicapped students, a faculty coordinator-counselor. Such eligible students include those who, because of being hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, crippled, otherwise health impaired, or mentally retarded, cannot succeed in a regular vocational or consumer and homemaking education program without special assistance.

The kind of assistance that may be provided an eligible student is indicated by his individual need. Limited provision can be made for tutors, attendants, readers, interpreters, and notetakers; also for books in Braille, large print, or converted to audio tape.

The “enabler” for handicapped students also serves as a liaison with the State of California Department of Rehabilitation. The Department offers various services to assist handicapped to become employable. Included are vocational counseling, training assistance with payment for books, supplies, tuition, fees, etc.; and aid in obtaining employment. In some circumstances, students may also receive assistance with medical needs, transportation, and incidental expenses.

An initial appointment at the Department can be made for a student by the faculty “enabler,” or the student may communicate directly to the Department of Rehabilitation, 3452 E. Foothill Blvd., Pasadena, California 91107. (Telephone 793-0651).

Información En Español

El Colegio de la Comunidad de Glendale es una institución pública de enseñanza post-secundaria que ofrece varios tipos de cursos a los ciudadanos de la comunidad: los dos primeros años de universidad, certificados ocupacionales en ciertas materias, cursos para obtener un diploma de A.A., y cursos para completar los requerimientos para un diploma de high school. También ofrece cursos a travez del Departamento de Educación Adulta en varios lugares de la comunidad, tales como Educación para los Padres, Inglés Como Segunda Lengua y muchos otros cursos de interés general.

Para ser admitidos los estudiantes deben de vivir dentro del área del Colegio y desear continuar su educación. La aplicación necesaria se puede hacer en las oficinas administrativas del Colegio de 8 a.m. a las 9 p.m. No hay que pagar cuota alguna con la excepción de libros y seguro de accidente, este último de solo $3.00 semestrales. Con la excepción de las clases de Español, todas las clases son en Inglés; consecuentemente si el Inglés del estudiante no esta a cierto nivel, clases para aprender Inglés deben de ser elegidas al principio de los estudios.

El Colegio participa en varios programas de ayuda financiera para los estudiantes que necesiten esa ayuda para continuar sus estudios. En todo caso, aplicaciones para esos programas se deben de hacer una vez que se haya registrado en el Colegio. Becas, préstamos, trabajo-estudios y otras formas de ayuda serán combinadas para ayudar a aquellos que demuestren necesidad economica y capacidad para estudios escolares.

El Colegio también ofrece ayuda en varios areas tales como: educación auto-programada, cursos cortos para refrescar conocimientos de secretaría, ayuda individual a travez de tutors, consejo educacional y personal en Español, consejo
International Students

Glendale Community College welcomes students from countries all over the world who desire to study in the United States. At any one time there are approximately 250 International Students in attendance at Glendale Community College representing approximately 40 foreign countries. International Students who desire to enter Glendale Community College may receive application materials from the Office of Admissions and Records. In order to be admitted to Glendale Community College, International Students must submit copies of all records of previous schools translated officially into English, submit results of the TOEFL test, obtain a United States citizen who will act as the student's sponsor, and complete certain health requirements. In addition, all International Students seeking admission must have on deposit one semester's tuition. They should check carefully the deadline dates as published in the College Catalog. It should be noted that all requirements must be completed before a decision is made as to acceptance. Those students not accepted will receive a refund of their tuition deposit. Selection of International Students is based upon previous school records, TOEFL test scores, and the desire to have as many nationalities represented in the student body as possible. Special academic programs for International Students are available and a counselor with responsibility for International Students is also available.

Library

The Glendale Community College Library is housed in a modern, air-conditioned building near the center of the Campus. It is planned to meet the curricular needs of students and to provide attractive and functional facilities.

Its collection includes more than 40,000 volumes as well as journals on microfilm and over 400 current periodical titles.

Students have direct access to the book collection located on both floors in three major reading rooms with many individual study stations. An outdoor reading patio provides an informal study area with a scenic view of the mountains and valley in the distance.

On the main floor, in addition to part of the general circulating collection, are the card catalogs, conference rooms, a map collection, a typing room with typewriters, a photo-duplicator, microfilm, and microfiche readers. Preparation areas for audio-visual services and for books are in the back of the building.

On the second floor is another part of the general circulating collection: the reference collection, oversized book collection, reserve collection, periodicals collection, pamphlet collection, and over 30 listening booths equipped with stereophonic earphones.
The Library Multi-media Center consists of a central audio system and 32 student carrels where, by use of earphones, students may listen to audio recordings on tape and phonorecords. The entire system is capable of stereophonic reproduction.

The system can be used in various ways:
1. As many as 32 students can listen to their choices of any number of programs,
2. As many as 32 students can listen to one phonorecording at the same time,
3. Eight student stations are designed so students in those stations can individually control their own listening for purposes of repetition and drill while students at the other 24 stations may listen to any of these student controlled programs,
4. Six student stations have phonorecord player installations so students can individually control and listen to phonorecords,
5. All 32 stations are equipped with small visual projection screens where film strip and slide projectors can be used for viewing related to the audio programs,
6. Several hundred programs are currently available on tape for listening and are classified, catalogued, and annotated in book catalogs to facilitate the problems of location and selection of needed material.

A recent addition to the Library Multi-media Center is a wireless audio cassette system. Students may check out headsets at the Center that contain radio receivers. These receivers are tuned to a transmitter that will play up to six audio recordings simultaneously. Loop antennas are installed in three reading areas where students may sit at tables or carrels and listen to these programs.

Through the use of this Library Multi-media Center the student has access to the ideas of the world’s greatest teachers, authorities, experts and entertainers and to some of the best music ever recorded.

Students are invited to visit the Library and to acquaint themselves with its many resources and services. Professional librarians are on duty for consultation regarding location and use of learning materials and for help in many other ways.

Library hours are from 7:30 a.m. to 10:00 p.m., Mondays through Thursdays, from 7:30 a.m. to 5:00 p.m. on Fridays, from 12:30 p.m. to 4:30 p.m. on Saturdays, and from 1:00 p.m. to 5:00 p.m. on Sundays.

A student may take a program at Glendale Community College which will qualify him for junior standing in most of the four-year colleges and universities of the United States. The requirements of colleges and universities vary so greatly that it is not possible to prescribe a program of work which will apply to all of them.* Two procedures are recommended:

1. A student should consult the catalog of the college or university to which he intends to transfer. He should choose his courses at Glendale Community College in accordance with the lower division (Freshman and Sophomore) requirements of the college or university of his choice as outlined in its catalog. See General Education Requirements for graduation from colleges and universities in this Catalog page

*See page this catalog.
2. In addition, it is advisable for him to submit his high school transcript plus his proposed lower division program to the registrar of the chosen college or university for tentative approval.

Catalogs of schools, colleges and universities are on file in the Guidance and Counseling Offices, the Office of Admissions and Records, and the Library for reference purposes. Students are urged to obtain catalogs directly from the college or university by writing the registrar of the institution in which the individual is interested.

**Veteran Education**

Veterans are invited to avail themselves of the guidance services and the educational training offered by Glendale Community College. Returned servicemen are helped and encouraged to secure the training necessary to realize their vocational aims. In order that this may be achieved, Glendale Community College cooperates with the Veterans Administration and with the California Department of Veterans Affairs.

The Federal educational assistance allowance payable to Veterans is as follows:

**Full time**—12 units or more

**¾ time**—9-11½ units

**½ time**—6-8½ units

Continuing and returning students who were previously enrolled for Veterans benefits must submit to the Admissions Office each semester a Request to be Entered Under Training form if they wish to continue to receive benefits.

New students desiring entitlements must present their Certificate of Eligibility form to the Admissions Office. These forms must be secured from the Veterans Administration prior to certification by Glendale Community College.

The Veterans Administration indicates that there has been no increase in the length of Veteran entitlement, with 36 months still the maximum. It is suggested that Veterans complete 15 units a semester if they are to complete their objective in the 36 month maximum.

**Cooperative Education**

Glendale Community College, under a State approved plan, cooperates with local business and industry in work experience education. The Community Colleges of California have the responsibility within the limits of their resources to maximize the utilization of possible educational experiences which might be made available to students. One method of attempting to reach such a goal recognizes work experience education. Through the cooperation of business, industry, and government, students earn credit for supervised learning experiences during off campus employment. Vocational work experience must be related to the student's two year career college program. Coordinated classroom instruction is included in the program to make the learning experiences more meaningful. The student must maintain an enrollment of no less than 8 units including work experience.
Student Services

Campus Center
These facilities provide offices and conference rooms for the Associated Students as well as a place where student clubs and other organizations may meet together for social and business functions. Arrangements for the Campus Center are to be made with the Dean of Community Services in Administration Building, Room 124.

The Patrons Club, civic groups, and other friends of the College may use the Campus Center for their business meetings and social affairs. Arrangements for such use must be made through the Business Office at the Board of Education, telephone 241-3111.

Employment
The College maintains an employment service to assist students and graduates in securing part-time and full-time employment. Applications should be made in person at the Placement Office in the Men's Gymnasium.

Employment opportunities exist on the College campus. Glendale Community College participates in the Federal College Work Study Program, as well as having a program totally funded by the College. Positions such as clerical aide, library aide, and lab technician are available. Information concerning student employment on the College campus is available in the Placement Office.

Referrals for placement are made on the basis of the student's experience, training, and where desirable, approval of faculty members.

Since it is not always possible to secure employment immediately, the student who plans to be self-supporting should not begin his college course without sufficient funds to cover the major expenses of at least the first semester.

Basic Educational Opportunity Grant Program
Glendale Community College participates in the Basic Educational Opportunity Grant Program which provides grants of up to $1400 per year, depending upon the financial ability of the family or individual to contribute, to the cost of higher education. Grants are paid in monthly installments dependent upon full-time (12 units) enrollment at Glendale Community College. The amount of the award is determined by the American College Testing Service in Iowa City. All students who have not completed any college credit work prior to September 1973 are eligible to apply for these grants. Applications are available in Ad107.

Supplemental Educational Opportunity Grant
Glendale Community College participates in the Supplemental Educational Opportunity Grant Program funded by the Federal Government under the Higher Education Act. Grants are available up to $500 per year for students who qualify under the provisions of the act. Students who receive such grants are required to earn an equal amount under the College Work Study Program. Interested students may file applications in the Office of the Dean of Student Personnel Services, Administration Building, Room 107.

Health Center
Glendale Community College provides facilities for a health appraisal of new students by means of health questionnaires and a limited number of physical examinations. A Health Clerk is available in the Women's Gymnasium, Room 103, to administer First Aid.
Housing

Glendale Community College has no housing facilities for its students, most of whom reside with members of their immediate family or relatives. A limited number of housing accommodations are available in private homes. It is possible for some students to work for room and/or board.

Any student interested in obtaining a place to live should review the listing in the Office of the Dean of Student Personnel Services, Administration Building, Room 107.

Loans

A loan fund for worthy and needy students is administered by the Dean of Student Personnel Services. Students in need of an emergency loan may apply for such loans in this office. These loans usually do not exceed $25.

Glendale Community College participates in the Federally Insured Guaranteed Loan Program whereby commercial lending institutions in the Glendale area make loans of up to $500 per school year to students at Glendale Community College. Information and application forms for these loans are also available in Administration Building, Room 107.

Scholarships

Any student who has completed 12 units of college work may file an application for a scholarship in the Office of the Dean of Student Personnel Services, Administration Building, Room 107. Selection is made by the Glendale Community College Scholarship Committee or the donors on the basis of academic achievement, financial need, integrity of character, chances of success, and fulfillment of the particular criteria stipulated by the donors.

Aesculapian Scholarship

A $500 scholarship is awarded annually to a student transferring to an upper division institution and planning a career in a medical or para-medical field. This scholarship is donated by a Glendale physician.

Aleta Rutter Memorial Scholarship

One scholarship for a student majoring in either Art or Art History. The winner is nominated by the faculty of these departments. Funds for this scholarship have been donated in memory of Aleta Rutter, a former student at Glendale Community College.

Alpha Gamma Sigma Scholarship

The Glendale Community College Chapter of Alpha Gamma Sigma State Scholarship Society awards scholarships of $50 each semester to one or more of its current members. The candidate must have a minimum grade point average of 3.4 and must have displayed an active interest in club activities.

Altrusa International Scholarship

Two $50 scholarships are awarded annually to International students continuing their education at Glendale Community College. The funds are donated by the Altrusa Club of Glendale.

American Association of University Women Scholarship

A scholarship of $275 is awarded by the Glendale Branch to an outstanding sophomore woman who plans to enter a four-year college or university. Academic achievement is given first consideration but leadership, participation in school activities, a well-adjusted personality, and financial need are also considered.

American Begonia Society Scholarship, Glendale Chapter

Two scholarships are awarded to outstanding Botany students, one each semester, as selected by students majoring in Botany.
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Business Women’s Association, Verdugo-Glen Chapter</td>
<td>A number of scholarships are awarded each year to help women students defray their expenses while attending Glendale Community College.</td>
</tr>
<tr>
<td>Assistance League of Glendale Scholarship</td>
<td>The Assistance League of Glendale awards $100 each to three continuing students for expenses while attending College.</td>
</tr>
<tr>
<td>Associated Women Students Scholarship</td>
<td>Each year the Associated Women Students make awards to two women students who have been members of the board for a minimum of two semesters, have good scholastic records, and who plan to continue their education.</td>
</tr>
<tr>
<td>Bank of America</td>
<td>The Bank of America awards four scholarships to outstanding students in the fields of Business, Technical-Vocational, Social Science-Humanities, and Science-Engineering. Glendale Community College winners are eligible to compete for statewide awards.</td>
</tr>
<tr>
<td>Chevy Chase Estates Garden Club</td>
<td>A $300 scholarship is awarded to a student continuing his/her education at Glendale Community College and planning to major in Botany, Ornamental Horticulture, or Landscape Architecture.</td>
</tr>
<tr>
<td>Delta Kappa Gamma, Epsilon Epsilon Chapter</td>
<td>One $100 scholarship awarded biennially for a woman transferring to a four-year college or university, with teaching as her goal.</td>
</tr>
<tr>
<td>Delta Kappa Gamma, Xi Chapter</td>
<td>One $200 scholarship for a woman transferring to a four-year college or university and planning for a career in the field of education.</td>
</tr>
<tr>
<td>Derrill Place Memorial Scholarship</td>
<td>One $50 scholarship is awarded to the outstanding graduating student majoring in journalism. The award is to be utilized at a four-year college or university. Funds for this scholarship have been donated in memory of Mr. Derrill Place, former instructor in journalism at Glendale Community College.</td>
</tr>
<tr>
<td>Doehring Foundation</td>
<td>Two $500 and two $250 scholarships are awarded to either men or women who have achieved well academically and are transferring to a four-year school.</td>
</tr>
<tr>
<td>Edvard Greig Norwegian Scholarship</td>
<td>Six $50 scholarships are awarded each year to help defray Glendale Community College expenses.</td>
</tr>
<tr>
<td>Eleanor Kentner Kohler Memorial Scholarship</td>
<td>An award of $250 is made annually to a student having a special talent in art or poetry to help defray expenses while a student at Glendale Community College. Selection is made by the Scholarship Committee from recommendations submitted by the fine arts and language divisions.</td>
</tr>
</tbody>
</table>
Elizabeth Rowley Memorial Scholarship  
An award of $250 is presented each year to a woman student planning to transfer to a four-year college or university with a Glendale Community College grade point average of at least a 3.0. This award is made from funds contributed by the Glendale Community College faculty to a memorial fund in honor of Elizabeth Rowley, a former Dean of Women at Glendale Community College. Selection is made by the Scholarship Committee.

Ella Woodrow Scholarship  
A scholarship is awarded annually in memory of Mrs. Ella Woodrow, former fashion design instructor at Glendale Community College. The scholarship is to help defray expenses for a student continuing her education at Glendale Community College in the field of Fashion Design.

Elsie Bishop Scholarship  
The Glendale Community College Patrons Club awards a $100 scholarship to a woman graduate selected as the outstanding graduating woman by the graduating class. This scholarship is in honor of Mrs. Elsie Bishop, former Dean of Students at Glendale Community College.

Gateway Kiwanis Scholarship  
The Gateway Kiwanis Club of Glendale each year awards $300 to an outstanding sophomore student who is planning to transfer to a four-year institution.

Glendale Academy of Dentists Scholarship  
The Glendale Academy of Dentists makes a scholarship award of $200 to a student who has been accepted for admission to the Dental College of the University of Southern California.

Glendale Bar Association Scholarships  
Two $100 scholarships are awarded to students majoring in the legal secretarial program. One scholarship is to be awarded to the outstanding first-year student continuing at Glendale Community College. The second scholarship is to the outstanding graduating student in the program. Awardees are selected by the Business Division faculty.

Glendale Community College Dental Alumni Fund  
This $200 scholarship is awarded by alumni of the College who are practicing dentists. A necessary criterion is acceptance into a college of dentistry.

Glendale Community College Faculty Award for Academic Excellence  
The faculty of Glendale Community College annually awards a plaque and a monetary award to the student with the highest grade point average. A minimum grade point average of 3.5, at least 60 units, 45 of which must have been taken at Glendale Community College, and a well-rounded program are the main requirements.

Glendale Community College Patrons Club Scholarships  
Scholarships of $75 each are available to both men and women for use at Glendale Community College. These are awarded primarily on the basis of financial need. An amount of approximately $2000 is donated yearly by the Club.

Glendale Community College Patrons Club Highest Man and Woman Awards  
The Patrons Club makes a $50 cash award each year to the man and the woman in the graduating class who have achieved the highest grade point average.

Glendale Community Foundation  
Awards of up to $1000 are made to students transferring from Glendale Community College and enrolling in an upper division institution. Students must display academic excellence as well as possessing financial need.

Glendale Medical Assistants  
Scholarships up to $150 are awarded to men or women who have completed two years of College and who plan to enter the paramedical field.
Institute of Internal Auditors

The Los Angeles Chapter, Institute of Internal Auditors awards an annual scholarship in the amount of $400 and two honorable mention awards of $50 each to students majoring in accounting and transferring to an upper division institution.

J. Lee Gregg Scholarship

The Fiel Foundation has established a scholarship in memory of Mr. J. Lee Gregg, prominent Glendale citizen. For two years $150 per month for the nine school months will be paid to an outstanding man student upon his transfer to a four-year college or university. Nominations are made by the Scholarship Committee of Glendale Community College, and final selection of the recipient is made by the Gregg family.

Janet and John Delmonte Scholarship

Two $50 scholarships are awarded through the generosity of the Delmonte family. Preference is given to international students to assist them in continuing their education at Glendale Community College.

John E. Kienle Scholarship in Sociology

One $250 scholarship is awarded for superior achievement in sociology and/or anthropology to a major in these areas. This scholarship is given in memory of a former teacher of sociology at Glendale Community College.

John Kreider Scholarship

The Glendale Community College Patrons Club awards a $100 scholarship to a man graduate selected as the outstanding graduating man by the graduating class. This scholarship is in honor of Mr. John Kreider, former Dean of Instruction at Glendale Community College.

Kathryn G. Hanson Memorial Scholarship

A scholarship fund has been established by the family of Mrs. Kathryn G. Hanson in order to assist continuing older women students who have returned to Glendale Community College to resume their educational careers.

La Crescenta Women's Club Scholarship

Two $100 scholarships are awarded each year to a man and a woman resident of La Crescenta who are transferring to a four-year college or university. Nominations are made by the Glendale Community College Scholarship Committee and final selection of the awardees is made by the Club.

Las Donantes Scholarship

One $50 scholarship awarded to a man or a woman continuing at Glendale Community College.

Little Theater of the Verdugos Award

The Little Theater of the Verdugos each year awards $300 to an outstanding student in theater arts. Consideration by the Scholarship Committee for this award is made each spring upon the recommendation of the faculty of the theater arts classes.

Los Angeles Advertising Club Scholarship

One $100 scholarship for a student majoring in commercial art and to be used to help defray Glendale Community College expenses. The winner is selected by the advertising faculty.

Los Angeles National Association of Accountants

This organization contributes one $150 scholarship to be awarded annually to an accounting student with a 3.0 grade point average planning to transfer to upper division. In addition, the awardee is eligible to compete for other scholarships donated by this organization. Candidates for this scholarship are nominated by the Business Division.
LVN Scholarships  Two $50 scholarships are donated by the California Licensed Vocational Nurses' Association, Chapter #20 of Glendale. Funds are to be used to help defray expenses for second semester students in the LVN program.

Montrose-La Crescenta Kiwanis Scholarship  A scholarship of $250 is awarded each year by the Montrose-La Crescenta Kiwanis Club to an outstanding young man or woman from the Montrose-La Crescenta area upon registration at a four-year college or university.

Oakmont League of Glendale Scholarship  The Oakmont League awards a $1000 scholarship annually to a transferring student to assist him in completing his education at a four-year accredited college or university. The selection is based on financial need, academic achievement, integrity of character, and chances of success. The scholarship is not restricted to any one field, but the candidate must have determined his occupational goal. An award is also made to an alternate. Candidates are selected by the Glendale Community College Scholarship Committee, and final selection of the recipient and the alternate is made by the Scholarship Committee of Oakmont League.

Opti-Mrs. Club of Glendale  One $150 scholarship for a student continuing at Glendale Community College offered yearly to a woman who has a 2.5 grade point average or better.

Owen Marsh Meredith  An award of $50 is given annually to a student transferring to a four-year college or university in memory of a former Glendale Community College student, Owen Marsh Meredith, from funds contributed by his parents.

Panhellenic Scholarship  Each year the Glendale Area Panhellenic Association awards a $100 scholarship to a graduating woman who plans to continue her education at a four-year college or university where there are national sororities.

Richard W. Tang, Jr. Memorial  Each year $50 is awarded to the outstanding male athlete of Glendale Community College.

San Gabriel Valley Dental Hygiene Society  A scholarship of $200 is awarded annually by this organization to a woman who has been accepted at an accredited school of dental hygiene.

Sertoma  The Sertoma Club of Glendale awards one scholarship in the amount of $100 to help defray expenses at Glendale Community College for a student's final semester of study. Candidates must have completed 45 units of work at Glendale Community College. Final selection is made by the Sertoma Club from candidates suggested by the Glendale Community College Scholarship Committee.

Southern California Edison Company Scholarship  A scholarship offered to an outstanding community college graduate pursuing his education in a four-year college or university located in the Southern California Service Area. Students must be residents of the same service area. Candidates must concentrate their studies in either the Business Administration or Engineering curricula. The scholarship is valued at from $500 to $1500 depending upon the four-year institution chosen for upper division study.
<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toastmasters Jewel City, Chapter 29</strong></td>
<td>One full year's membership in the Glendale Toastmasters Association for a student interested in developing public speaking. Candidates are selected by the Glendale Community College Scholarship Committee. Final selection is made by the Toastmasters organization.</td>
</tr>
<tr>
<td><strong>Tuesday Afternoon Club Juniors</strong></td>
<td>Each year the Tuesday Afternoon Club Juniors award a scholarship to a woman student continuing her education at Glendale Community College.</td>
</tr>
<tr>
<td><strong>Tuesday Afternoon Club Scholarships</strong></td>
<td>Each year the Tuesday Afternoon Club makes two awards of $100: one to a student who has majored in science, and is transferring to a four-year institution to complete his training in science; and one to a student who plans on becoming a teacher.</td>
</tr>
<tr>
<td><strong>Valley National Bank Scholarship</strong></td>
<td>Four scholarships are donated by the Valley National Bank, Glendale's home-owned banking institution. Awardees must be business majors continuing their education at Glendale Community College.</td>
</tr>
<tr>
<td><strong>Women's Athletic Club Study Grant</strong></td>
<td>The Women's Athletic Club of Glendale makes a $300 scholarship award to an outstanding woman in the graduating class who plans to make a career in physical education.</td>
</tr>
<tr>
<td><strong>Women's Committee, Glendale Chamber of Commerce</strong></td>
<td>One $100 scholarship for a student of Mexican-American ancestry who is continuing at Glendale Community College. Funds for this scholarship are raised during the annual Days of Verdugos celebration.</td>
</tr>
<tr>
<td><strong>Women's Committee of the Glendale Symphony Association</strong></td>
<td>This organization awards an annual scholarship to a student selected by the music department and the Scholarship Committee of the Association. Candidates must have completed 48 units of work at Glendale Community College, have a 3.0 grade point average in music, and be prepared to present a recital.</td>
</tr>
</tbody>
</table>
Student Government and Activities

The Associated Student Body of Glendale Community College is the official student organization. Numerous opportunities are provided students to participate in its activities. The Student Legislature is elected each semester and meets each Tuesday at 7:00 a.m. in the Conference Room of the Campus Center for the purpose of discussing and determining policies, procedures, and expenditures of student government. This meeting is open to all members of the Associated Student Body. Social and athletic programs and an accounting office for student funds are maintained. A well stocked bookstore is operated under the supervision of a business manager, and any net income is used to promote the program of the Associated Students. In addition, the Associated Women Students and the Associated Men Students have programs of activities.

A.S.B. Membership
Associated Student Body membership is required of all students who participate in any activity, program, or event which is financed in part or wholly by the Associated Students. In order that all students become acquainted with this regulation, non-A.S.B. members will be requested to sign a waiver form during the registration period, forfeiting the right to participate in A.S.B.-sponsored activities.

Activity Period
No classes are scheduled Tuesday and Thursday at 11:00 a.m. These hours are reserved for A.W.S. and A.M.S. Board meetings, club meetings, student committee meetings, student assemblies, College Orientation Seminars, and other all-college functions.

A Master Calendar is maintained in the Office of the Dean of Community Services, and all Campus groups are required to register their activities two weeks in advance of the event.

Athletic Program
A complete program of athletics is sponsored by Glendale Community College. The College is a member of the Western State Intercollegiate Athletic Conference and participates in most of the sports programs sponsored by the Conference. The Intercollegiate Sports Association and the Physical Education Department for Women sponsor a complete program of sports and athletic activities for both men and women.

Members of the Associated Student Body are offered the opportunity to join the intramural sports program. Most competition is between Campus organizations, but individuals are encouraged to participate.

Clubs
Opportunity to render service to Glendale Community College or to pursue a special interest is provided through participation in the club program offered on the Campus. (For a list of clubs see Organization Roster.) All students are urged to affiliate with at least one organization. Club policies are coordinated by the Inter-Club Council.
Hazing  According to the State Education Code, Article VIII, no club, group, organization, or individual may participate in any activity that involves hazing. Hazing includes any method of initiation or any pastime of amusement which causes, or is likely to cause, bodily danger or physical harm to any student or other person attending any educational institution in this State. Further, hazing also includes any act that tends to injure, degrade, or disgrace any fellow student attending Glendale Community College.

Any Glendale Community College student who participates in hazing of any kind shall be suspended from College for further discipline by authorities, and if a member of an on-campus club, shall be suspended from the club of which he is a member. Also, the club shall be placed on probation or suspended.

Honors  Superior scholarship and distinguished service to the College are recognized by various awards presented at the Honor Awards Banquet.

Honor Societies  The following honor societies function at Glendale Community College: Alpha Gamma Sigma — State Scholarship Society; Beta Phi Gamma — National Inter-Collegiate Journalism Fraternity; Delta Psi Omega — Drama Club; Epsilon Omega — Women's Honorary Club; Sigma Xi Sigma — Honorary Physics and Chemistry Club.

Recreation  Both students and faculty participate in the many recreational activities provided by the Associated Student Body. In addition to dances and games regularly held in the Campus Center and Corral, four CRA Sports Nights are scheduled each year in the College Gymnasium. This popular activity attracts an average attendance of about 400 students and faculty.

Orientation of New Students  Sponsored by the Associated Women Students, the "Welcome Coffee" and "Dungaree Dinner" are two added features of the Orientation Program for women students. They help the new woman student to become better acquainted with other women and with the purposes and activities of the Associated Women Students and Women's Service Clubs.

Campus Speakers and Distribution of Literature  Glendale Community College endeavors to promote the widest dissemination of opinion in harmony with state and federal regulations and district policies. Students who desire to present speakers on campus or distribute literature on campus may follow the procedures outlined for such activities. These procedures are available in the office of the Dean of Student Personnel Services in the Administration Building, Room 107.
## Organization Roster

### A.S.B. Government
- A.S.B. Legislature: Governing Body, Both
- A.S.B. Executive Board: Governing Body, Both
- A.M.S. Board: Governing Body, Men
- A.W.S. Board: Governing Body, Women
- Inter-Club Council: Governing Body, Both

### Athletic Organizations
- Intercollegiate Sports Assn.: Co-ed Sports, Both

### Interest Clubs
- Alpha Chi
- American Society of Engineers and Architects
- Aqua Vaqs
- Archi
- Beta Kappa
- Biology
- Chess Club
- Christian Science
- Delta Tau
- Flying Club
- Glendale Community College Democrats
- Glendale Community College Human Relations Council
- Glendale Community College Music Club
- Glendale Community College Republicans
- Hillel
- Intervarsity Christian Fellowship
- Judo-jujitsu
- Kappa Pi Sigma
- Latin American Club
- Latter Day Saints Student Organization
- Modern Dance
- Organization of Arab Students
- Photography Club
- Pre-Dental Club
- Ski Club
- Soccer
- Student Action Council
- Tau Omega Phi
- Young Americans for Freedom

### Honorary Organizations
- Alpha Gamma Sigma
- Beta Phi Gamma
- Delta Psi Omega
- Epsilon Omega
- Sigma Xi Sigma

### Service Organizations
- Circle K
- Delta Chi Delta
- Gamma Delta Phi
- Phi Alpha Theta
- Psi Delta Phi
- Zeta Sigma Phi

<table>
<thead>
<tr>
<th>Membership</th>
<th>Meets 1 &amp; 3 Tuesday</th>
<th>Meets 2 &amp; 4 Tuesday</th>
<th>Open to All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Both</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Both</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Both</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Both</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Both</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Interest clubs may be joined by attending the meetings.

Application for membership in Women's Service Clubs may be made through the Office of the Coordinator of Women's Activities, Administration Building, Room 106B.
Admission, Counseling and Registration

Admission Requirements
Applicants who are high school graduates or are over 18 years of age and give evidence that they will profit from the instruction given at Glendale Community College may be admitted. When considering applications for admission of persons having exhibited a questionable standard of citizenship, the basic test will be how other students will be affected by contact or association with these persons. Each case will be considered on an individual basis by the Petitions Committee after consultations between the applicant and the Dean of Student Activities.

International students applying for student visas must meet special requirements. For a statement of these, inquiries should be made to the Dean of Admissions and Records.

Application
All applications for admission should be sent to the Office of Admissions and Records, Glendale Community College, Glendale, California 91208.

Matriculated Student
All candidates for a degree or certificate from Glendale Community College, or planning to transfer to an upper division institution, or desiring to enroll for courses that have test and/or course prerequisites, should be matriculated students.

To become a matriculated student it is necessary to have all transcripts of previous high school and college schooling on file in the Admissions Office at Glendale Community College. Additionally, the applicant must have taken the Pre-registration Examination at Glendale Community College. Completion of this application, the submission of the transcripts, and taking the examination will provide full matriculation to the applicant.

Non-matriculated Student
A non-matriculated student is one who has filed an application for admission but either has not filed all transcripts as defined above, or has not taken the Pre-registration Examination at Glendale Community College. Such students are limited to courses for which the prerequisites have been satisfied by the records on file or the Pre-registration Examination. If in applying for non-matriculated status, the student elects to take the Pre-registration Examination, the form for admission to the examination must be requested at the time of filing the application, completed and presented for admittance to the testing area on the date the examination is to be taken. No student will be admitted to the testing area without the completed examination admission form.

Limited Student
A limited student is one who has filed an application for admission but has not filed transcripts of previous schooling nor taken the Pre-registration Examination. Such students must select courses from the list of classes having neither test prerequisites nor course prerequisites, except those satisfied by previous courses at Glendale Community College.

A limited student is limited to a total study load of 8½ units.
Transcripts
Each applicant as a matriculated student must have a certified transcript of his high school record sent to Glendale Community College. Applicants who have attended another college or university must, in addition, have transcripts sent from each attended, showing all attempted work. Glendale Community College reserves the right to evaluate work completed in other colleges. Transfers with acceptable grades will be granted advanced standing insofar as the work completely corresponds with that of Glendale Community College or the lower division work offered in the University of California. Transfers accepted with previous college academic records below a "C" average will be placed on academic probation upon admission.

Failure to file transcripts may delay or prevent admission. Transcripts should be sent directly from the high school or college to Glendale Community College. All transcripts become the property of Glendale Community College and will not be returned.

Pre-registration Examinations
Each applicant as a matriculated student must take Pre-registration Examinations which are given in April, May, June, July, August, September, December, and January (see College Calendar for dates and hours). Failure to take these Examinations will delay or prevent registration; applicants are advised to take them at the earliest date possible. Students applying for matriculated status must take the Pre-registration Examination. The form for admission to the examination must be requested when applying, completed and presented for admittance on the day of the examination. No student will be admitted to the testing area without the completed examination admissions form.

The results of these examinations are not used to disqualify any person seeking admission, but are used to help the student and his counselor in arranging a satisfactory program of studies.

The Test of English as a Foreign Language (TOEFL) Examination is required of all applicants seeking admission as International Students. Information concerning these examinations is available at the Admissions Office, Glendale Community College or from the Educational Testing Service, Box 899, Princeton, New Jersey 08540.

The Comparative Guidance and Placement Program is a group of tests, questionnaires, and related services designed to meet the unique guidance and placement needs of two-year colleges. The program is sponsored by the College Entrance Examination Board and was developed by the Board in cooperation with Educational Testing Service. The basic instruments of the CGP are two questionnaires and six tests. One questionnaire provides an inventory of student's interests in 11 academic and vocational areas; the other is a biographical questionnaire concerned with background, attitudes, plans, and needs. Three of the tests measure the student's verbal and mathematical skills; three are non-traditional measure of special abilities.

Interest and Background Measures, designed to collect and summarize information about a student's educational plans, aspirations, previous work, high school background, financial needs, and academic and vocational interests. Questionnaires are named Biographical Inventory and Comparative Interest Index.
Placement Tests, designed with particular emphasis on identifying deficiencies in reading, English usage, fundamental mathematics, all of which are basic skills necessary for success in almost any educational endeavor. Tests included are Reading, Sentences, and Mathematics. The results of this Examination will also be used to determine for the student his eligibility for enrollment in courses offered by the Social Science Division as well as the Language Arts Division. The Pre-registration Examination yields a score on the mathematics section evidencing the student’s proficiency in mathematics required for graduation.

Special Abilities Tests, designed to provide the student with information about his special abilities so that he can see his own abilities in relation to the kinds of abilities necessary for success and satisfaction in various curriculums. Tests include Year 2000, which measures ability to follow directions; Letter Groups, which requires the student to form and try out hypotheses; and Mosaic Comparison, which tests perceptual speed and accuracy.

Experimental Tests, designed for the development of new tests, particularly non-verbal tests, which will enable the student who does not fit the traditional collegiate pattern to demonstrate his competencies. (Students and colleges do not receive scores on these tests.)

Residence Requirements

At the time of registration each student is required to file a “Statement of Residence.” Even though a student may be admissible to Glendale Community College, he may be denied registration privileges in accordance with the residence requirements.

The residence requirements are applied as follows:

1. A “resident student” whose residence is in the Glendale Community College District which is composed of Glendale, Montrose, La Crescenta, Verdugo City, and the western part of La Canada may attend Glendale Community College.

2. A “resident student” whose residence is in California but outside the Glendale Community College District and not in another community college district in California may attend Glendale Community College.

3. A “resident student” whose residence is in California and in a community college district other than the Glendale Community College District may attend Glendale Community College if he presents a transfer permit from the district of residence.

4. Residents of the Los Angeles and Pasadena Community College Districts who enroll for less than 10 class hours per week may attend Glendale Community College without a permit.

5. A “non-resident student” may be admitted to Glendale Community College, but will have to pay a non-resident tuition charge which has been set by the Trustees of the California Community Colleges for the school year of 1974-75 at $27 per semester unit. The International Student tuition remains at $24 per unit.
A “resident student” means any person who is a bonafide resident of the state of California on the first day of instruction of a semester or session during which he proposes to attend. Rules for residence determination are:

**Government Code**

243 Residence. Every person has, in law, a residence.

244 Determination of place of residence. In determining the place of residence, the following rules are to be observed:

1. It is the place where one remains when not called elsewhere for labor or other special or temporary purpose, and to which he returns in seasons of repose.

2. There can only be one residence.

3. A residence cannot be lost until another is gained.

4. The residence of the father during his life, and after his death the residence of the mother while she remains unmarried, is the residence of the unmarried minor child.

5. The residence of the husband is the residence of the wife.

6. The residence of an unmarried minor who has a parent living cannot be changed by his own act.

7. The residence can be changed only by the union of act and intent.

**Education Code 25505.1**

Residence for community college attendance purposes shall be determined in accordance with Government Code Sections 243 and 244 except: (a) If an unmarried minor resides with a parent, the residence of the minor shall be that of the parent with whom he is residing. (b) A married woman may establish her own residence.

Special inquiries should be made to the Dean of Admissions and Records.

**Poliomyelitis and Measles Immunization**

All students registering at Glendale Community College are required by state law to have at least one poliomyelitis immunization, either the Salk or Sabin type, prior to first registration, and to have completed the series of three within a period of one year or to file a “contrary to beliefs” statement. Also, each student must, prior to first registration, have measles immunization or file a “contrary to beliefs” statement. Any person who has graduated from a high school in California is deemed to have fulfilled both of these requirements.

**Guidance and Counseling**

Glendale Community College includes within the structure of its administrative organization a guidance program with a counseling service providing skilled assistance for:

Helping the individual student to understand himself and to plan the best use of his abilities and opportunities.

Advising with and assisting the individual student to implement decisions which he makes in working out solutions to his personal problems.

Aiding the individual for college life adjustment by providing group guidance, as well as group and individual counseling.
Assisting the individual to achieve success in and beyond college by making available guidance and counseling services such as health, course planning, financial aid, placement, and follow-up.

Prior to registration and according to his vocational interest, every student is assigned a counselor who will assist with the preparation of the Study List to be used in formal registration. It is the responsibility of the student to plan his own course and make his own decisions; the counselor will help with suggestions based upon the information derived from the student's high school record, the ability and placement tests given at the Pre-registration Examination, and other special interest and personality tests administered as the need arises. After the initial interview, the counselor will be available at scheduled hours for conferences to give personal assistance to individuals about careers, education, student activities, employment, and personal and social problems that may arise with the adjustment to college life.

Counseling Services
Counseling Services are available in the Administration Building which houses the Counseling Offices and may be arranged for through the Office of the Dean, Guidance and Counseling, Room 112, or with the appointment secretary who will set a time for an interview with the assigned counselor, Room 113.

Group Counseling
Students may arrange with their assigned counselor to participate in a group scheduled primarily to help students cope with the problems incidental to academic achievement.

Guidance Testing
In addition to the tests included in the Pre-registration Examinations, the counseling staff has available a variety of standardized test materials for the assistance of students. Among these are other tests of ability, vocational interest, and achievement, as well as tests of various aptitudes, special skills and personality.

The Testing Office is located in Room 112 of the Administration Building.

Learning Resource Center
A laboratory provides students with the opportunity to increase their efficiency in the classroom. Auto-instructional machines, programmed texts, and devices for improving study skills, writing skills, listening skills, and reading skills are available to students in the Developmental Studies Program, English 190, 191, 192, and Guidance 190, 191, 192, 194, 196. Resource materials in mathematics, chemistry, physiology, anatomy and computer techniques are also available to students wishing a review or preview of courses in the college. Students are directed to the Learning Resource Center after consultation with a college counselor.

Eligibility for Courses
A student is eligible to enroll in any course offered at Glendale Community College provided he has fulfilled the stated prerequisites for the course. A student may occasionally have had outstanding experience in a given area which he may feel will substantially satisfy the stated prerequisite for a course. Where it is desired to offer such experience for the regular prerequisite, the student must have a petition approved to make such substitution. Once such a petition has been approved the student may not later receive credit for a course for which he substituted the outside experience. Students who are considering developing a petition should first read the section on Credit by Examination.
Credit for lower level courses will not be granted if credits have been earned in higher level courses. Many courses have no stated prerequisite. Here the student should realize that it may be assumed that: he has previous successful experience with related subjects, he has the ability to read with speed and understanding, and he has the ability to express himself in clear and concise English.

These factors are considered by counselors when assisting a student with his Study List from which he will select courses as he makes out his program during the registration period.

A student with a poor scholastic record in any subject field should not expect to carry advanced work in that field.

**Registration**

Each student must arrange for an interview with his counselor prior to registration. Registration is the formal arranging of the classes listed on the Study List on a Program Card which is filed in the Admissions and Records Office. Changes from this Program may be made by the student if he completes a Petition for Change of Program.

The student is held accountable for all classes on the Program Card or for classes which have been added by Petition for Change of Program. The student may not receive credit for classes not on the Program Card or for classes which have not been added by a Petition for Change of Program. All students must register in classes for credit; registration for auditing is not permitted. (See section on Withdrawal from Class or College.)

**Costs**

No tuition is charged at Glendale Community College for students whose legal residence is in California. A non-resident tuition will be charged students whose legal residence is in a state other than California. The tuition is $27 per semester unit to a maximum of $405 per semester. International students should consult the Office of Admissions and Records for special tuition charges. Special tuition rates are applicable to International Students who have an F-1 Student Visa. Check with the Admissions and Records Office for further information.

Students are held responsible for any loss or breakage of College equipment or furniture.

At registration time students will have the expenses of purchasing textbooks, supplies, and other incidentals. Students should bring about $60 at the time of registration to cover these expenses. There will be need for additional supplies during the semester but the amount varies with the course taken. A student taking flight training must contract for these services at his expense.

All students are required to purchase an accident insurance policy. The fee is $2 per semester for students enrolled in 9 or more units and $1 per semester for students enrolled in 8½ units or less. This charge is mandatory. It is payable at the time of registration. No refund of this fee is made at any time.

Students are provided the opportunity to become members of the Associated Student Body. The charge for membership is established each year by the Legislative Branch of the Associated Students. Membership entitles the student to free participation in many and varied school activities as well as discounts in over thirty (30) Glendale retail stores.
Membership fees for the Associated Student Body are set yearly by the Legislature of that Body. Inquiries concerning the fee should be directed to the Office of the Dean of Student Activities, Administration Building, Room 106. Current fees are also shown in the class schedule issued for each college semester. Students who withdraw from college may receive a refund according to the following schedule: during the first week of the semester 75% of the purchase price, during the second week of the semester 50% of the purchase price, and during the third week of the semester 25% of the purchase price. No refunds will be made for students who withdraw after the third week of instruction.
Scholastic Information and Regulations

Unit of Work
The credit value in semester units of each course is indicated after the title of the course under "Course Descriptions." Each unit represents one hour per week of lecture or discussion, or a longer time in laboratory or other exercises not requiring outside preparation. For each hour of lecture-discussion, two hours of preparation are assumed.

Unit Limitations
The student's program of studies will vary according to his needs and objectives. The normal program for a student at Glendale Community College is 16 units. Students registered in 12 or more units are classified as full-time students; those registered for less than 12 units are classified as part-time students. The academic load carried should be in line with the best combined judgment of the student and counselor. The College recommends that students who are working 20 hours per week should carry no more than 10 units; 30 hours per week, no more than 8 units; and 40 hours per week, no more than 6 units. Individuals having health problems should make proportionate adjustments in their college programs.

A first semester student, one who has not completed at any college one semester of resident study of 12 semester units of credit or a quarter of resident study of 8 semester units of credit, may not register for more than 16 units plus one unit of music performance and a physical education activity. Advanced students may not register in more than 18½ semester units. These unit limitations apply to the total of day and extended day courses.

Scholarship Standards
Glendale Community College interprets a "C" average as satisfactory scholarship standard — which means that the student should receive grade points equal to twice the number of units attempted (See section on Grades, Grade Points and Grade Point Average).

Students who fail to maintain satisfactory scholarship may be placed on academic probation and may be dismissed.

1. Academic Probation. A student will be placed on probation if the student's cumulative grade point average for units attempted is less than 2.0 (C average based on grade points per unit calculated as follows: A-4 grade points, B-3 grade points, C-2 grade points, D-1 grade point, F, WF, WU, W, Inc/W, Inc/F-0 grade points.)

2. Dismissal. A student who, while on probation, earns less than 2.0 grade point average during each of two consecutive semesters shall be dismissed and not be re-instated until at least one semester has elapsed after the dismissal. Students dismissed from other community or junior colleges must abide by the procedures for student's dismissed from Glendale Community College with respect to seeking admission.

A student having been re-instated on probation after academic dismissal from College must maintain a 2.0 grade point average for units attempted during each semester subsequent to the dismissal or will again be dismissed for at least one semester.
A student whose ratio of grade points to units attempted is low or a student who shows that he is not profiting from his college work may be placed on academic probation or excluded from College.

The standing of students in each course will be determined by class work and examinations. Grades will be reported and grade points allowed as follows:

A—Excellent  
B—Good, above average  
C—Average  
D—Barely passing  
F—Failure  
WF—Withdrew Failing  
WU—Withdrew Unofficial  
Inc/W Incomplete Withdrawal  
Inc/F —Incomplete Failure  
W—Withdrawn  
CR—Credit  

4 grade points per unit  
3 grade points per unit  
2 grade points per unit  
1 grade point per unit  
0 grade points  
0 grade points  
0 grade points  
0 grade points  
0 grade points

An incomplete grade ("Inc/W" or "Inc/F") or a "W" will be given when an emergency prevents a student from completing the work in a course. The incomplete grade must be removed by the end of the sixth school week after the beginning of the semester subsequent to the one in which the "Inc" was received, regardless of whether the student re-registers. If not removed, the incomplete grade automatically becomes a grade of "F" if the student was failing at the time the incomplete grade was recorded and a grade of "Inc/F" was reported; the student is automatically credited with a "W" if passing at the time the incomplete grade was recorded and a grade of "Inc/W" was reported.

The grade of "F" in any course denotes failure. It does not fulfill requirement for entry into any new course for which the failed course is a prerequisite, and the course must be repeated if the student desires credit. An "F" cannot be removed by examination. Except in the case of an "Inc" or clerical error, instructors are not to change a grade once it has been accepted by the Office of Admissions and Records, and all changes involving clerical error must be approved by petition before the change can be completed.

Although cumulative-credit courses, such as Music 130 (Chorus) or Music 151 (Orchestra), are designed to be continued for additional credit, most Glendale Community College courses are not so designed. Any course that is not a cumulative-credit course may be retaken for grade improvement. For computation of grade point average, the units attempted and grade points earned are counted only once and according to the higher or highest grade earned in the course. If the grade is the same in both or all cases, the units attempted and grade points will be counted only once. This applies to computation of grade point average as well as toward the completion of a curriculum or the requirements for the Associate in Arts Degree.

The grade point average is computed by dividing the number of units attempted into the total number of grade points earned. The units attempted is the sum of the units earned in classes taken with passing grades and,
when the recorded grade is an "F," "WU," or "WF" the units which would have been earned if a passing grade had been recorded. A "W" grade does not enter into such computation. Also, such computations do not include the unit value of courses for which only credit (CR) is allowed either on satisfactory completion of the course or on satisfactory completion of an examination taken under the regulations established for Credit by Examination. If a course is repeated for improvement of grade point average, the units attempted and grade points earned are counted only once and according to the higher or highest grade earned in the course. If the grade is the same in both or all cases, the units attempted and grade points will be counted only once. An "Inc" made up carries the grade points per unit appropriate to the grade given on makeup. An "Inc/F" not made up (see time limitation) automatically becomes a grade of "F" if the student was failing at the time the incomplete grade was recorded and a grade of "Inc/F" was reported. It is computed as such in units attempted and grade point computation. An "Inc/W" not made up (see time limitation) automatically becomes a grade of "W" if the student was passing at the time the incomplete grade was recorded and a grade of "Inc/W" was reported. Units of "W's" are not counted in the units attempted.

A student is entitled to two (2) copies of his college record for his own use.

Credit for Advanced Placement Examinations

Glendale Community College recognizes the high level of achievement of the student who has successfully completed one or more Advanced Placement Examinations as authorized by the College Entrance Examination Board (CEEB) and shall award credit based upon the criteria established by the College.

Credit for Military Training

Glendale Community College will recognize and grant credit to veterans for educational training completed in the armed forces provided such credit is not a duplication of work taken previously. College work completed through the United States Armed Forces Institute will be accepted. In order to receive credit for military training, veterans must petition for such credit and present authentic military service and training records including a copy of discharge papers.

Applicants desiring credit for military training will be required to prove their capability by earning fifteen units with "C" average at Glendale Community College before credit for military service can be granted. Credit earned for military training will count toward satisfying requirements for the Associate in Arts Degree.

Credit by Examination

Under special circumstances a student regularly enrolled and in good standing and who believes he is qualified by experience or previous training, may apply to take a special examination to establish credit in a course in which he is not formally registered. Credit for lower level courses will not be granted if credits have been earned in higher level courses.

Information concerning which departments offer credit by examination, and for which courses, may be obtained from the Counseling Office or the Office of Admissions and Records.
Courses open to Credit By Examination include the following:
Aerospace Technologies 110, 111, 113, 115, 116, 120, 121, 122, 123, 124, 125, 126, 127
Art 101, 102, 103, 106, 107, 108, 113, 116
Chemistry 101, 102, 110, 111
Drafting 131
Electronics 171
English 101
French 101, 102, 103
Geology 101, 105, 110
German 101, 102, 103
Health and Physical Education 110 (First Aid), 101
History 117-118
Machine Shop 101, 102
Materials and Processes 146
Music 110, 111, 112, 113, 120, 125, 126
Physics 145
Police Science 101, 108, 112
Political Science 101, 105
Spanish 101, 102, 103
Technical Graphics 165

NOTE: No student may earn more than 12 units by examination only.

College Level Examination Program Policy

The College Level Examination Program is designed to award academic credit to mature students who have gained the equivalency of college course work through means other than enrollment in a formal college program. Six (6) units of elective credit will be granted in each of five subject areas to students who achieve a percentile rank of fifty (50) or higher on each examination. The maximum credit is thirty (30) units. The five general areas are: English composition, humanities, mathematics, natural sciences, and social sciences - history. Further information concerning the CLEP is available in the Guidance and Counseling Office.

Credit-No Credit Courses

It is recognized that many students fail to explore outside their specific fields of competence for fear of damaging their academic records. To offset this factor a system of Credit-No Credit has been devised which allows them to vary their programs without risk to their records. If a student elects to take a given course on a Credit-No Credit basis, he participates in the class as a regular student. If he fails or earns a "D" grade in the course, no penalty is awarded and thus his grade point average is unaffected. If he passes the course with a grade of "C" or better, he does not receive a grade but is given credit for completing it. Courses completed on this basis count toward graduation and usually transfer just as courses completed on the normal letter grade system; but such courses are disregarded in determining a student's grade point average for all purposes for which a grade point average is required.

A student not on probation and enrolled for fifteen or more* units may designate one three unit course (selected from those listed below) for Credit-No Credit if he initiates a petition to do so during the first eleven (11) instructional weeks of a semester course. The course designated must be outside of courses required for the student's major. The petition is secured from the student's counselor. Courses which may be selected for Credit-No Credit evaluation include:
Anthropology 101, 102, 103  
Architecture (all)  
Art (all)  
Biology (all)  
Business (all courses except 101, 102, 245)  
Chemistry 110, 141, 143  
Drafting (all)  
Economics 101, 102, 107  
Electronics 171, 172  
Engineering 101, 103, 104, 108, 110, 142  
English 103, 105, 106, 109, 110, 122, 123, 124, 125, 126, 190, 192, 193, 199  
Fire Science (all)  
Geology 101, 105, 110  
Guidance (all)  
Health & Physical Education 121-195  
History 101, 102, 106, 107, 108, 109, 112, 119, 120, 151  
Home Arts (all)  
Machine Shop (all)  
Materials and Processes 146  
Mathematics 140, 141, 143  
144, 150  
Metals 115  
Mineralogy (all)  
Music (all except 163)  
Paleontology 101  
Philosophy (all)  
Photography (all)  
Physics 110, 145  
Police Science (all)  
Political Science 102, 104, 110, 151  
Psychology (all)  
Real Estate (all)  
Science 131  
Sociology (all)  
Spanish 106  
Speech 121  
Supervision (all)  
Technical Graphics (all)  
Theater Arts 103, 104, 109, 110  
121, 122, 123, 131, 134  
Welding (all)  

*If registered for 16 units, a four unit course may be designated for Credit-No Credit. If registered for 17 units, a five unit course may be designated for Credit-No Credit.

General Conduct

Students are expected to maintain the highest standards of citizenship. In conformity with California State Law, the governing board of Glendale Community College has drawn up a statement of conduct and disciplinary procedures for Glendale Community College students.

These Standards of Student Conduct are stated below.

A student enrolling in Glendale Community College may rightfully expect that the faculty, administrators, and the legislature of the Associated Students of Glendale Community College will maintain an environment in which there is freedom to learn. This requires that there be appropriate conditions and opportunities for learning in the classroom and on the campus. As members of the College Community, students should be encouraged to develop the capacity for critical judgment, to engage in sustained and independent search for truth and to exercise their rights to free inquiry and free speech in a responsible, non-violent manner.

Students shall respect and obey civil and criminal law, and shall be subject to legal penalties for violations of the laws of the city, county, state, and nation.

Student conduct at Glendale Community College must conform to the Glendale Community College Policy Standards of Student Conduct. Violations of such policy for which students are subject to disciplinary action include, but are not limited to, the following:
1. Failure to comply with directions of college officials acting in the performance of their duties,
2. Dishonesty including, but not limited to, cheating, plagiarism, or knowingly furnishing false information to the college,
3. Forgery, alteration, or misuse of college documents, records, or identification,
4. Obstruction or disruption of teaching, research, administration, disciplinary procedures, or other college activities, including (but not limited to) its community service functions, or of other authorized activities on college premises,
5. Physical abuse of any person on college-owned or controlled property or at college-sponsored or supervised functions or conduct which threatens or endangers the health or safety of any such person,
6. Theft of or damage to property of the college or a member of the college community or campus visitor,
7. Unauthorized entry to facilities or use of college supplies and equipment,
8. Violations of college policies or of campus regulations including campus regulations concerning student organizations, the use of college facilities or the time, place and manner of public expression,
9. Violation of judicial and statutory standards of obscenity,
10. Use, possession, distribution, or presence on a campus while under the influence of alcoholic beverages, narcotics, or other dangerous drugs, such as marijuana and lysergic acid diethylamide (LSD), except as expressly permitted by law,
11. Possession while on the college campus, or at a college-sponsored function, of any item ordinarily considered to be a weapon, which might inflict bodily harm, or be used to threaten the health and safety of members of the college community, is prohibited. This does not apply to members of law enforcement agencies such as police officers or other security personnel.

Violations of the Standards of Student Conduct may lead to probation, suspension, or dismissal from the college in accordance with the disciplinary action adopted by the governing board of Glendale Community College and administered through a system of due process.

Attendance and Punctuality

Students are expected to attend all classes regularly. There are no authorized cuts from classes, and irregular attendance may result in exclusion from classes or from college. Although absence may be unavoidable, such as illness of the student or serious illness or death of a member of the family, all work missed must be satisfactorily made up and responsibility for making up this work rests with the student.

Temporary Leave of Absence

Students who find it necessary to be absent from college for one or more classes should complete a Petition to Make Up Work in advance of leaving.

Petition forms for a personal leave of absence may be obtained from the student’s counselor. If a leave is for a school sponsored activity, the faculty member in charge will issue the Petition.

Withdrawal from Class or College

Once a student has registered for a class, he is not considered to have withdrawn from this class unless he files a Petition for Change of Program, a Request to Drop Class, or a Petition for Honorable Dismissal, which is the withdrawal from college.
These petitions are obtained from the student’s counselor or the Office of Admission and Records. Failure to attend classes does not constitute a regular withdrawal, and may result in an “F” or “WU” grade in the course. The date of withdrawal is when the completed Petition is received in the Office of Admissions and Records, not the last date of attendance in classes.

Students withdrawing from class or from college during the first 11 instructional weeks of a semester course are assigned a No-Penalty “W” grade. Students withdrawing from class or from college during the 12th instructional week and until the end of the week preceding the final examination period will be assigned a “W” grade if passing, and a “WF” grade if not passing. For classes scheduled for less than one semester the last day to withdraw from the class and receive either a “W” grade if passing or a “WF” grade if failing, is the Friday of the week preceding the last week of instruction. Petitions must be received by the Office of Admissions and Records by this date.

For classes scheduled for less than one semester, the No-Penalty “W” withdrawal periods are as follows:

- a 9-week course—6 weeks
- an 8-week course—5 weeks
- a 6-week course—4 weeks
- a 3-week course—2 weeks

**Physical Education**

Each first-time college student is required to enroll, to attend regularly, and to maintain a satisfactory record in physical education activity for his first two consecutive semesters of attendance at the Glendale Community College, except that a person may be exempt upon presentation of evidence that he (1) has attained the age of 21 years, or (2) is registered for 8 units or less, or (3) has a medical excuse on file, or (4) is enrolled in special programs such as extended day only, licensed vocational nursing or block-unit occupational programs. No student may receive credit for more than two Health and Physical Education activity classes in any one semester. It is recommended that a variety of activities be taken during a student’s attendance at Glendale Community College. It may be possible to repeat the same class for more than one semester.

**Final Examinations**

At the end of each semester a special Final Examination Schedule is followed. Students must attend all classes in accordance with the special schedule for that period. This arrangement permits the giving of final examinations in those classes which require them and the completion of the instructional program in the other classes. No student shall be excused from taking a final examination where such is required as part of a course.

**Petitions Procedure**

A student feeling that in his case there are circumstances warranting special consideration for adjustment or deviation from established procedures and policies of the College may petition.

**Clearance of Obligations**

All obligations to the College must be met before a student’s record may be considered clear.

**Transcripts to Other Colleges**

Upon the request of a student, a transcript of the student’s record at Glendale Community College will be sent to any college or university. A charge of one dollar each is made for sending transcripts.
Graduation Requirements

The Associate in Arts Degree is granted to persons who file in the Office of Admissions and Records a Petition for Graduation and who satisfactorily complete a college curriculum of 60 semester units with a "C" average and a minimum of 12 units taken at Glendale Community College, including all of the following:

1. A major leading to a well-defined objective. This requirement may be met by completing a 20 semester unit major in Humanities, or Science, or Applied Arts, or by completing the Glendale Community College general education breadth requirements for admission to the California State University and Colleges. See Page 217.

<table>
<thead>
<tr>
<th>HUMANITIES</th>
<th>SCIENCE</th>
<th>APPLIED ARTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine Arts</td>
<td>Biology</td>
<td>Business</td>
</tr>
<tr>
<td>Language Arts</td>
<td>Mathematics</td>
<td>Health</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>Physical Science</td>
<td>Home Arts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Technology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vocational Nursing</td>
</tr>
</tbody>
</table>

2. Two units in American Institutions are required. Courses which satisfy this requirement include History 117-118*; Political Science 101, 105, 151***; Social Science 131-132**.

3. One unit in State and Local Government is required. Courses which satisfy this requirement include Political Science, 106, 151***; Social Science 131-132**.

4. Two units in American History are required. Courses which satisfy this requirement include Economics 111; History 110, 117-118*, 151; Social Science 131-132**.

5. Six units in oral and/or written English are required. Courses which satisfy this requirement include English 101, 102, 120, 121, 122, 123, 125, 126, 131, 132, 190, 191, 192, 198, 199 (English 199 used for four of the six required units); Business 145, 147; Journalism 102; Speech 101, 121; and Supervision 111, 112.

6. Satisfactory evidence of proficiency in mathematics must be given. This evidence may be a satisfactory score on the Mathematics Proficiency Examination, or a passing grade in any mathematics course taken at any accredited college.

7. Two semester units of community and personal hygiene must be completed. Courses which satisfy this requirement include Health and Physical Education 101 or 103 or equivalent.

8. Two units of physical education activity classes must be completed unless exempted by established policy.

10. Fifteen semester units of general education including at least one course in each of the following areas:

a. Natural Science. At least one course from physical science or from biological science must be selected: Anthropology 101; Astronomy 101; Biology 101, 102, 112, 120, 121, 122, 123, 124, 125, 130, 137; Chemistry 101, 102, 103, 105, 106, 110, 141, 143; Geography 101; Geology 101, 105, 110; Home Arts 125; Mathematics 101, 102, 103, 104, 105, 106, 130, 138; Mineralogy 101, 141; Paleontology 101; Physics 101, 102, 103, 105, 106, 110, 111, 145; Science 131.

b. Social Science. Courses completed to satisfy requirements 2, 3, and 4 may not be used to fulfill the requirement in Social Science. At least one course from the Social Sciences must be selected: Anthropology 102, 103; Economics 101, 102, 105, 111; Geography 102, 105; History 101, 102, 103, 104, 106, 107, 108, 109, 110, 112, 117, 118, 119, 120, 151; Political Science 101, 102, 103, 104, 105, 106, 108, 110, 151; Psychology 101, 102, 110, 131; Social Science 121, 131-132; Sociology 101, 102.

c. Humanities. Courses completed to satisfy the requirements in 5 may not be used to fulfill requirements in Humanities. At least one course from the Humanities must be selected: Art 101, 102, 103, 106, 107, 108, 110; English 105, 106, 109, 110, 121, 122, 123, 125, 126, 198; Music 110, 111, 112, 113, 114, 120, 125, 126, 138; Philosophy 101, 113, 114, 116, 119, 120; Theater Arts 103, 105.

d. Learning Skills. Courses completed to satisfy the requirements in 5 may not be used to fulfill requirements in Learning Skills. At least one course from Learning Skills must be selected: Business 101, 102, 111, 112, 145, 147, 161; Economics 107; English 101, 102, 120, 131, 132, 190, 191, 192, 199; Journalism 101, 102; Mathematics 140, 141, 143, 144, 150; Philosophy 117; Social Science 141; Speech 101, 121; Supervision 111, 112; All Foreign Languages.

*This course satisfies requirements 2 and 4.
**This course satisfies requirements 2, 3, and 4. (Both courses, Social Science 131 and 132, must be completed to satisfy requirements 2, 3, and 4.)
***This course satisfies 2 and 3.
Curriculums

Curriculums which may lead to the Associate in Arts Degree* are of two categories, those designated Certificate Programs and those designated Transfer Programs.

Certificate Programs

Certificate Programs are primarily business and technical programs for students desiring education beyond high school. These programs provide opportunities for students to prepare themselves for a wide variety of careers and to enrich their cultural backgrounds. In most cases these programs are planned without regard to transfer schools; however, many courses are transferable to four-year colleges or universities if students change their educational goals.

Certificates of Completion are issued to those requesting them who complete the required Certificate courses with an average grade of "C" or better though they are strongly urged to meet the graduation requirements for the Associate in Arts Degree.*

1. Certificates of Completion shall be issued upon request by the Office of Admissions and Records to students who qualify for them by completing one of the occupation-centered curriculums. The student must have an average grade of "C" in the required occupational courses.

2. To be eligible for the Certificate a student must complete a minimum of 24 units of college work including the required courses.

3. At least twelve units of the required courses must be completed in residence at Glendale Community College.

Transfer Programs

Transfer Programs are for students planning to transfer to a university or a four-year college with full junior standing. Students planning to transfer with junior standing may with thoughtful planning complete the graduation requirements for the Associate in Arts Degree* by taking courses in the lower division which will also satisfy the Baccalaureate Degree requirements and in addition should fulfill the following conditions: (1) must remove any existing entrance deficiencies in grades or subject matter required by the senior college and they must maintain the grade point average specified by it; (2) they should complete the lower division requirements prescribed by the senior college for all students; (3) they should satisfy the lower division major field requirements prescribed by the senior college; (4) they must make a satisfactory score on a scholastic aptitude test, if this is required by the transfer college. Those planning to make the transfer without being admitted to junior standing need to complete only the first requirement listed above and to have made satisfactory progress on the others.

For the most part, the suggested courses for transfer programs are based upon the requirements and recommendations of the University of California and the California State University and Colleges. A student planning to transfer to a different institution of higher learning should study carefully the lower division requirements of that school. The lower division requirements of colleges of most frequent transfer are printed under General Education Requirements For Graduation From Colleges and Universities in the section of this Catalog describing programs for transfer students.

*For Graduation Requirements, see page 45
Certificate Programs

Certificate Programs which can be completed at Glendale Community College.

Advertising Art
Training in art may lead to many types of employment. Positions available and opportunities for advancement will largely be determined by the background of training and the ability of the applicant. The curriculum listed below is designed to prepare the student for employment in the commercial field. Those majoring in the field of advertising art will find it advantageous to know how to type. Students transferring to professional art schools for advanced training may receive credit for courses taken at Glendale Community College.

These courses are required: Art 103, 113, 114, 115, 116, 117, 122, 123 and 3 units from either Art 101 or Art 102

A minimum of four units must be selected from the following: Art 101 or 102, 118, 124, 125, 134, 138, 140, 142, 144
Photography 107

Aerospace Technologies—Airlines Administration
*Airlines Administration* is for those who wish to enter airline work as Clerks, Agents, Station and Traffic Managers.

These courses are required: Aerospace Technologies 120, 128, 130
Business 105, 145, 147 or equivalent
Psychology 110

A minimum of eight units must be selected from the following:
Aerospace Technologies 110, 111, 112, 113, 121, 122, 123, 124, 126
Business 175, 177, 241

Aerospace Technologies—Flight Stewardess
*Flight Stewardess* is for those who wish to become flight stewardesses. The airlines differ in specific requirements, but the following are typical: age 21-26 years; weight 100-125 pounds; height 62-66 inches; vision 20-40 or better; and two years of college. Applicants must be neat in appearance, interested in people and their travel problems, acceptable personally and physically.

*Note:* Students following the Flight Stewardess Program should take Aerospace Technologies 129 prior to Aerospace Technologies 120.

These courses are required: Aerospace Technologies 120, 129, 130
Home Arts 133
Psychology 110
Speech 101 or Speech 121

A minimum of nine units must be selected from the following:
Aerospace Technologies 110, 111, 122, 123, 126, 128
Business 241
Geography 105

Aerospace Technologies—Aircraft Powerplant Maintenance and Overhaul (FAA Powerplant License)
These courses are required: Aerospace Technologies 141, 142, 143
Aerospace Technologies—Aircraft and Powerplant Maintenance and Overhaul (FAA Powerplant and Airframe License)

This course of study is designed for those students who wish to complete the work for the "A" and "P" certificates in the shortest possible time. Required courses to be taken in this order: Aerospace Technologies 141, 142, 143, 145, 146.

*Note:* The Associate in Arts Degree may be obtained in two and one-half years along with the combined "A" and "P" course which requires four semesters by taking additional subjects required for graduation during the remaining one-half year.

Aerospace Technologies—Pilot Training

Training offered in this field:
1. Instruction for those who wish to complete two years of college to become eligible to enter Military Aviation Training or to become Commercial Pilots.
2. Basic Pilot Training: Designed for those who want to enter some field other than Military Pilots or Commercial Pilots. It is recommended that the Aviation Mechanic student take this course.
3. Advanced Pilot Training: A course designed to give the Private Pilot adequate aeronautical knowledge and experience necessary to enter the field as a Commercial Pilot with an Instrument Rating as his career. To enter this course, it is required the student satisfactorily complete the required courses of basic aeronautics.

These courses are required: Basic Pilot Training: Aerospace Technologies 120 Advanced Pilot Training: Aerospace Technologies 121, 122, 123, 124, 126

A minimum of 12 units must be selected from the following:
Aerospace Technologies 110, 111, 112, 113, 115, 116, 125, 127, 128, 130, 131
Mathematics 143 or equivalent

Architectural Drafting

This two-year curriculum prepares a student to enter employment as an architectural draftsman in the building construction field. The program follows the employment requirements of Southern California firms in the building trades. Fundamentals of architectural design and current drafting practice are stressed.

These courses are required: Architecture 101, 105, 109, 110, 111, 112
Art 116

Elective units from the following list are recommended: Art 113, 115, 117
Architecture 103
English 131 or 132
Materials and Processes 146
Mathematics 143-144 or 101-102
Metals 115
Physics 145

Architectural Engineering Drafting (Commercial)

The two-year curriculum prepares a student to enter employment as an architectural draftsman in the architects' offices. The program follows the recommendations of the Architectural Drafting Advisory Committee, and meets the employment requirements of Southern California architectural firms. The course covers basic principles of architectural revision, coordination, detailing and design, architectural engineering systems, and
specifications for reinforced concrete, concrete block, masonry and steel. Architectural strength of materials is integrated with a class project which includes the preparation of a complete set of working drawings from given specifications. This project stresses various presentation media, and current architectural professional practices.

These courses are required: Architecture 105, 191, 192, 193, 194
Art 116
Mathematics 143-144 or 101-102

Elective units from the following list are recommended: Architecture 103
Art 111, 113, 115, 117
English 131 or 132
Materials and Processes 146
Metals 115
Physics 145

Art
For the student who is interested in art as a career, this curriculum will prepare him for advanced work in an art school, or for further intensive work in the field of his choice. If the student plans to transfer to a university he should consult the catalog of that university for requirements.

These courses are required: Art 103, 113, 114, 115, 116, 117

A minimum of 11 units must be selected from the following: Art 101 or Art 102 (3 units) and Art 119, additional units from any remaining art courses.

Business—Accounting
The accounting curriculum provides comprehensive training for career employment as accountants, both in private business firms and in the public accounting field, as well as in civil service positions. Students who contemplate meeting the additional requirement for the CPA certificate should consult with their accounting instructor or write to the State Board of Accountancy for further information.

Students who have a definite interest in an accounting career, and are willing to make the intensive study necessary in a two-year preparation, can obtain the training to qualify for positions of responsibility in business enterprise, or governmental work. This curriculum also provides a broad general education in the field of business administration.

These courses are required: Business 101, 102, 123, 141, 143, 151, 161
Business 145 or English 101 or English 120
Economics 101-102
Mathematics 101

Elective units from the following list are recommended: Business 111, 124, 125, 126, 127, 135, 147, 149, 157, 162, 257
Cooperative Education 102
Economics 107

Business—Banking
Many types of financial institutions such as banks, savings and loan associations, mortgage companies, loan brokers, investment banks, and stock exchanges offer a variety of job opportunities. The suggested curriculum provides a wide general education in business administration important in these fields, as well as basic training in the specialty.
These courses are required: Business 101 or 105, 102 or 106, 117, 123, 141, 143, 151, 153, 161
Business 145 or English 101 or English 120

Elective units from the following list are recommended: Business 119, 124, 125, 147, 149, 155, 157, 171, 257
Cooperative Education 102
Economics 105
Mathematics 101
Real Estate 101

**Business—Bookkeeping**

The bookkeeping curriculum has been designed for students who wish to become bookkeepers in private industry or government service. It is so arranged that students forced to terminate their schooling after completing one, two, or three semesters will have acquired skills necessary for employment. Students expecting to serve in the Armed Forces will find this a suitable preparation for many military classifications. Students who wish to become public accountants should take the accounting curriculum.

These courses are required: Business 101 or 105, 102 or 106, 123, 141, 143, 161
Business 145 or English 101 or English 120
Business 117 or Mathematics 101
Elective units from the following list are recommended:
Business 119, 124, 147, 151, 153, 155, 157, 171, 241, 242, 257
Cooperative Education 102
Economics 105

**Business—Clerical**

This curriculum is designed for students who wish to prepare for office work in commercial, industrial, and financial companies, or in government service as typists, office machine operators, filing clerks, mailing clerks, or receptionists. The subject matter is designed to develop operational, communicational, and personal skills required in clerical positions.

These courses are required:
Business 105 or 101, 117, 143, 145, 155, 157 or 201, 231, 233, 235, 243, 245, 246
Elective units from the following list are recommended:
Business 106 or 102, 119, 123, 141, 147, 161 or 165, 175
Cooperative Education 102
Home Arts 133
Psychology 110

**Business—Data Processing**

This curriculum is designed for those students interested in business data processing as an occupational area. Students planning to enter this field to become specialists or technicians should have a comprehensive background in general business, including accounting, with specific emphasis on computer principles and business data processing applications. With the continuing expansion of data processing in business and industry, students who successfully complete this curriculum will have many opportunities for careers in this area.
These courses are required: Business 101 or 105, 123, 124, 125, 130, 135, 141
Business 145 or English 101 or English 120
Business 111 or Mathematics 101 or 141

Elective units from the following list are recommended: Business 102 or 106, 112, 126, 127, 143, 147, 161, 241 or 257
Cooperative Education 102
Economics 107
Mathematics 130
Philosophy 117

**Business—Distributive Education**

The several types of organizations to be found in the distributive industry offer many specialized types of work, and opportunities exist for single proprietorship.

This curriculum is designed for those who plan careers in activities such as marketing, marketing research, public relations, selling, retail selling, retail store management, and advertising. The suggested curriculum offers a wide general education in business administration as well as basic training in the specialty.

These courses are required: Business 101 or 105, 117, 123, 141, 161, 171, 173, 177
Speech 121

Elective units from the following list are recommended: Business 102 or 106, 119, 145, 147, 175, 257
Cooperative Education 102
Mathematics 101

A certificate will also be granted by the Sales and Marketing Association of Los Angeles for the completion of the above.

**Business—General**

The general business curriculum is intended for students who prefer a broad general education in the field of business administration, or for those who have not decided upon a particular specialization within the field of business. Since it constitutes an exploratory experience, many such students will develop an interest in one of the specialized business curriculums. If so, they are encouraged to make a change in program (with the counselor's help) during the first year to avoid loss of time or credit.

These courses are required: Business 105 or 101, 123, 141, 151 or 153, 155, 161, 173 or 175
Business 145 or English 101 or English 120
Business 117 or Mathematics 101

Elective units from the following list are recommended: Business 106 or 102, 119, 143, 147, 157, 162 or 165, 171, 177, 257
Cooperative Education 102
Economics 105
Real Estate 101

**Business—Insurance**

The several types of organizations to be found in the insurance field offer many specialized opportunities for individual proprietorship.
In the following insurance curriculum attention is given to the license requirements in California. The State requires that solicitors, agents, and brokers pass examinations before they can operate in their respective fields. An examination is given for life insurance and another examination for all other types of insurance.

These courses are required: Business 101 or 105, 117, 123, 141, 143, 149, 153, 155, 161 or 165, 175  
Business 145 or English 101 or English 120

Elective units from the following list are recommended: Business 102 or 106, 119, 147, 157, 171, 177, 257  
Cooperative Education 102  
Real Estate 101, 105

**Business—Medical Assistant (Administrative)**

This curriculum is designed for those students who are preparing to become administrative medical assistants in offices of physicians, medical clinics, hospitals, and allied facilities.

These courses are required: Biology 120 or 121  
Business 143, 221, 222, 225, 237, 243  
Business 145  
Psychology 101 or 110

Elective units from the following list are recommended: Biology 112  
Business 101 or 105, 117, 123, 147, 155, 161 or 165  
Cooperative Education 102  
Home Arts 133  
Sociology 101, 102

**Business—Real Estate**

Many job opportunities exist in the larger real estate offices, in title companies, in real estate departments, in banks, and in various departments of governmental agencies. The real estate field also offers excellent opportunities for individual proprietorship. Such opportunities and advancement depend upon basic training as well as upon individual initiative and experience in the field.

In the following real estate curriculum, special attention is given to the license requirements in California. The State requires that salesmen, agents, and brokers pass examinations before they may work in their respective fields. Before applicants may take the State examination for the broker’s license, they must have completed college credit courses in Real Estate 105, 107, 109, and 111.

Glendale Community College will grant a Certificate in Real Estate to persons who satisfactorily complete fifteen units chosen from the required real estate courses and nine elective units in recommended courses for a total of twenty-four units.

These courses are required: Real Estate 103, 105, 107, 109, 111

A minimum of nine units must be selected from the following: Business 101 or 105, 102 or 106, 117, 141, 147, 149, 151, 153, 155, 161, 162, 173, 175, 241, 242  
Business 145 or English 101 or English 120
Cooperative Education 102  
Economics 101, 102  
Real Estate 101

**Business—Secretary, Executive**  
This curriculum is designed for those students who wish to prepare for positions as professional secretaries. Such opportunities exist in commercial, industrial, and financial companies, as well as in government service.  
These courses are required: Business 105 or 101, 117, 145, 147, 202, 203, 211*, 231, 233, 235, 243, 245  
*Minimum speed requirement of 100 wpm

Elective units from the following list are recommended: Business 106 or 102, 119, 123, 141, 143, 151, 153, 155, 161, 162 or 165, 210 or 211, 246  
Cooperative Education 102  
Economics 105  
Home Arts 133  
Psychology 101 or 110

**Business—Secretary, General**  
This curriculum is planned for students who wish to prepare for positions as secretaries. Upon completion of the curriculum, graduates are equipped to enter any of the major fields of business or government service.  
These courses are required: Business 105 or 101, 117, 123, 141, 143, 147, 202, 211*, 231, 233, 235, 243, 245, 246  
*Minimum speed requirement of 80 wpm

Elective units from the following list are recommended: Business 106, or 102, 123, 141, 155, 161 or 165, 203, 210 or 211  
Cooperative Education 102  
Home Arts 133  
Psychology 101 or 110

**Business—Secretary, Legal**  
This curriculum is designed for those students who are preparing for a secretarial position in a law firm, in a legal department in business, or in government organizations.  
These courses are required: Business 105 or 101, 145, 161, 202, 203, 207, 211*, 231, 233, 235, 243, 245  
*Minimum speed requirement of 100 wpm

Elective units from the following list are recommended: Business 106 or 102, 117, 123, 141, 143, 147, 151, 155, 162, 210 or 211, 236, 246  
Cooperative Education 102  
Economics 105  
Home Arts 133  
Psychology 101 or 110  
Real Estate 101

**Business—Secretary, Medical**  
This curriculum is designed for those students who are preparing for a secretarial position in offices of physicians, medical clinics, hospitals, and allied facilities.  
These courses are required: Biology 121 or 120  
Business 105 or 101, 145, 202, 211*, 221, 222, 225, 235, 237, 243, 245
Minimum speed requirement of 80 wpm

Elective units from the following list are recommended: Biology 112 Business 117, 123, 143, 147, 155, 161 or 165, 203, 210 or 211, 246
Cooperative Education 102
Home Arts 133
Psychology 101
Sociology 101, 102

**Cosmetology**

Glendale Community College has contracted with two Glendale beauty colleges for the provision of cosmetology instruction to registered Glendale Community College men and women students. The college pays the student's full tuition expense at the beauty colleges. The completion of Cosmetology 111, 112, 113, and 114 provides 1600 hours of theory and practice required by the State of California Cosmetology Act and by the Board of Cosmetology for licensing as a Cosmetologist. The 1600 hours may be completed in four semesters; or a combination of three semesters and one ten-week summer session; or a combination of two semesters and two ten-week summer sessions.

During the program, at least one two-unit college course, in addition to cosmetology, must be taken except during the summer.

These courses are required: Cosmetology 111, 112, 113, 114.

**Draftsman (Junior Engineer)**

This course of study provides basic and advanced training in Technical Drawing. It covers the fundamentals of all types of drafting. The work is so organized that the student learns the manipulative skills, layout procedures, and drafting techniques required of the professional draftsman or junior engineer. A basic course in mechanics, strength of materials and shop processes, physics, electronics, structural and machine design is integrated within the framework of the two years of preparation.

These courses are required: Drafting 131, 132, 133, 134
Mathematics 143, 144 or equivalent
Materials and Processes 146

Elective units from the following list are recommended: Electronics 175, 177
English 131, 132
Machine Shop 101, 107, 108
Metals 115
Physics 145

**Electronics Technician (See Television Repair)**

Development of electronics and communications devices is in a large part responsible for the industrial growth of this country. Craftsmen and scientists conducting research in these fields are constantly adding new methods and machines to an already extensive industry. New discoveries are creating additional employment opportunities in the many fields of electronics. A large part of Space Technology is devoted to electronics, and as this area of science is expanded the need for qualified electronic technicians will greatly increase.

These courses are required: Drafting 129 or equivalent
Electronics 171, 172, 173, 174
Mathematics 143, 144 or equivalent
A minimum of six units must be selected from the following: English 101, 102, 131, 132
Mathematics 103
Physics 145
Speech 101 or Speech 121

For employed students taking Extended Day work the following courses are recommended: Electronics 177, 178.

**Engineer—Junior Engineer**
*(see Draftsman)*

**Fashion Design**
A curriculum designed to prepare persons for careers in the clothing industry includes training as pattern makers and designers, layout workers, sample makers, inspectors, drapers, fitters, cutters and finishers. Stresses knowledge of merchandise and selling techniques of fashion goods. Ample opportunity exists for students majoring in this field to obtain, through a wise selection of electives, a broad and liberal education.

These courses are required: Art 113, 116
Business 145
Home Arts 117, 118, 119, 120, 122, 133
Theater Arts 123 (2 units only)

**Journalism**
The two-year journalism curriculum is designed to give students who are planning to enter the journalism field immediately after graduation from a two-year college program which offers a background in general education and the opportunity to learn the basic techniques required for newspaper work.

These courses are required: English 101, 102, 105, 106
Journalism 102, 103, 104

A minimum of three units must be selected from the following: Economics 101
History 107, 108, 109, 110
Political Science 101

**Library Assistant**
This program is for the student who wishes to prepare for work as a clerical assistant in a library of a college, high school, or public or private agency. Students seeking employment in industrial and research libraries should choose electives and required course options which concentrate on the specialty of the library. Students wishing to become professional librarians should follow the Librarianship transfer curriculum. If course prerequisites have been met, students undecided between professional and non-professional careers should choose electives and required options from that curriculum.

These courses are required: Art 101 or 102
Biology 122
Business 242
English 101
History 110 or 117-118 or Social Science 131-132
Psychology 101 or 110
Science 131
*Business 117 or Mathematics 150

Practical experience as a student assistant in the Glendale Community College Library for two semesters.

*A satisfactory score on the Mathematics Proficiency Examination may be substituted.

Manufacturing Technology

Students seeking careers in manufacturing engineering, tool engineering, or tool design at the professional level should investigate this training program.

These courses are required: English 101 or 120 or 191
Machine Shop 101, 102, 103
Mathematics 103, 104
Physics 105, 106
Speech 101

Elective units from the following list are recommended: Chemistry 101
Economics 101
History 110
Machine Shop 104
Political Science 101
Psychology 101

Nursery School

The Nursery School curriculum is designed to prepare men and women to teach in nursery schools, Head Start Child Development Centers, pre-school classes, day-care centers and Children's Centers.

These courses are required: Home Arts 135, 140, 141, 142

A minimum of three units must be selected from the following: Home Arts 136, 138, 143

Electives (9 units) may be selected from any course listed in the current catalog.

Nursing, Vocational

A twelve month program in vocational nursing. Satisfactory completion of the program leads to the Glendale Community College Vocational Nursing Pin and Certificate, and to the California State Board Examinations in Vocational Nursing.

These courses are required: Vocational Nursing 101, 103, 105, 107, 110, 112, 114, 116, 118, 120, 130, 132, 134

Office Work (See Business-Clerical)

Photography

Designed to prepare a student to enter the field as a photographer in advertising design, studio work, as a news photographer, or a free-lance photographer. Students planning to enter advertising or studio work would find it advantageous to elect courses in art; if planning to specialize in technical work, they should take courses in chemistry and physics; and if wishing to become newspaper photographers, they would profit by courses in journalism.
These courses are required: Art 113
Photography 101, 102, 103, 105, 107, 108

Elective units from the following list are recommended: Art 115, 116, 122
Chemistry 141 or 143
English 101, 102
Journalism 101
Physics 105, 106
Social Science 131-132

**Police Science**
This curriculum in Police Science is designed for in-service or pre-service students who wish to prepare for, or to improve themselves in, positions in the several fields of law enforcement. A total of at least 24 units is required for the Certificate of Completion.

A minimum of 20 units must be selected from the following courses: Police Science 101, 103, 104, 106, 107, 108, 110, 112, 114, 116, 118, 120, 122, 124, 126, 129, 130, 134, 136

**Real Estate (See Business)**
**Recreation Leadership**
This program is designed for the man or the woman who plans to assist a graduate manager with the many and diverse projects of civic and/or church related recreation programs.

These courses are required: Health and Physical Education 101, 110, 118, 119
Badminton, Gymnastics, Archery, Tennis, Volleyball, Basketball, Touch Football, Dance

A minimum of 13 units must be selected from the following: Art 101 or 102 or 103 or 106
Biology 121, 122
Music 120, 130 or 131
Police Science 101 or 118
Psychology 101 or 110
Speech 101 or 121

**Supervision**
A training program for foremen, supervisors, leadmen, and other group leaders in business and industry. A Certificate of Completion in Supervision will be granted those who satisfactorily complete a 24-unit program as outlined. Students may select electives in specialized fields such as technical drafting, blueprint reading, electronics and technical mathematics.

A minimum of 20 units must be selected from the following courses: Supervision 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115

**Social Studies Statistician**
This course is for the student who would like to be of special assistance to librarians in government agencies or colleges. The training would familiarize the student with vocabulary and concepts in most of the social sciences.

These courses are required:
Anthropology 102
Economics 107
Political Science 107
Psychology 101, 107, 131
Teacher Aide

This program is designed for mature women who wish to be employed helping teachers with records, typing, duplicating, filing, and classroom management generally.

These courses are required: Business 233, 242
English 120 or 101
Home Arts 135, 136
Social Science 121 or 131

A minimum of seven units must be selected from any course listed in the current catalog.

Technical Graphics

Technical graphics is a visual communication process of preparing art work for our existing age of science and technology. In today's society commercial art and graphics are undergoing massive changes and industry has an ever-growing demand for broader training to fill its varied needs, ranging from drafting to pure artistic illustration and design. This curriculum is designed to prepare students to make pictorial renderings, drawings, brochures, publications, exhibits and models. The need for technical graphics personnel and visual communicators who can select the best approach to design graphic communications is great. Hence this program places emphasis on current methods and techniques used by industrial artists, illustrators, and designers.

These courses are required: Technical Graphics 165, 166, 167, 168

A minimum of 10 units must be selected from the following: Art 113, 116, 122
Engineering 103 or Architecture 105
English 131
Photography 101
Physics 145
Printing 101
Technical Graphics 169, 172

Technical Machine Shop (Machinist)

The two-year curriculum is designed to prepare students for positions in industry. This training should prove particularly beneficial in such occupations as machinist, tool and die maker, tool designer, production planner, tool planner, draftsman, and other manufacturing engineering positions. Completion of the two years will satisfy pre-apprenticeship requirements.

These courses are required: Machine Shop 101, 102, 103, 104

Elective units from the following list are recommended:
Drafting 129 or equivalent
English 131, 132
Machine Shop 109
Materials and Processes 146
Mathematics 150, 143 or equivalent
Physics 145
Welding 117, 118
Television Repair
(See Electronics Technician)
A curriculum designed to train persons in the fundamental skills and
technical knowledge needed by the television repair serviceman. A total of
24 units as indicated below must be earned to qualify for the Certificate. (In
case experience is offered in lieu of any of the four required Television Repi
courses, the course itself need not be taken, but the required number of
units must be taken.)

These courses are required: Television Repair 101, 102, 103, 104

A minimum of six units must be selected from the following:
Drafting 129, 136, 137, 138, 139
English 101, 102, 105, 106, 120, 131, 132
Materials and Processes 146
Mathematics 101, 102, 103, 104, 105, 106, 143, 144, 150
Metals 115
Physics 145
Welding 117, 118

Theater Arts
A curriculum designed to train students for the professional theater, fields of
radio, television, stage, and motion pictures. The following program is
intended primarily for students who plan to enter the profession immediate-
upon completion of the two-year program at Glendale Community College.

These courses are required: English 101 or 120 or 191
Theater Arts 103, 104, 105, 121, 122, 131, 134

Elective units from the following list are recommended:
English 102, 125, 126
Technical Graphics 165
Theater Arts 109, 135
Transfer Programs

Transfer Programs which can be completed at Glendale Community College and lead to junior standing at a University or a four-year College.

Accounting

University of California at Los Angeles

Undergraduate: A student preparing for a career in public accounting (CPA) or management accounting remains in the College of Letters and Science for his bachelor's degree work, selecting a major in a department in that college, such as economics or political science, that recognizes certain management and accounting courses as part of the major. The baccalaureate program is followed by the Professional Master's Program in the Graduate School of Management which leads to the MBA degree. The Professional Master's Program provides a balance between broad background preparation in management and specialization in a professional field of concentration, such as accounting.

Students selecting this combination of programs should consult with an adviser in the Graduate School of Management when selecting management and accounting courses as part of his or her bachelor's program.

Aeronautics (Baccalaureate Majors)

California State University, San Jose

Maintenance—The curricula for the two Bachelor of Science Degree programs in aeronautics have been designed to prepare the graduate for entry into a wide range of positions in the aerospace industry. All students receive a thorough training in the fundamentals of aviation integrated with mathematics, science and general education courses especially chosen for their applicability to the aerospace field. The opportunity for specialization is presented in the form of the two degree curricula, aeronautical maintenance and aeronautical operations. Additional orientation towards such areas as space technology, commercial air transportation, or fixed base operations may be obtained by a proper selection of elective courses. The services of the adviser are available for this purpose.

A Federal Aviation Administration-approved school is operated as an integral part of the aeronautics curriculum and extensive laboratory facilities are available to all students. All aeronautical maintenance majors are required to obtain their airframe and powerplant rating as a part of the Bachelor of Science Degree requirements.

Required courses—Maintenance: Aerospace Technologies 120; Chemistry 101, 102; Economics 101; Engineering 103, 104; English 101; Mathematics 103, 104, 105; Physics 101, 102; Psychology 101; Speech 101.

Required courses—Operations: Aerospace Technologies 120; Business 101, 102, 161; Chemistry 110; Economics 101, 102, 107; Engineering 104; English 101; Physics 105, 106; Psychology 101; Speech 101.
Agriculture  
California Polytechnic State University, San Luis Obispo
Agricultural students would find it advantageous to have completed the following courses in high school: Mathematics, including two years of algebra; chemistry, 1 unit; biology, 1 unit; vocational agriculture (if available), two years. Such high school preparation would serve to enhance the students' preparation for all agricultural majors. In the first two years of college, students should include in their course of study the following: Biology 101, 102; Chemistry 101, 105; English 101, 102; History 110; Political Science 101, 106; Mathematics 101, 102; Health and Physical Education 101. Recommended: Psychology 101; Speech 101; Welding 117.

Architecture  
Architectural Engineering  
Construction Engineering  
California Polytechnic State University, San Luis Obispo
Students planning to enter the School of Architecture and Environmental Design would be encouraged to include the following course work in their programs: English 101; English 102; Mathematics 103, 104; Physics 101; Psychology 101; Political Science 101, 106; History 110; Economics 105; Philosophy 101; Art 116; Architecture 101, 102, 103, 105.

City and Regional Planning  
California Polytechnic State University, San Luis Obispo
Students planning to enter the School of Architecture and Environmental Design would be encouraged to include the following course work in their programs: English 101; Business 111; Psychology 101; Political Science 101, 106; History 110; Economics 105; Philosophy 117; Physics 105, 106; Biology 122; Art 116; Architecture 103, 105.

Landscape Architecture  
California Polytechnic State University, San Luis Obispo
Students planning to enter the School of Architecture and Environmental Design would be encouraged to include the following course work in their programs: English 101; English 102; Business 111; Psychology 101; Political Science 101, 106; History 110; Economics 105; Philosophy 101; Science 131; Geology 101; Biology 101, 102; Art 116; Architecture 103, 105.

Business Administration  
Pepperdine University
The following are required or elective lower division courses in degree programs: Business Administration; Accounting; Bachelor of Science in Administrative Science; Aviation Management; Public Management:

Business 101, 102, 111-112, 141
Economics 101, 102, 107
English 192
Psychology 101
Sociology 101

The above are required or elective lower division courses in the following Pepperdine degree programs:
Business Administration
Accounting
Bachelor of Science in Administrative Science
Aviation Management
Public Management
Transfer students may also receive elective courses in certain Pepperdine programs for courses taken in the following fields: Aerospace Technologies; Business; Economics; Electronics; Police Science; Public Administration; Real Estate; Vocational Nursing.

Students graduating from Pepperdine must also complete General Education requirements described in the catalog. (A student entering Pepperdine with the A.A. degree meets all General Education requirements in the Public Management Program.)

University of California, Berkeley
A student transferring from a community college must have followed a program of study which includes the following:

Business 101-102, Mathematics 103-104, or Business 111-112; Economics 101-102, 107; English 101-102; two courses in natural science other than mathematics or statistics; Sociology 101 or Psychology 101, or Anthropology 102.

University of California, Los Angeles (Graduate)
The Graduate School of Management admits only students who have Bachelor's Degrees. Detailed information may be obtained from the Student Affairs Office of the School.

California State University, Los Angeles
Students planning to enter the School of Business and Economics, California State University, Los Angeles, at the end of two years at Glendale Community College, must complete a minimum of 60 transferable units and may have a maximum of 70 units, with an over-all "C" average in all work. Courses should be included which may be used to partially satisfy the general graduation requirements for the Bachelor's Degree. The following courses are required: Business 101-102, 111-112, 161; Economics 101-102, 107. See page 217 for general education requirements for California State University, Los Angeles.

CALIFORNIA STATE UNIVERSITY FRESNO
Elective Courses: Business 127, 135, 141.

California State University, Northridge
Office Administration Sequence:
Students planning to major in Business Administration, at the end of two years at Glendale Community College, must complete a minimum of 60 transferable units and have a maximum of 70 units, with an over-all "C" average in all work. Courses should be included which may be used to partially satisfy the general graduation requirements for a Bachelor's Degree. The following courses are required: Business 101, 102, 161; Economics 101, 102; Mathematics 103-104 or Business 111-112. See page 217 for general education requirements for California State University, Northridge.

For the option in Office Administration Sequence:
This program is offered especially for students who wish to prepare for positions as administrative assistants, executive secretaries, office
managers, office systems analysts, or careers in office data processing. The following courses are required: Business 241*, 242*

For the option in Business Education-Secondary Teaching Credential: This program is designed for the student who wishes to prepare for a teaching career in business at the junior high school level or senior high school level. The following courses are required: Business 111-112, 241*, 242*, 201-202**, 231, 141.

*Transfer credit in typing, 6 units maximum.
**Transfer credit in shorthand, 10 units maximum.

**University of Southern California**
The University of Southern California offers a curriculum in Business Administration leading toward the Bachelor of Science degree. The following courses are required with minimum units shown.

Accounting (8 units) Business 101 and 102
Behavioral Science (6 units) Anthropology 102; Geography 102 or 105; Psychology 101, 102, 131; Sociology 101, 102.
Economics (6 units) Economics 101-102
English (6 units) English 101-102
*Humanities or Social Sciences (6 units)
Art, Music, Philosophy, Theater Arts (Drama) History, Physical Geography, Political Science, Theater Arts
*Literature (3 units)
Mathematics (6 units) Mathematics 102, 103 or Business (10 units) Business 111-112

*Natural Sciences (7 units excluding mathematics)
Recommended: Business 161 and 162. Note: If Business 161 is taken, then 162 should also be taken before transferring. Business 161 and 162 will fulfill the upper division Business Law requirement at USC.
*See courses listed under these headings for The College of Letters, Arts, and Sciences on page 218.

**Chemistry**
**College of Chemistry, University of California at Berkeley**
Admission to upper division chemistry for a total of 90 quarter units is contingent upon a grade point average of at least 2.5 in courses basic to the major. Recommended courses include: Chemistry 101-102, 103, 105-106; Physics 101, 102, 103; Mathematics 103, 104, 105, 106; English 101 or Speech 101; Economics 101; German 101-102; History 117-118.
A student may pursue the study of chemistry on any campus of the University by enrolling in the College of Letters and Science, with a major in chemistry. For details on College of Letters and Science breadth requirements refer to page 194 of this catalog.

**Chiropractic**
**Los Angeles College of Chiropractic**
The pre-professional program of the student desiring to matriculate at the Los Angeles College of Chiropractic may be undertaken at Glendale Community College. Sixty transferable units should be completed. Electives should be chosen from speech, philosophy, literature, or from culturally or
professionally related subjects. It is recommended that a foreign language be included in the electives.

These courses are required: Biology 101, 102; Chemistry 101, 102
Complete a minimum of six units selected from the following:
Economics 101
Political Science 101
Psychology 101
History 117, 118

At least six units should be chosen from this category.
English 101, 102
Music 120
Electives to total 60 units.

Criminology

California State University, Long Beach
Majors in Criminology intending to transfer to California State University, Long Beach to continue work for a Bachelor of Science Degree in the law enforcement area are advised to familiarize themselves with the requirements of that University. California State University, Long Beach will accept for transfer credit to be applied toward the major a total of 24 units of lower division work in criminology.

Lower Division: A minimum of 15 units of which Police Science 103, 104, 110 and 120 are required. Courses not satisfied in lower division status may be taken after the student has attained upper division status.

Students may choose 12 units from the following list of courses for a total of 24 units.

Dental Hygiene

Dental Hygiene bears a relationship to dentistry similar to that which nursing bears to the medical profession. Students may complete the two-year Pre-dental Hygiene Curriculum at Glendale Community College and then transfer to a dental school for the remaining two years.

It is recommended by Glendale Community College that a student completing a two-year curriculum include Art 151 and Art 152.

University of California, San Francisco
These courses are required: Chemistry 101, 102, 105, 106
English 101-102
Biology 101-102
Psychology 101, 102 or 131
Twenty semester units selected from the social sciences, humanities, and foreign languages. Courses from each area are not required.

Electives to total 60 semester units.

University of Southern California
Students may apply for admission to the School of Dentistry after completing a minimum of 60 units excluding courses offered in the dental hygiene
curriculum and including the courses shown below. Application should be filed well in advance of February 1 of the year in which the student wishes to be admitted.

These courses are required: Chemistry 101-102  
English 101  
Biology 101-102  
Speech 101  
Psychology 101  
Sociology 101  
Electives from: Biological Science  
Chemistry  
Foreign Languages  
English Composition  
English Literature  
Philosophy  
Social Science  
Music or Art Appreciation

Dentistry, Pre-dental Curriculum

University of California, Los Angeles  
Those wishing to enter the School of Dentistry must have completed a minimum of three full academic years of college work, including the following courses: Chemistry 101-102, 105-106; Physics 105-106, Biology 101-102; English 101-102; Psychology 101; and upper division embryology. Generally, the pre-dental student is advised to seek a sound liberal arts background in the humanities, social and behavioral sciences, in addition to the requirements listed above.

University of California, San Francisco  
The completion of 90 transferable semester units (exclusive of repeated and nontransferable courses) of college work is a minimum requirement for admission to the School of Dentistry. Those who wish to enter the San Francisco School of Dentistry must have completed 90 units (at least 20 units of which must be completed at a senior college). These units must include the subjects in the following list:

General University Requirements*  
English 101-102  
Chemistry 101-102, 105-106  
Physics 105-106  
Biology 101-102  
Psychology 101-102 or 131  
11 semester units—Social Sciences, Humanities, Foreign Languages, Psychology in addition to above. Additional electives to bring the total number of units to at least 90 semester units. (Recommended: Embryology, comparative vertebrate anatomy, genetics, advanced mathematics)

*Students who plan to complete the requirements for the B.S. degree in dentistry must satisfy the English Composition and American History and American Institutions requirements.
University of Southern California
Students may apply for admission to the School of Dentistry after completing 60 units of college work including the following recommended courses: Chemistry 101-102, 105-106; Physics 105-106; Biology 101-102; English 101-102; Art 151, 101 or 102 or Music 120; English Literature; History 107-108, 107-109, 108-109: foreign languages; Philosophy; Political Science 105-106 or 101-106; Psychology 101. Applications should be filed well in advance of October 31 of the year preceding that in which the student wishes to be admitted.

Loma Linda University
Although a two-year pre-dental curriculum in an accredited liberal arts college is prescribed, a Bachelor of Arts Degree, or the equivalent, is advantageous. Students may apply for admission to the School of Dentistry after completing 64 units of college work including the following courses: Chemistry 101-102, 105-106; English 101-102; Physics 105-106; Biology 101-102; Machine Shop 105. Recommended: Art 151-152; Chemistry 103; Mathematics 103, 104, 105.

Dietetics California State University, Los Angeles
Students planning to complete the work for the Bachelor of Science Degree should include the following courses: Chemistry 101-102, 110 Biology 120, 121 Business 101 Sociology 101, or Anthropology 102 Psychology 131 Home Arts 125, 135

Engineering California State University, Fresno
Degrees are offered in civil, electrical, industrial, and mechanical engineering, and in surveying and photogrammetry. Students planning to complete the work for an Engineering degree should include the following courses: Chemistry 101, 102; Engineering 103 (except EE), 108, 110; Mathematics 103, 104, 105, 106, 130; Physics 101, 102, 103; History 117-118.

Students planning to complete the work for a degree in surveying and photogrammetry should include the following courses: Chemistry 110; Engineering 103; English 101; Geology 110; Mathematics 103, 104; Physics 105, 106; Speech 101; History 117-118.

California State University, Fullerton
The engineering curriculum requires completion of 132 semester units for graduation. The areas of concentration open to students are: Electrical engineering, mechanical/aerospace engineering, structural engineering/mechanical engineering mechanics, and engineering science. All students take a common core curriculum for the first two and one-half years.

Mathematics 103, 104, 105, 106; Chemistry 101, 102; Physics 101, 102, 103; Engineering 103, 108, 110. One course in data processing using FORTRAN is recommended.

California State University, Los Angeles
Students planning to complete the work for an engineering major, (B.S. Degree) should include the following courses: Chemistry 101, 102; Engineering 103, 108, 110; Mathematics 103, 104, 105, 106; Physics 101, 102, 103.
California Polytechnic State University, San Luis Obispo
Engineering students should have completed the following courses in high school: mathematics, 4 units, including two years of algebra and trigonometry; physics, 1 unit; chemistry, 1 unit; and mechanical drawing, 1 unit. Without this preparation it will be difficult to obtain an engineering degree in four years. In the first two years students should include in the course of study: Biology 122; Chemistry 101; English 101; Mathematics 103, 104, 105, 106; Physics 101, 102, 103; Engineering 103, 108, 110; Health and Physical Education 101; and four semesters of Health and Physical Education activity courses. Recommended: Engineering 104 or equivalent, Mathematics 130.

California State Polytechnic University, Pomona
Students who plan to transfer to the School of Engineering at Cal Poly, Pomona, should complete approximately 70 semester units if they hope to receive the Bachelor of Science Degree in a minimum of time. During April of the year the student becomes eligible to transfer, he should contact the department head of the Engineering major he wishes to pursue at Cal Poly, Pomona.

The following courses are recommended for all Engineering transfers: Mathematics 103, 104, 105, 106, 130; Physics 101, 102, 103; Engineering 103, 104, 108*, 110; Chemistry 101, 102.

*Engineering 108 required only for Electrical Engineering and Chemical Engineering.

California State University, Northridge
The engineering program is arranged to provide the student with a sound program in the fundamentals of engineering, preparing for a career in professional engineering or for continuing academic work toward an advanced degree, and at the same time to provide the broad academic program that constitutes a liberal education. The curriculum consists of 132 semester units and leads to the Degree of Bachelor of Science in Engineering. The curriculum is accredited by the Engineering Council for Professional Development.

It is necessary that today's engineer has a sound education that enables him to adapt to the rapidly changing requirements of a developing technology rather than a narrow and inflexible training. At this Institution, the program has been developed by emphasizing the fundamentals common to all branches of engineering, postponing the study of engineering specialties to the final year.

Since contemporary science is developing with unprecedented speed into ever increasing areas of knowledge, an essential part of the program consists of a rigorous background in the mathematical and physical sciences. This theoretical study comprises most of the curriculum for the first two years.

The program is designed to accept the transfer students from community colleges at the sophomore or junior level.

The undergraduate program for the first year should include: Chemistry 101-102; Economics 101; Engineering 103; Mathematics 103, 104; Physics 101.
The second year should include: Engineering 108, 110; Health and Physical Education 101; Mathematics 105, 106, Physics 101, 102.

For the General Education requirement see page 220.

Stanford
The new programs in the School of Engineering are divided into four majors.
Departmental Majors: Chemical Engineering, Civil Engineering, Electrical Engineering, Industrial Engineering, Materials Science, Mechanical Engineering
Innovative Majors: Any student, aided by his adviser, may propose a unique curriculum to attain his particular career goals. Such programs require approval of the Undergraduate Council.
Technology and Society: This program is designed as a foundation for a career requiring a combination of engineering, science, and societal subjects rather than study-in-depth of any one of these. Approval of such programs by the Undergraduate Council is required.

In the first two years students should include in the course of study the following:
Writing: English 101-102
Humanities and Fine Arts: three courses
Social Science: three courses
Technology: Three courses including:
Mathematics 103, 104, 105, 106
Chemistry 101, 102
Physics 101, 102, 103
Free electives (20 units)—these electives are entirely free and may be used by the student to build a program of greater depth and/or breadth (scientific or otherwise) according to his educational and professional objectives.

University Requirements
Since students majoring in engineering will automatically fulfill the technology requirement advisers and advisees need not be especially concerned with it.
Mathematics [21 units]
Appropriate courses in Mathematics, Statistics, Computer Science, etc. may be selected.

Science [24 units]
Appropriate courses in Physics, Chemistry, Biology, Geology, etc., may be selected.

Engineering Breadth [30 units]
This area is composed of eight categories as follows:
1. Mechanics of Solids and Fluids
2. Electric Circuits and Devices
3. Thermodynamics
4. Materials Science and Properties
5. Logic and Computer Systems
6. Systems Analysis and Control
7. Mass and Energy Transfer
8. Decision Processes, Engineering Economy, and Design
The student's program must contain courses selected from not less than five of these categories for a total of at least 30 units. Three (3) of these five categories should not be directly related to his engineering major. No more than 10 units in any one category can count toward satisfaction of the breadth requirement.

*Engineering Depth [36 units]*
Consult COURSES & DEGREES for detailed information.

*Free Electives [30 units]*

*Functional Balance*
The adviser should be sure that all programs contain some courses with some aspects of: communication, analysis, synthesis, and experimentation.

**University of California at Berkeley**, Davis**, Irvine,**
Los Angeles****, San Diego †, Santa Barbara††

Engineering students should have completed the following courses in high school: Mathematics, 4 units, including two years of algebra and trigonometry; physics, 1 unit or chemistry, 1 unit; and mechanical drawing, 1 unit.† Without this preparation it will be difficult to obtain an engineering degree in four years. In the first two years, students should include in the course of study: Chemistry 101-102, Mathematics 103, 104, 105, 106; Physics 101, 102, 103; Engineering 103, 104, 108, 110.** Nontechnical electives including courses in biology, English, fine arts, humanities and social sciences.

*The Berkeley lower division requirements for Civil Engineering, Civil Engineering and Materials, Science and Engineering, Electrical Engineering and Computer Sciences, Electrical Engineering and Computer Sciences and Materials Science and Engineering, Industrial Engineering and Operations Research, Mechanical Engineering, Mechanical Engineering and Materials Science and Engineering, now include a four-unit (quarter) course in Computers and Their Applications. Students entering Berkeley with junior standing or less in the College of Engineering and majoring in one of the above curricula will be required to have a substantial course in this material.


**Students planning to transfer to Davis are not required to take Engineering 104. Students should take English 101 and either English 102 or Speech 101, plus Mathematics 130 and a course in electronic field and circuits. Students planning to major in chemical engineering should take Chemistry 103 and 105 instead of Engineering 103, 104 and 108.
Students planning to transfer to the School of Engineering at Irvine are not required to take any engineering courses although credit toward graduation will be given for eight semester units (twelve quarter units) of engineering courses. For the engineering options offered, Electrical, Civil and Environmental, Mechanical, and General, a course in the use of the computer is suggested.

Students intending to enter the School of Engineering and Applied Science at Los Angeles should take Mathematics 130, which will satisfy a lower division requirement in computing. An upper division requirement will be met in part by taking Engineering 108.

†Students bound for the Applied Mechanics and Engineering Science majors at Revelle College should complete as many as possible of the Revelle breadth requirements especially in mathematics and physics. They need not take the Glendale Community College engineering courses.

††Students planning to enter the College of Engineering at Santa Barbara are advised to include the following in their lower division programs: Chemical Engineering majors should include Chemistry 103 and 105 instead of Engineering 103 and 104. They will also partially meet upper division requirements by taking Engineering 108. Mechanical Engineering majors will partially meet upper division requirements by taking Engineering 108 and it is recommended that they take Engineering 103, 104 and 110. All engineering students should take English 101 and either English 102 or Speech 101, and a course in Electronics, Field and Circuits. A course in FORTRAN computer programming is also required for all majors.

University of Southern California
The School of Engineering educates students for seven branches of the field. All departments are fully accredited by the Engineers' Council for Professional Development. A Bachelor's Degree in Computer Science is also available. The School works closely with Southern California industries to tailor the curricula to the actual needs of industry. Although the student must choose a program of studies in one of the major departments, the entering student may not be certain of his ultimate goals or of the offerings in the various departments. Therefore, the basic courses of the first two years are organized in such a way that the student may change from one department to another with a minimum loss of time. Bachelor of Science Degree offered in: Aerospace, Chemical, Civil, Electrical, Industrial and Systems, Mechanical, and Petroleum.

Admission Requirements: Students intending to transfer from a community college should plan their first two years of work to correspond as nearly as possible with the plan of study as outlined for their desired majors. Transfer students generally must present a grade point average of at least 2.50 (A—4.0) on all college work attempted. The program must include the following courses: Chemistry 101†; Economics 101-102; English 101; Mathematics 103, 104, 105, 106; Physics 101, 102, 103; Engineering 101 and 103 (except for majors in Electrical or Mechanical Engineering), 110 (except for majors in Electrical Engineering).

*It must also include Chemistry 102 for majors in Chemical and Petroleum Engineering.
California State University, Sacramento
Students who are planning a course of study in the Engineering Technology discipline should have completed the following courses: Materials and Processes 146; Electronics 171; Engineering 101, 108, 110; Business 101-102, 125; English 101-102, 105-106, 119-120; Speech 101; History 110; Political Science 101; Art 101, 102, 103; Music 120; Psychology 101-102; Economics 101-102; Health and Physical Education 101; Mathematics 102, 103; Biology 122; Physics 105-106; Chemistry 110.

Engineering Technology
California State Polytechnic University, Pomona
Students who are planning a course of study in the Engineering Technology discipline should have completed the following courses in high school: mathematics, including algebra and trigonometry; physics; chemistry; and mechanical drawing. Without this preparation it will be difficult to obtain a baccalaureate degree in Engineering Technology in four years. The following technical elective patterns are available in Engineering Technology: Aero-Mechanical, Construction, Electrical-Electronics, and Manufacturing. Students should direct their technical studies toward a career of their choice.

In the first two years students should include in their course of study: Biology 122, 124; Chemistry 101; Economics 101, 107; Electronics 171, 172, 173, 174; English 101; Mathematics 101, 102, 103, 130; Physics 105, 106; Engineering 101, 103; Speech 101; Welding 117; Physical Education Activity courses.

California Polytechnic State University, San Luis Obispo
Students who are planning a course of study in the Engineering Technology discipline should have completed the following courses in high school: mathematics, 4 units, including algebra and trigonometry; physics, 1 unit; chemistry, 1 unit; and mechanical drawing, 1 unit. Without this preparation it will be difficult to obtain a degree in Engineering Technology in four years. The following E.C.P.D. accredited options are available in Engineering Technology: Electronic Technology, Mechanical Technology, Air Conditioning and Refrigeration Technology, Manufacturing Processes Technology, and Welding Technology. Students should direct their studies toward an option of their choice.

In the first two years students should include in their course of study: Biology 122; Chemistry 101; English 101, 102; Mathematics 101, 102, 103, 104; Physics 105, 106; Engineering 103, 104; Health and Physical Education Activity courses.

Foreign Language
College of Letters and Science, University of California, Berkeley
Students majoring in a foreign language should follow the program of studies outlined under lower division requirements. The courses that are required or recommended for each particular language are as follows:

French:
Required: French 101, 102, 103, 104. Unless student receives grade of "A" or "B" in French 104, it will be necessary to complete French 35 at the University of California prior to being admitted to upper division work.

Recommended: History 101-102; Philosophy 119-120; English 101-102, 105-106; high school Latin.
German:
Required: German 101, 102, 103, 104.

Spanish:
Required: Spanish 101, 102, 103, 104. Unless student receives grade of "A" or "B" in Spanish 104, it will be necessary to complete Spanish 25 at the University of California prior to being admitted to upper division work.

Students may not major in Spanish unless a "C" average is maintained in all lower division Spanish courses. Two years of Latin in high school are required of majors in this field. This requirement may be completed by taking Latin 1-2 at the University of California before commencing the senior year.

Forestry and Conservation
The School of Forestry and Conservation, University of California at Berkeley, offers the following degrees: B.S., M.S., M.F., and Ph.D. Junior college transfer students are admitted in junior standing with a least 56 semester units of courses as specified. Minimum requirement may be met by Biology 101-102: Chemistry 101: Economics 101, 102, 107; Geology 101; Mathematics 103; Physics 105-106; and English 101-102 or Speech 101-102.

Students completing the pre-forestry curriculum must enroll in the Summer Field Program during the summer preceding their junior year. This is a ten-week summer field course offered only by the School of Forestry and Conservation and given at Meadow Valley. Application for the Summer Field Program should be made before March 1.

The School of Natural Resources of California State University, Humboldt offers a Bachelor of Science and M.S. Degree in Forestry. Recommended lower division courses for Forest Management and Forest Science options include Biology 101, 102; Chemistry 101, Mathematics 103; Physics 105; and Business 125 or Mathematics 130, Forest Science majors should also include Chemistry 102, Mathematics 104, and Physics 106.

Geography
Students majoring in this field should follow the lower division requirements for the College of Letters and Science. In addition, the following required and recommended courses should be completed at the college or university of their choice.

*(A required course in plane surveying can be taken as a junior at Berkeley.)*

California State University, Los Angeles
Required: Geography 101, 102, 105.

University of California at Los Angeles
Required: Geography 101-102.
Recommended: Mathematics 103-104.

University of California at Berkeley
Required: Geography 101-102, 105.

See page 189.
Geology

Students may specialize in geology in the petroleum engineering branch of the College of Engineering or in the College of Letters and Science. Those taking petroleum engineering should follow the curriculum for engineering. Those electing geophysics should consult the University of California Catalog. Those majoring in geology in the College of Letters and Science at a four-year college or university should fulfill the stated lower division requirements, taking into consideration the following requirements and recommendations:

University of California at Berkeley:
Required: Geology 105-110; Paleontology 101; 40 units of lower division courses in Physics 101, 102, 103; Chemistry 101-102, 103, 105-106; Mathematics 103, 104, 105, 106; Biology 101.

University of California at Davis: (B.S. Degree)
Required: Biology 101; Chemistry 101-102; Mathematics 103, 104, 105; Physics 101, 102, 103 or 105-106; Mineralogy 101.
Recommended: Biology 102; Geology 101, 105; Paleontology 101, Physics 105-106.

University of California at Los Angeles:
Biology 101, 102; Chemistry 101, 102; Geology 105, 110; Mathematics 103, 104, 105, 106; Paleontology 101; Physics 105-106.

See page 189.

History

History majors should follow the curriculum pattern outlined under lower division requirements, taking into consideration the following requirements and recommendations:

University of California at Berkeley:
Required: History 101-102. Two courses chosen from the following: History 107-108 or 108-109 or 107-109, and History 117-118.

University of California at Los Angeles:
Required: History 107, 108, 109 and six units (2 courses) from among the following: History 103, 104, 117, 118, 119, 120. Caution: It is recommended that if a Far East or Latin American course is taken, either the second course in the sequence or a U.S. course accompany it. UCLA calls for 2 non-Western courses in the same area.

University of Southern California:
Required: Six units from History 101, 102, 107, 108, 109, 119, 120.

Industrial Arts

Students majoring in industrial arts should be primarily planning to secure teaching credential. This type of training, however, is also designed to qualify for entering industry in a technical capacity. At present, programs in industrial arts education leading to degrees and fulfilling credential requirements are offered at the following California State Universities: Fresno, San Jose, Long Beach, and Los Angeles. The Catalogs of these particular Universities should be consulted for requirement details.

California State University, Fresno
Construction Option:
Core: Architecture 101; Electronics 175; Business 101, 123; Chemistry 110; Mathematics 103; Materials and Processes 146.
Heavy Building Emphasis: Engineering 103  
Light Building Emphasis: Business 161*, 162*, 165*.  
Real Estate Emphasis: Business 161*, 162*, 165*;  

Manufacturing Option:  
Core: Engineering 101; Electronics 175; Materials and Processes 146; Machine Shop 101 or Metals 115; Mathematics 103; Chemistry 110; Business 123.  
Drafting/Design Emphasis: Engineering 103, 104; Welding 117; Drafting 131*, 132*, 134*.  
Wood Products Emphasis: Chemistry 105  

General Education as outlined on Page 217 including: Economics 101, 102; Physics 105, 106; four semesters of Physical Education.  

*Will meet major requirements for equivalent emphasis courses to a maximum unit value represented by those courses whose content has been covered, and/or elective credit required.  

California State University, Long Beach  
The following courses are recommended in addition to the General Education requirements of the preceding schools; Machine Shop 101; Metals 115; Welding 117; Drafting 129 or Engineering 101; Electronics 175 or 177; Photography 101 or 102; Printing 101. To a maximum of 20 units of credit. See page 217.  

California State University, Los Angeles  
In addition to the completion of the General Education requirements (see page 217,) the following courses must be elected.  
Drafting 131 or Engineering 101; Metals 115; Electronics 171 or Electronics 175; Photography 101-102.  

California State University, San Jose  
Students planning to attend San Jose to seek a major in Industrial Arts should complete: a literature course; Chemistry 101 and 102; English 101 and 102; Mathematics 101 and 102; Physics 105 (4 units), Speech 101.  

California State University, Chico  
In addition to the completion of the General Education requirements (see page 217.)  
The following courses must be elected:  
Carpentry 151; Drafting 131; Electronics 171; Metals 115; Photography 101; Printing 101-104; Technical Graphics 165, 166.
Industrial Technology  California State University, Long Beach

Construction Option: Carpentry 151 for 5 units, plus 7 units of Architecture, or 14 units of Architecture chosen from the following: Architecture 101, 103, 105, 109-112.

Note: Maximum of 24 technical units may be transferred.
Chemistry 110, Business 161; Economics 101, Economics 111 or History 110; English 101; Mathematics 102, 103; Political Science 105-106; Physics 105, 106.

Electronics Option: Machine Shop 105; Electronics 171, 172, 173.
Note: Maximum of 24 units may be transferred for courses in Technical Education.
Chemistry 110; Business 161; Economics 101; Economics 111 or History 110; English 101; Mathematics 102, 103; Political Science 105, 106; Physics 105, 106.

Manufacturing Option: Machine Shop 101; Drafting 131; Technical Electives
Note: Maximum of 24 units may be transferred for courses in Technical Education.
Chemistry 110; Business 161; Economics 101; Economics 111 or History 110; English 101; Mathematics 102, 103; Political Science 105, 106; Physics 105, 106; any course in Art, Music, or Theater Arts (3 units).

Quality Assurance Option: Business 101, 161; Chemistry 110; Economics 101; English 101; Mathematics 103; Philosophy 117; Physics 105-106.

Law  Hastings College of the Law, University of California

The Dean and Committees on Admissions do not require that the prospective student present credits in any special area and an examination of the background of the members of the student body would substantiate this diversity. Generally, however, it is felt that the student should endeavor to provide himself with as broad and general an undergraduate education as possible. This not only aids the College in producing educated and cultured members of the profession but also helps the student by exposing him to more of the complex problems of our society and in providing him with a greater acuity for logical perception and in-depth analysis. It is essential that the student possesses habits of precision, fluency, and economy in speaking and writing.

Applicants for the degree of juris doctor must have received a Bachelor's degree or its equivalent from a college or university of approved standing prior to commencing his studies. All applicants are required to take the Law School Admission Test administered by the Educational Testing Service.

University of California at Berkeley

Experience has shown that students from diverse educational backgrounds do equally well in law school and later in practice. As a result, there is no single "pre-law" major required or even recommended. However, for those students still in a position to structure their curriculum the following are suggested: (1) Develop writing skills. Take courses in which work is edited vigorously. (2) Develop analytical skills. (3) Obtain breadth in humanities and social sciences. A good lawyer must understand the social context within which legal problems arise. (4) Acquire a general understanding of the
business world. A significant portion of legal problems are related to the business community. In selecting specific courses to fulfill these recommendations, consult your undergraduate adviser.

The ability to use a typewriter is also useful to a lawyer or law student.

A student should not be deterred from pursuing the study of law merely because his undergraduate education has not been focused on the suggested areas. The School of Law (Boalt Hall) selects its students from a wide variety of backgrounds and training. This diversity itself enhances and enriches the legal experience of all the students.

**University of California at Davis**

No specific college major is required for admission to the School of Law, and there is no prescribed pre-legal program. Degrees from the Colleges of Agricultural and Environmental Sciences, Engineering, and Letters and Science are all acceptable. The individual student’s college record and Law School Admission Test score must, of course, demonstrate that he is highly qualified for law study.

Pre-legal students should plan a course of study that will give them a broad cultural background and include intensive work for a substantial period of time in a selected field of study. Pre-legal students should develop the ability to communicate easily, persuasively, and accurately; to understand people and institutions; to gather and weigh facts; and to solve problems and think creatively. It is most important that pre-legal students obtain mastery of the English language. They should be able to read rapidly and with comprehension and to express themselves clearly, completely, and concisely, both orally and in writing.

For additional information, see the official *Pre-Law Handbook* 1973-74 edition, published in October, 1973, and prepared by the Law School Admission Test Council and the Association of American Law Schools. This book includes material on the law and lawyers, pre-law preparation, applying to Law School, and the study of law, together with individualized information on most American law schools. It may be obtained at college book stores or ordered from Educational Testing Service, Princeton, New Jersey, 08540.

**University of California at Los Angeles**

The School does not prescribe any fixed pre-law course, but requires the Baccalaureate Degree of all candidates for admission

Successful study of law is more often related to an acquired habit of disciplined work with difficult intellectual problems than to the possession of any special body of facts. Certain general objectives of a pre-legal education can, however, be given. The Association of American Law Schools has stated these objectives under three broad headings: education for comprehension and expression in words, education for critical understanding of human institutions and values, and education for creative power and thinking. The skills, understanding and cultural foundation encompassed in these statements can be gained from many fields of study. The law is peculiarly a discipline where every branch of knowledge will prove useful to the student and the practitioner. The best courses for pre-law study vary with the school at which the pre-law degree is taken, and students are urged to seek local advice.
University of Southern California
There are no required pre-law courses. The Faculty recommends college courses which are intellectually challenging, which require disciplined hard work, and which offer an opportunity for seminar discussions and for research and writing. The student may find that college courses in fields such as anthropology, economics, history, philosophy, political science, psychology, and sociology are more useful to his legal career than are vocationally oriented courses.

Law Enforcement and Administration
(See Criminology, Police Science)

California State University, San Jose
Police Science courses which are acceptable for transfer credit at California State University, San Jose to meet major requirements for the Bachelor of Science Degree are Police Science 101, 103, 104, 107, 116, 130. The Administration of Justice major who plans upon graduation to continue his work at California State University, San Jose should limit his program to the Police Science courses listed above. In addition he should complete as many as possible of the lower division General Education courses required of all majors at California State University, San Jose.

Liberal Studies

California State University, Long Beach
The following courses are required for a major in Liberal Studies at California State University, Long Beach: Anthropology 101, 102; Art 101, 102, 108, 113, 115; Biology 122; Chemistry 101, 110; Economics 101, 102; English 101, 102, 103, 105, 106, 122, 123, 125, 126; Geography 101, 102; Geology 110; History 101, 102, 103, 104, 117-118, 119, 120; Mathematics 103, 104; Music 111, 120; Physics 105, 110; Political Science 101, 102, 103; Psychology 101; Philosophy 114; Sociology 101, 102; Speech 101.

California State University, Northridge
The major in Liberal Studies is designed primarily for students seeking the multiple subject (elementary) credential, but is open to all students. The major consists of 84 units, distributed equally among the following four components: (1) English, including Speech; (2) Science and Mathematics; (3) Social Science; (4) Humanities, Fine Arts, and Foreign Languages.

The completion of the Liberal Studies major automatically satisfies the General Education requirements of the University and the U.S. Constitution and History requirement of the State Education Code.

In order to complete the B.A. Degree and the partial credential within four years, students must plan their programs carefully. For this reason, students in this major are advised to consult with advisers at California State University, Northridge, including the Credentials Office of the School of Education, as early as possible.

The following courses are required:
Aerospace Technologies 122; English 101, 102; Speech 101; Geography 101, 102; Geology 101, 105; Mathematics 138; Psychology 101; Sociology 101.

The following are elective courses, two of which are required: Anthropology 102; Economics 107; Philosophy 113, 117; Physics 101-102-103; Political Science 107; Psychology 107; Mathematics 103-104, 105; Sociology 107; Psychology 101.
Librarianship

There are five graduate library schools in California: they are located at California State University, Fullerton; California State University, San Jose (see below); University of Southern California; University of California at Los Angeles, and at Berkeley. Except for Fullerton's the programs are accredited by the American Library Association.

The program at Berkeley is primarily a graduate program offering courses leading to Ph.D. and DLS degrees, though only one course is offered to undergraduates. The State of California requires school librarians at the elementary and secondary levels to have a valid elementary or secondary teaching credential with specialized preparation in librarianship; or a Librarianship Credential (available to holders of a Master's Degree in Library Science). Librarians with a Master's Degree in Library Science also qualify for service in a community college under the provisions of the Community College credential. Librarians who work in public libraries, private institutions of higher education, or in industry need no credentials. Since school librarians now require valid general elementary or secondary teaching credentials, it is no longer true that UCB (or any other school) prepares a student for a school librarianship credential. UCB offers courses that partially fulfill credential requirements. However, a different type of credential called a librarianship credential is available to the holder of a Master's Degree in Library Science; with this credential one is qualified to serve on all grade levels, kindergarten through the community college.

Students should study very carefully the announcements of all five institutions, for no two have exactly the same entrance requirements, or feature the same course offerings.

In general, the broadest preparation possible is best, and it should include at least two years of modern foreign languages.

See page 189.

California State University, San Jose

The department offers a series of graduate programs that are designed to train personnel for all types of libraries, with the emphasis on the training of librarians to work with children in school and public libraries.

Students planning to qualify as school librarians in California may begin work for the Specialized Preparation in School Media Librarianship to accompany an elementary or secondary teaching credential during the senior year. The 100-level courses are open to those undergraduates who, during their senior year, have completed all requirements for an academic major and have time available for elective courses. Since the major part of the professional librarianship course work will be taken during the fifth year of the credential preparation program, the student has the opportunity to develop a strong academic background during the undergraduate years. It is highly desirable that students become acquainted with as many branches of knowledge as possible. Students are expected to have competency in at least one modern foreign language. To be eligible to complete the graduate year course work for the Specialized Preparation Program in School Media Librarianship the student must meet the requirements established for all persons entering the Master of Arts degree programs in librarianship. (See degree requirements outlined in the Graduate Bulletin).

Those undergraduates planning to complete the Master of Arts degree in librarianship may take the two prerequisites for the degree (Lib 114 and Lib
Medical Technologist
(Clinical Microbiology)

The University of California School of Medicine (San Francisco) offers a one-year (four quarters) curriculum to students preparing to be medical technologists in Clinical Microbiology. To be admitted to this curriculum, students must have a Bachelor's Degree including a major in one of the microbiological sciences with completion of certain required courses. Students should consult the Announcement of the Allied Health Professions of the University of California School of Medicine (San Francisco) for a list of the required courses and for details of this curriculum.

Medicine

Pre-medical Studies: Four Years

Students who intend to apply for admission to a medical school and who wish to complete the requirements for a Bachelor's Degree before such admission should select a major within the College. In addition to fulfilling the requirements for the chosen major, the student is advised to ascertain and satisfy the specific requirements for medical schools to which he expects to apply.

Pre-medical Curriculum: Three Years

It is assumed that as preparation for this curriculum the student will have completed in high school the following subjects: English, three units; United States history, one unit; mathematics, two units; chemistry, one unit; physics, one unit; foreign language (preferably French or German), two units. It is desirable that a course in freehand drawing be taken in high school*. If possible, the student should also complete in high school intermediate algebra, ½ unit, and trigonometry, ½ unit, because these courses cannot be taken in the university. It is important for the students to bear in mind that the class entering the School of Medicine is limited; in the past, there have been a great many more applicants than could be admitted. (Pre-medical students who, upon the conclusion of their third year find themselves thus excluded from the School of Medicine, may be unable to obtain the Bachelor's Degree in the College of Letters and Science at the end of the fourth year unless they plan their programs with this contingency in mind. They should, therefore, either enter a departmental major at the beginning of the third year, at the same time meeting all pre-medical requirements, or include in their pre-medical program a sufficient number of appropriate courses in some major department.) Provision for the completion of such a major will not prejudice the student's eligibility for admission to the School of Medicine.

*At University of California, San Francisco, high school freehand drawing is not necessary.

Stanford University

The Medical College Admission Test is required of all applicants.

While Stanford does accept an occasional student who presents only three years of undergraduate work at the time of matriculation in Medical School,
preference in the selection process is given to those who will obtain the Baccalaureate Degree before entering Stanford.

Biological Sciences 10 units
Biology 101, 102
Chemistry 16 units
Chemistry 101, 102, 103, 105, 106
Physics 8 units
Physics 101, 102, 103

Recommended:
English 6 units
English 101, 102
Mathematics 20 units
Mathematics 103, 104, 105, 106

University of California, Irvine—California College of Medicine
Applicants must have completed with satisfactory scholarship not less than ninety units of pre-medical work in an accredited institution of higher learning. Junior college credit is granted only to the extent admissible upon transfer to a four-year institution. The following courses are recommended:
Chemistry 101-102, 103, 105-106; English 101-102; Physics 105-106; Biology 101-102. Additional work should apply toward the elective and general education requirements along with courses in English, comparative anatomy, genetics and mathematics.

University of California, Davis
Biology 101-102
Chemistry 101-102, 105-106
English 101-102
Mathematics 103-104-105
Physics 105-106

University of California, Los Angeles
The following courses are required:
English 101, 102
Physics 105-106
Chemistry:
Inorganic chemistry—Chemistry 101-102
Organic chemistry—Chemistry 105-106
Quantitative chemistry—Chemistry 103
Biology 101-102
Mathematics 103 (104 is recommended)
(Zoology 107, 115 offered at U.C.L.A. or equivalent must be completed for admission.)

University of California, San Francisco
Ninety semester units of college work (60 units pre-medical in lower division school) is a minimum requirement for admission to the School of Medicine. These units must include the subjects in the following list:
Biology 101, 102
Chemistry 101-102, 105
Physics 101-102-103, or 105-106
Detailed description of course requirements is available in the announcement of the School of Medicine, San Francisco.

**University of Southern California**
The completion of the following studies is required: Chemistry 101-102, 103, 105-106; English 101-102; Physics 105-106; and Biology 101-102. It is recommended that additional courses be selected from the requirements in the College of Letters, Arts, and Sciences shown on page 215.

**Loma Linda University**
The completion of the following studies is required: Biology 101-102; Chemistry 101-102, 105-106; English 101-102; Physics 105-106; Mathematics 103, 104, 105.

**Natural Resources, School of California State University, Humboldt**
At California State University, Humboldt, the student may obtain either a Bachelor of Science or M.S. Degree in Fisheries, Forestry, and Wildlife Management. Bachelor of Science Degrees are also offered in Oceanography, Natural Resources, and Range Management. A M.S. Degree is available in Watershed Management.

These programs lead to employment by state, federal, or private agencies concerned with water, land, and animal research, and management. Emphasis in water pollution is possible.

For these majors one should carefully check the California State University, Humboldt catalog for lower division requirements in physical science, biological science, and mathematics.

**Nursing—(R.N.)**
Students wishing to enter a professional school of nursing should consult the catalog of the school they wish to enter.

**California State University, Los Angeles**
Anthropology 102; Biology 120, 121; Chemistry 101-102 or 110; Psychology 101; Sociology 101

**University of California at Los Angeles**
Students not already admitted to UCLA must submit separate applications for admission to the University and to the School of Nursing.

Application forms for admission to the University may be obtained from the Director of Admissions, 1147 Murphy Hall, University of California, Los Angeles, California 90024. Transcripts of all school work should be submitted in duplicate to the Office of Admissions with the application.

Applications for acceptance to the School of Nursing may be obtained from the School of Nursing, Center for the Health Sciences, University of California, Los Angeles, California 90024. An additional copy of all transcripts should be submitted to the School of Nursing with the application.

Deadline for applications for admission to the University and to the School of Nursing depends upon the number of applications received. Applications are accepted after November 1 of each year.
General University Requirements
Foreign Language (Completion of course 4)
English
One course in English composition (English 101)
Natural Sciences
Chemistry 101-102, 105
Physics 105*
Biology 101-102, 112 (two courses required)
Social Sciences
American History and Institutions
Anthropology 102
Psychology 101
Sociology 101
Nutrition
Home Arts 125
Breadth Requirements
Plan A or Plan B

See page 196.

*Physics 105 is waived for students who have completed a one-year high school laboratory course.

Oceanography Scripps Institution of Oceanography
Candidates for admission to the Graduate Department of the Scripps Institution of Oceanography should have a bachelor's or master's degree in one of the physical, biological, or earth sciences; in some cases a degree in mathematics or engineering science is accepted. The student's preparation should include:
1. Mathematics through differential and integral calculus—Mathematics 103-104-105-106
2. Physics, one year with laboratory (the course should stress the fundamentals of mechanics, electricity, magnetism, optics, and thermodynamics and should use calculus in its exposition)—Physics 105-106 or 101-102
3. Chemistry, one year with laboratory—Chemistry 101-102
4. An additional year of physics or chemistry—Chemistry 105-106 or Physics 103
5. Biology and geology, minimum of one quarter each—Biology 101-102, Geology 105-110
6. Preparation in at least one foreign language chosen from the following: German 101, 102, 103, 104 or French 101, 102, 103, 104 (French for the marine biology program)
7. Applicants for admission are required to submit scores on the verbal and quantitative tests of the Graduate Record Examination given by the Educational Testing Service of Princeton, New Jersey.

For specific additional requirements for admission to the various curricular programs see: Scripps Institution of Oceanography Catalog.

Optometry University of California, Berkeley
The School of Optometry offers a four-year curriculum leading to the Doctor of Optometry Degree. Eligible for admission consideration are students who have completed the requirements for the Degree of Associate in Arts in the
College of Letters and Science, and also the prerequisite subjects for the study of optometry with a minimum grade point average of 2.25. (2.4 for students ineligible for admission to the University as Freshmen.)

The following courses are required: Chemistry 101-102, 105-106; Economics 107; Mathematics 103-104; English 101-102; Physics 105-106; Psychology 101; Biology 101-102.

The following course is recommended: Psychology 102.

Southern California College of Optometry
Requires 60 units for entrance including:
Chemistry 101, 102
English 101-102
Art, Music, Literature 3 units*
Biology 101, 102
Foreign Language 8 units*
Mathematics 102, 103
Psychology 101-102
Biology 112
Philosophy 101*
Physics 105-106
*Optional for Bachelor of Science Degree candidates.

Optometric Technician's Program

Southern California College of Optometry
The following courses taken at Glendale Community College will satisfy the first year prerequisites for the Optometric Technician's Program:
Biology 122
Business 101 or 105; Business 231 and 241;
English 101-102; any history course; Mathematics 101;
Psychology 101; Sociology 101; Speech 101.

Pharmacy

University of California, San Francisco
Completion of sixty units of college work is a minimum requirement for admission to the School of Pharmacy. These units must include the subjects in the following list.
Biology 101-102*
Chemistry 101-102, 103
English 101-102
Mathematics 103-104
Physics 105-106
Electives
* A year course in general biology of six semester units plus four semester units of vertebrate zoology, or two semesters of zoology may be substituted. Students who have completed courses in botany may use these units to satisfy the 60 semester unit requirement for admission to the School but not to satisfy the biology requirement.

University of Southern California
Admission requires two years (60 semester units) of acceptable college work including the following courses:
Biology 101-102
Chemistry 101-102, 105-106
Economics 101 or 102
English 101-102
Mathematics 103
Physics 105-106
Psychology 101
Electives (10 units in Humanities or additional Social Sciences)

Physical Education Teacher
A student planning to become a physical education teacher should consult
the write-up under “Teaching” for teacher credential requirements. While at
Glendale Community College mastery of skills in a variety of physical
education activities should be attained by taking at least two activity classes
each semester and the following theory courses are recommended: Health
and Physical Education 103, 110, 118, 119, 120; Biology 120 and 121.

Physical Therapy
Physical therapists treat patients who have disabilities resulting from
accidents, congenital defects, or illnesses. On referral by a physician, they
(1) evaluate the capabilities of patients by various physical tests; (2) treat
patients by using therapeutic exercise and physical agents such as heat,
cold, electricity and ultrasound; and (3) teach patients and their families
appropriate home treatment and care—all with the aim of achieving the
greatest possible restoration of function.

Students planning to enter the field should complete two or three years at
Glendale Community College and transfer to an institution offering a
Bachelor's Degree in physical therapy, or complete the work for the
Bachelor's Degree and apply for admission to a Certificate or a Master's
Degree program. Prerequisite courses are required.

Accredited programs are approved by the Council on Medical Education of
the American Medical Association in collaboration with the American
Physical Therapy Association. Six such programs are available in California:
University of California, San Francisco; Stanford University, Palo Alto;
Children's Hospital, Los Angeles; Loma Linda University, Loma Linda;
California State University, Long Beach and Northridge. The prerequisite
courses and the type and length of the curricula vary: for information, write
to the Directors of the Physical Therapy Program.

Note: Students should plan to spend at least one year in the academic
community of the university at which they intend to complete the work in
physical therapy.

University of Southern California
In preparation for admission to the Department of Physical Therapy at the
University of Southern California, students should complete the requirements
shown for the College of Letters, Arts, and Sciences on page 215 as well as
additional requirements in Natural Sciences. Science credit must include
Biology 101-102, 120 and 121, and 16 units from Chemistry 101 or 102 and
Physics 105 or 106. Psychology 101 should be taken as one of the Social
Sciences.

Physics
Students planning to major in physics should follow the lower division
requirements of the College of Letters and Science for colleges and
universities to which they intend to transfer. In addition, the following
required and recommended subjects should be included:
See page 215.

Required: Physics 101, 102, 103; Chemistry 101, 102; Mathematics 103, 104, 105, 106.
Recommended: A reading knowledge of German and French; Engineering 141.

Podiatry  California College of Podiatric Medicine, San Francisco

Approximately 80 percent of the applicants present four years of college education in a pre-medical type of program. The minimum requirement for admission to the College is successful completion of two academic years of study at an accredited college or university. The pre-professional course must consist of a minimum of 60 semester hours of instruction. The following courses should be included: Biology 101-102; Chemistry 101-102, 105; English 101-102; Physics 105-106; Humanities and Social Sciences 12 units.

Additional background in Chemistry, Embryology, Comparative Anatomy, Mathematics, Physics, and Public Speaking is recommended. The students may have majored in any subject—the Natural Sciences, Social Sciences, Humanities, or Arts—but evidence of a balanced education as well as demonstrated interest and ability in the Natural Sciences is preferred.

Applicants are required to take the Colleges of Podiatry Admission Test (CPAT). This test is designed to measure verbal, quantitative, and natural science aptitude.

A letter of evaluation is required from the Pre-Professional Advisory Committee of the college or university which the student has attended. If there is no such Committee at his pre-professional school, three faculty recommendations (including at least two from science instructors) must be submitted.

The deadline for applying to the College is April 1 of the year for which the student wishes to be considered for admission.

Police Science and Administration  California State University, San Jose (See Law Enforcement and Administration)

California State University, Los Angeles

Police Science and Administration majors intending to transfer to California State University, Los Angeles, to continue work for a Bachelor of Science Degree in the law enforcement area are advised to familiarize themselves with the requirements of that University. California State University, Los Angeles, will accept for transfer credit to be applied toward the major a total of 20 units of lower division work in Police Science earned by the Police Science and Administration major.

Police Science courses which are acceptable for transfer credit at California State University, Los Angeles, to meet major requirements for the Bachelor of Science Degree are Police Science 101, 103, 108, 110, 114, 116, 120. The Police Science and Administration major who plans upon graduation to continue his work at California State University, Los Angeles, should limit his program to the Police Science courses listed above. In addition, he should complete as many as possible of the lower division General Education courses required of all majors at California State University, Los Angeles.
Units in Police Science and Administration may be applied as elective credits toward completion of total degree requirements.

See page 217.

**Political Science**

Students majoring in political science should follow the program of studies outlined in the lower division requirements of the College of Letters and Science of the college or university to which they intend to transfer.

See page 189.

**University of California at Berkeley**

Required: Political Science 101, 102.

Strongly recommended: Allied subjects in social sciences: appropriate courses in lower division from: Anthropology 102; Economics 101-102; Geography 101-102; History, any course; Philosophy 119-120, 116, 117; Psychology 101-102 and Sociology 101-102.

**Psychology**

The lower division requirements of the College of Letters and Science of the college or university to which they intend to transfer should be followed by students planning to major in psychology.

See page 191.

**California State University, Los Angeles**

Required: Psychology 101; Physiological Psychology; Mathematics 101; College Algebra.

Recommended: Foreign language.

**California State University, Northridge**

Required: Psychology 101-102.

Recommended: Statistics, Biology, Mathematics, Philosophy, Social Science.

**University of California at Los Angeles**

Required: Psychology 101; Biology 101-102; a course in Physics and Chemistry (Physics 105, 106, 110 and/or Chemistry 101, 102, 110); Mathematics 103, 104; Economics 107; Business 123; Anthropology 101.

Note: The major in psychology or sociology is highly desirable in preparation for graduate study in social work or para-professional work in the field of health.

**Public Health**

**School of Public Health, University of California, Los Angeles**

Students who major in public health concentrate during their junior and senior years in one of the following areas: biostatistics, environmental health, health education, health record science, or nutritional science. Students preparing for the major in public health should take Biology 101-102, 112; Chemistry 101, 102; English 101; History 117-118, and nine additional units of social science; Mathematics 103, 104; nine units in the Humanities. Two years of one language in high school. Additional units in chemistry, mathematics, or physics should be elected.
Speech  A curriculum designed to train students in the speech arts for the areas of public speaking, group discussion, radio, and television. Recommended courses for students who plan to pursue a speech major should include: Speech 101-102; Theater Arts 103; Fundamentals of Oral Interpretation; and speech for radio and television.

Teaching  A credential of the proper type is necessary for teaching in the public schools of the various states. Students planning to become teachers in California must complete the requirements for the type of credential which they expect to use. As a result of the Ryan Act which the California State Legislature passed in 1970, credential regulations are in the process of changing to a new pattern. Implementation of the law is the responsibility of the Commission on Teacher Preparation and Licensing. Details of current regulations are available from teacher training institutions.

Specialization in Elementary and Secondary teaching requires a B.A. degree, a fifth year consisting of 30 semester units of upper division or graduate work, and specific preparation in general education and professional education. Students who are interested in a teaching career in California should consult the requirements of the teacher training institution of their choice.

Specialization in Community College teaching requires a Master’s Degree, Doctor’s Degree or other postgraduate degree requiring not less than five years of college or university education. This preparation can be in most areas other than professional education.

Pacific Oaks College, Teaching Nursery School, Kindergarten, and the Primary Grades

This career requires as much interest in children themselves as in curriculum content. Preparation for teaching young children includes (1) psychology, sociology, anthropology and biology content which builds understanding of human development and (2) broad knowledge of the humanities and sciences. A student may enroll in a program leading to a California State Standard Teaching Credential with a specialization in elementary and/or early childhood teaching (pre-school through third grade). Pacific Oaks curriculum prepares for teaching in a wide variety of pre-school programs including Head Start Classes, and also for advanced study leading to such careers as parent education leadership, child welfare work, research, counseling and guidance, or child development laboratory teaching.

Completion of the recommended transfer program for Pacific Oaks College (see page 211) will also meet minimum requirements for the State permit for employment in Children’s Centers, if the following electives are included: Home Arts 135, 140, 142.

Veterinary Medicine  Veterinary medicine is the science and art that deals with the prevention, control, cure and alleviation of animal diseases and the prevention of the spreading of diseases from animals to man. Modern veterinary medicine is a profession that offers increasing opportunities for interesting and challenging careers.
The School of Veterinary Medicine offers a four-year curriculum leading to the Degree of Doctor of Veterinary Medicine. This training provides the technical knowledge necessary for work in veterinary practice, animal care and disease control, food quality control, and industrial veterinary medicine. Further specialization provides additional opportunities in teaching, biomedical research, and public health.

Nearly two-thirds of all veterinarians enter private practice. Many veterinarians are employed by the federal, state, and municipal governments. Veterinarians also hold positions in the United States Army and Air Force and in many areas of national defense, such as nuclear energy, atomic aircraft and rocketry, and space exploration. There are also many opportunities for teaching and research in schools, colleges, and medical research programs. Manufacturers of drugs and biological products, such as vaccines and animal feeds, and many other industries employ veterinarians.

The demand for graduate veterinarians far exceeds the supply. In the United States today many hundreds of additional veterinarians could be immediately placed in well-paying jobs.

Recent national surveys and projected needs indicate a growing demand for the professional services unique to the veterinarian. Despite expansion of existing schools of veterinary medicine, an essential deficit of graduate veterinarians will continue for many years.

In recent years an increasing number of women applicants have been accepted, being considered on an equal basis with men, and following graduation are pursuing rewarding careers. Such fields as research, laboratory animal medicine, and small animal practice offer many opportunities for the woman graduate.

A minimum of seven years of college is necessary to complete the requirements for the Degree, Doctor of Veterinary Medicine, however, for the past several years the D.V.M. graduates have averaged eight or more years of college.

The first step which must be completed is called the pre-veterinary medical curriculum. This consists of a series of required courses most of which can be completed in two years at the Glendale Community College. Additional required pre-professional work may be taken in any accredited university or four-year college. Pre-vet work must be completed. Following completion of the pre-professional medical curriculum the student applies for admission to the School of Veterinary Medicine. If he is accepted, he then begins the four-year professional curriculum in veterinary medicine. The Degree, Doctor of Veterinary Medicine, is awarded after successful completion of the four-year professional curriculum.

With the exception of vertebrate embryology and genetics the pre-professional medical curriculum may be completed at Glendale Community College. The following courses are required: Chemistry 101-102, 103, 105; Physics 105-106; Biology 101-102; English 101 plus English 102 or Speech 101. To complete the required 60 units the student should select courses in the social sciences, humanities or biological sciences which will best prepare him for a Baccalaureate Degree after transfer to a four-year institution. Students will not be admitted to the School of Veterinary Medicine with less than three years of pre-professional work.
Course Descriptions

Courses are listed in numerical order under department headings, which are in alphabetical order.

Each course is listed by number with the course title, the number of units and the number of hours of lecture and laboratory instruction per week. Preceding each description are listed the prerequisites of the course.

Whether or not all courses described will be offered during the present academic year will depend on the student enrollment.

148—INTERNATIONAL FIELD STUDY 1-6 UNITS

Prerequisite: Approval of program and units of credit attempted must be obtained from the Dean of Instruction prior to the foreign travel.

Provides units of credit for travel and study in foreign countries at the student's own expense in programs provided by agencies approved in advance by the college. One unit of elective credit to be offered for each six days of supervised foreign travel and study, up to a maximum of six units for 36 days. Fractional units cannot be earned.

198—DEVELOPMENTAL STUDIES 14½ UNITS

The Developmental Studies Program offers a diagnostic, prescriptive program dealing with the problems associated with low academic performance of college students.

This Program offers the student who has just completed high school and who has changed his attitude toward advanced education, an opportunity to overcome his scholastic weaknesses and set up realistic goals which may be attainable in line with his interest, aptitude and ability.

The Program has been developed to assist students who have personal inadequacies such as: lack of goals, inappropriate educational plans, lack of effective study habits, emotional disturbances, cultural deprivation and general inability to realize their academic or vocational potential. Students enrolling in the Developmental Studies Program, which meets 8-11 a.m. daily, will carry fourteen and one-half units, including the following courses:

English 198—Reading Fiction, 2 units.

English 199—Basic Communications, 6 units
Guidance 193—Psychology of Adjustment, 3 units
Guidance 195—Occupational Planning, 1 unit
Health and Physical Education Activity, ½ unit
Mathematics 150—Basic Mathematics, 2 units

In addition to the above described Program, a student may enroll in one other two unit class.

150—COLLOQUIA 1-3 UNITS

Prerequisite: Outstanding student performance and permission of instructor.

Note: 15 hours minimum of Colloquia per unit of credit.

Glendale Community College may make available in the curriculum of each division, lower division units of study known as colloquia. The purposes of a colloquium are to broaden a student's general education, to provide a means for a specific study in depth, to offer areas of study of meaningful interest to the student, to stimulate serious thought, and to encourage greater student-faculty relationships. Emphasis shall be on discussion and analysis based on subjects, issues, or ideas of continuing importance or lasting significance.

148—NATIONAL FIELD STUDY 1-6 UNITS

Prerequisite: Approval of program and units of credit attempted must be obtained from the Dean of Instruction prior to the domestic travel.

One unit of elective credit to be offered for six days of supervised travel and study up to a maximum of six units for 36 days, under the direction of a credentialed instructor.

Accounting

PRINCIPLES OF ACCOUNTING
See Business 101, 102

BOOKKEEPING
See Business 105, 106

BUSINESS DATA PROCESSING
See Business 123, 124, 125, 126, 127, 130, 135.
Aerospace Technologies

110—PRIVATE PILOT FLIGHT COURSE  2 UNITS

Prerequisite: Aerospace Technologies 120 must be taken prior to or concurrently with this course or Private Pilot's Written Examination passed.

Note: Flight training is contracted for by the student with any FAA approved flight school, and conducted independently of the Glendale Community College District. The College instructor helps the student to achieve an understanding of the relationship of flight theory to flight practice so that the student can achieve the knowledge required to meet FAA certification standards.

A course of flight training which meets the FAA flight experience requirements for the Private Pilot's Certificate. The flights are scheduled by the student at the airport and in addition the student must meet the College flight supervisor as scheduled. Flight experience is at student's own expense, and he must fly at least 18 hours during the semester to fulfill the course requirements.

Lecture 1 hour.

111—PRIVATE PILOT FLIGHT COURSE  2 UNITS

Prerequisite: Aerospace Technologies 120, or Private Pilot's Written Examination passed and 18 hours of flying time.

Note: Flight training is contracted for by the student with any FAA approved flight school, and conducted independently of the Glendale Community College District. The College instructor helps the student to achieve an understanding of the relationship of flight theory to flight practice so that the student can achieve the knowledge required to meet FAA certification standards.

A course of flight training which meets the FAA flight experience requirements for the Private Pilot's Certificate. The flights are scheduled by the student at the airport and in addition the student must meet the College flight supervisor as scheduled. Flight experience is at student's own expense and he must fly at least 18 hours during the semester to fulfill the course requirements. For satisfactory course completion the student must have flown at least 36 total flight hours on completion of Aerospace Technologies 110 and 111.

Lecture 1 hour.

112—COMMERCIAL PILOT FLIGHT COURSE  3 UNITS

Prerequisite: Aerospace Technologies 110 and 111 or Private Pilot's License.

Note: Flight training is contracted for by the student with any FAA approved flight school, and conducted independently of the Glendale Community College District. The College instructor helps the student to achieve an understanding of the relationship of flight theory to flight practice so that the student can achieve the knowledge required to meet FAA certification standards.

A course of flight instruction which meets the FAA requirements for the Commercial Pilot's Certificate. The flights are scheduled by the student at the airport and in addition the student must meet with the College flight supervisor as scheduled. For satisfactory course completion the student should have 100 hours of flight time by the end of the semester.

Lecture 2 hours, laboratory 1 hour.

113—COMMERCIAL PILOT FLIGHT COURSE  3 UNITS

Prerequisite: One hundred hours of flying time or completion of Aerospace Technologies 112. Aerospace Technologies 121, 122, 123, 124, 126 taken prior to or concurrently or Commercial Written Examination passed.

Note: Flight training is contracted for by the student with any FAA approved flight school and conducted independently of the Glendale Community College District. The College instructor helps the student to achieve an understanding of the relationship of flight theory to flight practice so that the student can achieve the knowledge required to meet FAA certification standards.

A course of flight instruction which meets the FAA requirements for the Commercial Pilot's Certificate. The flights are scheduled by the student at the airport and in addition the student must meet with the College flight supervisor as scheduled. Course completion requires 160 hours total flight time which will satisfy FAA requirements for the Commercial Pilot's Certificate.

Lecture 2 hours, laboratory 1 hour.
115—FLIGHT INSTRUCTOR FLIGHT COURSE    3 UNITS

Prerequisite: Private Certificate with 180 hours or a Commercial Pilot’s Certificate.

Note: Flight training is contracted for by the student with an FAA approved flight school and conducted independently of the Glendale Community College District. The College instructor helps the student to achieve an understanding of the relationship of flight theory to flight practice so that the student can achieve the knowledge required to meet FAA certification standards.

A course of flight instruction which meets the FAA requirements for a Flight Instructor rating. The flights are scheduled by the individual at the airport and in addition he must meet the College flight supervisor at the scheduled period.

Lecture 3 hours.

116—INSTRUMENT FLIGHT COURSE    3 UNITS

Prerequisite: Commercial Pilot’s License or Aerospace Technologies 113.

Note: Flight training is contracted for by the student with any FAA approved flight school, and conducted independently of the Glendale Community College District. The College instructor helps the student to achieve an understanding of the relationship of flight theory to flight practice so that the student can achieve the knowledge required to meet FAA certification standards.

A course of flight instruction which meets the FAA requirements for the instrument Pilot Rating. The flights are scheduled by the individual at the airport and in addition he must meet the College flight supervisor at the scheduled period. Flight experience is at student’s own expense. Upon completion of this course the student is prepared for the FAA instrument rating. Flight time: 30 hours of instrument flight training.

Lecture 3 hours.

120—BASIC AERONAUTICS    5 UNITS

Prerequisite: None.

Note: Students who have had Aerospace Technologies 9 will receive 3 units of credit only.


Lecture 5 hours.

121—NAVIGATION    3 UNITS

Prerequisite: Aerospace Technologies 120 or a Private Pilot’s License.

A study of dead reckoning and pilotage aerial navigation, computer problems and vector analysis. Approved FAA Advanced Ground School for Commercial Pilots No. WE-13-25. Course is not limited to pilots.

Lecture 3 hours.

122—METEOROLOGY    3 UNITS

Prerequisite: Aerospace Technologies 120 or a Private Pilot’s License.

Elementary study of the basic principles of meteorology with emphasis placed on physical laws that operate in the atmosphere, particularly as they affect aircraft flight. Weather maps and reports and forecasts and their interpretation are stressed.* Approved FAA Advanced Ground School for Commercial Pilots No. WE-13-25.

*Upon completion of this course the student will understand problems in meteorology as they affect the pilot.

Lecture 3 hours.

123—AIRCRAFT STRUCTURE AND AERODYNAMICS    2 UNITS

Prerequisite: Aerospace Technologies 120 or a Private Pilot’s License.

A course in aircraft structures and aerodynamics as they apply to the pilot. Course meets FAA requirements for Commercial Pilots in the study of aircraft. Approved FAA Advanced Ground School No. WE-13-25.

Lecture 2 hours.

124—RADIO PROCEDURES AND FLIGHT REGULATIONS    2 UNITS
A course covering radio navigation, use of radio charts, voice procedures, and federal air regulations. It prepares the student for the FAA Commercial Pilot Written Examination on Federal Air Regulations and Radio. Approved FAA Advanced Ground School No. WE-13-25.

Lecture 2 hours.

125—RADIO NAVIGATION  
3 UNITS

Prerequisite: Aerospace Technologies 121, 122, 124 taken prior to or concurrently; or a valid Commercial Pilot’s Certificate meets all prerequisites.

A detailed study of the use of radio navigation, weather briefing, advanced radio navigation and standard instrument approaches and procedures and Federal Air Regulations pertaining to instrument flight. Students are prepared for the FAA Instrument Examination.

Lecture 3 hours.

126—AIRCRAFT POWER PLANTS  
2 UNITS

Prerequisite: Aerospace Technologies 120 or a Private Pilot’s License.

A course in aircraft power plants. The study includes structures, operation, maintenance, and servicing as they apply to the pilot. Course meets FAA requirements for commercial pilots in the study of engines. Approved FAA Advanced Ground School No. WE-13-25.

Lecture 2 hours.

127—COMMERCIAL PILOT PROBLEMS  
2 UNITS

Prerequisite: Aerospace Technologies 121, 122, 123, 124, 126 taken prior to or concurrently; or a valid Commercial Pilot’s Certificate meets all prerequisites.

A core course designed to integrate all phases of the commercial pilot program in application to problems of the type a commercial pilot might expect to find in actual flight, i.e. being lost, low on fuel, bad weather, etc. Approved FAA Advanced Ground School No. WE-13-25.

Lecture 2 hours.

128—AIRPORT OPERATIONS  
3 UNITS

Prerequisite: None.

Note: Aerospace Technologies 120 and 130 are recommended.

Aerospace Technologies 128 is designed to acquaint the student with the practical airport problems as they exist today. The student is expected to be able to manage an airport or any diversified airport operation upon completion of this course.

The course intends to cover airport development, locations, local advertising, financial requirements, air safety in the confines of the airport as well as traffic pattern management, airport lighting, deterioration and depreciation of airport property, fire and crash protection, familiarization with the Federal Aviation Administration and the National Transportation Safety Board, meteorological situations that affect airport operations, and control of air traffic.

Lecture 3 hours.

129—FLIGHT STEWARDESS  
3 UNITS

Prerequisite: None.

Note: It is recommended that this course be taken prior to or concurrently with Aerospace Technologies 120.

Aerospace Technologies 129 will prepare the student for employment as a flight stewardess and will present the advantages and disadvantages of the job.

There is also a survey of the problems encountered by the new hostess both on the job and in training.

Lecture 3 hours.

130—AIR TRANSPORTATION  
3 UNITS

Prerequisite: None.

Development of air transportation, problems in commercial air transportation, commercial airplanes, organization and functions of airlines, regulations, airline routes in the United States and the world, pilot qualification, schedules and services, revenue sources and potential operating overhead. Importance of airports and airways, of advertising, and of public relations stressed.

Lecture 3 hours.

131—AIR TRAFFIC CONTROLLER  
5 UNITS

Prerequisite: Aerospace Technologies 121, 122, 123, and 126 taken prior to or concurrently or a Commercial Pilot’s Certificate.
AEROSPACE TECHNOLOGIES

Aerospace Technologies 131 prepares students for the FAA Control Tower Operator Written Examination and assists them in meeting the requirements necessary to apply for the position of Air Traffic Control Specialist, and is of value to those students preparing for the position of Dispatcher, Meteorologist, Commercial Pilot, and positions concerned with aircraft operations. Student pilots and private pilots will find this course informative; students preparing for their Instrument Rating will receive much valuable information which will assist them in preparing for the written examination and the flight check, Aircraft Recognition and Performance, and Radio Telephone Procedures.

Lecture 4 hours, laboratory 2 hours.

137—JET ENGINE OVERHAUL AND MAINTENANCE 8 UNITS

Prerequisite: Aerospace Technologies 143, or the Federal Aviation Administration Engine (“P”) Mechanic's Certificate.

Practical and theoretical instruction on jet engines and their accessories. Intensive instruction will be given in the following fields: engine theory, fuel, lubrication and electrical systems, and flight line maintenance. Fundamentals of rocket propulsion systems, including solid and liquid fuels, air dependent and non-air dependent engines.

Lecture 5 hours, laboratory 10 hours.

141— AIRCRAFT POWERPLANT MAINTENANCE AND OVERHAUL 8 UNITS

Prerequisite: None.

Note: This class meets six hours per day, five days per week.

The completion of Aerospace Technologies 141, 142, and 143 qualifies the student for industry employment as a maintenance and overhaul technician and prepares him practically and theoretically to successfully obtain the Federal Aviation Administration Powerplant Rating.

The course content of Aerospace Technologies 141 consists of practical application and theoretical study of powerplant overhaul procedures; precision inspections; lubrication systems; Federal Aviation Administration regulations. The course content is based on standards required for FAA certificated schools. Approved FAA Maintenance Technician School No. 3415.

Lecture 10 hours, laboratory 20 hours.

\142—AIRCRAFT POWERPLANT MAINTENANCE AND OVERHAUL 8 UNITS

Prerequisite: None.

Note: This class meets six hours per day, five days per week.

The completion of Aerospace Technologies 141, 142, and 143 qualifies the student for industry employment as a maintenance and overhaul technician and prepares him practically and theoretically to successfully obtain the Federal Aviation Administration Powerplant Rating.

The course content of Aerospace Technologies 142 consists of practical application and theoretical study of electrical systems, magnetos, generators, and starting systems. The course content is based on standards required for FAA certificated schools. Approved FAA Maintenance Technician School No. 3415.

Lecture 10 hours, laboratory 20 hours.

\143—AIRCRAFT POWERPLANT MAINTENANCE AND OVERHAUL 16 UNITS

Prerequisite: Aerospace Technologies 141 and 142.

The completion of Aerospace Technologies 141, 142, 143 qualifies the student for industry employment as a maintenance and overhaul technician and prepares him practically and theoretically to successfully obtain the Federal Aviation Administration Powerplant Rating.

The course content consists of practical application and theoretical study of carburetion; including float, pressure, injection systems, propellers, gas turbines, physical science and troubleshooting. The course content is based on standards required for FAA certificated schools. Approved FAA Maintenance Technician School No. 3415.

Lecture 15 hours, laboratory 15 hours.
145—AIRFRAME MAINTENANCE AND OVERHAUL  

16 UNITS

Prerequisite: Aerospace Technologies 143, or a powerplant rating.

Aerospace Technologies 145 qualifies the student for industry employment as a maintenance and overhaul technician and prepares him practically and theoretically to successfully obtain the Federal Aviation Administration Airframe Rating, upon completion of Aerospace Technologies 146. The course content consists of practical applications and theoretical study of structural repairs to aircraft, including woodwork; riveting; layout practices and repairs to metal structures; welding; electrical and hydraulic systems. Instrument and radio installation and flight line maintenance. The course content is based on standards required for FAA certificated schools. Approved FAA Maintenance Technician School No. 3415.

Lecture 10 hours, laboratory 20 hours.

146—AIRFRAME MAINTENANCE AND OVERHAUL  

16 UNITS

Prerequisite: Aerospace Technologies 145.

Aerospace Technologies 146 qualifies the student for industry employment as a maintenance and overhaul technician and prepares him practically and theoretically to successfully obtain the Federal Aviation Administration Airframe Rating. The course content consists of practical applications and theoretical study of structural repairs to aircraft, including dope and fabric, fuel systems, control systems, rigging, FAA forms, inspections and flight line maintenance. The course content is based on standards required for FAA certificated schools. Approved FAA Maintenance Technician School No. 3415.

Lecture 10 hours, laboratory 20 hours.

148—THEORETICAL AIRCRAFT POWERPLANT_MAINTENANCE  

5 UNITS

Prerequisite: Six months full-time employment in the aviation industry engaged in repair, maintenance, or overhaul of aircraft reciprocating powerplants.

Note: Aerospace Technologies 148 may not be taken for credit if student has completed Aerospace Technologies 141 and 142.

The course presents the theory of operation, maintenance and overhaul of aircraft reciprocating and gas turbine engines, electrical and lubrication subsystems and applicable Federal Aviation Administration regulations; inspections, forms and engine servicing.

Lecture 6 hours.

149—THEORETICAL AIRCRAFT POWERPLANT MAINTENANCE  

5 UNITS

Prerequisite: Six months full-time employment in the aviation industry engaged in repair, maintenance, or overhaul of aircraft reciprocating powerplants, or completion of Aerospace Technologies 148.

The successful completion of Aerospace Technologies 148 and 149 will prepare the student with the theoretical background necessary to pass the Federal Aviation Administration Written Examination for the powerplant rating. The course consists of the theoretical study of reciprocating and gas turbine fuel systems including float, pressure, and injection systems; propellers and propeller operation and governing systems; weight and balance; line maintenance and troubleshooting.

Lecture 6 hours.

ANATOMY
See Biology 120.

Anthropology

101—PHYSICAL ANTHROPOLOGY  

3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination, or a “B” average in United States History and Government courses in high school, or 12 units of college courses with a “C” average.

Studies human genetics; relation of man to animal world; human evolution; fossil men; racial differentiation; classification and distribution.

Lecture 3 hours.
102—GENERAL ANTHROPOLOGY

CULTURAL

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination, or a "B" average in United States History and Government courses in high school, or 12 units of college courses with a "C" average.

Studies the origin and development of cultures including material traits, social organization, political, religious, communication, family and kinship systems, emphasizing contemporary primitives.

Lecture 3 hours.

103—ARCHAEOLOGY

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination, or a "B" average in United States History and Government courses in high school, or 12 units of college courses with a "C" average.

A general course in archaeology for beginning students. A sampling of the material covered would include: archaeology as a profession; methods of locating archaeological sites; digging sites correctly; preservation and restoration of artifacts; a history of classical digs as Pompeii, Masada, "Atlantis," etc.; the Pleistocene Period; discovering fossil man; work of DuBois, Dart, the Leakeys; primitive man in the Paleolithic, Mesolithic, and Neolithic cultures; beginning of agriculture; domestication of animals; rise of the city. American archaeology: the Mound Builders; Folsom and Clovis Man; Aztec, Inca, and Maya civilizations. Underwater Archaeology.

Lecture 3 hours.

Architecture

101—DRAFTING

Prerequisite: None.

Note: Required for architecture majors who have not had at least one year of architectural drafting in high school. Recommended for art majors.

The fundamentals of drafting prerequisite to work in art and architecture; architectural symbols and conventions; plan and working drawings and building code requirements for a small home; scale detailing, framing and study of dimensioning, model building.

Lecture 3 hours, laboratory 3 hours.

102—ARCHITECTURAL DRAFTING

3 UNITS

Prerequisite: Architecture 101.

Note: A student may not receive credit for both Architecture 102 and Architecture 109.

A discussion of the residence and its design with emphasis on the one-story dwelling. Discussion of modern trends. Scale detailing, framing and blueprint reading. The application of building codes to such construction. Course includes the study of dimensions and spacing of members; modular framing and modern practices; also a study of heating, insulation, acoustics and sound-proofing, plumbing, wiring, orientation, etc.

Lecture 3 hours, laboratory 3 hours.

103—DESCRIPTIVE GEOMETRY

3 UNITS

Prerequisite: One year of architectural or mechanical drawing in high school, or Architecture 101, or Engineering 101 taken in college.

Note: Required for architecture majors.

An applied science treating of graphic representation of lines, planes, surfaces, and solids. Architectural applications are used for subject matter. Simple shades and shadows.

Lecture and laboratory 6 hours.

105—PERSPECTIVE

3 UNITS

Prerequisite: Architecture 103 and Art 113, and Art 116 and Art 117 (Art 117 may be taken concurrently).

Note: Required for architecture majors.

A course in technical perspective. Drawing of various architectural subjects and their shadows, rendering in various media, sketching in of people and landscape background and foreground.

Lecture 3 hours, laboratory 3 hours.
109—ARCHITECTURAL DESIGN  4 UNITS

Prerequisite: Architecture 101 and Architecture 105. (May be taken concurrently.)

Note: A student may not receive credit for both Architecture 102 and Architecture 109.

A discussion of the commercial building and its design with emphasis on the two-story building. Discussion of modern trends. Scale detailing, framing and blueprint reading. The application of building codes to such construction. The course includes the study of dimensions and spacing of members; modular framing and modern practice; also, a study of heating, insulation, acoustics and sound-proofing, plumbing, wiring, orientation, etc.

Lecture 4 hours, laboratory 4 hours.

110—ARCHITECTURAL DESIGN  4 UNITS

Prerequisite: Art 113, and Architecture 109.

Study of commercial architecture, its planning and design with emphasis on the concrete block building. Discussion of modern trends. Drawing plans, elevations, details with emphasis on stairs. The application of current building codes. The study of dimensions and spacing of framing members. Modular framing and modern practice are discussed, including the cantilevered beam. Further study of heating, insulation, acoustics, plumbing, electrical wiring, and model building.

Lecture 4 hours, laboratory 4 hours.

111—ADVANCED ARCHITECTURAL DESIGN  4 UNITS

Prerequisite: Architecture 110.

Planning and detailing of masonry buildings with large span roof framing as applied to commercial buildings. Use of building codes and specifications with reference to fire resistant types of construction. Study of physical properties and strength of materials in practical application. Preparation of complete sets of working drawings, including various presentation media.

Lecture 4 hours, laboratory 4 hours.

112—ADVANCED ARCHITECTURAL DESIGN  4 UNITS

Prerequisite: Architecture 111.

Planning and detailing of concrete buildings of institutional types. Use of building codes and specifications with reference to fire resistant types of construction. Study of physical properties and strength of materials in practical application. Preparation of working drawings, detail drawings and various presentation media.

Lecture 4 hours, laboratory 4 hours.

191—ARCHITECTURAL ENGINEERING DRAFTING (COMMERCIAL)  7 UNITS

Prerequisite: Art 113. (May be taken concurrently.)

A discussion and preparation of working drawings for major structures. A study of practices common to the construction of commercial reinforced concrete buildings; the relationship of plumbing, heating, ventilating, electrical, and air conditioning systems in the various areas of the structure; drawing changes of typical views, integrating and detailing them in the completed set of drawings; understanding and satisfying the requirements of the architect; studying the realities of the successful draftsman; the application of the current building code; and the cost factors affecting revisions.

Lecture 6 hours, laboratory 6 hours.

192—ARCHITECTURAL ENGINEERING DRAFTING (COMMERCIAL)  7 UNITS

Prerequisite: Architecture 191.

A discussion and preparation of working drawings for brick and concrete block structures. A study of practices common to the construction of commercial buildings; the relationship of plumbing, heating, ventilating, electrical, and air conditioning systems. Drawing changes of typical views; studying and satisfying the requirement of the architect.

Lecture 6 hours, laboratory 6 hours.

193—ARCHITECTURAL ENGINEERING DESIGN (COMMERCIAL)  7 UNITS

Prerequisite: Architecture 109, or Architecture 191, or Art 116.
Preparation and coordination of a complete set of commercial working drawings from given specifications, including various presentation media in architectural drafting.

Lecture 6 hours, laboratory 6 hours.

194—ARCHITECTURAL ENGINEERING DESIGN (COMMERCIAL) 7 UNITS

Prerequisite: Architecture 109 or 110 or 191.

Note: Recommended Architecture 105.

Class project in the preparation of a complete set of working drawings from given specifications, including various presentation media stressing the group concept in architectural design.

Lecture 6 hours, laboratory 6 hours.

106—ART OF THE AMERICAS (BEFORE 1600) 3 UNITS

Prerequisite: None.

Art of the Pre-Columbian (Inca, Maya, Aztec), Mexico, and South American cultures. American Indian art (especially Southwest Indian).

Lecture 3 hours.

107—ART OF THE AMERICAS (1600 TO THE PRESENT) 3 UNITS

Prerequisite: None.

The art of the United States, Canadian, Mexican, South American cultures and their European origins.

Lecture 3 hours.

108—ORIENTAL ART 3 UNITS

Prerequisite: None.

A survey of the sculpture, painting, and architecture of China, Japan, India, and Persia, from prehistory to the present. An introduction to the social, political, and philosophical ideas that influenced these trends.

Lecture 3 hours.

110—HISTORY OF MOTION PICTURES 3 UNITS

Prerequisite: None.

Note: Each week students will be required to see one film chosen from the instructor's list of pertinent films available on television and in local theaters.

Historical introduction to the appreciation of motion pictures through the analysis of audio and visual techniques which can make the film an expressive means of communications.

Lecture 3 hours.

113—ART STRUCTURE 2 UNITS

Prerequisite: None.

Study of the structure of the two-dimensional work of art. Special emphasis in the area of design and color. Provides fundamental understanding and control of the elements of design and the principles by which they can be related in solving design problems. The course is
“basic” for art students and helpful to students in related fields.

Lecture 2 hours, laboratory 2 hours.

114—ART STRUCTURE (ADVANCED) 2 UNITS

Prerequisite: Art 113.

Art 114 is advanced study in two-dimensional art structure. The study is developed in a series of problems. Certain problems will concentrate on advanced color study; some on space manipulation, some on understanding through practice, the current concepts at work in the fine and decorative arts fields. Whenever possible problems will reflect directions dominating the current art scene.

Lecture 2 hours, laboratory 2 hours.

115—THREE DIMENSIONAL DESIGN 2 UNITS

Prerequisite: Art 113. (May be taken concurrently.)

Note: Required for art majors. Recommended for related fields.

A study of space and color relationship expressed three-dimensionally in line, mass, volume, and texture. Experiences are provided involving different materials in the solution of three dimensional design problems.

Lecture 2 hours, laboratory 2 hours.

116—FREEHAND DRAWING 2 UNITS

Prerequisite: None.

A basic drawing course dealing with the fundamentals of pictorial organization. The various means of representing the three-dimensional aspect of forms on a flat surface are emphasized.

Lecture 4 hours.

117—FREEHAND DRAWING 2 UNITS

Prerequisite: Art 116

A second semester drawing course designed to enable the student to further his abilities in drawing forms in depth, composition, and various drawing techniques.

Lecture 4 hours.

118—LIFE DRAWING 2 UNITS

Prerequisite: Art 116. (Art 116 may be taken concurrently.)

Beginning studies in drawing the figure from life. Quick sketches, and progressively longer poses to study such problems as proportions, design and the animation of the body. Studies in human anatomy, as applicable to life drawing. The drawings are rendered in media such as charcoal or conte crayon, and are executed both as line drawings and in chiaroscuro.

Lecture 2 hours, laboratory 2 hours.

119—LIFE DRAWING 2 UNITS

Prerequisite: Art 118.

Continuation of basic studies in drawing the figure from life. Attention is given to arrangement and composition. Exploration of media for drawing the figure. Use of the figure in a personal and expressive manner. Problems in drawing the head.

Lecture 2 hours, laboratory 2 hours.

120—ADVANCED LIFE DRAWING 2 UNITS

Prerequisite: Art 119.

Continuation of basic studies in drawing the figure from life. Emphasis on using the figure in compositions. Stress on the creative use of the figure. Drawings should extend beyond “studies” and become personal statements. Increased emotional expression in drawings. May do one or more problems in three dimensions.

Lecture 2 hours, laboratory 2 hours.

121—ADVANCED LIFE DRAWING 2 UNITS

Prerequisite: Art 120.

Continuation of basic studies in drawing the figure from life. Figure compositions are stressed. Students are encouraged to use the figure in creative and expressive drawings. A major project will be required—this may follow an avenue of individual interest.

Lecture 2 hours, laboratory 2 hours.
122—ADVERTISING DESIGN  2 UNITS

Prerequisite: Art 113 and Art 116. (Art 113 and 116 may be taken concurrently.)

An applied design course, oriented primarily toward design in advertising. Special emphasis is placed upon those elements, techniques, and psychological aspects of design peculiar to advertising. Layout techniques, lettering typography, and the psychological use of color are stressed.

Lecture 2 hours, laboratory 2 hours.

123—ADVERTISING DESIGN  2 UNITS


An applied design course, oriented toward design in advertising. Special emphasis is placed upon those elements, techniques, and psychological aspects of design peculiar to advertising. Layout techniques, typography, printing methods, advanced one page layout and illustration are stressed.

Lecture 1 hour, laboratory 3 hours.

124—ADVANCED ADVERTISING DESIGN  2 UNITS

Prerequisite: Art 123.

An advanced advertising design course. Theory and practice in various phases of advertising. Design for television, packaging, brochure design and layout, magazine design, multiple page layout, etc. Problems in production for offset printing.

Lecture 1 hour, laboratory 3 hours.

125—ADVANCED ADVERTISING DESIGN  2 UNITS

Prerequisite: Art 124.

Advanced practices in advertising design. Emphasis on independent work and problem solving. The art of advertising display and problems in preparing camera-ready art work with two, three and four plate prints.

Lecture 1 hour, laboratory 3 hours.

126—CERAMICS  2 UNITS

Prerequisite: None.

An introductory study in the field of ceramics. Experience in preparing clay bodies, slips, and glazes. Exploration in hand forming works of art in clay by a variety of methods.

Lecture 1 hour, laboratory 3 hours.

127—CERAMICS  2 UNITS

Prerequisite: Art 126.

A continued study of the fundamentals. Advanced studies of throwing on the potter's wheel. Further study in formulating glazes. Some problems chosen individually to challenge and interest each student. This semester may include a project in mold making and casting.

Lecture 1 hour, laboratory 3 hours.

128—ADVANCED CERAMICS  2 UNITS

Prerequisite: Art 127.

Continued study of the fundamentals. Specific goals and standards for throwing on the potter's wheel. Ceramic sculpture is offered. Development of a personal glaze, and experimentation on variations of it. Selected projects "of challenging nature" of personal choice.

Lecture 1 hour, laboratory 3 hours.

129—ADVANCED CERAMICS  2 UNITS

Prerequisite: Art 128.

Advanced work on the potter's wheel. Intensive research and experiment in methods of decoration. Further experiment in glazes. One large complex problem will be set up, and carried through to completion. Development of critical evaluation and judgment.

Lecture 1 hour, laboratory 3 hours.

130—INTERIOR DESIGN  3 UNITS

Prerequisite: None.

A study of the floor plan and architectural background and the selection and arrangement of furniture. Emphasis is placed on the selection of floor coverings, draperies, curtains, upholstery, accessories, and color in the home.

Lecture 3 hours.
132—LETTERING  

1 UNIT

Prerequisite: None.

Note: Recommended for architecture majors and all art majors as a foundation for more advanced work in the art department.

Offered fall semester only.

Fundamental study of letter forms. Short history of lettering and typography; problems in the forming and spacing of letters, including the single stroke alphabet.

Lecture 1 hour, laboratory 2 hours.

134—PAINTING  

2 UNITS

Prerequisite: Art 116. (Art 116 may be taken concurrently.)

Development of skill, technique, and composition in drawing and painting, using media such as oils or casein. Problems include representation and abstraction.

Lecture 2 hours, laboratory 2 hours.

135—PAINTING  

2 UNITS

Prerequisite: Art 134.

Application of principles, theories and techniques of drawing and painting to problems of still life, figure, landscape, and non-objective painting.

Lecture 2 hours, laboratory 2 hours.

136—ADVANCED PAINTING  

2 UNITS

Prerequisite: Art 135. (Art 117 recommended.)

The application of principles of art in drawing and painting for the more advanced student.

Contemporary concepts in painting are explored. Individual assignments with emphasis on personal interpretation and expression.

Lecture 2 hours, laboratory 2 hours.

137—ADVANCED PAINTING  

2 UNITS

Prerequisite: Art 136.

A continuation of Art 136.

Painting for the advanced student. Special problems are assigned to the student on an individual basis. Painting problems may include figure painting and the figure in relation to architectural forms.

The student is encouraged to work from imagination as well as from direct visual experience.

Field trips to museums and galleries are included in the course of instruction.

Lecture 4 hours.

138—WATER COLOR  

2 UNITS

Prerequisite: Art 113 and Art 116. (One of the two prerequisites may be taken concurrently.)

A study of the water color medium and techniques. The problems of painting are directed with a regard for the special qualities of water color. Class problems include various approaches to landscape painting, still life painting, and figure painting. Other problems emphasizing abstraction and non-objective painting are explored.

Outdoor painting trips are used to help gain experience and skill in landscape painting.

Lecture 2 hours, laboratory 2 hours.

139—WATER COLOR  

2 UNITS

Prerequisite: Art 138.

A continuation of the study of water color painting for the more advanced student. The application of general principles and theories of painting in reference to the special qualities of the water color medium. Class problems include experimentation of a variety of techniques and stylistic approaches.

Individual interpretation and expression are encouraged.

Lecture 2 hours, laboratory 2 hours.

140—SCULPTURE  

2 UNITS

Prerequisite: Art 113 or Art 116 (may be taken concurrently).

Note: This course may be taken for two units each semester for a total of four semesters.

Recommended for art, pre-dental, and industrial design students. A series of sculptural problems in relief and in the round. Includes exploratory investigations of various media and techniques such as plaster, clay modeling, stone and wood carving, casting, constructions, etc.
Emphasis is on problems of historical and contemporary interest and importance.

Offered fall semester only.

Lecture 1 hour, laboratory 3 hours.

142—PRINTMAKING  2 UNITS

Prerequisite: Art 113 or Art 116.

Note: This course may be taken for two units each semester for a total of four units.

An introduction to various printing processes including linoleum cuts, woodcuts, engraving, drypoint, etching, and aquatint. Creative personal approaches to printmaking are encouraged. Technical and expressive qualities of the various media are explored.

Lecture 2 hours, laboratory 2 hours.

143—PRINTMAKING  2 UNITS

Prerequisite: Art 142

Note: This course may be taken for two units each semester for a total of four units.

Art 143 is a more advanced course than Art 142; this course explores various approaches and techniques of intaglio printing with special emphasis on color printing.

Lecture 2 hours, laboratory 2 hours.

144—SILK SCREEN PRINTING  2 UNITS

Prerequisite: Art 113.

An introduction to silk screen printing. Course will include: Preparation of equipment; various methods of stencil preparation; printing on paper and cloth; printing with a variety of paints and dyes. Projects will include serigraphs and repeat pattern textiles.

Lecture 1 hour, laboratory 3 hours.

145—SILK SCREEN PRINTING  2 UNITS

Prerequisite: Art 144.

An advanced study of silk screen printing. Preparation of specialized equipment. Research and experimentation to encourage creative use of the medium. Problems are selected to be "challenging" and as related to personal interests of each student.

Lecture 1 hour, laboratory 3 hours.

147—JEWELRY MAKING  2 UNITS

Prerequisite: None.

The study and application of basic principles of jewelry making. Use of precious and semi-precious metals, cutting and polishing of precious and semi-precious stones; basic principles of handwrought jewelry making; the use of the Lost Wax Casting technique; future arts and crafts instructors; training of jewelers for the profession; jewelry manufacturing and sales. Emphasis is placed on learning to design original pieces.

Lecture ½ hour every other week, laboratory 4 hours.

148—JEWELRY MAKING  2 UNITS

Prerequisite: Art 147.

Advanced studies and applications of jewelry making: The study and uses of precious and semi-precious stones used in the art of facet cutting; advanced problems in the Lost Wax Casting technique; continued training of jewelers for the profession; continued emphasis on designing original pieces.

Lecture ½ hour every other week, laboratory 4 hours.

149—ADVANCED JEWELRY MAKING  2 UNITS

Prerequisite: Art 148.

Note: Course offered in Extended Day only.

Advanced study of and uses of precious metals and gems. Continue emphasizing facet cutting; precision investment casting, and advanced designing techniques. Continue training to be used in jewelry manufacturing and designing.

Laboratory 4 hours.

150—ADVANCED JEWELRY MAKING  2 UNITS

Prerequisite: Art 149.

Note: Course offered in Extended Day only.

Advanced studies and designing in facet cutting; casting; handwrought and wax pattern duplication. Continue training to be used in jewelry manufacturing and designing.

Laboratory 4 hours.
151—DENTAL MATERIALS  2 UNITS

Prerequisite: Enrollment in the pre-dental program.

Basic studies of the various materials used in the field of dentistry. The development of laboratory techniques through the uses of wax, chalk, and plastics carvings; the casting of projects; the proper use of dental instruments and equipment. This course is designed to prepare the student for the American Dental Association (ADA) Examination.

Lecture 1 hour, laboratory 3 hours.

152—ADVANCED DENTAL MATERIALS  2 UNITS

Prerequisite: Art 151.

Advanced studies and techniques of dental materials and processes. Emphasis is placed on plaster and clay carvings; advanced techniques in the casting of wax models; the transfer of wax to plastic models. This course is designed to prepare the student for the American Dental Association (ADA) Examination as well as the University of California at San Francisco Examination.

Lecture 1 hour, laboratory 3 hours.

INTERIOR DESIGN
See Art 130

Astronomy

101—ELEMENTS OF ASTRONOMY  3 UNITS

Prerequisite: None.

A survey of the fundamental facts of the universe, presented as far as possible in non-technical language. A study is made of the solar system and the sidereal universe.

Lecture 3 hours.

Auto Mechanics

101—AUTOMOTIVE MAINTENANCE FOR CONSUMERS  1 UNIT

Prerequisite: None.

Note: This course may be repeated for a maximum of two units.

Auto Mechanics 101 is designed to meet the general needs of the automobile owner. Emphasis will be placed on general mechanical concepts and related physical principles such as maintenance procedures, purchasing of parts and service, safety, and consumer data.

Lecture and laboratory 3 hours. (8 weeks)

102—AUTOMOTIVE TUNE-UP  1 UNIT

Prerequisite: Auto Mechanics 101 or equivalent.

Note: This course may be repeated for a maximum of two units.

Auto Mechanics 102 is designed to cover theories of design and operation of ignition and fuel system components; techniques of engine trouble-shooting and tune-up procedures using both simple and specialized equipment. Vehicle emission control devices will be included in this class.

Lecture and Laboratory 3 hours. (8 weeks)

103—AUTOMOTIVE ELECTRICAL SYSTEMS  1 UNIT

Prerequisite: Auto Mechanics 101 or equivalent.

Note: This course may be repeated for a maximum of two units.

Auto Mechanics 103 is designed to introduce the trainee to the automotive electrical systems. Each of the four principle circuits will be studied with reference to the general purpose of the circuit, the identification of component parts that make up the circuit, and relationship of one circuit to another as they function together in the automobile.

Lecture and laboratory 3 hours. (8 weeks)

104—AUTOMOTIVE CHASSIS AND SUSPENSION SYSTEMS  1 UNIT

Prerequisite: Auto Mechanics 101 or equivalent.

Note: This course may be repeated for a maximum of two units.

Auto Mechanics 104 is designed to acquaint the trainee with the various automotive suspension systems. Empha-
sis will be placed on the types of systems the trainee will encounter most frequently and the names and functions of the components of each system.

Lecture and laboratory 3 hours. (8 weeks)

Biology

101—GENERAL BIOLOGY

Prerequisite: Chemistry 101 or Chemistry 110.

The first half of a one-year course designed for science majors covering fundamental biological processes; from the history and philosophy of biology through molecular biology, cell structure and function, physiology of the organism, and classification.

Lecture 3 hours, laboratory 3 hours.

102—GENERAL BIOLOGY

Prerequisite: Biology 101.

A continuation of the study of fundamental biological processes. Includes embryology, behavior, ecology, Mendelian and fine genetics, evolution, and global biology.

Lecture 3 hours, laboratory 3 hours.

112—MICROBIOLOGY

Prerequisite: Biology 101-102 or Biology 120 or Biology 121.

A study of life using microorganisms (algae, bacteria, molds, protozoa, viruses, and yeasts) as prototypes. Includes microbial biochemistry, genetics, cellular and ultracellular activities, applied uses, and pathogenicity of these forms of life. In laboratory each student will also identify two unknown microbial organisms which he has separated from their normal habitats, i.e., soil, pond water, sea water, etc.

Lecture 3 hours, laboratory 6 hours.

120—HUMAN ANATOMY

Prerequisite: None.

Note: Primarily for physical education and nursing students.

In this study of human structure, a detailed dissection is made of the cat; head of the dog fish shark; eye and brain of the sheep; and a careful study of the human skeleton. Lectures supplemented by charts, models and films.

Lecture 2 hours, laboratory 6 hours.

121—INTRODUCTION TO PHYSIOLOGY

Prerequisite: None.

A laboratory course in the functions of the various systems of the human body. Lectures, charts, models, and experimental materials. Course required for pre-nursing students, elective for others.

Lecture 3 hours, laboratory 3 hours.

122—INTRODUCTION TO BIOLOGY

Prerequisite: None.

Designed to give a cultural appreciation of the scientific method and an elementary working knowledge of the fields studied. A liberalized approach to the study of living organisms, both plant and animal. The emphasis is on the dynamic processes and functional inter-relationships between living organisms. Primarily for students majoring in fields other than the biological sciences.

Lecture 3 hours, laboratory 3 hours.

123—EVOLUTION AND SOCIETY

Prerequisite: None.

A presentation of selected aspects of the biological sciences having social implications for man in the twentieth century. The history and impact of Darwinism and Mendelism on biological and social thought and action.

Lecture 2 hours, laboratory 2 hours.

124—ECOLOGY

Prerequisite: None.

Biology 124 examines the contemporary problems of population and pollution in terms of basic ecological concepts including energy flow, cycles, populations, ecological communities and man's place in the system.

Lecture 2 hours, laboratory 2 hours.

125—MARINE BIOLOGY

Prerequisite: Biology 122 or Biology 101.
BIOLOGY/BUSINESS

Marine Biology is a study of the life forms of the ocean and their adaptations to the marine environment. The course surveys organisms common to the rocky coast, sandy beaches, wharf pilings, and estuaries. Emphasis is placed on field studies and laboratory examination of organisms from the local marine communities. Participation in field work is a necessary and required part of the class.

Lecture 2 hours, laboratory 4 hours.

130—NATURAL HISTORY 3 UNITS

Prerequisite: None.

Note: A course in either high school or college biology is recommended.

Natural History is a course designed to introduce the student to the study of California wildlife. The course consists of an introduction to the principles of natural history and field biology. Stress is put on the Southern California terrestrial and tide-pool habitats.

Lecture 2 hours, laboratory 3 hours.

137—FIELD BOTANY 5 UNITS

Prerequisite: None.

A study of the plant materials and the ecology of the plant communities of Southern California. Two all-day Field Trips are included.

Lecture 3 hours, laboratory 6 hours.

BOTANY
See Biology 137.

Business

REAL ESTATE
See Real Estate page 174.

STATISTICS
See Economics 107.

SUPERVISION
See Supervision page 178.

WORK EXPERIENCE
See Cooperative Education page 120.

101—PRINCIPLES OF ACCOUNTING 4 UNITS

Prerequisite: None.

Note: Required of business administration majors; this sequence (Business 101 and Business 102) satisfies lower division accounting requirements for most four-year colleges.

Thoroughly covers the accounting equation, the theory of debit and credit, the classification of accounts, the study of recording, analyzing and summarizing procedures in modern accounting devices; the preparation and analysis of balance sheets and income statements, payroll, systems design and automated data processing.

Lecture and laboratory 5 hours.

102—PRINCIPLES OF ACCOUNTING 4 UNITS

Prerequisite: Business 101.

Note: Required of business administration majors; this sequence (Business 101 and Business 102) satisfies lower division accounting requirements for most four-year colleges.

Comprises a continuation of Business 101. Deals with partnership and corporation accounts; manufacturing and cost accounting (including job order, process, and standard); tax accounting; construction and use of accounting statements and reports for management control and decision-making purposes; financial statement analysis.

Lecture and laboratory 5 hours.

105—BASIC ACCOUNTING 4 UNITS

Prerequisite: None.

Note: Recommended for students who do not intend to transfer to a four-year college. Business 117 should precede or be taken concurrently. No credit will be allowed for Business 105 if taken concurrently with Business 101 or completion of Business 101 or Business 102 with a "C" grade or better.

An introductory course in bookkeeping including study of the accounting equation, the theory of debit and credit, accounting devices, working papers and business forms, and the preparation of balance sheets and income statements.

Lecture 4 hours, laboratory 1 hour.
106—BASIC ACCOUNTING 4 UNITS
Prerequisite: Business 105 or two years of bookkeeping in high school.
A study of bookkeeping principles as applied to partnerships, corporations, departments, and branches. Emphasis is placed on practical bookkeeping problems more than on theory.
Lecture 4 hours, laboratory 1 hour.

111—FINITE MATHEMATICS 5 UNITS
Prerequisite: Mathematics 101 or equivalent in high school with a grade of “C” or better, or qualifying score on a mathematics proficiency test.
An introductory study to include the following: a review of number properties; exponents, roots, and logarithms; Boolean Algebra as applied in set theory, logic statements and binary arithmetic; probability with elements of Bayesian statistics; fundamentals of algebra and analytic geometry; linear and quadratic functions; and matrices and linear programming including the Simplex Method. Applications to problems in finance, accounting, marketing, production, and personnel management, where possible.
Lecture and discussion 5 hours.

112—MATHEMATICAL ANALYSIS 5 UNITS
Prerequisite: Business 111 with a grade of “C” or better.
A continuation of Business 111. Differential and integral calculus with business applications.
Lecture and discussion 5 hours.

117—BUSINESS MATHEMATICS 2 UNITS
Prerequisite: None.
An intensive course which develops speed and accuracy in the fundamentals of business arithmetic, incorporating shortcuts where applicable and the technique of estimating answers. Business applications include calculations pertaining to percentage, interest, commission, bank discount, negotiable instruments, annuities, mortgages, payroll, depreciation, and bank reconciliation. Business vocabulary is stressed, with an introduction to progression and the binary number system. The student progresses through the course at his own pace.
Laboratory and individual instruction 2 hours.

119—ADVANCED BUSINESS MATHEMATICS 1 UNIT
Prerequisite: Business 117
An advanced course presenting business applications of mathematics pertaining to cash and trade discount, profit and loss, merchandising, income and property taxes, fire and life insurance, stocks, bonds, and other securities. The student progresses through the course at his own pace.
Laboratory and individual instruction 2 hours (8 weeks)

123—INTRODUCTION TO BUSINESS DATA PROCESSING 3 UNITS
Prerequisite: None.
Note: Business 101 or Business 105 recommended.
An orientation course designed to introduce the terminology and concepts of electromechanical and electronic data processing. Topics include history and development of data processing, punched card equipment, digital computers, data representation, computer programming languages and management information systems. Students process programs on available time-sharing equipment.
Lecture and discussion 3 hours.

124—COMPUTER OPERATIONS 3 UNITS
Prerequisite: Business 123 or equivalent work experience.
Note: Business 101 or Business 105 recommended.
Studies the use, operation, and capabilities of computer systems. Students will learn to operate the computer and its peripheral equipment, with major emphasis on flowcharting, data flow, scheduling, and distribution of reports.
Lecture and discussion 3 hours.

125—COMPUTER PROGRAMMING I 4 UNITS
Prerequisite: Business 123 or Business 101 or Business 111 or Mathematics 101 or equivalent work experience.
A survey course in the programming of electronic digital computers for those who plan to be programmers or for those whose work may be related to computer applica-
tions in business, industry, or education. The course covers problems of data processing, characteristics of computers, and computer programming in machine, symbolic, and compiler languages. Programming emphasis is on the FORTRAN and COBOL languages.

Lecture and discussion 4 hours.

126—ADVANCED PROGRAMMING 3 UNITS
PRINCIPLES

Prerequisite: Business 125 or equivalent work experience.

Note: Business 101 or Business 105 recommended.

An advanced course in the third and fourth generation operating systems, data base management, and data communications.

Lecture and discussion 3 hours.

127—INTRODUCTION TO IBM 3 UNITS
SYSTEMS 360 AND 370
PROGRAMMING PRINCIPLES

Prerequisite: A grade of "C" in Business 125 or equivalent work experience in data processing and computer systems.

An introduction to third generation computer concepts through an analysis of the latest IBM computers—components of the IBM system 360 and 370, how the computer operates, and basic programming principles. Emphasis is on input and output devices and channels, characteristics of the central processing unit, data representation, the supervisor program, data management, magnetic tape concepts, direct access storage devices, programming systems, teleprocessing, and multiprogramming.

Lecture and discussion, 3 hours.

130—COBOL PROGRAMMING 3 UNITS

Prerequisite: A grade of "C" or better in Business 125 or equivalent work experience in or knowledge of data processing and computer programming.

Note: Business 101 or Business 105 recommended.

A study of the elements and capabilities of COBOL (Common Business Oriented Language). Programming COBOL as it applies to most common computer system configurations and to business problem-solving applications. Includes rules for COBOL words and statements, divisions, file usage, literals, page format, debugging, table generation, disk and magnetic tape files, editing, and other features. Programs written by the students will be batch processed at an off-campus facility.

Lecture and discussion 3 hours.

135—SYSTEMS ANALYSIS 3 UNITS

Prerequisite: Business 123.

Note: Business 141 and either Business 101-102 or Business 105-106 are recommended.

Study of systems and procedures, design of a system, its implementation and installation, and finally its operation, evaluation, and modification. Includes analysis of various existing applications in business and industry.

Lecture and discussion 3 hours.

141—INTRODUCTION TO BUSINESS 3 UNITS
ORGANIZATION AND MANAGEMENT

Prerequisite: None.

Orients students to the field of business. Introducing, in survey form, the functions, characteristics, organization, and problems of business. Serves as a foundation for later specialized study, and directs the thinking of students to possible careers.

Lecture and discussion 3 hours.

143—BUSINESS MACHINES 2 UNITS

Prerequisite: None.

Note: Recommended for all business majors.

Development of skill in the operation of rotary, printing, and electronic calculating machines. (Key-driven calculators and ten-key adding machines are available to students who request them.) Prepares transferring accounting students to take machines proficiency test required at some four-year institutions.

Lecture, demonstration, discussion, and laboratory 3 hours.
145—ENGLISH FOR BUSINESS  3 UNITS

**Prerequisite:** None.

**Note:** This course allows only one unit of credit for students who have completed English 191, and two units of credit for students having completed English 132. No credit will be given for students who have had English 101, 120 or 131.

A course designed to help secretarial and business students achieve proficiency in grammar, punctuation, vocabulary, syllabication, and sentence structure.

Lecture and discussion 3 hours.

147—WRITTEN BUSINESS COMMUNICATIONS  3 UNITS

**Prerequisite:** Business 145 or English 101 or English 120.

A course designed to help students develop proficiency in writing modern business letters and reports. A vigorous up-to-date approach is given to managerial problems in correspondence, including dictation, and letters of adjustment, credit, collection, and sales. Special emphasis is given to application letters. Particular attention is given to the human relations aspect of communications as well as the role played by language.

Lecture and discussion 3 hours.

149—INSURANCE PRINCIPLES  3 UNITS

**Prerequisite:** None

Acquaints the student with insurance of various types: life, fire, casualty and social insurance. Policies are analyzed to understand basic provisions; such as, costs in relation to benefits provided and obligations of both parties. Insurance is studied from the standpoint of logic, types of carriers, legal aspects, limitations, and loss adjustment features.

Lecture, discussion, films, and speakers, 3 hours.

150—FAMILY RISK MANAGEMENT-TV CONSORTIUM COURSE  2 UNITS

**Prerequisite:** None

Family Risk Management is designed to acquaint the general public with the problems of managing personal and business risks, both major and minor. The course will acquaint the student with insurance of various types; such as, personal liability, sickness, accidental injury, social security, unemployment, workmen's compensation, death, fire, and other property hazards. The course stresses planning and preventing or minimizing risks; for example, preventive medicine and family estate planning.

Lecture and discussion 2 hours.

151—MONEY AND BANKING  2 UNITS

**Prerequisite:** None.

A course designed to help young men and women secure employment with investment banking houses, commercial banks, finance companies, stock and commodity exchanges, and securities dealers. It is a study of the American monetary system and of the history of American financial institutions. The objectives of the course are an understanding of the Federal Reserve structure, monetary and fiscal policy and the commercial banking process.

Lecture, class discussion, problems, and reports, 2 hours.

153—INVESTMENTS  2 UNITS

**Prerequisite:** None.

Provides the student with an understanding of investment of objectives, basic types of securities, operation of stock exchanges, investment banking, investment principles, and personal financial planning.

Lecture, discussion, problems, and reports, 2 hours.

155—PERSONAL FINANCE  2 UNITS

**Prerequisite:** None.

Personal finance involving effective use of family income, which includes savings for major investments and retirements, by a study of such consumer problems as intelligent buying, an evaluation of consumer research and product-testing organizations, taxes, insurance, household budget, cooperatives, banking, and renting or buying a home.

Lecture and discussion 2 hours.

156—CONSUMER EDUCATION  3 UNITS

**Prerequisite:** None.

Consumer Education is designed for the general public with specific emphasis on problems associated with teens, young adults, newly formed families, and early,
middle, and late years of adult life. Concerns the study of comparative shopping techniques, consumer decisions according to rational priorities, and avenues of participation in the legislative process as they affect consumers.

Lecture and discussion 3 hours.

157—NOTEMAKING FOR SCHOOL AND BUSINESS 3 UNITS

Prerequisite: None.

Principles of notemaking are integrated with a phonetic system of briefhand for classroom and vocational use. Adaptable for notemaking in college classes, offices, business conferences, seminars, interviews, and for research report writing. Notemaking should be of interest to (a) all business majors who do not enroll in the secretarial programs, and (b) majors in other subject areas where a great deal of notemaking is essential.

Lecture 3 hours.

161—BUSINESS LAW 3 UNITS

Prerequisite: None.

A study of law as it influences business conduct, including growth of law and recent changes, especially the new Uniform Commercial Code, and principles of contracts, sales, and agency.

Cases, lecture, and discussion 3 hours.

162—BUSINESS LAW 3 UNITS

Prerequisite: Business 161.

Deals with real and personal property, negotiable instruments, partnership and corporate organizations, insurance, business torts, and trade regulation.

Cases, lecture, and discussion 3 hours.

165—LAW FOR THE LAYMAN 3 UNITS

Prerequisite: None.

A survey of legal problems which confront people in their everyday life activities. Included is a study of courts, trials, marriage and divorce, community property, wills, trusts, succession, mortgage, trust deeds, conditional sales, crimes, torts, homesteads, the Corporate Securities Act, the Workmen’s Compensation Act, and many other principles of business law.

Lecture and discussion 3 hours.

171—PRINCIPLES OF MARKETING 3 UNITS

Prerequisite: None.

A general course intended to acquaint students with the activities, the middlemen, and the business practices involved in the moving of goods from farms, factories, and mines to the ultimate consumers. The course deals with the problems of wholesalers, retailers, transportation companies, warehouses, and cooperatives. Consumer protection, analysis of marketing costs, and the establishment of sound sales policies and methods are emphasized.

Lecture and discussion 3 hours.

173—STORE MANAGEMENT AND MERCHANDISING 3 UNITS

Prerequisite: None.

Problems considered in this course are of concern to the store manager, a department store buyer, or to the person who wishes to organize and operate a small store. The course covers plans for financing, selection of location, choice of partnership or corporation, selection and training of employees, merchandising policies, problems of mark-up, mark-down, turnover, stock control, inventory methods, layout, advertising and display. Outside speakers from local stores will be scheduled. Students are required to interview a local merchant and make a report.

Lecture 3 hours.

175—SALESMANSHIP 2 UNITS

Prerequisite: None.

A salesmanship class in which each student selects an article or sales proposition, makes a careful study of it, and presents it before the class or to a qualified prospect. His methods of approaching the prospect, demonstrating his goods, and closing his sales are discussed and criticized. Successful salesmen are invited to give demonstrations of how sales actually are made. Fundamental principles of retail, wholesale and specialty selling are given in sufficient detail to fit the student for an apprenticeship position in any of these fields, whether it be selling ideas, services, or goods.

Lecture 2 hours.
177—ADVERTISING  

2 UNITS

Prerequisite: None.

An introductory course in the purpose and principles of advertising, including the organization and functions of advertising agencies. Buying motives and the writing of good copy are studied. Radio, television, and outdoor advertising methods and costs are covered. This course is not intended to develop artistic ability, but those who can illustrate their copy will find an opportunity to do so. Courses in advertising art are offered by the Art Department.

Lecture, discussion, and special reports 2 hours.

201—BEGINNING SHORTHAND  

5 UNITS

Prerequisite: Completion of, or concurrent enrollment in, the following: (1) Business 145 or a satisfactory score on the English Placement Examination, and (2) Business 242 or consent of instructor.

Note: Students who can take dictation at least 60 words a minute should enroll in Business 202.

An introductory course in shorthand covering theory, speed development, and beginning transcription skills.

Lecture, discussion, demonstration, and laboratory 5 hours.

202—SHORTHAND TRANSCRIPTION I  

3 UNITS

Prerequisite: Business 201 or at least one year of shorthand in high school; and concurrent enrollment in Business 211 (enrollment for the second eight weeks is optional upon achievement of 80 wpm) and Business 235; and completion of, or concurrent enrollment in, the following: (1) Business 243 or consent of instructor, and (2) Business 145 or a satisfactory score on the English Placement Examination.

Note: Students who have earned a "B" grade in second-year shorthand in high school should enroll in Business 203.

Continuation of Business 201, which incorporates review of theory, transcription techniques, and English skills to produce mailable letters.

Lecture, discussion, demonstration, and laboratory 3 hours.

203—SHORTHAND TRANSCRIPTION II  

3 UNITS

Prerequisite: Business 202 or a "B" grade in the second-year shorthand in high school; and concurrent enrollment in Business 211 (enrollment for the second eight weeks is optional upon achievement of 100 wpm); and completion of, or concurrent enrollment in, Business 231 and Business 243.

Finishing course for the executive secretary. Emphasis will be on office style dictation of business communications, applying transcription skills acquired in Business 202.

Lecture, discussion, demonstration, and laboratory 3 hours.

207—LEGAL SECRETARIAL TRAINING  

3 UNITS

Prerequisite: Business 202 and Business 242, or two years of typing and shorthand in high school.

A course offering specialized training in legal phraseology, spelling, specific training in the preparation of legal documents, office routine and methods, and other legal procedure information.

Lecture and discussion 3 hours.

210—SHORTHAND REVIEW  

(SEE NOTE)

Prerequisite: Prior training in shorthand.

Note: A student may earn one unit each eight weeks of instruction, with a maximum of two units for this course.

A quick, thorough review of the theory of shorthand, which provides an opportunity to brush up on principles, brief forms, phrases, and high-frequency words.

Lecture and laboratory 2 hours. (8 weeks)

211—SHORTHAND SPEED DEVELOPMENT  

(SEE NOTE)

Prerequisite: Business 201, or one year of high school shorthand or equivalent.

Note: A student may earn one unit each eight weeks of instruction, with a maximum of six units for this course.

A course offering shorthand speed development on an individualized basis with dictation ranging from 50 words a minute to 160 words a minute.

Lecture and laboratory 2 hours. (8 weeks)
221—MEDICAL TERMINOLOGY I 3 UNITS

Prerequisite: None.

Designed to familiarize those interested in the medical field with origin, correct spelling, pronunciation, meaning and current usage of common medical terms and their application to clinical records and reports. Emphasis will be placed on the roots, prefixes, suffixes, and word combinations.

Lecture 3 hours.

222—MEDICAL TERMINOLOGY II 3 UNITS

Prerequisite: Business 221.

Continuation of Business 221. Designed to provide an adequate vocabulary for persons interested in employment in the medical profession. Emphasis will be placed on the roots, prefixes, suffixes, and word combinations, as well as on medical abbreviations, symbols, and terms common in patients' records and laboratory reports.

Lecture 3 hours.

225—MEDICAL ASSISTANT (ADMINISTRATIVE) 3 UNITS

Prerequisite: Present employment or six months of previous experience in a medical office or enrolled in the medical training program.

A course offering an introduction to the medical office and concentrating on four critical areas of medical office training: Career guidelines and professional qualifications, meeting and handling patients, processing medical records and forms, and managing the medical office. Training will be applicable in offices of physicians, medical clinics, hospitals, and allied facilities.

Lecture 3 hours.

231—OFFICE ORIENTATION 3 UNITS.

Prerequisite: Business 241, or Business 257, or one year of typing in high school.

A detailed study of general office procedures including the selection of office supplies; the processing of mail; use of postal and telegraph services; receptionist and telephone techniques; handling travel arrangements; data processing; preparation of reports; banking procedures, payroll, insurance, and tax records; legal forms, and the job interview.

Lecture, discussion, and demonstration 3 hours.

233—STENO-CLERICAL PROCEDURES 2 UNITS

Prerequisite: Business 241, or one year of typing in high school.

Development of proficiency in the preparation of masters for, and operation of, the mimeograph and spirit duplicators; photocopier; executive typewriter; and intensive training in filing and records management. Emphasis is placed upon the application of skill and judgment in the performance of essential office duties.

Lecture, discussion, demonstration, and laboratory 3 hours.

235—MACHINE TRANSCRIPTION, BUSINESS 2 UNITS

Prerequisite: Business 241 or one year of typing in high school; and completion of, or concurrent enrollment in, Business 145 or a satisfactory score on the English Placement Examination.

A course in machine transcription which presents modern business procedures, terminology, and equipment in a work environment through which realistic skills, attitudes, and knowledge are developed.

Lecture, discussion, demonstration, and laboratory 3 hours.

236—MACHINE TRANSCRIPTION, LEGAL 2 UNITS

Prerequisite: Business 241 or one year of typing in high school; and completion of, or concurrent enrollment in, Business 145 or a satisfactory score on the English Placement Examination.

Development of proficiency in the operation of transcription machines. Students will type legal communications from dictation on the machine, and they will have practice in typing legal forms commonly used in legal offices. Emphasis will be placed on excellence in typing and proficiency in use of English skills; such as, spelling, grammar, punctuation, etc.

Lecture, demonstration, and laboratory 3 hours.
237—MACHINE TRANSCRIPTION, MEDICAL        2 UNITS

Prerequisite: Business 241 or one year of typing in high school; and completion of, or concurrent enrollment in, Business 145 or a satisfactory score on the English Placement Examination.

Development of proficiency in the operation of transcription machines. Students will type medical communications from dictation on the machine, and they will have practice in typing medical forms commonly used in medical offices. Emphasis will be placed on excellence in typing and proficiency in use of English skills; such as, spelling, grammar, punctuation, etc.

Lecture, discussion, demonstration, and laboratory 3 hours.

241—BEGINNING TYPING                    3 UNITS

Prerequisite: None.

The basic skills of keyboard techniques are developed to give the foundation for advanced training in typing. Training is given in the preparation of memorandums, personal letters, business letters, simple tabulation, outlines, and manuscripts.

Lecture, demonstration, and laboratory 5 hours.

242—INTERMEDIATE TYPING                  3 UNITS

Prerequisite: Business 241 or a typing speed of at least 30 words a minute.

Continuation of Business 241. Refinement and development of technique with increased emphasis on accuracy and speed. Detailed study of business letters, special office forms, tabulated reports, and manuscripts.

Lecture, demonstration, and laboratory 5 hours.

243—ADVANCED TYPING                     3 UNITS

Prerequisite: Business 242 or a typing speed of at least 40 words a minute.

Advanced typing is vocational, and the standards are set in terms of business demands. This program is designed to help the student to develop and integrate all of the "back-up" skills, knowledge, and techniques into a complete production typingwriting skill. Emphasis is placed upon the development of accuracy and speed both in straight-copy material and in production projects and upon the application of related learnings.

Lecture, demonstration, and laboratory 5 hours.

245—MAGNETIC TAPE SELECTRIC
     TYPEWRITING I              1 UNIT

Prerequisite: A typing speed of at least 50 words a minute on an electric typewriter.

Training in the operation of the Magnetic Tape Selectric Typewriter (MT/ST), which is particularly adaptable to school, business, and government offices requiring volume typing, repetitive typing, and typing from rough draft, to produce personalized letters, statistical tables, forms, legal documents and instruments, and other forms of office communications.

Lecture, demonstration, laboratory 3 hours (8 weeks).

246—MAGNETIC TAPE SELECTRIC
     TYPEWRITING II             1 UNIT

Prerequisite: Business 245.

Note: Business 235 or Business 236 or Business 237 is recommended.

Continuation of Business 245. Thorough review of MT/ST operating principles with major emphasis on applications pertaining to business office communications. New techniques will be learned involving indented materials and automatic letter writing.

Demonstration, laboratory 3 hours. (8 weeks)

249—LEGAL TYPING                      1 UNIT

Prerequisite: Business 242 or two years of typing in high school.

A course offering specific training in and supervision of preparation of legal documents.

Lecture and laboratory 2 hours.

257—PERSONAL TYPING                   1 UNIT

Prerequisite: None.

Introductory typing which offers the student an opportunity to learn how to operate the typewriter for his
personal use. *Designed for the nonclerical and nonsecretarial major.* Emphasis is placed on basic skill development and on theory concepts.

Demonstration, laboratory, homework 2 hours.

**Carpentry**

151—WOODWORK (SEE NOTE)

*Prerequisite:* None.

*Note:* Maximum credit per semester will be 5 units. Proportionately less credit may be earned for carrying less than a full schedule. A maximum of 20 units of credit will be allowed for Carpentry 151.

Workmanship, construction and functional design are emphasized, particularly in practical projects for home use and construction. Projects for class work may be selected by enrollees.

Lecture as required, laboratory 15 hours maximum per week.
Chemistry

101—GENERAL CHEMISTRY 5 UNITS

Prerequisite: An introductory college chemistry course or high school chemistry or Science 131; Mathematics 101 or one and one-half years of algebra and one year of plane geometry in high school.

A course in fundamental chemistry designed to set forth the most important facts and theories with which chemistry is concerned. Basic laws and chemical calculations are stressed.

Lecture 3 hours, laboratory 6 hours.

102—CHEMISTRY 5 UNITS

Prerequisite: Chemistry 101.

A continuation of the study of the basic concepts of general chemistry introduced in Chemistry 101, with emphasis on the theory and technique of qualitative analysis, including a brief introduction to organic chemistry.

Lecture 3 hours, laboratory 6 hours.

103—QUANTITATIVE ANALYSIS 4 UNITS

Prerequisite: Chemistry 102.

Note: Chemistry 103 is required of pre-medical students. Chemistry 103 is recommended for majors in chemistry, physics, pharmacy, mining engineering, geology, metallurgical or petroleum engineering, sanitary and municipal engineering, certain agriculture and public health curricula and medical technologists.

Emphasis is on the principles and techniques of quantitative analysis, including calibration, volumetric, gravimetric and spectrophotometric procedures. Large numbers of illustrative problems are solved.

Lecture 2 hours, laboratory 6 hours.

105—ORGANIC CHEMISTRY 3 UNITS

Prerequisite: Chemistry 102.

Note: Required of pre-medical and pre-dental students; recommended for majors in chemistry, petroleum engineering, sanitary and municipal engineering, and pharmacy; and for certain home economics, public health, and agriculture majors.

An introductory study of the compounds of carbon, including the preparation, properties, and reactions of both aliphatic and aromatic hydrocarbons, halogen derivatives, alcohols, and ethers. Methods of synthesis are stressed, and reaction mechanisms and modern structural principles are introduced.

Lecture 2 hours, laboratory 4 hours.

106—ORGANIC CHEMISTRY 3 UNITS

Prerequisite: Chemistry 105.

A study of the preparation, properties, and reactions of aliphatic, and aromatic acids, amines, aldehydes, ketones, carbohydrates, heterocyclic compounds, amino acids and proteins. Analysis as well as synthesis of compounds is stressed.

Lecture 2 hours, laboratory 4 hours.

110—ELEMENTS OF GENERAL CHEMISTRY 5 UNITS

Prerequisite: Mathematics 141 or one year of algebra in high school and Mathematics' 140 or one year of plane geometry in high school.

A basic course in the fundamental principles, laws and computations of chemistry emphasizing the descriptive phases and including a brief introduction to the chemistry of the carbon compounds.

Lecture 4 hours, laboratory 3 hours.

141—INTRODUCTION TO CHEMISTRY 5 UNITS

Prerequisite: None.

Note: Recommended as a foundation course for either Chemistry 110 or Chemistry 101.

An introductory course emphasizing the essential principles of chemistry with a descriptive survey of chemical facts and including a brief introduction to elementary organic chemistry. Reference is made to industrial and practical home chemistry.

Lecture 4 hours, laboratory 3 hours.
143—INTRODUCTION TO CHEMISTRY  4 UNITS

Prerequisite: None.

Note: Recommended as a foundation course for either Chemistry 110 or Chemistry 101. This course will satisfy the chemistry requirement for many schools of nursing.

An introductory course emphasizing the essential principles of chemistry with a descriptive survey of chemical facts. Reference is made to industrial and practical home chemistry.

Lecture 3 hours, laboratory 3 hours.

Cooperative Education

101—GENERAL WORK EXPERIENCE  (SEE NOTE)

Prerequisite: Be enrolled in a college program of no less than eight (8) units including Cooperative Education, and concurrent employment for a minimum of five (5) hours per week. The employment need not be related to the occupational goal of the student.

Note: Units are based on the number of hours worked per week. (a) 5-9 hours = 1 unit; (b) 10-14 hours = 2 units; (c) 15 or more hours = 3 units.

The course may be repeated for a total of six (6) units, provided new or expanded learning experiences are provided each semester. Cooperative Education 102 cannot be taken concurrently.

To observe part-time employment of students with the intent of assisting them to acquire desirable work habits and attitudes in real jobs.

Lecture 1 hour per week, laboratory (work experience) 5 to 15 hours per week.

102—OCCUPATIONAL WORK EXPERIENCE  (SEE NOTE)

Prerequisite: Be enrolled in a college program of no less than eight (8) units including Cooperative Education; and concurrent employment for a minimum of five (5) hours per week. The employment must be related to the student's two-year career college program.

Note: Units are based on the number of hours worked per week. (a) 5-9 hours = 1 unit; (b) 10-14 hours = 2 units; (c) 15-19 hours = 3 units; (d) 20 or more hours = 4 units.

The course may be repeated for a total of sixteen (16) units, the maximum amount for all Cooperative Education. New or expanded learning experience on-the-job must be provided each semester. Cooperative Education 101 cannot be taken concurrently.

Cooperative Education 102 affords the student an extension of occupational learning opportunities through part-time employment in the occupation for which his curriculum in college is preparing him.

Lecture 1 hour per week, laboratory (work experience) 5 to 20 hours per week.

Cosmetology

101—WIG AND HAIRPIECE SERVICING I  2 UNITS

Prerequisite: None.

Basic techniques in the skill of wig servicing. Emphasis is placed on fundamentals for those students who have never experienced working with hair or hairpieces. This service does not require a California license.

Lecture 1 hour, laboratory 2 hours.

102—WIG AND HAIRPIECE SERVICING II  2 UNITS

Prerequisite: A Cosmetology License, or be a senior cosmetology student in high school, or have one thousand hours of cosmetology training.

Emphasizes skill for achieving satisfactory results in individual wig styling, coloring, conditioning and servicing. Develops important personal qualifications, stresses how wigs are made, fitted and altered as well as how to recognize types of wigs and hairpieces available. Outlines the importance of knowledge of wigs in regard to buying and selling them and prepares the student on the proper care and handling of wigs and hairpieces.

Lecture 1 hour, laboratory 2 hours.

111—ELEMENTS OF COSMETOLOGY  (SEE NOTE)

Prerequisite: High school graduation or age 18 with 10th grade education.
Note: Students are granted one unit of credit for each 34 hours of lecture and laboratory attendance each semester for a maximum of 16 units and a total of 48 units for the entire 1600 hours as required by the Board of Cosmetology for licensing as a Cosmetologist. The student must enroll in a minimum of 25 hours per week for 12 units and a maximum of 40 hours per week for 16 units. Late enrollment is allowed. Students will be granted credit as earned at the rate of 34 hours of attendance equaling one unit. In addition to the class in cosmetology, the student must be enrolled in at least one other college class during fall and spring semesters (minimum of two units).

A study covering basic sciences of the hair, skin, scalp, sanitation, sterilization and hygiene recognition of conditions of the skin, scalp and hair. Preparation training in theory and practical operation.

Practical application of skills in shampooing, curl construction, basic hair cutting, comb-out procedures, responsibilities as a receptionist, ethics of the profession, as well as personal hygiene.

Lecture and laboratory 25 hours.

112—BASIC COSMETOLOGY  (SEE NOTE)

Prerequisite: Cosmetology 111. Students transferring from another state approved school may enter Cosmetology 112 providing 400 hours have been completed.

Note: Students are granted one unit of credit for each 34 hours of lecture and laboratory attendance each semester for a maximum of 16 units and a total of 48 units for the entire 1600 hours as required by the Board of Cosmetology for licensing as a Cosmetologist. The student must enroll in a minimum of 25 hours per week for 12 units and a maximum of 40 hours per week for 16 units. Late enrollment is allowed. Students will be granted credit as earned at the rate of 34 hours of attendance equaling one unit. In addition to the class in cosmetology, the student must be enrolled in at least one other college class during fall and spring semesters (minimum of two units).

Theory and application of permanent waving, all phases of hair coloring. Modern methods of hair shaping and hair styling shall be practiced on models. This course also offers practice on fellow students.

Lecture and laboratory 25 hours.

113—INTERMEDIATE COSMETOLOGY  (SEE NOTE)

Prerequisite: Cosmetology 112. Students transferring from another state approved school may enter Cosmetology 113 providing 800 hours have been completed.

Note: Students are granted one unit of credit for each 34 hours of lecture and laboratory attendance each semester for a maximum of 16 units and a total of 48 units for the entire 1600 hours as required by the Board of Cosmetology for licensing as a Cosmetologist. The student must enroll in a minimum of 25 hours per week for 12 units and a maximum of 40 hours per week for 16 units. Late enrollment is allowed. Students will be granted credit as earned at the rate of 34 hours of attendance equaling one unit. In addition to the class in cosmetology, the student must be enrolled in at least one other college class during fall and spring semesters (minimum of two units).

A review of all requirements as set forth by the State Board of Cosmetology. Instruction in the science of permanent waving, hair coloring, and creating a hair style with further course of study in electrical facial, and electrical scalp treatments.

Lecture and laboratory 25 hours.

114—ADVANCED COSMETOLOGY  (SEE NOTE)

Prerequisite: Cosmetology 113. Students transferring from another state approved school may enter Cosmetology 114 providing 1200 hours have been completed.

Note: Students are granted one unit of credit for each 34 hours of lecture and laboratory attendance each semester for a maximum of 16 units and a total of 48 units for the entire 1600 hours as required by the Board of Cosmetology for licensing as a Cosmetologist. The student must enroll in a minimum of 25 hours per week for 12 units and a maximum of 40 hours per week for 16 units. Late enrollment is allowed. Students will be granted credit as earned at the rate of 34 hours of attendance equaling one unit. In addition to the class in cosmetology, the student must be enrolled in at least one other college class during fall and spring semesters (minimum of two units).

Advanced methods of all phases of cosmetology as performed in a salon, corrective hair coloring, salon management, and preparation for the State Board Examination.

Lecture and laboratory 25 hours.
DRAFTING

DATA PROCESSING
See Business 123

DENTAL MATERIALS
See Art 151

Drafting

129—FUNDAMENTALS OF DRAFTING 2 UNITS
( FOR TECHNICIANS)

Prerequisite: None.

Note: A recommended course for non-drafting majors. No credit is allowed for this course to students having credit in Engineering 101, 103, 104; Drafting 131, 132, 133, 134; Technical Graphics 165, 166, 167, 168.

A study of the fundamentals of orthographic drawing to develop in the student the ability to visualize objects and obtain information pertaining to them from blueprints. Such areas as size description, shape description, vocabulary of terms, descriptive terminology used on drawings, reproduction processes, mechanical and freehand sketching are covered.

Lecture 1 hour, laboratory 2 hours.

131—TECHNICAL DRAFTING 7 UNITS

Prerequisite: Mathematics 143 or Mathematics 144 taken concurrently.

Note: Students must register for the full number of hours for which the course is scheduled. A basic course in drafting consisting of the techniques used in the use of instruments for technical drawing, lettering, geometry used in technical drawing, orthographic projection and visualizing in three dimensions, revolutions, sections, primary and secondary auxiliary views, isometric drawing, types of fasteners, springs, oblique drawing, freehand drawing and sketching.

Lecture 6 hours, laboratory 6 hours.

132—INTERMEDIATE TECHNICAL DRAFTING 7 UNITS
AND MACHINE DETAILING

Prerequisite: Drafting 131 or Technical Graphics 165. Mathematics 144 taken concurrently, or a more advanced mathematics course.

Note: Students must register for the full number of hours for which the course is scheduled. An intermediate course in the application of drafting techniques and practices. Special emphasis on industrial and military specification dimensioning practices in drawing detail and assembly drawings in accordance to professional standards.

Application of tolerancing, metal fits between parts, mating surfaces which will be machined for drawing production detail drawings. Preparing production casting, forging, gear, and cam drawings of professional quality to meet military specifications and production processes and materials. Detailing structural steel drawings and attaching by rivets and welding.

Lecture 3 hours, laboratory 9 hours.

133—ELECTRICAL DRAWING AND ELECTRONIC PACKAGING 7 UNITS

Prerequisite: Drafting 131, Physics 145, or a more advanced physics course, taken concurrently.

Note: Students must register for the full number of hours for which the course is scheduled.

Electronic and electrical symbols, wiring or connection and block diagrams, electron tube and transistor symbols, electronic schematic diagrams, electric power drafting, and electronic package drawing.

Lecture 3 hours, laboratory 9 hours.

134—ADVANCED DRAFTING IN MACHINE DESIGN 7 UNITS

Prerequisite: Drafting 133 and concurrent enrollment in one of the following: Metals 115, Welding 117, Materials and Processes 146.

Note: Students must register for the full number of hours for which the course is scheduled.

Strength of materials, mechanics, and statics as related to machine design in equilibrium, centroid, moment of an area, simple stress and strain, reactions, statically determinate and indeterminate beams, torsion, bending combined with tension, compression, and repeated stress.

Machine design as applied to type of materials, strength requirements, shape configuration, and general design
considerations. Compound stresses, bolts and screws, connectors, shafting and keys, pulleys, sprockets, friction drives, bevel gears, bearings, and machine design project.

Lecture 5 hours, laboratory 7 hours.

136—BASIC TECHNICAL DRAFTING 3 UNITS

Prerequisite: None.

Not a basic transfer course for students who hope to continue in an engineering course in a four-year college. A basic course in drafting techniques for instruments, lettering, and geometry.

This class is offered in the Extended Day Program only.

Laboratory 6 hours.

137—TECHNICAL DRAFTING 3 UNITS

Prerequisite: Drafting 136.

Primarily designed for students already employed in related industry and for students planning to start working in related fields in the near future. Not a basic transfer course for students who hope to continue in an engineering course in a four-year college.

This class is offered in the Extended Day Program only.

Lecture 3 hours, laboratory 3 hours.

138—TECHNICAL DRAFTING 3 UNITS

Prerequisite: Drafting 137.

Primarily designed for students already employed in related industry and for students planning to start working in related fields in the near future. Not a basic transfer course for students who hope to continue in an engineering course in the four-year college.

This class is offered in the Extended Day Program only.

Lecture 3 hours, laboratory 3 hours.

139—ADVANCED TECHNICAL DRAFTING 3 UNITS

Prerequisite: Drafting 138.

Primarily designed for students already employed in related industry and for students planning to start working in related fields in the near future. Not a basic transfer course for students who hope to continue in an engineering course in a four-year college.

This class is offered in the Extended Day Program only.

Lecture 3 hours, laboratory 3 hours.

101—PRINCIPLES OF MICROECONOMICS 3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a "B" average in United States History and Government courses in high school or 12 units of college courses with a "C" average. One year high school algebra or Mathematics 141.

A fundamental course in economic analysis including methodology, the history of economic thought and mathematical techniques. Price theory including consumer behavior (utility and demand), production (cost and supply), partial equilibrium, tax incidence, and theory of the firm (profit maximization under pure competition) are examined. Other selected topics may include imperfect competition, monopoly, agriculture, labor, factor pricing, international trade and comparative advantage, business organization, accounting and the stock market.

Lecture 3 hours.

102—PRINCIPLES OF MACROECONOMICS 3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a "B" average in United States History and Government courses in high school or 12 units of college courses with a "C" average. One year high school algebra or Mathematics 141.

Note: It is recommended that Economics 101 be taken prior to Economics 102.

A fundamental course including an introduction to economic history, comparative economic systems, and statistical analysis. Stress is placed on National Income theory, consumption, investment, inflation, unemployment, and fiscal and monetary policy. Other selected topics may include money and banking, national debt, international balance of payments, growth and development, and urban problems.

Lecture 3 hours.
105—THE AMERICAN ECONOMY 3 UNITS

Prerequisite: None.

Note: No credit will be granted for Economics 105 if Economics 101 and Economics 102 have been taken previously.

An introduction to the American economy. A foundation for understanding it and the problems that it faces. A description of the important institutions of our system and an analytical approach to the understanding of the basic economic problems.

Lecture 3 hours.

107—PROBABILITY AND STATISTICS 3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a “B” average in United States History and Government courses in high school or 12 units of college courses with a “C” average. One year of high school algebra or Mathematics 141 or equivalent.

An introduction to the areas of probability and statistics. A consideration of the methods of gathering, classifying, and analyzing statistical data.

Lecture 3 hours.

111—ECONOMIC HISTORY OF THE UNITED STATES 3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a “B” average in United States History and Government courses in high school or 12 units of college courses with a “C” average.

A history of economic development of the United States from its settlement to the present. Emphasis is placed on the growth and development of institutions and movements in our modern society. This course meets the California State requirement in American History.

Lecture 3 hours.

EDUCATION
See Social Science 101

ELECTRONICS
See Television Repair

Electronics

171—BASIC ELECTRONICS I 7 UNITS

Prerequisite: Mathematics 143 or Mathematics 144 or a more advanced mathematics course. (May be taken concurrently.)

Note: Students must register for the full number of hours for which the course is scheduled, but late registration is permitted provided a vacancy in the class exists.

Study of the DC and AC circuit principles and characteristics. Study and application of network theorems for circuit analysis. Study of magnetism and magnetic units. Theory and application of volt-ohm meters.

Fundamental skills are developed in shop practice, soldering techniques, wiring practice, schematic reading and circuit tracing, use of meters, oscilloscopes, and other test equipment. Practice in layout and construction of simple electronic circuits.

Lecture 6 hours, laboratory 6 hours.

172—BASIC ELECTRONICS II 7 UNITS

Prerequisite: Electronics 171 and concurrent enrollment in Mathematics 144 or a more advanced mathematics course.

Note: Students must register for the full number of hours for which the course is scheduled, but late registration is permitted provided a vacancy in the class exists.

Analysis of DC and AC circuits. Principles of vacuum tubes, vacuum tube amplifiers, power supplies, and filters. Laboratory experiments with vacuum tubes, amplifiers and power supplies. Use of signal generators, oscilloscopes and other test instruments.

Lecture 6 hours, laboratory 6 hours.

173—ADVANCED ELECTRONICS 7 UNITS

Prerequisite: Electronics 172, and concurrent enrollment in one of the following: Metals 115, Drafting 129, Physics 145 or Materials and Processes 146.

Note: Students must register for the full number of hours for which the course is scheduled, but late registration is permitted provided a vacancy in the class exists.

Theory of transistors. Analysis of linear transistor cir-
circuits. Amplifiers and oscillators using transistors and vacuum tubes. Regulated power supplies. Laboratory experiments for checking transistor parameters and behavior.

Lecture 6 hours, laboratory 6 hours.

174—ADVANCED ELECTRONICS  7 UNITS

Prerequisite: Electronics 173, and concurrent enrollment in one of the following: Metals 115, Drafting 129, Physics 145 or Materials and Processes 146.

Note: Students must register for the full number of hours for which the course is scheduled, but late registration is permitted provided a vacancy in the class exists.

Transmitter theory, antennas and transmission lines, test instruments, integrator and differentiator circuits, and computer logic circuits, superheterodyne theory. Laboratory includes troubleshooting, test instrument use and maintenance, and experiments with special circuits.

Lecture 6 hours, laboratory 1 hour.

Lecture 6 hours, laboratory 6 hours.

175—BASIC ELECTRONIC THEORY I  3 UNITS

Prerequisite: None.

Note: Reduced credit if Electronics 171 is taken prior to or subsequent to Electronics 175-176.

A course in the basic principles of electricity and electronics for non-electronics majors. It is designed to provide the student with a sound understanding of the basic principles of electronic circuits and their applications.

Ohm's Law, DC and AC circuit principles and characteristics, magnetism and magnetic units, and meters.

Lecture 4 hours.

176—BASIC ELECTRONIC THEORY II  3 UNITS

Prerequisite: Electronics 175.

Note: Reduced credit if Electronics 171 is taken prior to or subsequent to Electronics 175-176.

Continuation of Electronics 175. Principles of vacuum tubes, AF and RF vacuum tube amplifiers, power supplies, oscillators, and introduction to transistors.

Lecture 4 hours.

177—BASIC ELECTRONICS I  3 UNITS

Prerequisite: Satisfactory score on Mathematics Proficiency Test or credit in Mathematics 150.

A basic course covering theory and mathematical applications of DC circuits, Ohm's Law, series circuits, parallel circuits, electrical power, Kirchhoff's Laws, and introduction to AC. Laboratory meetings are included.

This class is offered in the Extended Day Program only.

Lecture 5 hours, laboratory 1 hour.

178—BASIC ELECTRONICS II  3 UNITS

Prerequisite: Electronics 177 or equivalent.

Note: Students having had Electronics 171 will receive no credit for Electronics 178.

A basic electronics course covering theory and mathematical applications of magnetism and electromagnetic induction, alternating current, inductance and inductive reactance, AC circuits, series and parallel resonance, and filters. Laboratory meetings are included.

This class is offered in the Extended Day Program only.

Lecture 5 hours, laboratory 1 hour.

Engineering

101—ENGINEERING DRAWING  3 UNITS

Prerequisite: None.

Training in the manipulation of instruments, lettering, orthographic projection, sketching, drawing auxiliary and pictorial views, sectioning and dimensioning.

Lecture 2 hours, laboratory 4 hours.

103—DESCRIPTIVE GEOMETRY  3 UNITS

Prerequisite: Engineering 101 or Drafting 131 or Technical Graphics 165 or Architecture 101, or one year of mechanical drawing in high school.

Note: This course may not be taken for credit by students who have completed Architecture 103.

A valuable engineering tool which facilitates the solution of engineering problems graphically. A study of lines and
planes in space. The representation of surfaces, solids, interferences, and intersections. Excellent training in visualization and interpretation of engineering drawings.

Lecture and laboratory 6 hours.

**104—ADVANCED ENGINEERING DRAWING** 3 UNITS

*Prerequisite:* Engineering 101 or Drafting 131 or one year of mechanical drawing in high school.

*Note:* Engineering students should take Engineering 103 prior to Engineering 104.

Delineation of simple machine parts including problems in visualization, dimensioning and tolerances, screw threads and fasteners, freehand sketching, pictorial drawing, piping, welding, gears and cams, assembly and working drawings. Special emphasis is laid upon the interpretation and production of drawings which conform to standard practice.

Lecture and laboratory 6 hours.

**108—PROPERTIES OF ENGINEERING MATERIALS** 2 UNITS

*Prerequisite:* Chemistry 102 (may be taken concurrently), Physics 101, and Mathematics 104.

A study of the fundamental structural, thermodynamic, and quantum considerations underlying the properties of materials, with accent on crystal structure, phase rule, phase diagram, and alloy systems, of ferrous and non-ferrous metals, and engineering properties of organic and inorganic compounds. Applications of basic principles to the evaluation, selection, and use of engineering materials.

Lecture 2 hours.

**110—STATICS** 3 UNITS

*Prerequisite:* Physics 101-102 and Mathematics 105. (Physics 102 and Mathematics 105 may be taken concurrently.)

Force systems and equilibrium conditions as applied to mechanical engineering problems. The course includes graphical methods and the use of diagrams as an aid to algebraic solutions. Structures, distributed forces, friction, virtual work, funicular polygons, moments of inertia, shear and bending moment diagrams, and Maxwell diagrams are included in the course. Vector analytical methods using the dot and cross products are stressed.

Lecture 3 hours.

**141—ENGINEERING COMPUTATIONS** 1 UNIT

*Prerequisite:* Mathematics 102 or trigonometry in high school.

*Note:* For engineering and science majors. This course may not be taken for credit by students who have completed Engineering 142.

Lectures and instruction in the use of the slide rule. Mannheim and log-log trigonometric slide rules will be explained and used in computation. Estimating, checking, and solving problems in computation will be required of the student.

Lecture 2 hours.

**142—SLIDE RULE** 1 UNIT

*Prerequisite:* None.

*Note:* For non-science majors. This course may not be taken for credit by students who have completed Engineering 141.

Lectures and instruction in the use of the slide rule. Estimating, checking, and solving problems in computation will be required of the student.

Lecture 2 hours. (9 weeks)

**English**

**101—FRESHMAN ENGLISH** 3 UNITS

*Prerequisite:* A satisfactory score on the English Placement Examination; or a grade of "B" or better in English 191; or a grade of "C" or better in English 120.

A foundation course in writing and reading, required of those students intending to transfer to a university. English 101 provides instruction and practice in expository writing, analysis and criticism of selected prose models.

Lecture 3 hours.
102—FRESHMAN ENGLISH 3 UNITS

Prerequisite: English 101.

An introduction to literature which includes practice in writing, related to the study and evaluation of types of imaginative literature, including the short story, novel, drama, and poetry.

Lecture 3 hours.

103—CREATIVE WRITING WORKSHOP 3 UNITS

Prerequisite: None.

An introduction to the theory and practice of creative verbal expression in the major imaginative forms of prose fiction and non-fiction, poetry, and drama. Emphasis is placed upon specific techniques used to communicate personal ideas and feelings. Students may concentrate on one of the major writing forms.

Lecture and discussion 3 hours.

105—SURVEY OF ENGLISH LITERATURE FROM THE ANGLO-SAXON PERIOD TO 1780 3 UNITS

Prerequisite: English 102.

Note: Required of all English majors. Open to all who have completed English 102.

A survey course covering the development of English literature from the beginning to 1780 and emphasizing the development of thought in relation to historical and social backgrounds.

Lecture 3 hours.

106—SURVEY OF ENGLISH LITERATURE FROM 1780 TO THE PRESENT TIME 3 UNITS

Prerequisite: English 102.

Note: Required of all English majors. Open to all who have completed English 102.

English 106 may be taken without English 105.

A survey course covering the development of English literature from 1780 to the present time. English 106 continues to study the development of thought as an expression of our cultural heritage.

Lecture 3 hours.

109—INTRODUCTION TO LITERATURE OF THE WESTERN WORLD 3 UNITS

Prerequisite: English 102.

A survey of the literature of the Western World from ancient times (including selections from the Old and New Testaments) to the Renaissance. Emphasis upon the Greek and Roman classics. Includes a study of Classical and Norse mythology.

Lecture 3 hours.

110—INTRODUCTION TO LITERATURE OF THE WESTERN WORLD 3 UNITS

Prerequisite: English 102.

A survey of the literature of the Western World from the Renaissance to the present time. Emphasis upon cultural history and the history of important ideas reflected in the literary works.

Lecture 3 hours.

120—COMPOSITION AND READING 3 UNITS

Prerequisite: A satisfactory score on the English Placement Examination, or a grade of "B" or better in English 131, or a grade of "C" or better in English 191.

Note: Allows no credit to those who have completed English 101.

English 120 is designed for the student who is aiming toward an Associate in Arts Degree or who needs additional instruction in the techniques of writing before attempting English 101. English 120 will provide practice in the mechanics of writing, in the organization of a paragraph and essay, and in the analysis of appropriate written models dealing with important contemporary ideas. Student-Teacher interviews will be stressed in an attempt to isolate the individual writing problems of each student.

Lecture 3 hours.

121—READING LITERATURE 3 UNITS

Prerequisite: None.

An introductory study of the major forms of creative literature; the short story, the novel, the drama, the poetry, drawn from the best modern authors. The course is planned to develop a greater appreciation and under-
standing of the literature of our time with special emphasis on the literary expression of contemporary issues. It is designed for the non-English major and for the student planning to earn an Associate in Arts Degree.

Lecture 3 hours.

122—READINGS IN EARLY AMERICAN LITERATURE 2 UNITS

Prerequisite: None.

Note: Not recommended for English majors.

Designed to give a generous sample of the works of major American authors, from Colonial days to the Civil War, and to relate these works to the history of ideas. Important historical movements are traced so that the student may gain increased understanding of his own heritage.

Lecture 2 hours.

123—READINGS IN MODERN AMERICAN LITERATURE 2 UNITS

Prerequisite: None.

Note: Not recommended for English majors.

Designed to give a generous sample of the works of major American authors from the Civil War to the present day, the course is intended to enrich the student's understanding of selected works. The important literary movements with their sociological implications are traced so that the student may have background for critical judgment of contemporary American writing.

Lecture 2 hours.

125—SHAKESPEARE 2 UNITS

Prerequisite: None.

Note: Not recommended for English majors.

An introduction to the works of Shakespeare. The course is focused on a close study of Shakespeare's major plays. It also provides a background and insights into the Elizabethan world so that the student may more fully understand and appreciate Shakespeare's writings.

Lecture 2 hours.

126—THE MODERN DRAMA 2 UNITS

Prerequisite: None.

A study of modern plays and playwrights. Representative works of European and American dramatists are read with special attention given the literary and sociological importance of plays written since 1870. The aim of the course is to enable the student to make an intelligent evaluation of contemporary drama.

Lecture 2 hours.

131—INDUSTRIAL ENGLISH 3 UNITS

Prerequisite: None.

Note: Only one unit of credit will be allowed to those students who have completed English 191 and no credit to those who have completed English 120, or Business 145. If a grade earned in English 131 is "B" or higher, the course will be acceptable in lieu of English 191 as a prerequisite to English 120, but not as a prerequisite to English 101 regardless of the grade earned.

A course designed especially for students taking technical education courses. It stresses training in reading, listening, and writing, including the related skills of grammar usage, sentence and paragraph structure, and spelling. A major emphasis in writing will be placed on types of business correspondence.

Lecture 3 hours, laboratory 1 hour.

132—INDUSTRIAL ENGLISH 3 UNITS

Prerequisite: None.

A course designed especially for students taking technical education courses. It includes training in oral communications with emphasis being placed on speaking and listening for both public and private, formal and informal occasions. Additionally, students will learn major advertising and propaganda techniques and basic library usage, emphasizing both the practical and recreational uses of the library as a lifelong learning resource center.

Lecture 3 hours.

190—BASIC READING TECHNIQUES 2 UNITS

Prerequisite: None.

Note: No credit will be given to those students who have completed English 101 or English 120.
A course in reading improvement for the student with below average reading skills. Emphasis is on improvement of word recognition, vocabulary, and comprehension. The flashmeter and controlled reader are used with relatively simple materials. Book reviews and summaries are assigned.

Lecture and laboratory 4 hours.

191—FUNDAMENTALS OF ENGLISH 2 UNITS

Prerequisite: None.

Note: This course should be elected by those who fail to make a satisfactory score on the English Placement Examination. No credit will be given to those students who have completed English 101, 120, 131, or Business 145.

A course combining auto-instructional techniques, programmed learning, and lectures to improve grammar, punctuation, spelling, the composition of paragraphs, study techniques, reading skills, and listening skills.

Lecture and laboratory 4 hours.

192—ADVANCED READING TECHNIQUES 2 UNITS

Prerequisite: A satisfactory score on the English Placement Examination or a grade of “C” or better in either English 120 or English 190.

A course planned to help the student with average or better vocabulary develop the skills required for rapid, effective reading of both pleasure and study materials. Emphasis is on flexible rates of reading. Special clinical methods and materials are applied, including the use of the flashmeter and the controlled reader.

Lecture and laboratory 4 hours.

193—ENGLISH AS A SECOND LANGUAGE 3 UNITS

Prerequisite: Any student whose native tongue is not English may enter the course.

Note: English 193 is offered each semester as a credit-no credit course. Students electing to take advanced work in English must continue to enroll in the course until credit is earned.

English 193 is designed to help students of English as a second language develop their abilities to use common English idioms and grammatical structures in speech and writing. Emphasis is on classroom discussion and group study.

Lecture 3 hours, laboratory 1 hour.

198—READING FICTION 2 UNITS

Prerequisite: None.

An introduction to fiction designed for the non-English major. It seeks to foster an appreciation, understanding, and evaluation of the modern short story and novel by the use of tools of critical analysis.

Lecture 2 hours.

199—BASIC COMMUNICATIONS 6 UNITS

Prerequisite: None.

A unified course in reading, listening, writing, and speaking. It should be elected by students having deficiencies in communication skills.

Lecture 5 hours—section meetings, laboratory 3 hours—Learning Resource Center.

FASHION DESIGN
See Home Arts 117, 118, 119, 120, 122, 124.

Fire Science

Classes in Fire Science are offered in the Extended Day Program as in-service training and up-grading for firefighting personnel and as pre-employment training for those interested in preparing for a career as a fireman. Identical classes are offered on consecutive evenings to provide for those firemen who must change shifts each week.

101—INTRODUCTION TO FIRE PROTECTION 3 UNITS

Prerequisite: None.

Philosophy and history of fire protection; history of loss of life and property by fire; review of municipal fire defenses; study of the organization and function of Federal, State, County, and private fire protection agencies; and survey of professional fire protection career opportunities.

Lecture 3 hours.
102—INTRODUCTION TO FIRE SUPPRESSION  3 UNITS

Prerequisite: None.

Familiarization with national, state, and local laws and ordinances which influence the field of fire prevention. Lecture 3 hours.

107—FIRE HYDRAULICS  3 UNITS

Prerequisite: Nine units of Fire Science or employment in a related occupation.

Review of basic mathematics; hydraulic laws and formulas as applied to the fire service; application of formulas and mental calculation to hydraulic problems; water supply problems; underwriters' requirements for pumps. Lecture 3 hours.

103—FUNDAMENTALS OF FIRE PREVENTION  3 UNITS

Prerequisite: Fire Science 101 or Fire Science 102 or employment in a related occupation.

Organization and function of the fire prevention organization; inspection; surveying and mapping procedures; recognition of fire hazards; engineering a solution to the hazard; enforcement of the solution; public relations as affected by fire prevention. Lecture 3 hours.

104—FIRE FIGHTING TACTICS AND STRATEGY  3 UNITS

Prerequisite: Nine units of Fire Science or Fire Science 102 and employment in a related occupation.

Review of fire chemistry, equipment and man power; basic fire fighting tactics and strategy; methods of attack; pre-planning fire problems. Lecture 3 hours.

108—FIRE APPARATUS AND EQUIPMENT  3 UNITS

Prerequisite: Three units of Fire Science or employment in a related occupation.

Driving laws, driving technique, construction, and operation of pumping engines, ladder trucks, aerial platforms, specialized equipment, and apparatus maintenance. Lecture 3 hours.

105—FIRE PROTECTION EQUIPMENT AND SYSTEMS  3 UNITS

Prerequisite: Nine units of Fire Science or employment in a related occupation.

Portable fire extinguishing equipment; sprinkler systems; protection systems for special hazards; and fire alarm and detection systems. Lecture 3 hours.

109—RESCUE PRACTICES  3 UNITS

Prerequisite: Three units of Fire Science or employment in a related occupation or volunteer in a related occupation.

Rescue practices, the human body, emergency care of victims, childbirth, artificial respiration, toxic gases, chemicals and diseases, radioactive hazards, rescue problems, and techniques. Lecture 3 hours.

110—FIRE COMPANY ORGANIZATION AND PROCEDURE  3 UNITS

Prerequisite: None.

Review of fire department organization; fire company organization; the company officer; personnel administration; communications; fire equipment; maintenance; training; fire prevention; fire fighting; company fire fighting capability; records and reports. Lecture 3 hours.

106—RELATED CODES AND ORDINANCES  3 UNITS

Prerequisite: Fire Science 103 or employment in a related occupation.
111—FIRE INVESTIGATION  3 UNITS

Prerequisite: Fire Science 101 or Fire Science 102 or employment in a related occupation or consent of the instructor.

Introduction to arson and incendiaryism, arson laws, and types of incendiary fires. Methods of determining fire cause, recognizing and preserving evidence, interviewing and detaining witnesses. Procedures in handling juveniles; court procedure and giving court testimony.

Lecture 3 hours.

112—WILDLAND FIRE CONTROL  3 UNITS

Prerequisite: Fire Science 101 or Fire Science 102 or employment in a related occupation.

Designed to provide the employed fireman or fire science major with a fundamental knowledge of the factors affecting wildland fire prevention, fire behavior, and control techniques.

Lecture 3 hours.

FORTRAN
See Mathematics 130.

French

101—BEGINNING FRENCH  4 UNITS

Prerequisite: A satisfactory score on the English Placement Examination or a grade of “B” or better in English 191 or a grade of “C”, or better in English 120.

Fundamentals of French grammar. The student is trained to pronounce correctly, to acquire a small working vocabulary which he uses in conversation and writing, and to learn to read simple French.

In addition to the regular class hours, the student must spend two half-hour periods a week in the laboratory.

Lecture 5 hours.

102—BEGINNING FRENCH  4 UNITS

Prerequisite: French 101, or two years of French in high school completed within the past two years.


In addition to the regular class hours, the student must spend two half-hour periods a week in the laboratory.

Lecture 5 hours.

103—INTERMEDIATE FRENCH  4 UNITS

Prerequisite: French 102, or three years of French in high school completed within the past two years.


In addition to the regular class hours, the student must spend two half-hour periods a week in the laboratory.

Lecture 4 hours.

104—INTERMEDIATE FRENCH  4 UNITS

Prerequisite: French 103, or four years of French in high school completed within the past two years.


In addition to the regular class hours, the student must spend two half-hour periods a week in the laboratory.

Lecture 4 hours.

105—CONVERSATIONAL FRENCH  2 UNITS

Prerequisite: One year of college French, or three years of high school French, or permission of the instructor.

Intensive practice in oral expression and comprehension of spoken French.

Lecture and participation 2 hours.
Geography

101—ELEMENTS OF GEOGRAPHY 3 UNITS

Prerequisite: None.

Study of the basic physical elements of geography, their correlation and integrated patterns of world distribution. Special attention is given to the earth and its astronomical relationships, weather, climate, and landforms.

Lecture 3 hours.

102—ELEMENTS OF GEOGRAPHY 3 UNITS

Prerequisite: None.

A systematic study of the cultural variables of mankind: population, religion, language, economic activities, settlements. Emphasis upon selected cultural problems of man's occupation.

Lecture 3 hours.

105—ECONOMIC GEOGRAPHY 3 UNITS

Prerequisite: None.

A study of the physical and cultural elements of environment and their relation to the economic activities of man. Special attention is given to the climatic regions, the soils, the products and the resultant economy.

Lecture 3 hours.

105—HISTORICAL EARTH SCIENCE 5 UNITS

Prerequisite: None.

The study of the geological and paleontologic history of the North American continent. Field trips are required and the student is charged a transportation fee.

Lecture, investigation, and demonstration 5 hours plus 4 days of field geology.

110—PHYSICAL EARTH SCIENCE 5 UNITS

Prerequisite: None.

Note: Students who have taken Geology 101 will receive only two units of credit for Geology 110.

The study of various geologic processes, their products, ecologic implications, and related natural resources. Field trips are required and the student is charged a transportation fee.

Lecture, investigation, and demonstration 5 hours plus 4 days of field geology.

German

101—BEGINNING GERMAN 4 UNITS

Prerequisite: A satisfactory score on the English Placement Examination or a grade of "B" or better in English 191 or a grade of "C" or better in English 120.

Training in accurate pronunciation through daily drill. Elementary grammar and sentence structure. Reading and reproduction of simple prose.

In addition to the regular class hours, the student must spend two half-hour periods a week in the laboratory.

Lecture 5 hours.

102—BEGINNING GERMAN 4 UNITS

Prerequisite: German 101 or two years of German in high school completed within the past two years.

Continuation of German 101. Completion of elementary grammar essentials. Reading and interpretation of prose of increasing difficulty. Conversation, diction, and composition. Some knowledge of German tradition and
character folklore. Essential geographical and historical data concerning German people.

In addition to the regular class hours, the student must spend two half-hour periods a week in the laboratory.

Lecture 5 hours.

103—INTERMEDIATE GERMAN 4 UNITS

Prerequisite: German 102, or three years of German in high school completed within the past two years.

A review of elementary grammar, a study of word analysis, sentence structure, idioms, and composition. Intensive reading of historical and belletristic German literature. Development in the language laboratory of vocabulary, idioms, and sentences fundamental to an active use of German in speaking.

Lecture 4 hours.

104—INTERMEDIATE GERMAN 4 UNITS

Prerequisite: German 103 or four years of German in high school completed within the past two years.

Continuation of German 103, reading and interpretation of more difficult prose. Increasing stress on oral ability and free composition. Reading of contemporary newspapers and magazines.

Lecture 4 hours.

105—CONVERSATIONAL GERMAN 2 UNITS

Prerequisite: One year of college German, or three years of high school German, or permission of the instructor.

Intensive practice in oral expression and comprehension of spoken German.

Lecture (with student participation) 2 hours.

Guidance

190—COLLEGE ORIENTATION (SEE NOTE)

Prerequisite: None.

Note: The student may earn one-half, one, two, or three units each semester. For students electing one-half, one, or two units, the course may be repeated for a maximum of three units.

Special emphasis is placed upon the time schedule, the discovery of the nature and extent of reading difficulties, outlining the lecture and reading assignments, the efficient use of the facilities for study, developing skill in note taking, and preparing for and taking of examinations. Ample opportunity is provided for the consideration of individual study problems and for practicing suggested procedures.

191—COLLEGE ORIENTATION—INTERNATIONAL STUDENTS

Prerequisite: None.

Note: The student may earn one-half, one, two, or three units each semester. For students electing one-half, one, or two units, the course may be repeated for a maximum of three units.

Special emphasis is placed upon the time schedule, the discovery of the nature and extent of reading difficulties, outlining the lecture and reading assignments, the efficient use of the facilities for study, developing skill in note taking, and preparing for and taking of examinations. Ample opportunity is provided for the consideration of individual study problems and for practicing suggested procedures.

192—COLLEGE ORIENTATION—ACADEMIC PROBATION

Prerequisite: None.

Note: The student may earn one-half, one, two, or three units each semester. For students electing one-half, one, or two units, the course may be repeated for a maximum of three units.

Special emphasis is placed upon the time schedule, the discovery of the nature and extent of reading difficulties, outlining the lecture and reading assignments, the efficient use of the facilities for study, developing skill in note taking, and preparing for and taking of examinations. Ample opportunity is provided for the consideration of individual study problems and for practicing suggested procedures.

193—PSYCHOLOGY OF ADJUSTMENT 3 UNITS

Prerequisite: Counselor recommendation.

A course designed to increase the student's personal and social maturity; principles of psychology related to better
self-understanding and self-actualization. Development of effective study skills through systematic methods of study, increased motivation and self-discipline.

Lecture 3 hours.

194—COLLEGE ORIENTATION—STUDY SKILLS

(SEE NOTE)

Prerequisite: None.

Note: The student may earn one-half, one, two, or three units each semester. For students electing one-half, one, or two units, the course may be repeated for a maximum of three units.

Special emphasis is placed upon the time schedule, the discovery of the nature and extent of reading difficulties, outlining the lecture and reading assignments, the efficient use of the facilities for study, developing skill in note taking, and preparing for and taking of examinations. Ample opportunity is provided for the consideration of individual study problems and for practicing suggested procedures.

195—OCCUPATIONAL PLANNING

1 UNIT

Prerequisite: None.

Occupational Planning provides students with an opportunity to investigate, analyze, and choose a vocational area that is appropriate in terms of their interests, abilities, and personal needs. Lectures, standardized tests, self-analysis, interviews.

Lecture 1 hour.

196—COLLEGE ORIENTATION—PARA-PROFESSIONAL TRAINING

(SEE NOTE)

Prerequisite: None.

Note: The student may earn one-half, one, two, or three units each semester. For students electing one-half, one, or two units, the course may be repeated for a maximum of three units.

Special emphasis is placed upon the time schedule, the discovery of the nature and extent of reading difficulties, outlining the lecture and reading assignments, the efficient use of the facilities for study, developing skill in note taking, and preparing for and taking of examinations. Ample opportunity is provided for the consideration of individual study problems and for practicing suggested procedures.

Health and Physical Education for Men

All first-time college students are required to enroll in physical education activity classes for their first two consecutive semesters of attendance at Glendale Community College, except that a person may be exempt upon presentation of evidence that he (1) has attained the age of 21 years, or (2) is registered for 8 units or less, or (3) has a medical excuse on file, or (4) is enrolled in special programs such as extended day only, licensed vocational nursing or block-unit occupational programs.

It is recommended that a variety of activities be taken during a student's attendance at Glendale Community College. It may be possible to repeat the same class for more than one semester.

101—HEALTH EDUCATION—COEDUCATIONAL

2 UNITS

Prerequisite: None.

Note: Required of all students for graduation.

A consideration of health and its effect upon the quality of human life, the effect of exercise and fatigue, prevention of specific diseases, the significance of nutrition in health and disease, and the hygiene of the different body systems. Practices and problems in community health.

Lecture 2 hours.

103—HEALTH EDUCATION—COEDUCATIONAL

3 UNITS

Prerequisite: None.

Note: It is recommended that this course be taken by all prospective elementary teachers and physical education and recreation majors. This course meets the graduation requirement of hygiene. Only one unit of credit will be allowed students having credit in Health and Physical Education 101.

Fundamentals of healthful living to provide the prospective teacher with scientific health information and desirable attitudes and practices in healthful living.

Lecture 3 hours.
HEALTH & PHYSICAL EDUCATION FOR MEN

110—FIRST AID—COEDUCATIONAL  1 UNIT

Prerequisite: None.

Note: Required of all students for graduation. Recommended for physical education majors.
Prevention and care of accidents or sudden illness.
Lecture 2 hours.

118—INTRODUCTION TO PHYSICAL EDUCATION—COEDUCATIONAL  2 UNITS

Prerequisite: None.

Note: Recommended for physical education majors.
A course designed to acquaint prospective teachers with the social, physical, and professional demands of physical education. A preview of the profession of physical education as a whole is gained through testing, class recitation, and field trips. Opportunities in health and recreation are explored.
Lecture 1 hour, laboratory 2 hours.

119—RECREATIONAL LEADERSHIP—COEDUCATIONAL  2 UNITS

Prerequisite: None.

Note: Recommended for physical education majors and students entering the recreation field.
A basic training course for playground directors and recreation leaders. A study in the organization and administration of community and school recreation programs. Emphasis is placed on training in leadership techniques and on the development of programs in recreation, sports, and athletics.
Lecture 2 hours, laboratory 1 hour.

120—FOOTBALL THEORY  (SEE NOTE)

Prerequisite: Health and Physical Education 134 taken concurrently.

Note: Recommended for physical education majors. This course may be taken for two units each semester for a total of two semesters (4 units).
Theory and development of offensive and defensive formations.

121—PHYSICAL EDUCATION ACTIVITIES  1 UNIT

Prerequisite: None.
Instruction in the fundamentals of individual activities. Free and competitive participation in seasonal sports. Adapted activities to meet the needs of special students.
Laboratory 2 hours.

125—INTERMEDIATE BASEBALL  1 UNIT

Prerequisite: None.
Instruction in rules and game strategy. Practice in fundamental techniques of throwing, fielding, batting, and team play.
Fall semester only.
Laboratory 2 hours.

126—ADVANCED BASEBALL (VARSITY)  2½ UNITS

Prerequisite: Some previous playing experience in baseball.

Note: Limited to students trying out for the varsity teams.
Development of team play for competitive participation.
Spring semester only.
Daily.
Laboratory 5 hours.

127—BEGINNING BASKETBALL  1 UNIT

Prerequisite: None.
Instruction and practice in the fundamental techniques and rules of the game. Development of team play and competitive participation.
Laboratory 2 hours.

128—INTERMEDIATE BASKETBALL  1 UNIT

Prerequisite: None.
Instruction in rules and game strategy, practice in fundamental techniques.

129—ADVANCED BASKETBALL (VARSITY)  2½ UNITS

Prerequisite: Some experience on an organized team.
Note: Limited to students competing for the varsity team.

Individual instruction and development of team play for competitive participation.
Fall semester. Daily.
Laboratory 5 hours.

131—BOWLING
Prerequisite: None.
Instruction and practice in the fundamental techniques and rules of the game. Individual and team play.
Laboratory 2 hours.

132—TOUCH FOOTBALL
Prerequisite: None.
Instruction and practice in fundamentals, with the development of team play and competition.
Laboratory 2 hours.

133—INTERMEDIATE FOOTBALL
Prerequisite: None.
Instruction and practice in techniques of individual offense and defense.
Spring semester only.
Laboratory 2 hours.

134—ADVANCED FOOTBALL (VARSITY)
Prerequisite: Previous experience on an organized team.
Note: Limited to students trying out for the varsity team.
Development of team play for competitive participation.
Fall semester only. Daily.
Laboratory 5 hours.

135—ADVANCED GOLF (VARSITY)
Prerequisite: Some previous playing experience in golf.
Note: Limited to students competing for the varsity team.
Development of play for competitive participation.
Spring semester only.

136—BEGINNING GYMNASTICS
Prerequisite: None.
Instruction and practice in the fundamental techniques of tumbling and apparatus.
Laboratory 2 hours.

140—SOCCER
Prerequisite: None.
Instruction and practice in the basic fundamentals, techniques, and rules. Development of team play, with emphasis on offensive and defensive strategy.
Laboratory 2 hours.

145—BEGINNING TENNIS
Prerequisite: None.
Instruction and practice in the basic strokes, fundamental techniques and rules of the game.
Laboratory 2 hours.

146—INTERMEDIATE TENNIS
Prerequisite: Some previous playing experience in tennis.
Instruction and practice in individual fundamentals, development of team play and court strategy.
Laboratory 2-3 hours.

147—ADVANCED TENNIS (VARSITY)
Prerequisite: Some previous playing experience in tennis.
Note: Limited to students trying out for the varsity team.
Development of team play for competitive participation.
Offered Spring semester only. Daily.
Laboratory 5 hours.

148—PADDLE TENNIS
Prerequisite: None.
Instruction and practice in the basic strokes, fundamental techniques and rules of the game. A sport very similar to regular tennis.
Laboratory 2 hours.
150—INTERMEDIATE TRACK AND FIELD 1 UNIT

_Prerequisite:_ None.

Instruction and practice in fundamental techniques of running and field events.

Laboratory 2 hours.

151—ADVANCED TRACK AND FIELD (VARSITY) 2 1/2 UNITS

_Prerequisite:_ None.

_Note:_ Limited to students trying out for the varsity team.

Designed for competitive participation.

Spring semester only. Daily.

Laboratory 5 hours.

152—CROSS-COUNTRY RUNNING (VARSITY) 2 1/2 UNITS

_Prerequisite:_ None.

_Note:_ Recommended for distance runners and track men wishing to condition themselves for track.

Designed for competitive participation.

Fall semester only. Daily.

Laboratory 5 hours.

153—BEGINNING VOLLEYBALL 1 UNIT

_Prerequisite:_ None.

Instruction in the rules and practice in the fundamental techniques of volleyball. Development of team play and competitive participation.

Laboratory 2 hours.

154—INTERMEDIATE VOLLEYBALL 1 UNIT

_Prerequisite:_ Previous playing experience.

Instruction and practice in individual fundamentals, development of team play and court strategy.

Laboratory 2 hours.

160—BODY MECHANICS—WEIGHT TRAINING AND CONDITIONING 1 UNIT

_Prerequisite:_ None.

Conditioning exercises to increase body flexibility and strength of musculature in various parts of the body; to develop skilled body control with respect to agility, balance, and coordination; and to produce skills in relaxation.

Laboratory 2 hours.

161—INTERMEDIATE BODY MECHANICS 1 UNIT

_Prerequisite:_ Health and Physical Education 160 or equivalent.

Conditioning exercises to increase strength, body flexibility, and overall physical fitness. Instruction and practice and techniques of weight training.

Laboratory 2 hours.

163—BEGINNING ARCHERY—COEDUCATIONAL 1 UNIT

_Prerequisite:_ None.

Instruction in the technique of archery and participation in official target archery tournaments.

Laboratory 2 hours.

164—INTERMEDIATE ARCHERY—COEDUCATIONAL 1 UNIT

_Prerequisite:_ Health and Physical Education 163 or credit in high school.

Practice in target and tournament shooting using National Archery Association Tournament Rounds.

Laboratory 2 hours.

165—BEGINNING BADMINTON—COEDUCATIONAL 1 UNIT

_Prerequisite:_ None.

Instruction in the rules and practice in individual fundamentals, development of singles and doubles play, and competitive participation.

Laboratory 2 hours.
HEALTH AND PHYSICAL EDUCATION FOR MEN

166—INTERMEDIATE BADMINTON—
COEDUCATIONAL

Prerequisite: Health and Physical Education 165.
Additional practice and more detailed instruction in fundamentals, development of singles and doubles play, and court strategy.
Laboratory 2-3 hours.

167—BOWLING—COEDUCATIONAL

Prerequisite: None.
Note: Each student is responsible for the lane fee.
Instruction and practice in the fundamental techniques and rules of the game.
Laboratory 2 hours.

168—SQUARE DANCE—COEDUCATIONAL

Prerequisite: None.
Instruction and participation for recreational groups in Square Dance.
Laboratory 2 hours.

169—FOLK DANCE—COEDUCATIONAL

Prerequisite: Health and Physical Education 168, or equivalent.
Instruction and participation for recreational groups in American cowboy, square, circle, and folk dances.
Laboratory 2 hours.

170—BEGINNING SOCIAL DANCING—
COEDUCATIONAL

Prerequisite: None.
Instruction and practice in the fundamental skills of social dance.
Laboratory 2 hours.

171—INTERMEDIATE SOCIAL DANCING—
COEDUCATIONAL

Prerequisite: Health and Physical Education 170 or a knowledge of basic steps.
Instruction and practice in fundamental skills of social dance.
Laboratory 2 hours.

172—MODERN DANCE I—
COEDUCATIONAL

Prerequisite: None.
A wide variety of concrete experiences in movement relative to the acquisition of concepts for a structure of understanding of Modern Dance as an art form is presented.
Laboratory 2-3 hours.

173—MODERN DANCE II—
COEDUCATIONAL

Prerequisite: Health and Physical Education 172 or consent of the instructor.
An increased understanding of the principles that govern movement, an increased sensitivity to perception, a greater ability to control the body as an instrument of expression, and an understanding of the use of space, time, and force factors related to the basic principles that govern art forms.
Laboratory 2 hours.

174—MODERN DANCE PRODUCTION—
COEDUCATIONAL

Prerequisite: A grade of "A" in Health and Physical Education 172 or Health and Physical Education 173 or at discretion of the instructor.
The course provides practical experience in utilization of knowledge and understanding in modern dance as an art form. Opportunity is provided for student choreography and participation in modern dance productions.
Laboratory 4 hours.

175—MODERN DANCE TECHNIQUE—
COEDUCATIONAL

Prerequisite: None.
Health and Physical Education 175 provides opportunity for personal development in modern dance technique.
Laboratory 4 hours.
176—BEGINNING GOLF—COEDUCATIONAL 1 UNIT

Prerequisite: None.

Instruction and practice in the fundamentals of golf.
Laboratory 2 hours.

177—INTERMEDIATE GOLF—COEDUCATIONAL 1 UNIT

Prerequisite: Health and Physical Education 176 or equivalent.

Note: Each student is expected to pay a fee for use of golf facilities. This course should be taken one semester only to satisfy the physical education requirement.

Advanced instruction and practice on the golf course.
Laboratory 2 hours.

179—HIKING AND BACKPACKING—COEDUCATIONAL 2 UNITS

Prerequisite: None.

Prepares the student with knowledge and experience in the skills necessary for camping, hiking, and backpacking. Local hiking and backpacking experience. Compass and map reading, trail cooking, clothing, safety, and equipment are discussed and practiced.

Lecture 1 hour, laboratory 3 hours.

180—JOGGING—COEDUCATIONAL 1 UNIT

Prerequisite: None.

An introduction to jogging as a life-time activity. To make the student aware of the physiological benefits derived from jogging.
Laboratory 2 hours.

183—MARTIAL ARTS—COEDUCATIONAL 1 UNIT

Prerequisite: None.

The course is divided into four segments: Karate, Aikido, Judo, and Jujiitsu. Karate, Aikido, and Judo run concurrently with student instructors in charge of each small unit (if qualified personnel is available). The Jujiitsu unit is run last with the total class.
Laboratory 2 hours.

185—BEGINNING TENNIS—COEDUCATIONAL 1 UNIT

Prerequisite: None.

Instruction and practice in the basic strokes, fundamental techniques and rules of the game.
Laboratory 2 hours.

186—INTERMEDIATE TENNIS—COEDUCATIONAL 1-1½ UNITS

Prerequisite: Some previous playing experience in tennis.

Instruction and practice in individual fundamentals, development of team play and court strategy.
Laboratory 2-3 hours.

187—ADVANCED TENNIS—INTERCOLLEGIATE SPORTS ASSOCIATION—COEDUCATIONAL 2 UNITS

Prerequisite: Health and Physical Education 146 or equivalent.

Development of advanced techniques for competitive participation with other community colleges.
Laboratory 4 hours.

188—PADDLE TENNIS—COEDUCATIONAL 1 UNIT

Prerequisite: None.

Instruction and practice in the basic strokes, fundamental techniques and rules of the game. A sport very similar to regular tennis.
Laboratory 2 hours.

189—BEGINNING VOLLEYBALL—COEDUCATIONAL 1 UNIT

Prerequisite: None.

Instruction and practice in volleyball techniques with team tournaments.
Laboratory 2 hours.

190—INTERMEDIATE VOLLEYBALL—COEDUCATIONAL 1-1½ UNITS

Prerequisite: Health and Physical Education 189 or equivalent.
HEALTH AND PHYSICAL EDUCATION FOR MEN/WOMEN

Instruction and practice in advanced volleyball techniques with team tournaments for experienced players.
Laboratory 2-3 hours.

191—ADVANCED VOLLEYBALL—INTER-COLLEGIATE SPORTS ASSOCIATION—COEDUCATIONAL

Prerequisite: Health and Physical Education 190 or equivalent.
Development of advanced techniques in volleyball for competitive participation with other community colleges.
Laboratory 4 hours.

195—ADAPTED ACTIVITIES

Prerequisite: A medical excuse on file with the school nurse that exempts the student from all scheduled physical education activities.
A diversified program of developmental activities for students with disabilities which prevent their participation in a regular physical education program. The emphasis is on the student's remaining abilities, not his disability.
Laboratory 2 hours.

101—HEALTH EDUCATION—COEDUCATIONAL

2 UNITS

Prerequisite: None.
Note: Required of all students for graduation.
A consideration of health and its effect upon the quality of human life, the effect of exercise and fatigue, prevention of specific diseases, the significance of nutrition in health and disease, and the hygiene of the different body systems.
Lecture 2 hours.

103—HEALTH EDUCATION—COEDUCATIONAL

3 UNITS

Prerequisite: None.
Note: It is recommended that this course be taken by all prospective elementary teachers and physical education and recreation majors. This course meets the graduation requirements of hygiene. Only one unit of credit will be allowed students having credit in Health and Physical Education 101.
Fundamentals of healthful living to provide the prospective teacher with scientific health information and desirable attitudes and practices in healthful living.
Lecture 3 hours.

110—FIRST AID—COEDUCATIONAL

1 UNIT

Prerequisite: None.
Note: Required of all students for graduation. Recommended for physical education majors.
Prevention and care of accidents or sudden illness.
Lecture 2 hours.

118—INTRODUCTION TO PHYSICAL EDUCATION—COEDUCATIONAL

2 UNITS

Prerequisite: None.
Note: Recommended for physical education majors.
A course designed to acquaint prospective teachers with the social, physical, and professional demands of physical education. A preview of the profession of physical education as a whole is gained through testing, class
recitation and field trips. Opportunities in health and recreation are explored.

Lecture 1 hour, laboratory 2 hours.

119—RECREATIONAL LEADERSHIP—
COEDUCATIONAL
2 UNITS

Prerequisite: None.

Note: Recommended for physical education majors and students entering the recreation field.

A basic training course for playground directors and recreation leaders. A study in the organization and administration of community and school recreation programs. Emphasis is placed on training in leadership techniques and on the development of programs in recreation, sports, and athletics.

Lecture 2 hours, laboratory 1 hour.

122—BEGINNING BADMINTON
1 UNIT

Prerequisite: None.

Instruction in the rules and practice in fundamentals, development of singles and doubles play, and competitive participation.

Laboratory 2 hours.

123—INTERMEDIATE BADMINTON
1 UNIT

Prerequisite: Health and Physical Education 122, or equivalent.

Advanced instruction in the rules and practice in fundamentals of development of singles and doubles play, and competitive participation.

Laboratory 2 hours.

130—BODY CONTOURING AND CONDITIONING
1 UNIT

Prerequisite: None.

Conditioning exercises to increase body flexibility, and increase cardiorespiratory endurance, and strength of musculature in various parts of the body; to develop skilled body control with respect to agility, balance, and coordination; and to produce skills in relaxation.

Laboratory 2 hours.

142—BEGINNING SPORTS
1 UNIT

Prerequisite: None.

Instruction in the fundamental techniques of seasonal sports: basketball, volleyball, and softball.

Laboratory 2 hours.

143—INTERMEDIATE SPORTS
1-1½ UNITS

Prerequisite: Health and Physical Education 142 or credit in high school.

Development of team play in seasonal sports: basketball, volleyball, and softball.

Participation in class tournaments.

Laboratory 2-3 hours.

144—ADVANCED SPORT—INTER-
COLLEGIATE SPORTS ASSOCIATION
2 UNITS

Prerequisite: Health and Physical Education 143 or equivalent.

Development of advanced techniques in basketball, volleyball, and softball for competitive participation with other community colleges.

Laboratory 4 hours.

145—BEGINNING TENNIS
1 UNIT

Prerequisite: None.

Instruction and practice in tennis strokes, techniques, and rules.

Laboratory 2 hours.

146—INTERMEDIATE TENNIS
1-1½ UNITS

Prerequisite: Health and Physical Education 145 or credit in high school.

Instruction and practice in tennis strokes, techniques, umpiring, and doubles and singles tactics.

Laboratory 2-3 hours.

147—ADVANCED TENNIS—INTER-
COLLEGIATE SPORTS ASSOCIATION
2 UNITS

Prerequisite: Health and Physical Education 146 or equivalent.
Note: Fall Semester, Coeducation—Spring Semester, women only.

Development of advanced techniques for competitive participation with other community colleges.
Laboratory 4 hours.

163—BEGINNING ARCHERY—
COEDUCATIONAL

Prerequisite: None.
Instruction in the technique of archery and participation in official target archery tournaments.
Laboratory 2 hours.

164—INTERMEDIATE ARCHERY—
COEDUCATIONAL

Prerequisite: Health and Physical Education 163 or credit in high school.
Practice in target and tournament shooting using National Archery Association Tournament Rounds.
Laboratory 2 hours.

165—BEGINNING BADMINTON—
COEDUCATIONAL

Prerequisite: None.
Instruction in the rules and practice in individual fundamentals, development of singles and doubles play, and competitive participation.
Laboratory 2 hours.

166—INTERMEDIATE BADMINTON—
COEDUCATIONAL

Prerequisite: Health and Physical Education 165.
Additional practice and more detailed instruction in fundamentals, development of singles and doubles play, and court strategy.
Laboratory 2-3 hours.

167—BOWLING—COEDUCATIONAL

Prerequisite: None.
Note: Each student is responsible for the lane fee.
Instruction and practice in the fundamental techniques and rules of the game.
Laboratory 2 hours.

168—SQUARE DANCE—COEDUCATIONAL 1 UNIT

*Prerequisite:* None.

Instruction and participation for recreational groups in Square Dance.
Laboratory 2 hours.

169—FOLK DANCE—COEDUCATIONAL 1 UNIT

*Prerequisite:* Health and Physical Education 168, or equivalent.

Instruction and participation for recreational groups in American cowboy, square, circle, and folk dances.
Laboratory 2 hours.

170—BEGINNING SOCIAL DANCING—COEDUCATIONAL 1 UNIT

*Prerequisite:* None.

Instruction and practice in the fundamental skills of social dance.
Laboratory 2 hours.

171—INTERMEDIATE SOCIAL DANCING—COEDUCATIONAL 1 UNIT

*Prerequisite:* Health and Physical Education 170 or a knowledge of basic steps.

Instruction and practice in the fundamental skills of social dance.
Laboratory 2 hours.

172—MODERN DANCE I—COEDUCATIONAL 1-1½ UNITS

*Prerequisite:* None.

A wide variety of concrete experiences in movement relative to the acquisition of concepts for a structure of understanding of Modern Dance as an art form is presented.
Laboratory 2-3 hours.

173—MODERN DANCE II—COEDUCATIONAL 1 UNIT

*Prerequisite:* Health and Physical Education 172 or consent of the instructor.

An increased understanding of the principles that govern movement, an increased sensitivity to perception, a greater ability to control the body as an instrument of expression, and an understanding of the use of space, time, and force factors related to the basic principles that govern art forms.
Laboratory 2 hours.

174—MODERN DANCE PRODUCTION—COEDUCATIONAL 2 UNITS

*Prerequisite:* A grade of "A" in Health and Physical Education 172 or Health and Physical Education 173 or at discretion of instructor.

The course provides practical experience in utilization of knowledge and understanding in modern dance as an art form. Opportunity is provided for student choreography and participation in modern dance productions.
Laboratory 4 hours.

175—MODERN DANCE TECHNIQUE—COEDUCATIONAL 2 UNITS

*Prerequisite:* None.

Health and Physical Education 175 provides opportunity for personal development in modern dance technique.
Laboratory 4 hours.

176—BEGINNING GOLF—COEDUCATIONAL 1 UNIT

*Prerequisite:* None.

Instruction and practice in the fundamentals of golf.
Laboratory 2 hours.

177—INTERMEDIATE GOLF—COEDUCATIONAL 1 UNIT

*Prerequisite:* Health and Physical Education 176 or equivalent.

*Note:* Each student is expected to pay a fee for use of golf facilities.
Advanced instruction and practice on the golf course.
Laboratory 2 hours.
HEALTH AND PHYSICAL EDUCATION FOR WOMEN

179—HIKING AND BACKPACKING—COEDUCATIONAL 2 UNITS

Prerequisite: None.

Prepares the student with knowledge and experience in the skills necessary for camping, hiking, and backpacking. Local hiking and backpacking experience. Compass and map reading, trail cooking, clothing, safety, and equipment are discussed and practiced.

Lecture 1 hour, laboratory 3 hours.

180—JOGGING—COEDUCATIONAL 1 UNIT

Prerequisite: None.

An introduction to jogging as a life-time activity. To make the student aware of the physiological benefits derived from jogging.

Laboratory 2 hours.

183—MARTIAL ARTS—COEDUCATIONAL 1 UNIT

Prerequisite: None.

The course is divided into four segments: Karate, Aikido, Judo, and Jujojitsu. Karate, Aikido, and Judo run concurrently with student instructors in charge of each small unit (if qualified personnel is available). The Jujojitsu unit is run last with the total class.

Laboratory 2 hours.

185—BEGINNING TENNIS—COEDUCATIONAL 1 UNIT

Prerequisite: None.

Instruction and practice in the basic strokes, fundamental techniques, and rules of the game.

Laboratory 2 hours.

186—INTERMEDIATE TENNIS—COEDUCATIONAL 1-1½ UNITS

Prerequisite: Some previous playing experience in tennis.

Instruction and practice in individual fundamentals, development of team play, and court strategy.

Laboratory 2-3 hours.

187—ADVANCED TENNIS—INTER-COLLEGIATE SPORTS ASSOCIATION—COEDUCATIONAL 2 UNITS

Prerequisite: Health and Physical Education 146 or equivalent.

Development of advanced techniques for competitive participation with other community colleges.

Laboratory 4 hours.

188—PADDLE TENNIS—COEDUCATIONAL 1 UNIT

Prerequisite: None.

Instruction and practice in the basic strokes, fundamental techniques, and rules of the game. A sport very similar to regular tennis.

Laboratory 2 hours.

189—BEGINNING VOLLEYBALL—COEDUCATIONAL 1 UNIT

Prerequisite: None.

Instruction and practice in volleyball techniques with team tournaments.

Laboratory 2 hours.

190—INTERMEDIATE VOLLEYBALL—COEDUCATIONAL 1-1½ UNITS

Prerequisite: Health and Physical Education 189 or equivalent.

Instruction and practice in volleyball techniques with team tournaments for experienced players.

Laboratory 2-3 hours.

191—ADVANCED VOLLEYBALL—INTER-COLLEGIATE SPORTS ASSOCIATION—COEDUCATIONAL 2 UNITS

Prerequisite: Health and Physical Education 190 or equivalent.

Development of advanced techniques in volleyball for competitive participation with other community colleges.

Laboratory 4 hours.
195—ADAPTED ACTIVITIES 1 UNIT

Prerequisite: A medical excuse on file with the school nurse that exempts the student from all scheduled physical education activities.

A diversified program of developmental activities for students with disabilities which prevent their participation in a regular physical education program. The emphasis is on the student’s remaining abilities, not her disability.

Laboratory 2 hours.

103—HISTORY OF THE AMERICAS 3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a “B” average in United States History and Government courses in high school or 12 units of college courses with a “C” average.

A general survey of the history of the Western Hemisphere from discovery to independence. The planning of the European civilization in the Western Hemisphere, the growth of the colonies of the different nations, colonial systems, the international contest for the continents, and the wars of independence in English-America and Hispanic-America.

Lecture 3 hours.

104—HISTORY OF THE AMERICAS 3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a “B” average in United States History and Government courses in high school or 12 units of college courses with a “C” average.

A general survey of the history of the Western Hemisphere from the establishing of the independent American republics to the present; their individual problems, their relations with each other and with the rest of the world.

Lecture 3 hours.

106—HISTORY AND POLITICS OF THE RUSSIAN PEOPLE 3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a “B” average in United States History and Government courses in high school or 12 units of college courses with a “C” average.

A study of the political, social, economic and cultural development of the Russian people from earliest days to the contemporary period. Emphasis will be laid on the
development of the modern soviet ideology and power politics.

Lecture 3 hours.

107—HISTORY OF CIVILIZATION 3 UNITS
(Pre-History to 800)

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a “B” average in United States History and Government courses in high school or 12 units of college courses with a “C” average.

A general political survey of the world from earliest times to the Carolingian Empire, c. 800, with emphasis on the development of human ideas, arts, and institutions. Emphasis is placed upon the contributions to civilization made in ancient times by Egypt, Greece, Rome, India, China, and other powers. An attempt is made to give the student a perspective on the past.

Lecture 3 hours.

108—HISTORY OF CIVILIZATION (Carolingian Empire to the French Revolution, c. 1789) 3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a “B” average in United States History and Government courses in high school or 12 units of college courses with a “C” average.

Note: Students who have taken History 101 will receive only one unit of credit for History 108.

A general political survey of the world from the Carolingian Empire, c. 800, to the French Revolution, c. 1789, with emphasis on the development of human ideas, arts, and institutions. The characteristics of the medieval and modern worlds are examined. The principal factors—cultural, social, economic, and political—which brought the modern world into being are analyzed.

Lecture 3 hours.

109—HISTORY OF CIVILIZATION (French Revolution to the Present) 3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a “B” average in United States History and Government courses in high school or 12 units of college courses with a “C” average.

Note: Students who have taken History 102 will receive only one unit of credit for History 109.

A general political survey of the world from the French Revolution, c. 1789, to the present with emphasis on the development of human ideas, arts, and institutions. An attempt is made to give the student a perspective and a basis for interpreting current world events.

Lecture 3 hours.

110—UNITED STATES HISTORY 3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a “B” average in United States History and Government courses in high school or 12 units of college courses with a “C” average.

Note: This course allows only one unit of credit for students who have completed History 117 and Social Science 131-132 and no credit for those who have completed History 118.

An interpretation of the more meaningful and significant issues, events, and ideas of the past which have played a major role in shaping present day America. Main attention is focused upon political and economic aspects with some treatment of social and cultural developments. This course meets the California State requirement in American History. Recommended for students transferring to California State University, Los Angeles.

Lecture 3 hours.

112—PACIFIC COAST HISTORY 3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a “B” average in United States History and Government courses in high school or 12 units of college courses with a “C” average.

A survey of the discovery, exploration, and settlement of Mexico, California, Oregon, Washington, British Columbia, and Alaska. Emphasis is placed upon the development of their particular political, economic, and cultural institutions, along with their relationships with each other and the rest of the world.

Lecture 3 hours.
117—HISTORY OF THE UNITED STATES 3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a "B" average in United States History and Government courses in high school or 12 units of college courses with a "C" average.

Note: Second semester standing is recommended for all students. History 117 allows only two units of credit for students who have completed History 105 and 1½ units of credit for those who have completed History 110. History 117-118 allows only four units of credit for students who have completed History 105. History 117-118 allows only three units of credit for students who have completed History 110.

A history of American civilization, European backgrounds, the English colonies, the Revolutionary War, the Constitution, and the political, social, and economic history of the United States to the Civil War. This course (if both semesters are completed) meets the California State requirements in American History and the American Constitution.

Lecture 3 hours.

120—HISTORY OF THE FAR EAST 3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a "B" average in United States History and Government courses in high school or 12 units of college courses with a "C" average.

Note: History 119 is recommended.

A general survey of China, Japan, Korea, and Southeast Asia in the international community from the nineteenth century to the present. Primary emphasis is centered upon the impact of Western culture and the major political and social movements of the twentieth century, Nationalism and Communism.

Lecture 3 hours.

118—HISTORY OF THE UNITED STATES 3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a "B" average in United States History and Government courses in high school or 12 units of college courses with a "C" average.

Note: Second semester standing is recommended for all students. History 117-118 allows only four units of credit for students who have completed History 105. History 117-118 allows only three units of credit for students who have completed History 110.

A history of American civilization, the Civil War, Reconstruction, post-war socio-economic patterns, the Progressive Era, World War I, the Depression, World War II, and current commitments. This course (if both semesters are completed) meets the California State requirements in American History and the American Constitution.

Lecture 3 hours.

119—HISTORY OF THE FAR EAST 3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a "B" average in United States History and Government courses in high school or 12 units of college courses with a "C" average.

A general survey of East Asian civilization from antiquity through the nineteenth century. Primary emphasis is placed upon the political, religious, social, and economic development of China and Japan with integrated units on Korea and Southeast Asia.

Lecture 3 hours.

151—THE UNITED STATES IN THE TWENTIETH CENTURY 3 UNITS

Prerequisite: None.

History 151 is designed for the non-transfer student; this course analyzes the political, economic, and social history of the United States since 1900. Emphasis is placed on the critical issues of contemporary life in the perspective of their historical background in the current century. Meets the U.S. History requirement for the A.A. degree.

Lecture 3 hours.

ECONOMIC HISTORY OF THE UNITED STATES
See Economics 111.

INTRODUCTION TO SOCIAL SCIENCE
See Social Science 131-132.
Home Arts

111—CLOTHING  3 UNITS

Prerequisite: None.

The study and application of the basic pattern and its uses, applications to pattern making, and alteration of commercial patterns. A study is also made of textiles and of the care and selection of clothing for personality as well as appearance. Two machine projects are made in class from either a commercial pattern or a pattern of the student's own design and a hand project using four different stitches.

Lecture 2 hours, laboratory 4 hours.

112—ADVANCED CLOTHING  3 UNITS

Prerequisite: Home Arts 111 or Home Arts 117.

The techniques of tailoring in hand and machine work necessary to turn out fine, well tailored garments. A coat, suit, and hand project are required.

Lecture 2 hours, laboratory 4 hours.

117—FASHION DESIGN  7 UNITS

Prerequisite: Home Arts 111 or equivalent.

Pattern making and design is taught in Home Arts 117. It presents the information and demonstrates the skills designed to develop in the student the ability to: make a block pattern from standard measurements, then from individual measurements; apply the knowledge gained therefrom to various types of patterns used in the women's apparel trade and to make finished garments. Three projects are required: one sports dress, one dressy dress or formal, one additional garment.

Lecture 4 hours, laboratory 8 hours.

118—FASHION DESIGN  7 UNITS

Prerequisite: Home Arts 117.

Crotch items and children's clothing are taught in Home Arts 118 which presents the information and demonstrates the skills to develop in the student the ability to: make an adult's and a child's basic crotch pattern, the basics for children's clothing, 2 to 6X size range, and apply the basics to various types of garments in each group, as well as making the finished garments. Four projects are required: one pair slacks, one bathing suit, one child's dress, one child's play suit. Grading of all types of garments.

Lecture 4 hours, laboratory 8 hours.

119—ADVANCED FASHION DESIGN  7 UNITS

Prerequisite: Home Arts 117.

Tailoring is taught in Home Arts 119. It presents the information and demonstrates the skills to develop in the student the ability to: make the necessary hand and machine stitches used in tailoring—put in hems, seams, plackets, buttonholes, and pockets; make the hip length sloper and two-piece sleeves; grade up one size; apply all knowledge to suit and coat patterns. Garments required: one suit, one coat, one hand project. Arrange and present a fashion show.

Lecture 4 hours, laboratory 8 hours.

120—ADVANCED FASHION DESIGN  7 UNITS

Prerequisite: Home Arts 117.

Draping, taught as Home Arts 120, presents the information and demonstrates the skills necessary to develop in the student the ability to: work individually using a custom dress form to drape various types of blouses, skirts, dresses, coats, and suits employing both French draping and flat table draping; make alterations, organize and manage shop, and run work room. Comparison of men's fashions by identifying style features and quality construction. Garments required: drape one sports dress, drape one dressy dress or formal, drape one lingerie item.

Lecture 4 hours, laboratory 8 hours.

122—FASHION PRINCIPLES  2 UNITS

Prerequisite: None.

A study of the principles of fashion. Includes a study of fashion designers, apparel producers, and fashion retailers.

Lecture 2 hours.

124—FASHION ECONOMICS  2 UNITS

Prerequisite: None.
A study of the selection and buying of clothing and fabrics as it relates to retailing and purchasing in the fashion industry. This course is designed for those seeking employment as fashion buyers and retailers.

Lecture 2 hours.

125—ELEMENTS OF NUTRITION 2 UNITS

Prerequisite: None.

An overview of the many aspects of nutrition including problems of today, the nutritive processes of the body and dietary planning. Functions, utilization, and recommended allowances of nutrients are emphasized. Consumer education is included.

Lecture 2 hours.

133—PERSONAL DEVELOPMENT 3 UNITS

Prerequisite: None.

Development of social competence, discriminating dress, poise and personality attributes. Good health, grooming habits, diet and exercise stressed. Emphasis on wardrobe planning, make-up, hair styling, and personal analysis. Applications to home, careers, and social occasions.

Lectures, consultations, and class discussions.

Lecture 3 hours.

135—PRE-SCHOOL CHILD 3 UNITS

Prerequisite: None.

The growth and development of the child from conception through age five. The meaning and value of play, significance of creative activities, interpretation of child-adult relationships, standards for wholesome routines of management and discipline. Nursery schools and pre-school classes used as laboratory for course.

Lecture 3 hours.

136—THE CHILD FROM FIVE TO TWELVE 3 UNITS

Prerequisite: Home Arts 135.


Lecture 3 hours.

138—CHILD HEALTH 3 UNITS

Prerequisite: None.

Home Arts 138 seeks to analyze the responsibilities of the home, the school, and the community for health protection. The characteristics of good health and the recognition of the symptoms of communicable diseases are examined. The habits and attitudes essential for physical and mental health of teachers, parents, and children are studied.

Lecture 3 hours.

139—HOME MANAGEMENT (Consumer and Homemaking Education) 3 UNITS

Prerequisite: None.

Consideration of essentials for the homemaker and consumer. Lectures, reports, and discussions giving primary emphasis to the consumer aspects of management of finances, resources and services, human development, housing, food and nutrition, clothing and textiles.

Lecture 3 hours.

140—PRINCIPLES AND PRACTICES IN PRE-SCHOOL EDUCATION 3 UNITS

Prerequisite: Home Arts 135.

Home Arts 140 includes studies of the selection and arrangement of equipment and materials for groups of young children; such as materials for art, music, science, stories, and play activities appropriate for the pre-school child. Role of the pre-school teacher is examined.

Lecture 3 hours.

141—PRINCIPLES AND PRACTICES IN PRE-SCHOOL EDUCATION 3 UNITS

Prerequisite: Home Arts 135, and Home Arts 140, and verification of chest X-ray.

Note: This course may be taken for a maximum of nine units.

Home Arts 141 enables the student to participate in the entire routine of a children's center—first as an observer and then as a teacher's aide. Questions arising from experiences in practice teaching at the children's centers are discussed and research is done.
Lecture 2 hours, laboratory 3 hours.

142—HOME, SCHOOL, AND COMMUNITY RELATIONS 3 UNITS

Prerequisite: None.

A study of responsibilities of the home, the school, and the community to each other. The location and services of various community agencies—voluntary, private, and public including local, state, and federal are examined.

Lecture 3 hours.

143—SUPERVISION AND ADMINISTRATION OF NURSERY SCHOOLS 3 UNITS

Prerequisite: Home Arts 135 and Home Arts 141 or equivalent including teaching experience.

Role of Nursery School in meeting needs of young children and their families: organization, management, equipment and programs appropriate to developmental needs during pre-school years.

Lecture 3 hours.

COSTUME CONSTRUCTION
See Theater Arts 123.

INTERIOR DESIGN
See Art 130.

MARRIAGE AND FAMILY LIVING
See Psychology 131.

SILK SCREEN PRINTING
See Art 144-145.

Journalism

101—INTRODUCTION TO MASS COMMUNICATIONS 3 UNITS

Prerequisite: None.

A survey of the mass communication media, including newspapers, magazines, radio, and television, with emphasis on the newspaper. Study of theory and function of news, features, editorials, and advertising, historical development of the media, legal freedoms and limitations of the media, and the ethics of communication. Stress is placed on the relationships and responsibilities of the mass media to society.

Lecture 3 hours.

102—REPORTING THE NEWS 3 UNITS

Prerequisite: A satisfactory score on the English Placement Examination, or a grade of "B" or better in English 191, or a grade of "C" or better in English 120.

An introductory course in the gathering and writing of news, features, and editorials. Emphasis on clear and concise written expression with laboratory drill in English fundamentals. Study of news sources, acceptable forms for stories, style and methods of various media, elementary editing, and law and ethics of communication. Newspapers and other media at the local community level as well as the national metropolitan level are utilized.

Lecture 3 hours, laboratory 1 hour.

103—NEWS WRITING AND NEWSPAPER PRODUCTION 3 UNITS

Prerequisite: Journalism 102, professional publication experience or newspaper experience on the college level.

A course in writing news, feature, and editorial copy, copy reading and editing, headline writing, newspaper layout and make-up and the mechanics of newspaper production. Study of law and ethics of the press and over-all emphasis on the function and responsibility of the newspaper. Second semester stress is on interpretative reporting. Class produces the campus newspaper El Vaquero.

Lecture 2 hours, laboratory 4 hours.

104—ADVANCED NEWS WRITING AND NEWSPAPER PRODUCTION 3 UNITS

Prerequisite: Journalism 102 or Journalism 103.

An advanced course in writing news, feature, and editorial copy, copy reading and editing, headline writing, newspaper layout and make-up, and the mechanics of newspaper production. Study of law and ethics of the press and over-all emphasis on the function and responsibility of the newspaper. Second semester stress is on interpretative reporting. Class produces the campus newspaper El Vaquero.
Lecture 2 hours, laboratory 4 hours.

**LAW, BUSINESS**
See Business 161, 162.

**LAW, FOR THE LAYMAN**
See Business 165.

---

**Library Technology**

**101—INTRODUCTION TO LIBRARY SERVICES** 3 UNITS

*Prerequisite:* None.

An introduction to libraries and their organization. It is designed for students interested in employment in a special, school, public, or college library at a semiprofessional level. Basic philosophy, procedures, resources, and techniques to accomplish work on a supportive level to the professional staff are emphasized. The orientation is that of a modern multi-media learning center. The laboratory experience gives practical training for the student so that he or she may take a job as a library assistant or aide.

Lecture 2 hours, laboratory 2 hours.

---

**Machine Shop**

**101—MACHINE SHOP** 7 UNITS

*Prerequisite:* Concurrent enrollment in Mathematics 150, or Mathematics 143, or Mathematics 144.

*Note:* Drafting 129 is recommended, but not required for Certificate of Completion. Students must register for the full number of hours for which the course is scheduled, but late registration is permitted provided a vacancy in the class exists.

Fundamentals of the machinist trade. Instructions on the proper care and use of precision and hand tools. Basic training in tool grinding, machine set-up, and the operation of lathes, shapers, milling machines, drill presses, and grinders.

This course consists of four three-hour periods each week of which a minimum of two hours per week will be lectures on basic related science and mathematics. Machine demonstrations will precede all new operations.

**102—MACHINE SHOP** 7 UNITS

*Prerequisite:* Machine Shop 101 or Machine Shop 105 and concurrent enrollment in Mathematics 144 or a more advanced mathematics course.

*Note:* Students must register for the full number of hours for which the course is scheduled, but late registration is permitted provided a vacancy in the class exists.

Fundamentals of the machinist trade. More advanced training in set-up work, tool grinding, and machine operations. Related lectures will cover types of threads and threading, calculating and cutting of tapers, gears and gear trains. Basic design and capacity of machine tools will be investigated.

This course consists of four three-hour periods each week of which a minimum of two hours per week will be lecture. Machine demonstrations will precede all new operations.

**103—ADVANCED MACHINE SHOP** 7 UNITS

*Prerequisite:* Machine Shop 102. Concurrent enrollment in one of the following is recommended, but not required for Certificate of Completion: Welding 117, Drafting 129, Physics 145 or Materials and Processes 146.

*Note:* Students must register for the full number of hours for which the course is scheduled, but late registration is permitted provided a vacancy in the class exists.

More advanced and complicated operations of machine tools and equipment. Precision inspection, production and assembly, are studied. Lectures and demonstrations on specialized machine tools and equipment will give the student a better understanding of their use and capacities.

This course consists of four three-hour periods each week of which a minimum of two hours per week will be lecture.

**104—ADVANCED MACHINE SHOP** 7 UNITS

*Prerequisite:* Machine Shop 103. Concurrent enrollment in one of the following is recommended, but not required for Certificate of Completion: Welding 117, 118, or Drafting 129, Physics 145.
Note: Students must register for the full number of hours for which the course is scheduled, but late registration is permitted provided a vacancy in the class exists.

More advanced and complicated operations of machine tools and equipment. Lectures and demonstrations will include a thorough investigation of heat-treatment of metals, special metals and their uses, abrasives, grinding wheels, and efficient use of surface, cylindrical, and tool cutter grinders. Basic tool and die work in which the student designs and builds jigs and fixtures is offered to students showing advanced abilities.

This course consists of four three-hour periods each week of which a minimum of two hours per week will be lecture.

105—INTRODUCTION TO MACHINE SHOP 5 UNITS

Prerequisite: None.

Introductory machine shop training program offered for men currently working in industrial machine shops or related fields. This program is set up primarily to upgrade and review technical skills and related knowledge of industrial workers. Engineering and drafting majors will gain a better insight into manufacturing procedures through participation in this program.

Lecture 2 hours, laboratory 7 hours.

106—MACHINE SKILLS ACCELERATION 5 UNITS

Prerequisite: Concurrent enrollment in one of the following: Machine Shop 101, 102, 103, 104, or 109.

Note: Students must register for the full number of hours for which the course is scheduled but late registration is permitted provided a vacancy in the class exists.

The entire laboratory periods will be spent preparing cutting tools, setting up machines and operating shop machinery and supporting equipment. Maximum 5 units per semester for five semesters.

Demonstration and practice 12 hours.

107—MACHINE SHOP PRACTICE (SEE NOTE) 5 UNITS

Prerequisite: None.

Note: Credit per semester will be indicated on Schedule.

Proportionately less credit may be earned for carrying less than a full schedule. A maximum of 32 units of credit will be allowed for the combined work of Machine Shop 107 and Machine Shop 108.

A course to provide practice on machine shop equipment. Students will work on individual projects which they will retain for their use. Training received in this course will develop an ability to visualize and perform various functions necessary in the machine trade.

Laboratory 6 hours.

108—MACHINE SHOP PRACTICE (SEE NOTE)

Prerequisite: Machine Shop 107.

Note: Credit per semester will be indicated on Schedule. Proportionately less credit may be earned for carrying less than a full schedule. A maximum of 32 units of credit will be allowed for the combined work of Machine Shop 107 and Machine Shop 108.

A course to provide practice on machine shop equipment. Students will work on individual projects which they will retain for their use. Training received in this course will develop an ability to visualize and perform various functions necessary in the machine trade.

Laboratory 6 hours.

109—PRINCIPLES OF TOOL ENGINEERING 7 UNITS

Prerequisite: Machine Shop 104.

Note: Students must register for the full number of hours for which the course is scheduled, but late registration is permitted provided a vacancy in the class exists.

Advanced course in machine shop training presenting systems of production, interchangeability, and dimensioning as they pertain to tool design and construction of drill jigs, milling, grinding, and lathe fixtures, locating and clamping of parts, tooling for horizontal turret lathes, and toolroom inspection and gauging will be studied. The tool engineer and designer's training, duties and place in a manufacturing organization are investigated.

Lecture 2 hours, laboratory 10 hours.
Materials and Processes

146—MATERIALS AND PROCESSES 3 UNITS

Prerequisite: None.

A study of the manufacture and properties of ferrous and nonferrous alloys, ceramic products, wood cements, plastics, fuels, glass, concrete, rubber, etc. Their uses, adaptability, and limitations in industry will be studied. Methods of manufacture and techniques currently used will be covered. The course covers the strength and testing of materials by the destructive and non-destructive methods and the physical properties of materials.

Lecture 3 hours.

Mathematics

BUSINESS MATHEMATICS
See Business 111, 112, 117,

101—INTERMEDIATE ALGEBRA 5 UNITS

Prerequisite: Mathematics 140 and Mathematics 141, or one year of algebra and one year of plane geometry in high school. Mathematics 140 may be taken concurrently.

Fundamental laws, curve plotting, linear equations, negative and fractional indices, quadratic equations, arithmetic and geometric progressions, the binomial theorem, the factor theorem, the remainder theorem, synthetic division, logarithms, and second and third order determinants.

Lecture 5 hours.

102—TRIGONOMETRY 3 UNITS

Prerequisite: Mathematics 101 or two years of algebra and one year of plane geometry in high school.

A course in plane trigonometry which emphasizes the analytic aspects of the subject including trigonometric functions of right, acute and related angles, trigonometric identities and equations, radian measure, functions of two angles, logarithms, right and oblique triangles, inverse functions, complex numbers.

Lecture 3 hours.

103—CALCULUS AND ANALYTIC GEOMETRY 5 UNITS

Prerequisite: Mathematics 101 and Mathematics 102, or two years of algebra, one year of plane geometry, and one semester of trigonometry in high school or equivalents.

This is the first of a sequence of three courses which combines the subject matter of analytic geometry, calculus and linear algebra. Functions and their graphs are studied with special attention to differentiation, indefinite and definite integrals with applications.

Lecture 5 hours.

104—CALCULUS AND ANALYTIC GEOMETRY 5 UNITS

Prerequisite: Mathematics 103.

Transcendental functions, polar coordinates, techniques of integrations, conic sections, indeterminate forms and infinite series.

Lecture 5 hours.

105—CALCULUS AND ANALYTIC GEOMETRY 5 UNITS

Prerequisite: Mathematics 104.

Vectors in the plane and 3 dimensional space, the differential calculus of functions of several variables, multiple integration, and linear algebra.

Lecture 5 hours.

106—LINEAR ALGEBRA AND DIFFERENTIAL EQUATIONS 5 UNITS

Prerequisite: Mathematics 105

Vector spaces, linear transformations and matrices, matrix algebra, determinants and solutions of systems of equations, La Place transforms. Differential equations including applications.

Lecture 5 hours.

130—FORTRAN IV PROGRAMMING 3 UNITS

Prerequisite: Mathematics 102 or plane trigonometry.
Mathematics 130 is designed to introduce the student to the techniques of writing a program in FORTRAN IV, with mathematical and scientific application. Use of a computer to test programs will be a significant part of the course.

Lecture 2 hours, laboratory 4 hours.

138—ARITHMETIC FOR ELEMENTARY TEACHERS 3 UNITS

Prerequisite: One year of algebra in high school or Mathematics 141; one year of plane geometry or Mathematics 140; proof of competence in arithmetic (satisfactory score on the Mathematics Proficiency Examination) or Mathematics 150 or Business 117.

Designed primarily for prospective teachers of arithmetic. The study of the fundamental operations of integers and fractions is stressed, together with suitable visual aids. Although efficiency in arithmetical skills is required, the emphasis is on the understanding of arithmetical procedures.

Lecture 3 hours.

140—PLANE GEOMETRY 3 UNITS

Prerequisite: Mathematics 141 or one year of algebra in high school.

A comprehensive course in plane geometry: sets and geometric figures, congruence, parallel lines and parallelograms, circles, inequalities, proportion and similar polygons, loci, constructions, areas of polygons.

Lecture 3 hours.

141—FUNDAMENTALS OF ALGEBRA 3 UNITS

Prerequisite: None.

A course in the fundamental operations of algebra: solution of linear and quadratic, algebraic operations, algebraic fractions, and powers and roots. This course is the equivalent of one year of algebra in high school.

Lecture 5 hours.

143—TECHNICAL MATHEMATICS 2 UNITS

Prerequisite: A satisfactory score on the Mathematics Proficiency Examination or Mathematics 150.

A review of the basic principles of arithmetic covered briefly. Practical algebra through quadratic equations will be covered. The work is illustrated by practical problems drawn from the industrial field.

Lecture 3 hours.

144—TECHNICAL MATHEMATICS 3 UNITS

Prerequisite: Mathematics 143 or a satisfactory score on the Mathematics Proficiency Examination plus Mathematics 141 or one year of high school algebra.

Phases covered include: percent, ratio and proportion, areas and volume, trigonometry, logarithms, slide rule, and mathematical tables.

Lecture 3 hours.

150—BASIC MATHEMATICS 2 UNITS

Prerequisite: None.

Note: This course may not be taken for credit by students who have made a satisfactory score on the Mathematics Proficiency Examination.

A course in the fundamental processes of arithmetic designed to develop both accuracy and speed in computation using whole numbers, fractions, decimals, percent, basic units of measure, and properties of decimal number system.

Lecture 2 hours.

Metals

115—GENERAL METALS (1A) 3 UNITS

Prerequisite: None.

A course designed to aid students in allied fields of metal working. Emphasis is placed on teaching techniques for industrial arts majors. The course includes theory and practice in metal working, pattern drafting, heat-treating, foundry, welding, art metal, and metals in everyday living.

A suggested related course for engineering students.

Lecture 1 hour, laboratory 5 hours.
Mineralogy

101—MINERALOGY 4 UNITS

Prerequisite: Chemistry 101 or Chemistry 110 or Chemistry 141; or chemistry in high school. Chemistry 101 may be taken concurrently.

Note: It is recommended that Geology 101 be taken prior to or concurrently.

Lectures and laboratory work on the physical properties of minerals, their occurrence and crystal morphology. Practice in determination of minerals by physical properties and simple chemical tests.

Lecture 2 hours, laboratory 6 hours.

141—MINERALOGY AND ORE IDENTIFICATION 2 UNITS

Prerequisite: None.

An introductory course, including laboratory, on minerals and ores and means of identifying them both in the field and confirmation in the laboratory. The interrelationships of geological structure and economic geology. Formation of ore bodies, prospecting, mineral types, use of Geiger counter and scintillometer for identification of uranium-radium bearing ores.

Lecture 1 hour, laboratory 2 hours.

Music

110—FUNDAMENTALS OF MUSIC 3 UNITS

Prerequisite: None.

A course designed especially for those who wish a comprehensive knowledge of the basic theory of music. It includes the study of the piano keyboard, music symbols and notation, musical terminology, major and minor scales, simple and compound meter, simple sight-singing, intervals and triads. This course is necessary for music majors who are not qualified to enter Music 111 and is recommended as extremely helpful to those students who plan a career in the field of elementary education. It is suggested that, if possible, Music 160 be taken concurrently.

Lecture 3 hours.

111—THEORY AND STRUCTURE OF MUSIC 4 UNITS

Prerequisite: Music 110 or equivalent or permission of instructor.

A study of harmony and structure through analysis, part-writing, sight-singing, dictation and keyboard applications. Concurrent study of piano recommended. Required for music majors.

Lecture 5 hours.

112—THEORY AND STRUCTURE OF MUSIC 4 UNITS

Prerequisite: Music 111.

Continuation of Music 111. Emphasis placed on both linear (contrapuntal) and chordal (four-part harmonic) writing. Required for music majors. Concurrent study of piano recommended.

Lecture 5 hours.

113—THEORY AND STRUCTURE OF MUSIC 4 UNITS

Prerequisite: Music 112.

Required for music majors. Continuation of Music 112. Chromatic alteration and modulation. Concurrent study of piano recommended.

Lecture 5 hours.

114—COUNTERPOINT 3 UNITS

Prerequisite: Music 112.

A study of 18th century melody, invention, cannon and fugue through analysis and composition.

Lecture 3 hours.

115—ARRANGING 2 UNITS

Prerequisite: High school harmony, Music 110 or Music
111 at Glendale Community College. (Students who have had harmony with a private teacher may request an examination to be given by the instructor and be accepted or rejected on the result of this test.)

This course includes Dance Band Harmony and Voicing; planning an arrangement; present dance band vocal styles; intros, modulations and endings; harmonic progression; experimental material for the progressive arranger-composer.

Lecture 3 hours.

120—HISTORY AND APPRECIATION OF MUSIC 3 UNITS

Prerequisite: None.

Note: Students having credit for Music 125 or Music 126 may not receive credit for Music 120. This course is designed especially for non-music majors. Music majors should enroll in Music 125 and Music 126.

A study of form and style in music through lectures, illustrations, readings, and live musical performances with regard to the structure and aesthetics of musical compositions. The historical development of music is shown with emphasis on music performed on the concert stage today.

Lecture 3 hours, directed listening 1 hour.

125—HISTORY AND LITERATURE 3 UNITS

Prerequisite: A substantial background in music is required of all students who enroll in Music 125. The following courses will satisfy this requirement: High school harmony or musicianship, and the following Glendale Community College courses, or their equivalent: Music 110 or Music 111.

Note for Music Majors: Music 125 is required for all music majors. This course is designed primarily for the music major and meets the partial transfer requirements of Music History and Literature courses for a music major into a four-year college. Music majors may enroll in Music 126 before enrolling in Music 125; this is not advised unless absolutely necessary.

Music 125 covers the history of music from the early Christian era through the Baroque Period. In addition to lectures and readings, the course includes a study of live and recorded musical performances and also requires attendance at concerts.

Lecture 1 hour, laboratory 1 hour.

126—HISTORY AND LITERATURE 3 UNITS

Prerequisite: A substantial background in music is required for all students who enroll in Music 126. The following courses will satisfy this requirement: High school harmony or musicianship, and the following Glendale Community College courses, or their equivalent: Music 110, Music 111, or Music 125.

Note for Music Majors: Music 126 is required for all music majors. This course is designed primarily for the music major and meets the partial transfer requirement of Music History and Literature courses for a music major into a four-year college. Music majors may enroll in Music 126 before enrolling in Music 125; this is not advised unless absolutely necessary.

Music 126 begins with the mid-18th century and continues with musical history through the present day. In addition to lectures and readings, the course includes a study of live and recorded musical performances and also requires attendance at concerts.

Lecture 3 hours, directed listening 1 hour.

130—CHORUS (SEE NOTE)

Prerequisite: None.

Note: This course may be taken for one unit each semester for a total of four semesters (4 units).

A beginning course in the appreciation and performance of standard choral literature, with special emphasis on principles of part singing, vocal control, interpretation, diction, phrasing, and breath control. Public performances may be required.

Lecture 1 hour, laboratory 1 hour.

131—COLLEGE CHOIR 2 UNITS

Prerequisite: Music 130 or at least one year of choral experience in high school and evidence of vocal ability and musicianship. Admission by audition only.

Note: This course may be repeated for a maximum of twelve units.

An advanced form of choral art. Repertoire drawn from all
periods and styles of western choral composition. Emphasis on interpretation, choral techniques, and public performances.

Lecture 2 hours, laboratory 3 hours.

**132—VOCAL ENSEMBLES**  (SEE NOTE)

**Prerequisite:** The ability to sing with good pitch and acceptable vocal quality. The display of good musicianship.

**Note:** This course may be taken for one unit each semester for a total of four semesters (4 units).

The study and performance of choral literature composed for the small vocal ensembles (quartets, trios, etc.). Emphasis is placed on choral blend, balance, and correct habits in vocal production. Preparation of music for public presentation. Auditions must precede registration.

Lecture 1 hour, laboratory 1 hour.

**133—CHAMBER CHORALE**  (SEE NOTE)

**Prerequisite:** Evidence of previous choral experience of a satisfactory nature. Ability to sight-read at least simple vocal parts; a basic knowledge of techniques of choral work. At least one semester of Music 131 taken previously or concurrent enrollment in Music 131. Admission by audition only.

**Note:** This course may be taken for one unit each semester for a total of six units. Membership is limited to sixteen.

A group of highly selected voices which performs representative works of the choral literature suitable for a chamber group. Madrigals as well as many other styles and types are performed from every century.

Lecture 1 hour, laboratory 3 hours.

**135—VOICE TRAINING**  2 UNITS

**Prerequisite:** A sufficiently accurate ear to sing in tune.

The principles of correct vocal production and their application to the simpler songs and ballads in English. Good breathing habits, poise, diction, style, tone-color, and interpretation are stressed. The development of appreciation for the vocal arts is an important aspect of the course.

Instruction 2 hours, directed practice by arrangement 2½ hours.

**136—VOICE TRAINING**  2 UNITS

**Prerequisite:** Music 135.

The principles of correct vocal production and their application to the simpler songs and ballads in English. Some foreign songs will be explored. Good breathing habits, poise, diction, style, tone-color, and interpretation are stressed. The development of appreciation for the vocal arts is an important aspect of the course.

Instruction 2 hours, directed practice by arrangement 2½ hours.

**138—PRIVATE STUDY IN MUSIC**

**OFF-CAMPUS TEACHERS**  (SEE NOTE)

**Prerequisite:** All students receiving credit for private instruction will be required to obtain the consent of the Music Department and be concurrently enrolled in one of the following courses relating to their private study. These include: Music 130, 131, 133, 140, 150, 151, 162, 163, 165.

**Note:** One unit per semester (maximum 4 units).

Private study with accredited voice or instrumental teacher. Performance before faculty committee will take the place of an examination.

Lecture 1 hour, laboratory 5 hours.

**140—INSTRUMENTAL TECHNIQUES**  1 UNIT

(Wood Wind—Brass)

**Prerequisite:** None.

Music 140 provides class instruction in the basic techniques of wood-wind and brass instruments. This course is primarily designed as a preparatory course for music majors who plan to enter the field of music education. The course is, however, open to non-music majors; it is of special value to those students who wish to become elementary teachers, but it also provides a fundamental knowledge of the potential of wood-wind and brass instruments for purposes of composition and arranging.

Instruction 2 hours, directed practice by arrangement 3 hours.
141—CONCERT BAND  (SEE NOTE)

**Prerequisite:** Ability to perform on a standard band instrument.

**Note:** This course may be taken for one unit per semester for a total of six units.

The Concert Band meets once each week for rehearsal. During the first ten weeks of the fall semester members of the Concert and Pep Band rehearse simultaneously; members enrolled in Concert Band are not required to attend games. A student may, however, enroll in both Music 141 and Music 142 for the fall semester and receive one unit for each course. At the close of the football season the Concert Band devotes itself entirely to the study of concert music for band and the preparation of material for band concerts.

Instruction 2 hours, directed practice by arrangement 3 hours.

142—PEP BAND  (SEE NOTE)

**Prerequisite:** Ability to perform in a satisfactory manner on a standard band instrument.

**Note:** This course may be taken for one unit per semester for a total of six units.

The Pep Band meets once each week in conjunction with the Concert Band for a rehearsal period of two hours. Materials used during the first ten weeks for both the Pep and Concert Band are marches and other selections that are suitable for the football games. Members enrolled in Music 142 are required to attend all football games, rallies, etc., during the first ten weeks of the fall semester.

Lecture 2 hours. Games: Average 4 hours.

143—STAGE BAND  (SEE NOTE)

**Prerequisite:** The ability to perform in a proficient manner upon the trumpet, trombone, saxophone, drums, string bass, guitar, or piano.

**Note:** This course may be taken for one unit each semester for a total of six units.

Workshop for the study and performance of music in the contemporary idiom. Performances are made at Glendale Community College, and for various programs in the community. Membership is limited to twenty and is subject to final approval of the instructor following an audition.

Laboratory 2 hours.

144—WOOD WIND ENSEMBLE  (SEE NOTE)

**Prerequisite:** Ability to play a musical instrument in a band or orchestra. Approval of the instructor is required.

**Note:** This course may be taken for one unit each semester for a total of six units.

A small instrumental group which plays for College and community activities. Emphasis on balance, dynamics, phrasing, and interpretation.

Instruction 2 hours, directed practice by arrangement 3 hours.

145—BRASS ENSEMBLE  (SEE NOTE)

**Prerequisite:** Ability to play a musical instrument in a band or orchestra. Approval of the instructor is required.

**Note:** This course may be taken for one unit each semester for a total of four semesters (4 units).

A small instrumental group which plays for College and community activities. Emphasis on balance, dynamics, phrasing, and interpretation.

Instruction 2 hours, directed practice by arrangement 3 hours.

150—INSTRUMENTAL TECHNIQUES (Strings)  1 UNIT

**Prerequisite:** None.

Music 150 provides class instruction in the basic techniques of stringed instruments. This course is primarily designed as a preparatory course for music majors who plan to enter the field of music education. The course is, however, open to non-music majors; it is of special value to those students who wish to become elementary teachers, but it also provides a fundamental knowledge of the potential of string instruments for purposes of composition and arranging.

Instruction 2 hours, directed practice by arrangement 3 hours.

151—ORCHESTRA  (SEE NOTE)

**Prerequisite:** Ability to perform on a standard orchestral
instrument. Approval of the instructor is required.

Note: This course may be taken for one unit each semester for a total of six units.

The orchestra meets one evening each week for three hours, thus providing an opportunity to participate in this organization with the minimum of program conflicts. The repertoire includes both serious music for symphony orchestra, and music of a more popular nature, symmetrically arranged. The orchestra performs at both College and community activities.

Laboratory 2 hours.

152—STRING ENSEMBLE  
(SEE NOTE)

Prerequisite: Ability to play a musical instrument in a band or orchestra. Approval of the instructor is required.

Note: This course may be taken for one unit each semester for a total of six units.

A small instrumental group which plays for College and community activities. Emphasis on balance, dynamics, phrasing, and interpretation.

Instruction 2 hours, directed practice by arrangement 3 hours.

160—PIANO I  
2 UNITS

Prerequisite: None. It is recommended that students have a piano available for practice.

Note: Music 160 is not open to students having previous instruction or experience in piano playing. This course may be repeated for credit but not more than eight units in piano will be granted by Glendale Community College for Music 160, 161, 162, 163.

Music 160 is designed for students who wish to gain an elementary knowledge of piano keyboard and the rudiments of music reading. The content of the course will be based on the assumption that students have had no previous musical training.

Instruction 2 hours, directed practice by arrangement 5 hours.

161—PIANO II  
2 UNITS

Prerequisite: Music 160 or one-half year of piano experience.

Note: This course may be repeated for credit but not more than eight units in piano will be granted by Glendale Community College for Music 160, 161, 162, 163.

A course for the advancement of the beginning pianist in skills, interpretation and tonal coloring.

Instruction 2 hours, directed practice by arrangement 5 hours.

162—PIANO III  
2 UNITS

Prerequisite: Music 161 or one year of piano experience.

Note: This course may be repeated for credit but not more than eight units in piano will be granted by Glendale Community College for Music 160, 161, 162, 163.

The theory and interpretation of works from the pre-classical, classical, and romantic periods as well as modern or contemporary music. Emphasis on development of technique, style, tone-color, dynamics and phrasing.

Instruction 2 hours, directed practice by arrangement 5 hours.

163—PIANO IV  
2 UNITS

Prerequisite: Music 162 or three years of piano experience.

Note: This course may be repeated for credit but not more than eight units in piano will be granted by Glendale Community College for Music 160, 161, 162, 163.

For the student with at least three years of piano study. Emphasis will be placed upon the development of each student through the study of all periods and styles of piano literature. Each student is expected to perform in recital during the semester.

Instruction 2 hours, directed practice by arrangement 5 hours.

165—ACCOMPANIST TRAINING  
(SEE NOTE)

Prerequisite: Ability to sight read and play with ease piano literature of more than moderate difficulty.

Note: The student may take accompanist training for one or two units each semester. A proportionate amount of work will be required according to the number of units elected by the student and signed for at the time of registration.
A course designed to give training in the piano accompaniment of choral or instrumental groups, or solo performances.

Instruction 2 hours, directed practice by arrangement 3 hours.

166—ORGAN

2 UNITS

Prerequisite: Ability to play with ease keyboard literature of moderate difficulty.

Note: This course may be taken for two units each semester for a total of four semesters (8 units).

Intended for the beginner as well as the experienced organ student, the course is designed to acquaint the student with fundamentals of organ technique and repertoire. Materials assigned for study emphasize individual development in preparing for church and concert performance.

The course includes field trips to visit various pipe organs in the metropolitan area.

Instruction 2 hours, directed practice by arrangement 3 hours.

170—MUSIC THEATER WORKSHOP

2 UNITS

Prerequisite: Ability to sing with good pitch and acceptable vocal quality.

Note: This course may be repeated for a maximum of twelve units.

A course designed to provide training and experience in the art of the musical stage. A major production will be the objective of the course work. All students will have the opportunity to participate in the rehearsals, and auditions for principal roles will be open. It is recommended that students plan to enroll for both semester credits (Spring and Summer Sessions).

Lecture and laboratory varying.

172—COMMERCIAL MUSIC WORKSHOP

2 UNITS

Prerequisite: None.

Note: This course may be repeated for two units each semester for a total of four semesters (8 units).

Coaching and/or arranging for instruments and voice directed toward developing individual potential in musical comedy, popular song styling, and performance.

Lecture 2 hours, laboratory 4 hours.

NATURAL HISTORY

See Biology 130.

NURSING

See Vocational Nursing.

Paleontology

101—GENERAL PALEONTOLOGY

3 UNITS

Prerequisite: None.

Note: A good high school record or second semester standing is recommended.

A survey of the classification and history of life including both plants and animals. An interpretation of the significance of fossils as evidence of organic evolution and of the adaptations of life to its physical and biological environments. The sequences of floras and faunas as found in the rocks. An outline of man’s physical development.

Lecture 3 hours.

PERSONAL DEVELOPMENT

See Home Arts 133

Philosophy

101—INTRODUCTION TO PHILOSOPHY

3 UNITS

Prerequisite: Sophomore standing preferred. A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a “B” average in United States History and Government courses in high school or 12 units of college courses with a “C” average.

An overview of both the classical and modern problems of philosophy. A consideration of idealism, naturalism, and the problems of truth, beauty, ethics, and theology.

Lecture 3 hours.

113—COMPARATIVE WORLD RELIGIONS:

NEAR EAST

3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination, or a “B” average in United States History and Government courses in high school or 12 units of college courses with
a "C" average.

A comparative study of the salient ideas and philosophical developments in Zoroastrianism, Judaism, Christianity, Islam, and the primitive and national religions of the past.

Lecture 3 hours.

114—COMPARATIVE WORLD RELIGIONS: FAR EAST

3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a "B" average in United States History and Government courses in high school or 12 units of college courses with a "C" average.

A comparative study of the salient ideas and philosophical developments in Hinduism, Buddhism, other Indian religions, Taoism, Confucianism, and Shinto.

Lecture 3 hours.

116—ETHICS

3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination, or a "B" average in United States History and Government courses in high school or 12 units of college courses with a "C" average.

An analysis of the concept of the good, the scope of morality, the deterministic controversy, the standards of evaluation, and the major ethical systems. Attention is given to contemporary positivism, John Dewey, Marxist ethics, authority as an ethical principle, intuitionism, egoistic hedonism, utilitarianism, ethical idealism, Immanuel Kant, modern Aristotelianism, and existentialism.

Lecture 3 hours.

117—INTRODUCTION TO LOGIC

3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination, or a "B" average in United States History and Government courses in high school or 12 units of college courses with a "C" average.

A study of the structure and functions of language, inductive and deductive forms of reasoning and argumentation. Includes the study of formal argumentation and its application to ordinary language, symbolic forms of reasoning, and propositional functions. Analyzes analogical argumentation, the methods of experimental inquiry, the nature of scientific hypothesis, and probability theory.

Lecture 3 hours.

119—HISTORY OF PHILOSOPHY: ANCIENT PERIOD

3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination, or a "B" average in United States History and Government courses in high school or 12 units of college courses with a "C" average.

A critical study of the philosophic systems and ideas of the Western civilization from the ancient Greeks to the end of the Medieval period, with special emphasis on the Pre-Socratics, Plato, Aristotle, Roman philosophical thinkers, and the impact of Christian thought on Western culture.

Lecture 3 hours.

120—HISTORY OF PHILOSOPHY: MODERN PERIOD

3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination, or a "B" average in United States History and Government courses in high school or 12 units of college courses with a "C" average.

A critical study of the philosophic systems and ideas of the modern period which have had a dominant impact on Western civilization, with special emphasis on Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, Kant, Hegel, Marx, Nietzsche, Twentieth Century British and American philosophers.

Lecture 3 hours.

Photography

101—ELEMENTS OF PHOTOGRAPHY

2 UNITS

Prerequisite: None.
A two-hour lecture course. Survey of still cameras; characteristics of lenses and shutters; study of negatives, paper, and chemicals. Photographic nomenclature.
Lecture 2 hours.

102—ELEMENTS OF PHOTOGRAPHY* 2 UNITS

Prerequisite: Photography 101, and Art 113.
Photography 102 is lecture and laboratory practice.
Lecture 1 hour, laboratory 3 hours.

103—INTERMEDIATE PHOTOGRAPHY* (SEE NOTE)

Prerequisite: Photography 101 (which may be taken concurrently).
Note: Two hours are required for each unit earned. May be taken for two or three units according to the Schedule. The course may be repeated for a total of six units.

A lecture and laboratory course designed for students who have had some experience in photography.
Lecture, laboratory — (See Note).

105—ADVANCED PHOTOGRAPHY* (SEE NOTE)

Prerequisite: Photography 103.
Note: Two hours are required for each unit earned. May be taken for two or five units according to the Schedule. The course may be repeated for a total of ten units.

An advanced course for competent students with previous training and experience. Portfolio preparation. Individual assignments.
Lecture and laboratory — (See Note).

107—SPECIAL PROJECTS—PHOTOGRAPHY* (SEE NOTE)

Prerequisite: None.
Note: Two hours are required for each unit earned. May be taken for two or three units according to the Schedule. The course may be repeated for a total of six units. Art 113 is recommended.
A course to develop the talent of students unable to devote full time to photography, to offer art majors an opportunity to experiment and combine artistic ability with photo-technique, to complete projects related to a specific field; such as botany, technical graphics, advertising design.
Lecture and laboratory.

108—PHOTOCOMMUNICATION 2 UNITS

Prerequisite: Previous course in photography at college or high school or experience in the field.
Note: Course may be repeated once for total of 4 units.
A study of the relationship between journalism and photography. Assignments are given for reproduction in Glendale Community College and community publications.
Lecture 1 hour, laboratory 3 hours.

PHYSICAL SCIENCE
See Science 131

Physics

101—ENGINEERING PHYSICS 5 UNITS

Prerequisite: Physics 111 or physics taken in high school and Mathematics 103. (Mathematics 104 must be taken concurrently or prior to taking Physics 101.)
Note: Physics 101 is restricted to engineering and science majors.
Mechanics and properties of matter. An intensive study of motion, dynamics and statics, oscillations, wave motion, and sound, with emphasis upon vector analytical methods.
Lecture 4 hours, laboratory 2 hours, problem and quiz session 1 hour.

102—ENGINEERING PHYSICS 4 UNITS

Prerequisite: Physics 101 and Mathematics 104. (Mathematics 105 must be taken concurrently or prior to taking Physics 102.)
A study of static electricity including Gauss’ Law, potentials and electric fields, direct and alternating
t

*The College reserves the right to retain student work for one year for exhibit purposes.
current theory, laws of magnetism and magnetic properties of matter, electro-magnetism and induced currents, Maxwell's Equations and radiation theory.

Lecture 3 hours, laboratory 2 hours, problem and quiz session 1 hour.

103—ENGINEERING PHYSICS 5 UNITS

Prerequisite: Physics 101 and Mathematics 104. (Mathematics 105 must be taken concurrently or prior to taking Physics 103.)

Heat, thermodynamics, optics, and modern physics. An intensive study of the concept of fluids, temperature, heat, calorimetry, heat transfer, thermodynamics, entropy, and kinetic theory. A thorough presentation of geometrical and physical optics with considerable emphasis on modern physics including quantum physics, wave mechanics, and special relativity.

Lecture 4 hours, laboratory 2 hours, problem and quiz session 1 hour.

105—GENERAL PHYSICS 4 UNITS

Prerequisite: Physics or chemistry (any one of: Physics 110 or Physics 111, one year of physics in high school, Chemistry 141 or Chemistry 110, or one year of chemistry in high school) and trigonometry (one semester of trigonometry in high school or Mathematics 102 which may be taken concurrently with Physics 105).

Note: Required of pre-dental and pre-medical students.

A general course including properties of matter, mechanics, heat, wave motion, and sound. Lectures, demonstrations, problems, and laboratory work. Ability to use a slide rule is recommended.

Lecture 3 hours, laboratory 3 hours.

106—GENERAL PHYSICS 4 UNITS

Prerequisite: Physics 105.

Note: Required of pre-dental and pre-medical students.

A general course including the study of light, electricity, magnetism, and modern physics. Lectures, demonstrations, problems, and laboratory work. Ability to use a slide rule is recommended.

Lecture 3 hours, laboratory 3 hours.

110—INTRODUCTION TO PHYSICS 3 UNITS

Prerequisite: Mathematics 141 and Mathematics 140, or one year of algebra and one year of geometry in high school.

Note: This course may not be taken for credit by students who have completed Physics 101, Physics 105, or Physics 111.

A brief presentation of some of the more important and usual phenomena in physics with classroom demonstrations and lectures in mechanics, heat, sound, light, electricity, magnetism, and modern physics.

Lecture 3 hours.

111—ENGINEERING PREPARATORY PHYSICS 3 UNITS

Prerequisite: Mathematics 102, or trigonometry in high school. Mathematics 103 should be taken concurrently by engineering and science majors. Engineering 141 recommended.

Note: This course may not be taken for credit by students who have completed Physics 101 or Physics 105.

A mathematical course in general physics with emphasis on mechanics designed to prepare students for engineering physics (Physics 101, 102, 103), particularly those students who have not had an adequate high school course in physics. Emphasis is upon analysis and solution of problems.

Lecture 3 hours.

145—APPLIED PHYSICS 3 UNITS

Prerequisite: A satisfactory score on the Mathematics Proficiency Examination or Mathematics 143 or Mathematics 150.

The application of physics to industry. Fundamental concepts, pressure and buoyancy in fluids, simple and compound machines, hydraulic and pneumatic machines, work, energy, and power, composition and resolution of forces, heat—its measurement, transfer, and conversion to work, light and color, magnetism, atomic energy, and electronics.

Lecture 3 hours.

PHYSIOLOGY
See Biology 121.
Police Science

Classes in Police Science are offered as in-service training for law enforcement officers by the Glendale Community College. Identical sections of in-service Police Science classes are scheduled in the afternoon and evening so that students may continue attendance in spite of shift changes. Some Police Science classes will accept students and adults in the community who plan on going into law enforcement work. Consult Extended Day Schedule for classes open to other than enforcement officers.

101—INTRODUCTION TO LAW ENFORCEMENT  
3 UNITS

Prerequisite: None.

The philosophy and history of law enforcement; overview of crime and police problems; organization and jurisdiction of local, state, and federal law enforcement agencies; survey of professional career opportunities and qualifications required.

Lecture 3 hours.

103—CRIMINAL LAW I  
3 UNITS

Prerequisite: Police Science 101 should precede or be taken concurrently, or Sociology 101, or employment as a peace officer.

The structure, definitions and the most frequently used sections of the California Penal Code and other criminal statutes.

Lecture 3 hours.

104—CRIMINAL LAW II  
3 UNITS

Prerequisite: Police Science 101 should precede or be taken concurrently, or Sociology 101, or employment as a peace officer.

The structure, definitions and the most frequently used sections of the California Penal Code and other criminal statutes. Continuation of Police Science 103.

Lecture 3 hours.

106—LAW ENFORCEMENT IN URBAN AMERICA  
3 UNITS

Prerequisite: None.

Intended for the general public, this historical overview is not recommended for police officers. Covers the evolution of justice and law enforcement as a means of achieving social harmony. An analysis of the different police systems that have resulted in the development of today's police organization. An examination of the present police system, its organization, functions, and problems. The nature of crime and social disorder and prospects for the future in American Law Enforcement. In-depth analysis of the relationships and responsibilities between a police agency and the public it serves.

Lecture 3 hours.

107—POLICE-COMMUNITY RELATIONS  
3 UNITS

Prerequisite: None.

Considers current aspects and problems of police-community relations. Included will be the police image, crisis areas, organization for police community relations activities, groups and law enforcement, the press, training in police-community relations programming, role of the individual officer, and police-community relations in American society tomorrow.

Lecture 3 hours.

108—POLICE PATROL PROCEDURES  
3 UNITS

Prerequisite: Police Science 101 should precede or be taken concurrently, or employment as a peace officer.

Designed to develop basic understandings and a reasonable degree of skill with reference to the following problems and practices: responsibilities, powers, and duties of the uniformed and patrol officer; patrol procedure; foot patrol, vehicle patrol and observation; field interrogation, pedestrians, vehicles; preliminary handling of field problems; stakeouts; arrest and transportation of prisoners; booking of property; marking and handling of evidence; report writing; civil disputes; special events; controlling crowds, and how to handle riots.

Lecture 3 hours.
110—ADMINISTRATION OF JUSTICE 3 UNITS

Prerequisite: Police Science 101 should precede or be taken concurrently, or employment as a peace officer. Review of court systems; procedures from incident to final disposition; principles of constitutional, Federal, State and civil laws as they apply to and affect law enforcement.

Lecture 3 hours.

112—CALIFORNIA VEHICLE CODE 3 UNITS

Prerequisite: None.

A study of the Vehicle Code of the State of California as it pertains to Law Enforcement Officers and discussions of leading court cases. Covers Vehicle Code definitions, organization of the DMV and CHP. Also, registration and licensing, financial responsibility and laws regulating the operation of garages, repair shops, service stations, and driving schools. Study of the "Rules of the Road" covering all moving vehicle violations, parking, pedestrian, and equipment violations.

Lecture 3 hours.

114—TRAFFIC CONTROL 3 UNITS

Prerequisite: Police Science 101 should precede or be taken concurrently, or employment as a peace officer.

A study of the principles and practices of accident investigation including the purposes of investigation, selective enforcement procedure and data use, hit-and-run accidents, determination of speed from skid marks, the nature and use of the intoxication testing devices, and field practice in actual cases.

Lecture 3 hours.

116—CRIMINAL INVESTIGATION 3 UNITS

Prerequisite: Police Science 101 should precede or be taken concurrently, or employment as a peace officer.

Fundamentals of investigation; crime scene search and recording; collection and preservation of physical evidence; scientific aids; modus operandi; sources of information; interviews and interrogation; follow-up and case preparation.

Lecture 3 hours.

118—JUVENILE PROCEDURES 3 UNITS

Prerequisite: Police Science 101 should precede or be taken concurrently, or Sociology 101, or employment as a peace officer.

The organization, functions, and jurisdiction of juvenile agencies; the processing and detention of juveniles; juvenile case disposition; juvenile statutes and court procedures.

Lecture 3 hours.

120—CRIMINAL EVIDENCE 3 UNITS

Prerequisite: Police Science 101 should precede or be taken concurrently, or employment as a peace officer.

A discussion of the statutes and pertinent decisions of the courts of the State of California dealing with the production and presentation of evidence in criminal trials. Special emphasis is given to the law as it affects actual arrest of criminal offenders and subsequent court trials.

A study of the development, importance, and purpose of evidence; a discussion of the laws of the Federal Government as they affect the conduct of law enforcement officers. Supplemented by recent decisions of the United States Supreme Court.

Lecture 3 hours.

122—POLICE CIVIL LAW 3 UNITS

Prerequisite: Police Science 101 should precede or be taken concurrently, or employment as a peace officer.

A brief survey is made of the fundamentals of the law of contracts, torts, and personal property, including liens, landlord and tenant, with special reference to their application to police. Emphasis is placed upon legal reasoning and analysis through a study of court decisions. The case method of instruction is used.

Lecture 3 hours.

124—PHYSICAL ASPECTS OF ARREST 2 UNITS

Prerequisite: Open to law enforcement officers only.

Methods and techniques of self-defense, disarmament, use of the baton, civil disturbance formations, and the use of tear gas. Also techniques in how to interview suspects, witnesses, etc., how to stop and search
automobiles, how to apprehend prowlers, and the
important points in how to make misdemeanor and felony
arrests.
Lecture 2 hours.

126—FIREARMS 1 UNIT
Prerequisite: Satisfactory completion of 12 units of
Police Science courses.
The moral aspects, legal provisions, safety precautions
and restrictions covering the use of firearms; firing of
sidearms and shotguns.
Lecture 3 hours, for 5 weeks, laboratory 4 hours for 4
weeks.

129—NARCOTICS AND DRUGS 3 UNITS
Prerequisite: Police Science 101 should precede or be
taken concurrently, or employment as a peace officer.
Designed to give all levels of law enforcement officers a
fundamental understanding of narcotic addiction and the
effects of hypnotic drugs as these factors are involved in
the daily routine of police work. The principles of
detecting and investigating narcotic offenders.
Lecture 3 hours.

130—POLICE ADMINISTRATION 3 UNITS
Prerequisite: Police Science 101 should precede or be
taken concurrently, or employment as a peace officer.
An analysis of the organization and administration of
police departments including city, county, State, and
Federal law enforcement agencies. Includes problems of
professionalism, types of organizations, and line and
staff functions. Detail studies of personnel programs,
including job classification, recruitment procedures,
training programs, promotion methods, and supervision
of personnel as well as retirement plans, processing of
grievances, and personnel discipline.
Lecture 3 hours.

134—REPORT WRITING 3 UNITS
Prerequisite: None.
A survey of report writing and Records and Identification
Bureaus. A study to aid the police officer to analyze what
he sees, and to make a permanent and coherent record of
facts to be used in criminal prosecution and
administration procedures.
Lecture 3 hours.

136—INTERROGATION AND LIE DETECTION 3 UNITS
Prerequisite: Police Science 101 should precede or be
taken concurrently, or employment as a peace officer.
Principles and psychology in interviews and
interrogation. Methods of handling victims, witnesses,
informants, and suspects. Information evaluation.
Civilian interview versus police interrogation. Rules of
evidence regarding court acceptance of confessions,
admissions, res gestae. Study of mechanical truth
devices, truth serums, types of approaches, interview
preparation.
Lecture 3 hours.

Political Science

101—INTRODUCTION TO GOVERNMENT 3 UNITS
Prerequisite: A satisfactory score on the Reading and
Language sub-tests of the Pre-registration Examination or
a "B" average in United States History and Government
courses in high school or 12 units of college courses with
a "C" average.
Note: Political Science 101 allows only one unit of credit
for students who have completed Political Science 105 or
Social Science 131-132. Recommended for students seek-
ing an A.B. (4-year) degree.
An introduction to the principles and problems of
government in the United States with emphasis placed on
the Federal government and the interplay of democratic
politics at the national level. Political Science 101 meets
the California State requirement in the United States
Constitution.
Lecture 3 hours.

102—MODERN COMPARATIVE
GOVERNMENTS
Prerequisite: Political Science 101 or Political Science
105, or Social Science 131-132 and a satisfactory score on
the Reading and Language sub-tests of the Pre-registration Examination or a "B" average in United States History and Government courses in high school or 12 units of college courses with a "C" average.

A comparative study of the constitutional principles, governmental institutions, political parties, and recent history of policy and action of selected foreign governments.

Lecture 3 hours.

103—INTRODUCTION TO WORLD POLITICS 3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a "B" average in United States History and Government courses in high school or 12 units of college courses with a "C" average.

The development of an intellectual framework which will order the student's thoughts on world politics and enable him to analyze and evaluate present and potential issues and events that affect international power and the pursuit of peace.

Lecture 3 hours.

104—AMERICAN POLITICAL CULTURE 3 UNITS

Prerequisite: A grade of "B" or better in any of the following courses: Political Science 101, 102, 103, 105, 106, 108, or Social Science 132, or consent of the instructor.

An examination of American attitudes towards politics and government through an analysis of American literature.

Lecture and discussion 3 hours.

105—AMERICAN POLITICAL IDEALS 2 UNITS

Prerequisite: None.

Note: It is recommended that the California State requirement in American History be completed prior to enrollment in this course. Political Science 105 allows no credit for students who have completed Political Science 101 or Social Science 131-132. Recommended for students seeking an Associate in Arts (2-year) degree.

A study of the theory and practices of the American democratic political process and formal institutional functions. Special emphasis is placed on the Federal Constitution and how it operates in the context of political democracy. The role of parties and groups in politics is analyzed. Political Science 105 meets the California State requirement in the United States Constitution.

Lecture 2 hours.

106—AMERICAN STATE AND LOCAL GOVERNMENT 1 UNIT

Prerequisite: None.

Note: It is recommended that this course be taken after the completion of the Constitution requirement. This course or Social Science 131-132 is a graduation requirement. No credit is allowed for this course to students having credit in Social Science 131-132.

A study of the origins, structures, and functions of California government and politics with emphasis on the State level, but including the city, county and district levels.

Lecture 2 hours.

107—PROBABILITY AND STATISTICS 3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a "B" average in United States History and Government courses in high school or 12 units of college courses with a "C" average. One year of high school algebra or Mathematics 141 or equivalent.

An introduction to the areas of probability and statistics. A consideration of the methods of gathering, classifying, and analyzing statistical data.

Lecture 3 hours.

108—URBAN POLITICS 3 UNITS

Prerequisite: A grade of "B" or better in any of the following courses: Political Science 101, 102, 103, 104, 105, 106, or Social Science 132, or consent of the instructor.

Classroom and field work in the process and problems of local government. After classroom preparation, students will work with local agencies on mutually agreed tasks as part of a course-required research project. The aim of the course is to develop the student's knowledge of his
community and the nation’s metropolitan areas.
Lecture 3 hours, laboratory 6 hours.

110—CONTEMPORARY WORLD PROBLEMS 3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a "B" average in United States History and Government courses in high school or 12 units of college courses with a "C" average.

Current problems of too many people, too little food, and too little space. Accent is on the political and sociological solutions to the problems posed by excess fertility and declining food per capita in select areas of the world.
Lecture 3 hours.

151—FUNDAMENTALS OF GOVERNMENT AND YOU 3 UNITS

Prerequisite: None.

Political Science 151 is designed for the non-transfer student; this course deals with the individual as a student, as a worker, and as a member of society. It examines the benefits, controls, and rights of the individual which result from our political system as it operates through government.

Meets the requirements for the A.A. Degree in the United States Constitution and state and local government.
Lecture 3 hours.

INTRODUCTION TO SOCIAL SCIENCE
See Social Science 131-132.

Printing

101—SURVEY OF GRAPHIC ARTS FUNDAMENTALS 2 UNITS

Prerequisite: None.

Note: This course may be taken for two units each semester for two semesters. Any combination of Printing 101, 102, and 103 may not earn more than 12 semester units. Students may not transfer from any of these three courses to any other of the three courses after the end of the third week of the semester.

A survey course in letterpress and offset lithographic processes for persons with no prior printing experience. Provision is made for students to explore the broad scope and to discover the opportunities for graphic communications in our society. Course content includes basic principles and techniques of shop practices through a series of lecture-laboratory experiences.
Lecture 1 hour, laboratory 2 hours.

102—LETTERPRESS PRESSWORK PROCEDURES 2 UNITS

Prerequisite: Printing 101 or one year of printing in high school, or one year in the printing trade.

Note: This course may be taken for two units each semester for two semesters. Any combination of Printing 101, 102, and 103 may not earn more than 12 semester units. Students may not transfer from any of these three courses to any other of the three courses after the end of the third week of the semester.

Instruction covers basic press operations, imposition, make-ready, correct use of inks, and paper handling. Practical job experience is attained by running forms made of type, half-tones, engravings, and forms requiring special preparation such as perforating rule forms, die-cutting, scoring, and numbering. Lubrication, press nomenclature, and maintenance are also emphasized.
Lecture 1 hour, laboratory 2 hours.

103—OFFSET PRINTING PROCESS 2 UNITS

Prerequisite: Printing 101 or one year of printing in high school, or one year in the printing trade.

Note: This course may be taken for two units each semester for three semesters. Any combination of Printing 101, 102, and 103 may not earn more than 12 semester units. Students may not transfer from any of these three courses to any other of the three courses after the end of the third week of the semester.

Covers history, job planning, type composition, copy preparation, line and half-tone photography, color reproduction, darkroom procedures, layout and stripping, platemaking, offset inks, papers and bindery work, presswork, legal restrictions, drawing instruments. Lubrication, press nomenclature, and maintenance are also emphasized.
Lecture 1 hour, laboratory 2 hours.
PRINTING/PSYCHOLOGY/PUBLIC ADMINISTRATION

104—ADVANCED OFFSET PROCESSES  2 UNITS

*Prerequisite:* Printing 103.

Designed to help the student improve his skills, knowledge, and techniques in offset printing. Continued study of half-tone negatives, duo-tones, contact printing, veloxing, brownline, and color key techniques. Covers film scribing, multiple burns, step and repeat, and offset press problems. Provides additional training in the operation of larger offset presses. Emphasizes nomenclature, lubrication, and maintenance procedures.

Lecture 1 hour, laboratory 2 hours.

Psychology

101—GENERAL PSYCHOLOGY  3 UNITS

*Prerequisite:* A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a "B" average in United States History and Government courses in high school or 12 units of college courses with a "C" average.

*Note:* Sophomore standing preferred.

An intensive study of human behavior; emotions, learning, memory, motivation, and thinking; the individual differences in ability, intelligence, personality, maturation, and development; personal applications.

Lecture 3 hours.

102—ADVANCED GENERAL PSYCHOLOGY  3 UNITS

*Prerequisite:* Psychology 101.

An advanced study of the principles of general psychology with special emphasis on the experimental method in the study of behavior. Special consideration of recent findings in psychology and areas of contemporary research attention.

Lecture 3 hours

107—PROBABILITY AND STATISTICS  3 UNITS

*Prerequisite:* A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a "B" average in United States History and Government courses in high school or 12 units of college courses with a "C" average. One year of high school algebra or Mathematics 141 or equivalent.

An introduction to the areas of probability and statistics. A consideration of the methods of gathering, classifying, and analyzing statistical data.

Lecture 3 hours.

110—PERSONAL AND SOCIAL ADJUSTMENT  2 UNITS

*Prerequisite:* None.

A course designed to acquaint the student with basic principles of human behavior that may help him to deal effectively with life situations (viz., finding himself in society, inter-personal relations, career decision making, and educational endeavors).

Lecture 2 hours.

131—MARRIAGE AND FAMILY LIVING  3 UNITS

*Prerequisite:* None.

Basic information and attitudes for creating a successful marriage; including such topics as courtship, engagement, finances, sexual life, in-laws, mixed marriages, children, family interaction, and resolving conflicts. Lectures, discussions, films, temperament tests, readings and reports.

Lecture 3 hours.

PRE-SCHOOL CHILD
See Home Arts 135.

Public Administration

101—PUBLIC SERVICE ADMINISTRATION  3 UNITS

*Prerequisite:* Employment in a governmental agency or consent of instructor.

A survey course dealing with management analysis techniques, systems analysis and systems implementation; organization audits and appraisal; work and time measurement techniques; the organization (chart) — its structure and communications system; forms and records management; manuals and other administrative directives; work simplification; techniques of work-flow
and process charting; reports control.

Lecture 3 hours.

102—FEDERAL ORGANIZATIONS, FUNCTIONS, AND RELATIONSHIPS

3 UNITS

Prerequisite: Supervision 101 or Public Administration 101 or Political Science 101.

Note: This course allows only two units of credit for students who have received credit in Political Science 105.

The American Federal System in the administration of public policy; its constitutional characteristics; Federal, State, Regional, and Local Organization structure and relationships; functional and administrative coordination; Federal Executive Boards; the Regulatory Commission; Regional Authorities; the Government Corporation; Executive Office of the President; Congressional Committees; the Federal Judiciary structure; the Cabinet.

Lecture 3 hours.

103—GOVERNMENTAL FINANCIAL MANAGEMENT

3 UNITS

Prerequisite: None.

A survey of federal, state, and local government fiscal policies; the appropriation process; accounting; tax, revenue, and debt administration; financial controls, reporting, and analysis; budget preparation, authorization, and execution; Planning Programming Budgeting System; inter-governmental fiscal relationships; cost analysis; audit.

Lecture 3 hours.

103—REAL ESTATE ECONOMICS

3 UNITS

Prerequisite: None.

Note: It is recommended that Real Estate 105 or Real Estate 107 be taken prior to this course or that the student be a holder of a valid California Real Estate license.

Deals with those trends and factors which affect the value of real estate; the nature and classification of land economics; the development of property, construction and subdivision, economic values and real estate evaluation; real estate cycles and business fluctuations, residential market trends, real property, and special purpose property trends.

Lecture 3 hours.

105—REAL ESTATE PRACTICE

3 UNITS

Prerequisite: None.

Note: It is recommended that Real Estate 101 be taken prior to this course or that the student be a holder of a valid California Real Estate license.

Day-to-day operations in real estate roles and brokerage, including listing, prospecting, advertising, financing, sales techniques, escrow, and ethics. Applies toward State's educational requirements for the broker's examination.

Lecture 3 hours.

107—LEGAL ASPECTS OF REAL ESTATE

3 UNITS

Prerequisite: None.

Note: It is recommended that Real Estate 101 or Real Estate 105 be taken prior to this course or that the student be a holder of a valid California Real Estate license.

A study of California real estate law, including rights incident to property ownerships and management, agency, contracts, and application to real estate transfer, conveyancing, probate proceedings, trust deeds, and
foreclosure, as well as recent legislation governing real
estate transactions. Applies toward education
requirement of broker's examination.

Lecture 3 hours.

109—REAL ESTATE FINANCE 3 UNITS

Prerequisite: None.

Note: It is recommended that Real Estate 105 or Real
State 107 be taken prior to this course or that the student
be a holder of a valid California Real Estate license.

Analysis of real estate financing, including lending
policies and problems in financing transactions in
residential, apartment, commercial, and special purpose
properties. Methods of financing properties emphasized.

Lecture 3 hours.

111—REAL ESTATE APPRAISAL 3 UNITS

Prerequisite: None.

Note: It is recommended that Real Estate 105 or Real
State 107 be taken prior to this course or that the student
be a holder of a valid California Real Estate license.

Covers the purposes of appraisals, the appraisal process,
and the different approaches, methods, and techniques
used to determine the value of various types of property.
Emphasis is on residential and single-unit property.

Lecture 3 hours.

Science

131—GENERAL PHYSICAL SCIENCE 4 UNITS

Prerequisite: None.

The course is designed to give a cultural appreciation of
the scientific method and an elementary working
knowledge of the fields studied. Emphasis is placed on
the methods by which scientific facts are established and
related by means of scientific theories. The course is an
integrated survey of physics, chemistry, geology, and
astronomy. Elementary mathematical concepts are
introduced as required.

Lecture 4 hours, laboratory 2 hours.

Social Science

101—INTRODUCTION TO EDUCATION 2 UNITS

Prerequisite: A satisfactory score on the Reading and
Language sub-tests of the Pre-registration Examination or
a "B" average in United States History and Government
courses in high school or 12 units of college courses with
a "C" average.

An introductory course designed to acquaint the student
with the field of teaching, with the personal and
professional qualifications needed by the successful
teacher, with the duties and opportunities of the
professional educator, and with the availability of teacher
training facilities and requirements.

Lecture 2 hours.

121—ETHNIC AND RACIAL MINORITIES 3 UNITS

Prerequisite: A satisfactory score on the Reading and
Language sub-tests of the Pre-registration Examination or
a "B" average in United States History and Government
courses in high school or 12 units of college courses with
a "C" average.

A survey of the major ethnic and racial minorities in the
United States. A basis for a better understanding of the
socio-economic, cultural and political conditions among
the following minorities: Afro-American, Mexican-
American, Chinese, Japanese, and American Indian.

Lecture 3 hours.

131—INTRODUCTION TO SOCIAL SCIENCE 4 UNITS

Prerequisite: A satisfactory score on the Reading and
Language sub-tests of the Pre-registration Examination or
a "B" average in United States History and Government
courses in high school or 12 units of college courses with
a "C" average.

Note: Social Science 131-132 allows only six units of
credit for students having credit in Political Science 101 or
Political Science 105 or History 110. If only Political
Science 106 has been completed for credit, seven units
are allowed. If either Political Science 101 or Political
Science 105 and History 110 are completed for credit, then
only four units are allowed for Social Science 131-132; if
History 117-118 are completed for credit, then only two
units are allowed for Social Science 131-132.
The inter-relationship of the social sciences and their application to the problems of group living in the twentieth century are developed through a survey of the principal facts and concepts of history and sociology. Problems are studied in relationship to the historical development of the United States. The student is led to acquire a body of knowledge through an analysis of historical and contemporary social problems. This course (if both semesters are completed) meets the California State requirements in American History, the American Constitution, and State and Local Government.

Lecture 4 hours.

132—INTRODUCTION TO SOCIAL SCIENCE  4 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a “B” average in United States History and Government courses in high school or 12 units of college courses with a “C” average.

Note: Social Science 131-132 allows only six units of credit for students having credit in Political Science 101 or Political Science 105 or History 110. If only Political Science 106 has been completed for credit, seven units are allowed. If either Political Science 101 or Political Science 105 and History 110 are completed for credit, then only four units are allowed for Social Science 131-132; if History 117-118 are completed for credit, then only two units are allowed for Social Science 131-132.

The inter-relationship of the social sciences and their application to the problems of group living in the twentieth century are developed through a survey of the principal facts and concepts of political science and economics. Problems are studied in relationship to governments in the United States. The student is led to acquire a body of knowledge through an analysis of contemporary political and economic problems. This course (if both semesters are completed) meets the California State requirements in American History, the American Constitution, and State and Local Government.

Lecture 4 hours.

101—INTRODUCTION TO SOCIOLOGY  3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a “B” average in United States History and Government courses in high school or 12 units of college courses with a “C” average.

An introduction to sociology, its methods and resources, the study of society and culture, personality organization and disorganization, social interaction and social processes, human groups and collective behavior, role and status, class and stratification, ethnic and other intergroup relations, ecology and urban sociology, population and social change.

Lecture 3 hours.

102—INTRODUCTION TO SOCIOLOGY  3 UNITS

Prerequisite: Sociology 101.

The development of a definition and criteria of social problems. An analysis of selected social problems, juvenile delinquency, crime, intergroup tensions, family disorganization, poverty, dependency, personality problems as related to social problems within the overall theoretical framework of the influence of social movements and institutional change.

Lecture 3 hours.

141—STUDENT LEADERSHIP  2 UNITS

Prerequisite: None.

Note: Open to all students interested in developing leadership skills. Officers of all student organizations are urged to enroll. This course may be repeated for a total of four (4) units.

Fundamentals of student leadership. A study of leadership theory, parliamentary law, committee techniques, democratic organization, principles and functions of student government and group leadership problems.

Lecture 2 hours, laboratory 3 hours by arrangement.

Sociology

107—PROBABILITY AND STATISTICS  3 UNITS

Prerequisite: A satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination or a “B” average in United States History and Government courses in high school or 12 units of college courses with
a "C" average. One year of high school algebra or Mathematics 141 or equivalent.

An introduction to the areas of probability and statistics. A consideration of the methods of gathering, classifying, and analyzing statistical data.

Lecture 3 hours.

Spanish

101—BEGINNING SPANISH 4 UNITS

Prerequisite: A satisfactory score on the English Placement Examination or a grade of "B" or better in English 191 or a grade of "C" or better in English 120.

Fundamentals of Spanish grammar. The student is trained to pronounce Spanish correctly, to acquire a small working vocabulary which he uses in conversation and writing, and to read simple Spanish.

In addition to regular class hours, the student must spend two half-hour periods a week in the laboratory. Recitation 3 hours, language laboratory 2 hours.

102—BEGINNING SPANISH 4 UNITS

Prerequisite: Spanish 101, or two years of Spanish in high school completed within the past two years.

Spanish 102 is based upon the reading and interpretation of idiomatic Spanish prose, with a further study of pronunciation and review of the fundamentals of Spanish grammar.

In addition to the regular class hours, the student must spend two half-hour periods a week in the laboratory. Lecture 3 hours, language laboratory 2 hours.

103—INTERMEDIATE SPANISH 4 UNITS

Prerequisite: Spanish 102, or three years of Spanish in high school completed within the past two years.

Spanish 103 includes further study of Spanish grammar and idioms, intensive and extensive reading in contemporary colloquial Spanish, and written composition.

In addition to the regular class hours, the student must spend two half-hour periods a week in the laboratory. Lecture 4 hours.

104—INTERMEDIATE SPANISH 4 UNITS

Prerequisite: Spanish 103, or four years of Spanish in high school completed within the past two years.

A continuation of Spanish 103 with reading of more difficult literary texts, and increased emphasis on conversation.

In addition to the regular class hours, the student must spend two half-hour periods a week in the laboratory. Lecture 4 hours.

105—CONVERSATIONAL SPANISH 2 UNITS

Prerequisite: One year of college Spanish, or three years of high school Spanish, or permission of instructor.

Intensive practice in oral expression and comprehension of spoken Spanish. Lecture (and participation) 2 hours.

106—ADVANCED CONVERSATIONAL SPANISH 2 UNITS

Prerequisite: Spanish 105 or consent of the instructor.

Spanish 106 is designed for those students who wish more advanced conversation on more controversial topics. It fills a general education requirement. Lecture 2 hours.

Speech

101—PUBLIC SPEAKING 3 UNITS

Prerequisite: A satisfactory score on the English Placement Examination or a grade of "B" or better in English 191 or a grade of "C" or better in English 120.

Emphasis is placed upon organization and delivery of extemporaneous speeches. Experience is provided in group discussion, oral reading, and informative and persuasive speaking. This course satisfies speech requirements of those expecting to transfer to specialized and professional work in colleges and universities. Lecture 3 hours.
102—PUBLIC SPEAKING  
Prerequisite: Speech 101.

Emphasis is placed on the development of further effectiveness in the organization and delivery of the complete speech and on the preparation of students for effective participation in group discussion and debate.

Lecture 1 hour, laboratory 2 hours.

121—FUNDAMENTALS OF SPEECH  
Prerequisite: None.

Training in oral communication to assist the student in eliminating stage fright and developing self-confidence, poise, and an acceptable speaking voice. Exercises in voice development, in reading aloud, and in preparing extemporaneous speeches.

Lecture 2 hours.

STATISTICS

See Economics 107.
Political Science 107
Psychology 107
Sociology 107

Supervision

An Extended Day training program especially for foremen, supervisors, leadmen, and other group leaders in business and industry. The purpose of the program is to supplement job experiences with the best in supervisory training. For information about classes offered each semester consult the Extended Day Schedule of Classes.

101—INTRODUCTION TO SUPERVISION  
Prerequisite: None.

Note: It is recommended that the student complete one year of occupational training or equivalent service, industrial, or business experience before taking this course.

Covers in general terms the management system organization as it affects the supervisor; direction of subordinates through leadership; appreciation for fiscal and property accounting; procedures for hiring, training, evaluation, discipline, grievances, and dismissal; effective communication; vertical and lateral forces affecting the supervisor; wage and salary administration; and collective bargaining.

Lecture 3 hours.

102—HUMAN RELATIONS FOR SUPERVISORS—BASIC  
Prerequisite: Supervision 101.

Covers relationship of supervisor to various goals; history of human relations and revisionist movements; basis for motivation; work incentives; personnel selection, training, appraisal, and development; group organization; communications; human engineering; effective leadership; and the selection and training of considerate leaders.

Lecture 3 hours.

103—HUMAN RELATIONS FOR SUPERVISORS—ADVANCED  
Prerequisite: Supervision 102.

Covers development of human relations climate; patterns, function, and types of leadership; simulation training; organization levels; staff relationships; organizational and group dynamics; informal organizations; working with unions; managing change; wage administration and incentives; procedures and work systems; attitudes; and development of participations.

Lecture 3 hours.

104—SUPERVISOR'S RESPONSIBILITY FOR MANAGEMENT OF PERSONNEL  
Prerequisite: Supervision 101.

Personnel techniques for which the supervisor is partially responsible and for which he should have some training. Selection, testing, placement, orientation, training, counseling, merit rating, promotion, transfer, and training for responsibility.

Lecture 3 hours.

105—ORGANIZATION AND MANAGEMENT FOR SUPERVISORS  
Prerequisite: Supervision 101.
Covers successful planning; staffing; organization objectives, and flexibility; functions of directing, control, coordinating, and training; service departments; job descriptions; preventing grievances; and maintaining production through work simplification.

Lecture 3 hours.

106—LABOR-MANAGEMENT RELATIONS 3 UNITS

Prerequisite: Supervision 101.

The history and development of the labor movement. The development of the National Labor Relations Acts, the Wagner Act, the Taft-Hartley Act. The supervisor's responsibility for good labor relations. The union contract and grievance procedure.

Lecture 3 hours.

107—INDUSTRIAL ECONOMICS 3 UNITS

Prerequisite: Supervision 101.

Significant economic facts. Development of a critical attitude toward industrial economics. Institutions and practices that determine our social environment. Management-supervisory employee relationships to economy and local industry.

Lecture 3 hours.

108—WORK SIMPLIFICATION 3 UNITS

Prerequisite: Supervision 101.

The supervisor's responsibility for job-methods improvement. The basic principles of work simplification. Administration and the problems involved. Motion study fundamentals for supervisors. Time study techniques.

Lecture 3 hours.

109—COST CONTROL AND ANALYSIS FOR SUPERVISORS 3 UNITS

Prerequisite: Supervision 101.

Analysis of cost in industry. Cost control and its functions. The supervisor's responsibility for costs. Factors in cost control: costs, materials, waste, salvage, quality control, quantity control, control of time, etc.

Lecture 3 hours.

110—JOB ANALYSIS FOR WAGE ADMINISTRATION 3 UNITS

Prerequisite: Supervision 101.


Lecture 3 hours.

111—ORAL COMMUNICATION FOR SUPERVISORS 3 UNITS

Prerequisite: Supervision 101.

Covers planning interpersonal communication, speaking techniques, conducting question-and-answer periods, conference leading on the job, objectives of good presentations, use and misuse of visuals in oral presentations, interviewing, bridges and barriers to communications, and what to do about rumors.

Lecture 3 hours.

112—WRITTEN COMMUNICATION FOR SUPERVISORS 3 UNITS

Prerequisite: Supervision 101.

Covers principles of business communications, techniques for business letters, types of business letters, informal and formal reporting, interpreting written directions, the report and memorandum, and building a vocabulary.

Lecture 3 hours.

113—INDUSTRIAL SAFETY AND FIRE PREVENTION 2 UNITS

Prerequisite: Supervision 101.

Management and supervisory responsibility for fire and accident prevention. Accident reports and the supervisor. Good housekeeping and fire prevention. Machine guarding and personnel protective equipment. State Industrial Accident Code and fire regulations. The First Aid Department and the line supervisor's responsibility. Job and safety instruction. Company rules and

Lecture 2 hours.

114—DEVELOPING EMPLOYEES THROUGH TRAINING 3 UNITS

Prerequisite: Supervision 101 and either Supervision 104 or equivalent.

The supervisor's responsibility for developing employees through training. Orientation and induction; vestibule and on-the-job techniques. Job instruction training principles, apprenticeship training, technical training, supervisory training and management development. Use of outside agencies, advisory committees.

Lecture 3 hours.

115—MANAGEMENT CONTROL AND THE SUPERVISOR 3 UNITS

Prerequisite: Supervision 101.

Basic principles of controls. Delegation of responsibility through the use of controls. The purpose and objectives of controls, manufacturing costs, quality control, quantity control, production control, control over materials, control over the organization, control over personnel, etc.

Lecture 3 hours.

INDUSTRIAL ENGLISH
See English 131-132.

Technical Graphics

165—BASIC GRAPHICS 7 UNITS

Prerequisite: None.

Note: Students must register for the full number of hours for which the course is scheduled, but late registration is permitted provided a vacancy in the class exists and all work missed is made up.

This course covers the basic methods required by industry for the preparation of drawings of mechanical devices. It includes a basic course in drafting consisting of instruments used in technical drawing; lettering and briefing charts, geometry of technical drawing, orthographic projection, revolutions, primary and secondary auxiliaries, sections, dimensioning, fasteners, springs, intersections, and oblique and isometric drawing.

Training emphasized both the artistic as well as the drafting approach to enable students to be proficient in pictorial sketching. A relevant program which encourages skills toward visual communications and organizing problems, to meet the ever increasing demands for speed of preparation by industry.

Lecture 4 hours, laboratory 8 hours.

166—BASIC GRAPHICS 7 UNITS

Prerequisite: Technical Graphics 165.

A study of the fundamentals of isometric, dimetric, and trimetric drawing, offset measurements, non-isometric lines, inking techniques, illustrations prepared for technical publication, schematic drawing, and introduction to the basic techniques of rendering through the medium of charcoal, pastel chalks, wash, dry brush, tempera and water colors. General technical knowledge and skills used by professional illustrators are practiced in the classroom.

Laboratory 15 hours.

167—TECHNICAL GRAPHICS 7 UNITS

Prerequisite: Technical Graphics 166.

Note: Students must register for the full number of hours for which the course is scheduled, but late registration is permitted provided a vacancy in the class exists and all work missed is made up.

Covers the general technical knowledge and skills used by the professional illustrators, with the aim of preparing the student to perform complicated assignments in the preparation of technical publications such as operational handbooks, illustrated parts breakdown, visual aids, and manuals concerning maintenance, repair and overhaul procedures. Covers the rotation from the isometric plane in single and double directional rotations.

Lecture 4 hours, laboratory 8 hours.

168—ADVANCED TECHNICAL GRAPHICS 7 UNITS

Prerequisite: Technical Graphics 167.
Covers the general technical knowledge and skills used by professional illustrators with the aim of preparing the student to perform complicated assignments in preparation of technical publications and graphic communication presentations. Covers perspective theory, rendering in all manner of graphic arts techniques: the operation, use, and care of the air brush. Creative decisions are necessary in student's approach to visualization of class problems which have underlying requirement of both mechanical and artistic training.

Lecture 4 hours, laboratory 8 hours.

169—INDUSTRIAL DESIGN 7 UNITS

Prerequisite: Technical Graphics 168.

Technical Graphics 169 covers the design and production of technical graphic communications used by engineers, technicians, scientists, and executive personnel in industry. The student is directed in the design and preparation of presentation material such as: charts, graphs, slide projecturals, exhibits, industrial design models, displays, and technical brochures. Course also covers lettering and type layout reproduction methods and processes used in preparation of graphics. Latest industrial art methods and techniques are studied in order to achieve economy, speed, accuracy.

Laboratory 15 hours.

172—PUBLICATION GRAPHICS 3 UNITS

Prerequisite: None.

Technical Graphics 172 is designed to increase the student's ability to employ the ingredients, methods, and techniques used in the preparation and production of brochures, reports, proposals, manuals, and audio visuals from start to finish. Though the course does not require skilled art application, it deals with the fundamentals of design, layout, typography, paper, inks, printing, binding, and audio visual preparation. Visiting specialists from related industries will discuss their roles in the graphic arts industry and answer related questions.

Lecture 3 hours.

Television Repair

(SEE ELECTRONICS)

101—TELEVISION REPAIR 4 UNITS

Prerequisite: None.

This is the first of a series of courses which will enable the student to diagnose and repair the defective television receiver with the end objective being to develop those skills required to perform a satisfactory home service call. Basic television receiver circuits, theory and service techniques. The study of high voltage circuits, deflection circuits and test equipment.

Lecture 3 hours, laboratory 3 hours.

102—TELEVISION REPAIR 4 UNITS

Prerequisite: Television Repair 101 or one year of high school or community college electronics or one year in the trade.

Advanced theory and servicing of black and white television receivers. Front end alignment and fringe area problems.

Lecture 3 hours, laboratory 3 hours.

103—TELEVISION REPAIR 4 UNITS

Prerequisite: Television Repair 102.

Advanced circuit analysis and receiver techniques. Colorimetry, adjustment techniques and test equipment.

Lecture 3 hours, laboratory 3 hours.

104—TELEVISION REPAIR 4 UNITS

Prerequisite: Television Repair 103.

Advanced circuit analysis and service techniques. Set up techniques; test equipment application to modern color television receivers. The student will become familiar with the components and fundamental circuits used in color receivers and obtain experience in adjusting, testing and servicing the complete color receiver.

Lecture 3 hours, laboratory 3 hours.

Theater Arts

103—FUNDAMENTALS OF ACTING (VOCAL INTERPRETATION) 2 UNITS

Prerequisite: None.
A course planned to introduce the student to the theory and basic mechanics of vocal control and interpretation necessary for the successful study of acting.

Lecture 1 hour, laboratory 3 hours.

104—FUNDAMENTALS OF ACTING (BODY CONTROL) 2 UNITS

*Prerequisite:* Theater Arts 103.

Theater Arts 104 deals with the development of bodily control and interpretation and the integration of a controlled voice and body.

Lecture 1 hour, laboratory 3 hours.

105—THEATER ARTS WORKSHOPS 1-3 UNITS

*Prerequisite:* Theater Arts 103-104 either completed or in progress, or consent of the instructor.

*Note:* The student may take Theater Arts 105 for 1-3 units each semester for a total of 12 units. A proportionate amount of work will be assigned according to the number of units elected.

Students enrolled in this course will be formed into a company to present the Glendale Community College drama productions. Each student will be assigned to work in accordance with his interests and talents. The following phases of a producing theater are involved: acting, directing, playwriting, business administration, and publicity.

Rehearsal laboratory consists of 10-15 hours per week. Usually ten weeks are spent preparing a production. Two productions are attempted each semester.

109—STAGE MAKE-UP 1 UNIT

*Prerequisite:* None.

Instruction in the use and application of all types of stage make-up. Students from this course will compose the make-up crew for all College productions.

Theater Arts majors should have at least one semester of make-up.

Laboratory 3 hours.

110—STAGE MAKE-UP 1 UNIT

*Prerequisite:* Theater Arts 109.

A continuation of Theater Arts 109 with emphasis on unusual character make-up.

Laboratory 3 hours.

121—STAGE SCENIC DESIGN 2 UNITS

*Prerequisite:* Theater Arts 131 (3 units) or the consent of the instructor.

A practical course in instruction in the fundamentals of designing stage scenery. All the sets used in Glendale Community College productions are designed by this class. Some ability in art, costuming, or theater techniques is helpful.

Laboratory 3 hours.

122—STAGE SCENIC DESIGN 2 UNITS

*Prerequisite:* Theater Arts 121.

A continuation of Theater Arts 121 with more emphasis on originality of design.

Laboratory 3 hours.

123—COSTUME CONSTRUCTION (SEE NOTE) 2 UNITS

*Prerequisite:* Home Arts 117 and/or Home Arts 111.

(Home Arts 117 may be taken concurrently.)

*Note:* Students may earn a maximum of two units in one semester for a maximum total of eight units.

Designing and construction of group costumes for stage, ensembles, etc. This course includes the planning for and the buying of suitable materials, design and color schemes, the design and construction of costumes and accessories, arrangement and maintenance of the costume wardrobe. Students in this course design and make costumes for school dramatic programs.

Lecture 2 hours, laboratory 6 hours.

131—TECHNICAL STAGE (SEE NOTE) 1 UNIT

*Prerequisite:* None.

*Note:* The student may take Theater Arts 131 for 1-3 units each semester for a total of nine units. A proportionate amount of work will be required according to the number of units elected by the student and signed for at the time of registration.
A laboratory class in the construction, painting, and handling of scenery and scenic effects and in the operation of the stage. All technicians for staging the various Glendale Community College productions will be drawn from this class. It is required that class members have free time to devote to rehearsals and performances. Theater Arts majors should have at least one semester of technical stage. See also Theater Arts 105.

134—PRACTICAL AND THEORETICAL ASPECTS OF STAGE LIGHTING

Prerequisite: Theater Arts 131 (6 units) or the consent of the instructor.

This course is for the advanced student in technical theater. It is a course designed to develop the skills and techniques which are necessary for the student’s participation and appreciation of the art of stage lighting. It is hoped that the student will develop, as a result of familiarity with stage lighting practice, a sense of balance and rhythm with regard to color, light and shadow, and mass.

Laboratory 5 hours.

Vocational Nursing

Credit for all course work is granted by the College and is recorded on the official transcript; however, approximately 20 to 23 hours per week are scheduled in clinical areas of local hospitals.

101—NURSING FUNDAMENTALS 6 UNITS

Prerequisite: Acceptable Pre-registration Examination scores.

Note: Concurrent enrollment in Vocational Nursing 103, 105, 107.

Study leading to the understanding of psychological and physiological aspects which are common to all conditions of illness. Emphasis is placed on interpersonal, technical, and motor skills required for competency of a specific nursing task inventory.

Lecture-laboratory 130 hours, 162 clinical hours.

103—PHARMACOLOGY FOR NURSES 4 UNITS

Prerequisite: A satisfactory score on the Mathematics Proficiency Examination.

Note: Concurrent enrollment in Vocational Nursing 101, 105, 107.

Study leading to mastery of computational skills for the solution and dosages of drugs. Knowledge of federal and state regulation of drugs. Manual skills and knowledge of drugs, their classifications, desired effects, contraindications, and toxic effects for safe administering of medications by all routes except intravenous.

Lecture 54 hours, 54 clinical hours individually supervised followed by total patient care.

105—LIFE SCIENCES FOR HEALTH TECHNOLOGY I 2 UNITS

Prerequisite: Satisfactory score on Pre-registration Examinations.

Note: Concurrent enrollment in Vocational Nursing 101, 103, 105.

Study leading to the understanding of basic concepts in physical sciences. Study of the normal anatomical and physiological functioning of the human body. Application of broad general principles in caring for medical and surgical patients of all ages.

Lecture 36 hours.

107—MEDICAL AND SURGICAL NURSING I 5 UNITS

Prerequisite: Acceptance into the course.

Note: Concurrent enrollment in Vocational Nursing 101, 103, 105.

Study of pathological conditions of the human body which are amenable to medical and surgical correction in all age groups. Study and mastery of a task inventory of nursing procedures that are unique to specific body systems.

Lecture 36 hours, 162 clinical hours.

110—LIFE SCIENCES FOR HEALTH TECHNOLOGY II 2 UNITS

Prerequisite: Successful completion of Vocational Nursing 105.
VOCATIONAL NURSING

Study of the normal anatomical and physiological functioning of the human body. Study will include those systems not covered in Vocational Nursing 105.

Lecture 36 hours.

112—MEDICAL AND SURGICAL NURSING II 6 UNITS

Prerequisite: Successful completion of Vocational Nursing 107.

Intermediate study of pathological conditions of the human body amenable to medical and surgical correction. Study and mastery of a task inventory of nursing procedures that are unique to specific systems.

Lecture 36 hours, 216 clinical hours.

114—OBSTETRICS AND CARE OF THE NEWBORN 3 UNITS

Prerequisite: Completion of semester one and registration in Vocational Nursing 110, 112, 116, 118, 120.

Study leading to the understanding of the reproductive process with emphasis on the normal birth process, post partum care of the mother, and care of the newborn and the premature infant. Study of complications that threaten maternal and fetal mortality and psychological adjustments in family life.

Lecture 27 hours, 144 clinical hours.

116—INTRODUCTORY PEDIATRICS 3 UNITS

Prerequisite: Completion of semester one and registration in Vocational Nursing 110, 112, 114, 118, 120.

Study to understand the normal developmental process from infancy to adolescence; knowledge of common pathological childhood conditions with emphasis on contagious diseases and their control. Study of psychological problems that are common to adaptive and maladaptive behavior in the child.

Lecture 27 hours, 96 clinical hours.

118—BASIC NUTRITION 1 UNIT

Prerequisite: Completion of semester one and registration in Vocational Nursing 110, 112, 114, 116, 120.

The study leading to the understanding of basic nutritional requirements for health, and dietary modifications indicated for medical and surgical conditions. Survey of metabolic disturbances and corrective approaches.

Lecture 18 hours.

120—COMMUNITY HEALTH 1 UNIT

Prerequisite: Completion of semester one and registration in Vocational Nursing 110, 112, 114, 116, 118.

A study of federal, state, county, and volunteer agencies that regulate and maintain optimal health conditions in the community.

Lecture 18 hours.

130—MEDICAL AND SURGICAL NURSING III 7 UNITS

Prerequisite: Completion of semester one and semester two and registration in Vocational Nursing 132, 134.

An integrated study of patients with more complex medical and surgical problems in total patient care which includes administration of medications. The nursing problem approach is introduced for care of patients in intensive care units.

Lecture 36 hours, 308 clinical hours.

132—LEGAL AND ETHICAL ASPECTS OF NURSING 1 UNIT

Prerequisite: Completion of both semesters and registration in Vocational Nursing 130, 134.

Study of legal implications involved with licensure to perform a nursing service for the public and ethical considerations of professional conduct.

Lecture 18 hours.

134—MENTAL HEALTH AND EMOTIONAL ILLNESS 2 UNITS

Prerequisite: Completion of semester one and two and registration in Vocational Nursing 130, 132.

A study leading to the understanding of adaptive and maladaptive behavior in intrapersonal and interpersonal relationships, and to knowledge necessary for caring for emotional disturbances in patients of all ages.

Lecture 36 hours.
Welding

117—GENERAL WELDING  
3 UNITS

Prerequisite: None.

This course includes the principles and techniques involved in general welding, and the uses of metallic arc welding, inert arc welding and the studies of the basic metals. Emphasis is also placed on teaching techniques for industrial arts majors. The student is given experience in applying the principles by individual practice on a sequence of selected plates of various metals.

Lecture 1 hour, laboratory 5 hours.

118—GENERAL WELDING  
3 UNITS

Prerequisite: Welding 117.

This course carries on the advanced studies of metals and alloys in industry as: monel, stainless steel, titanium, beryllium, zirconium, aluminum and magnesium. Emphasis is placed on more heli-arc welding and the studies of atomic-arc welding and other new techniques of fabrication. Principles of pattern development are discussed and developed. Emphasis is also placed in techniques needed for certification of welders.

Lecture 1 hour, laboratory 5 hours.

Work Experience

See Cooperative Education
General Education Requirements for Graduation from Colleges and Universities

The requirements for college and university entrance with advanced standing vary significantly.

It is important for a student who plans to transfer to a four-year college or university at the close of his community college studies to decide early which college he will enter. Having decided this, he should plan his program in accordance with the requirements of that institution.

In general, a student who is eligible for admission to a university at the time of twelfth year graduation is admitted to that institution with full credit for all courses which are listed by that university as first two-year courses which he has completed at Glendale Community College, provided he has maintained a satisfactory record in all work taken since twelfth year graduation.

Ordinarily a student with high school deficiencies is not permitted to transfer to a higher institution in advanced standing until he has proven his ability to do college work. He may remove his high school grade and subject deficiencies by completing specific courses and maintaining a specific grade-point average.

Transfers to the University of California

An applicant from the community college is subject to regulations governing admissions in advanced standing. He may not disregard his college record and apply for admission in freshman standing. Applicants for admission to advanced standing must meet the requirements listed below. See the University of California UNDERGRADUATE ADMISSIONS CIRCULAR for details.

Admission in Advanced Standing

Effective Fall Quarter, 1973, eligibility for admission of advanced standing students who are California residents will be as follows:

1. Students who were eligible for admission as freshmen may be admitted to the University at any time after they have established a 2.0 grade point average at another college or university.*

2. Students who were ineligible for admission as freshmen may be admitted to the University after they have established a grade point average of 2.0 in 84 quarter (56 semester) units of college credit that is transferable to the University. * Upon completion of this work all subject and scholarship deficiencies in the high school record will be disregarded. Students who were ineligible for admission as freshmen only because they had not studied some of the required subjects in high school have two options by which they may become eligible. They may choose to take college-level courses in the subjects they lacked and become eligible upon completion of those courses with grades of "C" or better and establishment of a 2.0 grade point average. If such students choose not to make up deficiencies in high school subject requirements, they may be admitted upon completion of 84 quarter (56 semester) units of transferable work with a 2.0 grade point average.
Admission in Freshman Standing

Completion of the following subjects, and a "B" average in work completed in grades 10 to 12 with no grade less than "C" in these subjects in grades 9-12.

Examination Requirement: All freshman applicants must submit acceptable scores from the College Entrance Examination Board Tests listed below.**

If applying for admission to the fall quarter, tests should be taken no later than January of the senior year. The following tests are required:
1. Scholastic Aptitude Test (The Verbal and Mathematics scores submitted from this test must be from the same sitting.)
2. Three Achievement Tests, which include (a) English Composition, (b) Social Studies or Foreign Language, and (c) Mathematics or Science.

If student is a California applicant and his scholarship average in the required high school subjects is 3.0 to 3.09 inclusive, he must earn a total score of 2500 or higher in these tests. The scores of all applicants will be used to assist the University in counseling, guidance, and placement, and when possible, to satisfy the Subject A requirement.

(a) History (U.S. History or U.S. History and Civics) ....................... 1 unit
(b) English .................................................. 3 units
(c) Mathematics (college preparatory courses in subjects such as algebra, geometry, trigonometry, calculus, elementary functions, matrix algebra or courses combining these topics) ....................... 2 units
(d) Science (a year course in one laboratory science, taken in the 10th, 11th, or 12th grade) ....................... 1 unit
(e) Foreign Language (in one language) ................................. 2 units
(f) Additional .................. 1 unit

A year course in any laboratory science completed subsequent to the laboratory science used for (d) or Advanced Mathematics or Foreign Language. [If in a language other than that offered under (e)] 2 units will be required.

Complete details on admission to the University will be found in the University of California UNDERGRADUATE ADMISSIONS CIRCULAR.

*The grade-point average is determined by dividing the total number of acceptable units attempted into the number of grade points earned on those units. Courses completed with a grade lower than "C" may be repeated, but the units and grade points count each time the course is taken. Scholarship standard is expressed by a system of grade points and grade-point averages in courses acceptable for advanced standing credit in the University of California. Grade points are assigned as follows: for each unit of A, 4 points; B, 3 points; C, 2 points; D, 1 point; Inc. and F, no points.

**This requirement also applies to advanced standing applicants who have completed less than 12 quarter or semester units of transferable college credit.
There are three breadth requirements. The first, a two-course sequence in reading and composition, must be completed without delay.* Completion of the third breadth requirement, described below, may be spread over the four years of college attendance. In fact, until a student declares a major, he cannot define the fields from which he must select the courses to satisfy this breadth requirement.

All major programs offered in the College of Letters and Science are grouped under the fields of natural science, social science, and humanities. The student must complete a minimum of eight courses, each with a value of at least two semester units, in a field or fields outside the general area of his major subject. Courses required in the major which are listed below in a field other than that of the major may be included in the eight required courses, even if they are offered in the major department. Sequences such as Chemistry 101-102, which have a value of eight or ten semester units, will complete three courses for the requirement. A sequence of two one-unit courses will be accepted as one course.

1. General University Requirements:
   - English Subject A—Students completing English 101 in Glendale Community College with grade of “C” or better satisfy this requirement.

2. Reading and Composition:
   - English 101-102

3. Foreign Language:
   - French 101, German 101, Spanish 101

4. Eight courses outside the major field:
   a. Natural Science
      - Anthropology 101
      - Astronomy 101
      - Biology 101, 102, 112, 120, 121, 122, 123, 124
      - Chemistry 101, 102, 103, 105, 106, 110
      - Economics 107
      - Geography 101
      - Geology 101 or 110, 105
      - Mathematics 103, 104, 105, 106
      - Mineralogy 101
      - Paleontology 101
      - Physics 101, 102, 103, 105, 106, 110, 111

   b. Social Science
      - Anthropology 102, 103
      - Economics 101, 102, 105, 111
      - Geography 102, 105
      - Political Science 101, 102, 103, 110
      - Psychology 101, 102
      - Social Science 121, 131, 132
      - Sociology 101, 102

*Students who complete the major in history have satisfied this requirement, since history courses are listed in both social science and humanities fields.
c. Humanities
   Art 101, 102, 103, 106, 107, 108, 113, 114, 115, 116, 117, 118, 119, 120,
   121, 134, 135, 136, 137, 138, 139, 140, 142
   Theater Arts 103, 104
   English 105, 106, 109, 110, 122, 123, 125, 126, 198
   French 101, 102, 103, 104
   German 101, 102, 103, 104
   History 101, 102, 103, 104, 107, 108, 109, 110, 112, 117, 118, 119, 120
   Music 110, 111, 112, 113, 114, 120, 125, 126, 130, 131, 132, 133, 144,
   145, 151, 152
   Philosophy 101, 113, 114, 116, 117, 119, 120
   Spanish 101, 102, 103, 104
   Speech 101, 102
   *The second, a requirement in foreign language, usually satisfied in
   high school by completion of two years of one foreign language with
   minimum grades of "C." If not completed in high school, it may be
   satisfied in college.

University of California, Davis
College of Letters and Science

The requirements for junior standing is the completion of not less than 60
units of college work. Following are the breadth requirements for the A.B.
degree in the College.

a. General University Requirements:
   English Subject A—Students completing English 101 in Glendale
   Community College with grade “C” or better satisfy this requirement.
   American History and Institutions—Satisfied with "C" grades in American
   History and Government courses in high school.

b. An examination in English composition to be taken at Davis no earlier
   than the final quarter of the sophomore year.

c. Foreign Language
   For the A.B. degree: The equivalent of 8 units in one foreign language.
   High school work in foreign language, when successfully validated by one
   or more Glendale Community College courses or by examination taken at
   Davis, will satisfy this requirement in part or in whole.
   Four of these units may be applied as Humanities toward the area
   requirement.
   For the B.S. degree: Not required.

d. A total of 36 units from the Humanities, Social Sciences, and Natural
   Sciences areas with 14 units in each of two of the three areas.
   For the B.S. degree: Complete a minimum of 14 units from the Social
   Sciences and/or Humanities areas; 60 units in the Natural Sciences.

1. Humanities
   Art 101, 102, 103, 108, 113, 114, 115, 118, 119, 120, 121, 134, 135, 136,
   137, 138, 139, 140
   English 102, 105, 106, 109, 110, 122, 123, 125, 126, 198
   French 103, 104
   German 103, 104
   History 101, 102, 103, 104, 106, 107, 108, 109, 110, 112, 117,
   118, 119, 120
Music 110, 111, 112, 113, 114, 120, 125, 126, 130, 131, 132, 133, 141, 151
Philosophy 101, 113, 114, 116, 117
Spanish 103, 104
Speech 101, 102
Theater Arts 103, 104

2. Social Science
   Anthropology 102, 103
   Economics 101, 102, 105, 111
   Geography 102, 105
   Political Science 101, 102, 103, 105, 106, 110
   Psychology 101, 102
   Social Science 121, 131, 132
   Sociology 101, 102

3. Natural Science
   Anthropology 101
   Astronomy 101
   Biology 101, 102, 112, 120, 121, 122, 124
   Chemistry 101, 102, 103, 105, 106, 110
   Geography 101
   Geology 101, 105, 110
   Mathematics 103, 104, 105
   Mineralogy 101
   Paleontology 101
   Physics 101, 102, 103, 105, 106, 110, 111

University of California, Irvine

The Academic Plan. The academic plan combines the stability of major disciplines with the flexibility of interdisciplinary study. Academic units are not grouped under colleges in the conventional sense, but into five basic schools: Biological Sciences, Fine Arts, Humanities, Physical Sciences, and Social Sciences, all of which stress interdisciplinary work in one way or another. In addition to the five schools there are three unaffiliated programs offering majors in Comparative Culture, Information and Computer Science, and Social Ecology. The Office of Teacher Education offers the single and multiple subject credentials. The School of Engineering is a professional school for upper division and graduate students.

No specific courses or areas of study are required for breadth at Irvine, only a broad distribution of study outside one's major. Other requirements are determined by the schools, and departments. Credit by examination is offered in a number of fields, as are various grading options. Independent study is widely utilized and is encouraged as a vital procedure for learning.

University Requirements. English (Subject A) - English 101 or a satisfactory score on the CEEB Achievement Test in English Composition, the Advanced Placement Examination in English, or the College-Level General Examination in English Composition.
American History and Institutions - Completion of Social Science 131-132 or History 117-118, or History 110, or Economics 111, plus Political Science 101 or 105; passage of an examination offered by the University or satisfactory coursework in the high school (two semesters).

General Requirements. Two three semester unit courses in each of two schools other than the school of concentration, and four three semester courses in a third school other than the school of concentration. (Note: This is a graduation requirement, and need not be completed before transfer.)

School and Departmental Requirements

School of Biological Sciences

Physics 105-106, or Physics 101-102-103, Mathematics 103-104
Chemistry 101-102, 105-106
Biology 101-102, 112

School of Fine Arts

Art Department: Art 101, 102, 103, 113-114, 115, studio course, 3 courses in dance, drama, or music
Dance Department: Theater Arts 103-104 (at least 4 units), Health and Physical Education 172, 173, 174, 175
Drama Department: Theater Arts 103-104 (at least 4 units), Health and Physical Education 172-173
Music Department: Music 110-111-112-113, 125, 126, command of piano; three courses in fine arts outside of the departmental major; participation in chorus, orchestra, or chamber music each year.

School of Humanities

Foreign Language 101-102-103-104; English 101-102; one course each in history, philosophy, and literature; or History 107-108-109; English 101 or 102, and one course in literature, history, or philosophy.
Comparative Literature Department: English 101-102 or 109-110
English Department: English 101-102
Foreign Language and Literature Department: See the Irvine catalog.
History Department: One sequence from among: History 101-102; 117-118; 119-120; 107-108-109; 103-104
Philosophy Department: Philosophy 117

School of Physical Sciences

Chemistry Department: Chemistry 101-102, 103, 105-106; 32 units in mathematics, physics, or the biological sciences, including at least Mathematics 103, 104, 105, and Physics 101-102
Mathematics Department: Mathematics 103-104-105-106. One year of college study in French, German, or Russian.
Physics Department: Physics 101-102-103, Mathematics 103-104-105-106

School of Social Sciences

Mathematics 103-104-105; specialized departmental courses.

Pre-Engineering Curriculum

Required: Mathematics 103-104-105-106; Physics 101-102-103.
University of California, Los Angeles
College of Fine Arts

Requirements for the A.B. degree:
Completion of the approved major in the College of Fine Arts:

Major in
History of Art
Studio Art
Design

Major in Music
Composition and Theory
Ethnomusicology
History and Literature
Performance
Music Education

Systematic Musicology
Opera
Major in Dance
Major in
Theater
Motion Picture and
Television**
Major in Ethnic Arts
Interdisciplinary Studies

BREADTH REQUIREMENTS: College of Fine Arts (For those on the semester system)

A. American History and Institutions

B. English 101 (with grade of "C" or better) may not be taken pass/fail
36 units chosen from the following areas, including at least two courses in
one foreign language, and at least eight units in each of two other areas. Any
course applied on one of the four general requirements may not also be
applied on another of these requirements.

Exception: American History and Institutions may also apply on the Social
Science or Humanities requirement.

Four general requirement areas:

1. **Foreign Language**: At least two courses in one foreign language. Without
reducing the total number of units required for the Bachelor's Degree, high
school foreign language — first two years together equal one college
course, and the third year in the same language equals course two. No
more than the equivalent of eight semester units of foreign language taken
at the high school level will count toward the required 36 units.

2. **Natural Science**: Select any courses from Physical and Biological Sciences,
also Physical Anthropology, Physiological Psychology*, and Physical
Geography**: Anthropology 101**; Astronomy 101; Biology 101-102, 112, 120,
121, 122, 123, 124, 125, 130, 137; Business 111-112; Chemistry 101, 102, 103,
105, 106, 110; Science 131; Geography 101; Geology 101, 105 or 110;
Mineralogy 101; Paleontology 101; Physics 105, 106, 110, 111.

3. **Social Science**: Select any courses from Anthropology, Economics,
Geography, History, Political Science, Psychology, and Sociology.
Anthropology 102; Economics 101, 102, 105, 107, 111; Geography 102, 105;
History (all courses) except History 151. Political Science 101, 102, 103, 105,
106, 110; Psychology 101, 102, 110, 131, 193; Social Science 121, 131, 132;
Sociology 101, 102.
4. **Humanities**: Select any courses from Literature, Philosophy or the Arts, outside the student's major department. **Note**: Performance or studio courses do not meet this requirement.

Art 101, 102, 103, 106, 107, 108, 110**; Music 110, 111, 112, 113, 114, 115, 120, 125, 126; English 105, 106, 109, 110, 121, 122, 123, 125, 126, 198; Philosophy, all courses.

Individual departments in the College may require additional courses in any of the four areas as well as additional evidence of writing ability.

The College of Fine Arts admits only once a year, each fall. Applications must be on file with the Admissions Office by November 30 the previous year.

*Natural Science or Social Science but not both.

**M.P./T.V. Students must be juniors, with all Fine Arts Breadth requirements completed, and selected by the Department.

***Transfers as Theater Arts title—will apply on Humanities for Art majors but NOT for Theater Arts majors.

---

**University of California, Los Angeles**

**College of Letters and Science**

**BREADTH REQUIREMENTS**

For the purpose of these requirements, departmental and interdepartmental majors are classified in the following divisions:

<table>
<thead>
<tr>
<th>Humanities</th>
<th>Psychology</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Language</td>
<td>Psychobiology</td>
</tr>
<tr>
<td>Ancient Near Eastern Civilizations</td>
<td>Quantitative Psychology</td>
</tr>
<tr>
<td>Arabic</td>
<td>Zoology</td>
</tr>
<tr>
<td>Chinese</td>
<td>PHYSICAL SCIENCES</td>
</tr>
<tr>
<td>Classics</td>
<td>Astronomy</td>
</tr>
<tr>
<td>English</td>
<td>Biochemistry</td>
</tr>
<tr>
<td>Ethnic Arts</td>
<td>Cybernetics</td>
</tr>
<tr>
<td>French</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>German</td>
<td>Earth Physics and Exploration Geophysics</td>
</tr>
<tr>
<td>Greek</td>
<td>Geology</td>
</tr>
<tr>
<td>Hebrew</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Indo-European Studies</td>
<td>Mathematics-Applied Science</td>
</tr>
<tr>
<td>Italian</td>
<td>Mathematics-Computer Science</td>
</tr>
<tr>
<td>Japanese</td>
<td>Mathematics-System Science</td>
</tr>
<tr>
<td>Jewish Studies</td>
<td>Meteorology</td>
</tr>
<tr>
<td>Latin</td>
<td>General Physics</td>
</tr>
<tr>
<td>Linguistics</td>
<td>SOCIAL SCIENCES</td>
</tr>
<tr>
<td>Near Eastern Studies</td>
<td>Anthropology</td>
</tr>
<tr>
<td>Philosophy</td>
<td>Business-Economics</td>
</tr>
<tr>
<td>Portuguese</td>
<td>(for Business Teachers)</td>
</tr>
<tr>
<td>Russian</td>
<td>Economics</td>
</tr>
<tr>
<td>Scandinavian Languages</td>
<td>Geography</td>
</tr>
<tr>
<td>Spanish</td>
<td>Geography-Ecosystems</td>
</tr>
<tr>
<td>LIFE SCIENCES</td>
<td>History</td>
</tr>
<tr>
<td>Bacteriology</td>
<td>Latin American Studies</td>
</tr>
<tr>
<td>Botany</td>
<td>Political Science</td>
</tr>
<tr>
<td>Kinesiology</td>
<td>Sociology</td>
</tr>
</tbody>
</table>

Each student will choose to satisfy the requirements according to either Plan A or Plan B.
To meet a breadth requirement a transfer student may offer a 3-unit semester course which parallels a quarter course at UCLA. 1-unit semester courses are not acceptable for application on the breadth requirements. English 101 may not be used again here.

Plan A
The student will ordinarily take three courses in each of the three divisions outside the division of his own major.

The student will take three courses, excluding elementary and intermediate foreign language, in each of two divisions outside the division of his own major, and in addition complete course 5 in one foreign language. This new option is open to students in all divisions. A French major, for example, can choose to complete German 5 rather than meet either e or f or g requirement.

For the purposes of both options, except for the individual courses specified under e-h, courses in the student's major divisions required in preparation for the major may be used to satisfy these requirements. Courses in the history or appreciation of Art, Music, or Theater Arts are acceptable as Humanities.

General University and College Requirements
The completion of 60 semester units of acceptable college work is required for junior standing. Students are advised to meet the following general requirements for the Bachelor of Arts Degree so far as possible within these 60 units.

a. General University Requirements:
   Subject A. Every undergraduate entrant must demonstrate an acceptable ability in English composition. This requirement may be met by (1) achieving a grade of 5, 4, or 3 in the College Entrance Examination Board (CEEB) Advanced Placement Examination in English, or (2) achieving a satisfactory score in the CEEB Achievement Test in English composition. Students completing English 101 in Glendale Community College with a grade of "C" or higher satisfy this requirement.

b. American History and Institutions. Completion of requirements set by Glendale Community College meets the State requirement.

c. English 101 with a grade of "C" or better.

d. Physical Sciences
   Astronomy 101
   Business 111-112
   Chemistry 101, 102, 103, 105, 106, 110
   Geography 101
   Geology 101, 105, 110
   Mathematics 103, 104, 105, 106
   Mineralogy 101
   Paleontology 101 (on Plan B only)
   Physics 101, 102, 103, 105, 106, 110, 111
   Science 131

e. Life Sciences
   Anthropology 101
   Biology 101, 102, 112, 120, 121, 122, 123, 124, 125, 130, 137
   Paleontology 101 (on Plan A only)
f. Social Sciences
   Anthropology 102, 103
   Economics 101, 102, 105, 111
   Geography 102, 105
   Political Science 101, 102, 103
   Psychology 101, 102, 110, 131
   Sociology 101, 102

g. Humanities
   Art 101, 102, 103, 106, 107, 108, 110
   English 102, 105, 106, 109, 110, 122, 123, 125, 126
   Music 120, 125, 126
   Philosophy 101, 113, 114, 116, 117, 119, 120
   Speech 101, 102
   Foreign Language (Any student wishing to apply Foreign Language on the breadth requirements should consult the College of Letters and Science at UCLA.)

Note: An appropriate 2 semester unit course will not displace a full 4 quarter course on the requirement. On Plan A a student must have at least 12 quarter units (8 semester units) in each division. On Plan B a student must have 28 quarter units (nearest equivalent 20 semester units) in one division outside the major plus 4 quarter units (3 semester units) in each of two other divisions or 8 quarter units (at least 6 semester units) in one division.

Plan B.
The student will take seven courses in any division outside the division of his own major, and either one course in each of the two remaining divisions or two courses in one of the remaining division. The divisional requirements may be satisfied according to the e-h list.

No courses in foreign language will apply on Plan B unless the student has passed course 5 in one foreign language at the college level. If the student has completed course 5 in one foreign language, then all elementary and intermediate foreign language courses taken at the college level are acceptable for satisfaction of this requirement under the division of humanities.

Courses required for the major or in preparation for the major may not also be used to satisfy this requirement.

University of California, Riverside

There now exist on campus four colleges and one division offering undergraduate work and awarding the baccalaureate degree. For administrative purposes, academic departments assigned to them are:

College of Biological and Agricultural Sciences
Biochemistry
Biology
Entomology
Environmental Sciences
Paleobiology

Plant Science
Psychobiology
Soil Science
Statistics
Systems Ecology
College of Humanities
Ancient Civilization
Art History
Art (Studio)
Classics (Greek and Latin)
Dance
English
French
Interdepartmental majors: Comparative Literature, Religious Studies, Humanities

College of Physical Sciences
Applied Science
Chemistry
Geography
Geological Sciences
Geophysics
Mathematics
Physics
Interdepartmental majors: Paleobiology; Physical Sciences

College of Social and Behavioral Sciences
Anthropology
Economics
Political Science
Psychobiology
Psychology
Sociology

Division of Undergraduate Studies
Physical Education
Interdepartmental majors: Latin-American Studies; Linguistics; Mexican-American Studies, Asian Studies, American Studies, and Liberal Studies.

A teaching minor is offered by the Department of Physical Education, although there is no undergraduate major.

Students who are undecided on a major register in the Division of Undergraduate Studies, where special counseling is provided. They may earn a general A.B. degree in the Division, or may transfer to one of the disciplinary colleges. Also, students may transfer from one disciplinary college to another or may complete a double major in two colleges.

General University Requirements:
English Subject A—Students completing English 101 in Glendale Community College with grade “C” or better satisfy this requirement.
American History and Institutions—History 117-118 in Glendale Community College satisfies this requirement. May also be met by one high school unit in American History or one-half high school unit in American History and one-half high school unit in civics or American government.

Students are advised to consult the general catalog for courses required for a specific major.

**College of Biological and Agricultural Sciences**

Subject Requirements for Bachelor of Arts Degree

English 101-102: 6 units. If met by examination, 6 units are added to the humanities and social sciences requirement.

Foreign Language: 12 units, (a) in one language by completing course 3 or equivalent, or (b) by completing 8 units or equivalent in each of two languages. (Exception: Biology majors must complete course 3 in a single foreign language.) Completion of four years or equivalent of one foreign language in high school will meet the College requirement. Students who choose option (b) may satisfy the requirement for one of the two languages by completing two years of that language in high school.

Humanities and Social Sciences: 22 units, with no fewer than 6 units in each. Applicable courses in the Humanities are: Art 101, 102, 103, 106, 107, 108, 110; (Performance courses for which credit is granted to the extent of four units: Art 113, 114, 115, 116-117, 118-119, 120-121, 126-127-128-129, 130, 134-135, 136-137, 138-139, 140, 142, 144-145, 147-148-149-150); English 105, 106, 109, 110, 122, 123; Music 110, 111, 112, 113, 114, 115, 120, 125, 126; (Performance courses for which credit is granted to the extent of four units: Music 130, 131, 132, 133, 135-136, 140, 141, 142, 143, 144, 145, 150, 151, 152, 160, 161, 162, 163, 165, 166, 170); Philosophy 101, 113, 114, 116, 117, 119, 120; Applicable courses in the Social Sciences are: Anthropology 102; Economics 101, 102, 105; Geography 102; Political Science 101, 102; Psychology 101, 102; Sociology 101, 102; Social Science 121, 131, 132.

Natural Sciences: 12 units.

Subject Requirements for Bachelor of Science Degree

English 101-102: 6 units. If met by examination, 6 units are to be added to the Humanities and Social Sciences requirement; 12 units (see above)

**College of Humanities**

Subject Requirements for the Bachelor of Arts Degree

Proficiency in the writing of expository English prose to level 3 of the College Advanced Placement Test or its equivalent, by examination or by course (English 101-102 or equivalent from a community college will meet this requirement).

Proficiency in the reading of a foreign language through the level of course 3 or equivalent. May be met by proficiency examination in reading, by completion of four years of the same language in high school, by completion of course 3.
A minimum of 19 units outside the College of Humanities, including at least 6 units in biological or physical sciences or mathematics, and excluding physical education courses.

A minimum of 32 units in the College of Humanities outside the chosen major (including all units used to satisfy the English proficiency and foreign language requirements).

**College of Physical Sciences**

Subject Requirements for the Bachelor of Arts Degree

English: 6 units. Normally will be satisfied by English 101-102 but other non-remedial English courses may be substituted.

Foreign Language: 12 units. This requirement may be fulfilled in one language by completing course 3 or demonstrating equivalent proficiency, or by completing 8 units or by demonstrating equivalent proficiency in each of two languages; two years of the same language in high school will complete one-half of the requirement.

Humanities and Social Sciences: 22 units, with no fewer than 6 units in each. (see above) Not to include English 101-102, foreign languages through course 3, or performance courses.

Natural Sciences: 12 units excluding mathematics and cultural geography courses.

Subject Requirements for the Bachelor of Science Degree

*The Bachelor of Science Degree is authorized for majors in Applied Science, Chemistry, Geophysics, Geology, Mathematics, Paleobiology, and Physics.*

At least 44 units in courses outside of Chemistry, Physical Geography, Geology, and Physics of which at least 16 units, including at least 6 units of English shall be in the humanities and/or social sciences. (see above)

**College of Social and Behavioral Sciences**

Subject Requirements for the Bachelor of Arts Degree

A minimum of 36 units outside the College of Social and Behavioral Sciences. (see above) No Physical Education courses may be counted toward the satisfaction of the above 36 unit requirement.

Subject Requirements for the Bachelor of Science Degree

*The Bachelor of Science Degree is authorized for majors in Anthropology, Economics, Sociology, Social Relations and Social Environmental Science.* A minimum of 28 units outside the College of Social and Behavioral Sciences. (see above) No Physical Education courses may be counted toward the satisfaction of the above 28 unit requirement.

**Division of Undergraduate Studies**

Subject Requirements for the Bachelor of Arts Degree

A minimum of 54 units outside the Division of Undergraduate Studies including at least 6 units in each of three colleges. Students not declaring a major will register in this division.
Choose two groups under Section A and two under Section B, and complete two semesters in one subject in each of the four groups chosen. No work required in the remaining two groups unless demanded by the major.

SECTION A
Social Sciences Group. Two courses from one subject:
Anthropology 101, 102, 103
Economics 101, 102, 105, 111
Geography 101, 102, 105
History 106, 110, 117, 118
Political Science 101, 102, 103, 105, 106, 110
Psychology 101, 102, 110
Social Science 121, 131, 132
Sociology 101, 102

Mathematical Sciences Group. Two courses from:
Business 111, 112
Mathematics 103, 104, 105, 106, 130, 138

Natural Sciences Group. Two courses from one subject:
Biology 101, 102, 112, 120, 121, 122, 123, 124, 125, 130, 137
Chemistry 101, 102, 103, 105, 106, 110 (no credit for Chemistry 110 following Chemistry 101.)
Geology 101, 105, 110; Mineralogy 101
Physics 101, 102, 103, 105, 106, 110, 111

SECTION B
Fine Arts Group. Six or more units from one subject:
Art 101, 102, 103, 106, 107, 108, 110—or one of the preceding plus an additional 3 or more units from:
Music 110, 111, 112, 113, 114, 120, 125, 126—or one of these plus 3 or more units from: Music 115, 130, 131, 132, 133, 135, 136, 138, 140, 141, 142, 143, 144, 145, 150, 151, 152, 160, 162, 163, 165, 166, 170
Photography 101, 102, 103, 105, 107

Humanities Group. Six units from one subject:
English 101, 102, 105, 106, 109, 110, 122, 123, 125, 126, 193, 194
History 107, 108, 109
Philosophy 101, 113, 114, 116, 119, 120

Foreign Language Group. One year in any foreign language, at the college level. Examples: French (or other language) 101 and 102, 102 and 103, or 103 and 104.
The educational philosophy of Revelle College is based upon the idea that today's citizen benefits by an understanding of the fundamental concerns, methods, and powers of the humanities and arts, the social and behavioral sciences, and the physical and biological sciences. The first two years contain work in all of these fields, and all students pursue essentially the same sequence of courses. At the end of that time, the student will have been exposed to the real essence of these areas of study, and will be able to make a wise choice of his major; he will also be prepared to enter upon any major offered by Revelle College.

Units

a. Humanities ................................................................. 12
   1. English 101-102, 105, 106, 109, 110, 122, 125, 193, 194
      (English 101-102 recommended.)
      History 107, 108, 109
      Philosophy 101, 113, 114, 116, 119, 120

b. Physical Sciences ....................................................... 10
   1. Chemistry 110 and 101, or 101 and 102, 105*, 106*
      Physics 105 and 106, or 111 and 101 or 101 and 102, 103*

c. Biology—one course from among: .................................. 4
   1. Biology 101*, or 122

d. Mathematics ............................................................. 10
   1. Mathematics 103-104, 105*, 106*

e. Social Sciences ......................................................... 6
   1. Six units from among:
      Anthropology 101, 102, 103
      Economics 101, 102, 105, 111
      History 110, 117, 118
      Political Science 101, 102, 103, 105, 106, 110
      Psychology 101, 102, 110, 131
      Social Science 121, 131, 132
      Sociology 101, 102

f. Foreign Language ........................................................ 4-16
   1. Through Language 103

g. Fine Arts ................................................................. 3
   Art 101, 102, 103, 106, 107, 108, 110, 113, 114, 115, 116, 117, 118,
   119, 120, 121, 134, 135, 136, 137, 138, 139, 140, 142, 143, 144, 145
   English 126
   Music 110, 111, 112, 113, 114, 115, 120, 125, 126, 170
   Photography 101, 102, 103, 105, 107
   Theater Arts 103, 104, 105
h. Electives

All transferable courses not listed here will be applied as free electives toward the degree, with the exception of physical education and certain home economics courses. These are graduation requirements, NOT entrance requirements; the student who is eligible to enter the University may do so whether or not the requirements have been completed. But if he lacks too much in preparation for the major, graduation may well be delayed.

*Recommended as electives for science majors.

University of California, San Diego
Third College—

COMPOSITION. 3 units in English Composition.

   English 101

COMMUNICATIONS. This is an unusual course, designed to meet the specific needs of the Third College program. The requirement may be met after transfer, without slowing the student's progress toward the degree.

MATHEMATICS: Two courses (6 or more units) from:

   Business 111, 112
   Mathematics 103, 104, 105, 106, 130, 138

SCIENCE AND TECHNOLOGY. Three courses, in any combination, from among:

   Astronomy 101
   Biology 101, 102, 112, 120, 121, 122, 123, 124, 125, 130, 137
   Chemistry 101, 102, 103, 105, 106, 110 (no credit for 110 following 101)
   Geology 101, 105, 110
   Mineralogy 101
   Paleontology 101
   Physics 101, 102, 103, 105, 106, 110, 111
   Science 131

THIRD WORLD STUDIES. Two courses (6 or more units total) from among:

   Anthropology 102
   Economics 101
   Geography 105
   History 119, 120
   Philosophy 113, 114
   Political Science 102, 103, 110
   Social Science 121
   Sociology 101, 102

URBAN AND RURAL STUDIES. This too is an unusual course, and the requirement may be satisfied after transfer as an upper division course, without slowing the student's progress toward the degree.
Fourth College will open in the Fall Quarter, 1974. Some details of the program are still to be announced, but in general it will look like this:

WRITING. Two courses, one in the Freshman year, one in upper division.

FORMAL REASONING. Two courses, chosen from Mathematics, Logic, Computer Language.

MAJOR. Same as in the other three Colleges; 12 to 15 courses in upper division, following upon adequate preparation in lower division.

MINORS. Two minors to be completed, one of them in a field not closely related to that of the major. At least three courses in each minor must be in upper division. Any subject taught by a UCSD department may be followed as a minor; in addition, a number of interdisciplinary career-oriented minors will be announced.

ELECTIVES—to bring the total number of courses to 45, or 180 quarter units. (NOTE: to convert semester units to quarter units, multiply semester units by 1.5. Thus 120 semester units are equal to 180 quarter units; 56 semester units equal 84 quarter units, etc.)

The main thrust in Fourth College will be to require a great deal of breadth, but to allow the student a great deal of flexibility in working out a program with the help of the faculty and the advisors. This program will be of particular interest to students with a leaning toward a specific career or group of career possibilities.

<table>
<thead>
<tr>
<th>University of California, Santa Barbara College of Letters and Science— Bachelor of Arts</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. English 101-102 (Two courses)</td>
<td>6</td>
</tr>
<tr>
<td>b. Natural Science and Mathematics (Three courses)</td>
<td>9-12</td>
</tr>
<tr>
<td>1. Two courses from: Astronomy 101; Biology 101, 102, 112, 120, 121, 122, 123, 124, 125, 130, 137; Chemistry 101, 102, 110; Physics 101, 105, 110; Geology 101, 105, 110; Mathematics (any transfer course—except Mathematics 138)</td>
<td></td>
</tr>
<tr>
<td>2. One course from above or from: Anthropology 101, 103; Biology 124; Geography 105; Science 131</td>
<td></td>
</tr>
<tr>
<td>c. Fine Arts (Two courses)</td>
<td>6</td>
</tr>
<tr>
<td>Art 101, 102, 103, 106, 107, 108; Music 120, 125, 126</td>
<td></td>
</tr>
<tr>
<td>d. Humanities (Three courses)</td>
<td>10</td>
</tr>
<tr>
<td>1. Literature, English 105, 106, 109, 110, 122, 123, 125</td>
<td></td>
</tr>
<tr>
<td>2. Philosophy 101, or 119 and 120; Foreign Language (second year college level); Speech 101</td>
<td></td>
</tr>
<tr>
<td>e. History, Social Sciences and Psychology (Three courses)</td>
<td>9-12</td>
</tr>
<tr>
<td>1. Any course from the following: Anthropology 103, 104</td>
<td></td>
</tr>
<tr>
<td>Economics 101, 102, 105, 111</td>
<td></td>
</tr>
<tr>
<td>Geography 102</td>
<td></td>
</tr>
<tr>
<td>History: Any course except History 151</td>
<td></td>
</tr>
<tr>
<td>Political Science: Any course except Political Science 106, 151</td>
<td></td>
</tr>
<tr>
<td>Psychology 101</td>
<td></td>
</tr>
<tr>
<td>Sociology 101, 102</td>
<td></td>
</tr>
</tbody>
</table>
2. Two additional courses from above or from:
   Anthropology 102, 103
   Social Science 121
   Sociology 101, 102

In fulfilling these requirements, the following restrictions are applied to transfer courses:
1. Courses must consist of three or more quarter units.
2. Courses in the subject of the student's major may not fulfill General Education requirements b-e. (For example, a student majoring in History may not use History courses toward requirement e.) This stipulation applies to departmental majors only. For interdepartmental majors, all courses in the major will apply to the appropriate General Education requirement.

The colleges at Santa Cruz are designed to strengthen undergraduate education by making natural the communication—between student and teacher, between students, and between fields—that is essential to the process and enjoyment of learning in a university.


Although every college is devoted to the liberal arts, no attempt is made to guarantee in each a perfect academic balance. Each develops its own intellectual center of gravity. This intent reflects a conviction not that the world of intellect can be readily divided, but that precisely because it cannot one can honor, without sacrifice of liberal education, a faculty's instincts to approach it from a variety of directions.

The first three colleges sought to establish, for subsequent development at Santa Cruz, a solid footing in the major areas: the humanities, the social sciences, and the natural sciences. The fourth focuses on problems of poverty at home and underdevelopment abroad. The fifth college addresses the arts, the fine arts and the popular arts in the twentieth century, with special attention to both creativity and the identification of talent. See College VII and VIII Statement in the 1972-73 catalog. The course of study a student pursues, however, will in no way be restricted by the emphasis his college may develop. Where such emphasis evolves, it will be in the context of a liberal arts college.

The colleges are coeducational and residential. Roughly 65 per cent of the undergraduates at Santa Cruz live in a college. For others who commute from home or quarters in town, the colleges undertake to provide special facilities. Some college faculty live within the college; most have their offices there. Graduate students may be affiliated with a college.
Teaching is carried on primarily in seminar and lecture rooms provided in the colleges. However, teaching that requires highly specialized kinds of space is housed in central facilities serving all the colleges. Science laboratories, accordingly, are centralized.

Each college library is operated informally by the college's faculty and students. Its collections supplement the resources of the main University Library.

Leadership of each college is vested in a Provost, assisted by one or more Senior Preceptors and by the other Fellows of the college. Together, they are responsible for shaping the program and life of the college.

The following statements are prepared by the Provosts of the five colleges that will be in operation during the 1974-75 academic year. They should be read in the light of three facts concerning college membership:—Major programs are governed by campus-wide guidelines; that is to say, a student majoring in history will do so within the same framework whether he is a member of Cowell College or of Crown College.

Although the eight colleges have different orientations they all have Fellows drawn from all fields. It is not the intention of the academic plan to have all students majoring in the humanities become members of Cowell, or all social science majors members of Stevenson, and so forth. On the contrary, it is intended that all colleges should have students from all disciplines.

Finally, in membership in a college there are other factors involved in addition to the academic program. These factors are impossible to describe in the pages of a catalog; they include such things as the "personality" of the faculty and of the college community as a whole, modes of government, and the college's architecture. Information and impressions concerning these matters can best be found in conversation with students who are already here, or by visiting the campus—especially while classes are in session.

**Humanities.** Three courses (five quarter units each) or the equivalent*

**Natural Sciences.** Three courses (five quarter units each) or the equivalent, offered by the Boards of Studies in Astronomy, Biology, Chemistry, Earth Sciences, Mathematics,** or Physics, or by the Division of Natural Sciences. Any number may be used.

**Social Sciences.** Three courses (five quarter units each) or the equivalent. Administration of these requirements will be governed by the following policies:

Students entering the University of California at Santa Cruz as freshmen must satisfy the breadth requirements of this campus before graduation. Students entering with three or more quarters of advanced standing from other campuses of the University must satisfy the Santa Cruz breadth requirements unless, at the time of transfer, they have entirely satisfied the breadth requirements of the campus from which they are transferring.

*Any level of Foreign Language
**Business 111, 112 may be selected in the place of a mathematics course.
Claremont Men's College  General Requirements—All Majors

a. Humanities
   Required:
   1. English 101-102
   2. Additional Humanities Courses:
      Philosophy 101, 102, 113, 114, 116
      Art 101, 102, 103, 108
      English 105, 106, 109, 110, 122, 125, 126
      Music 120, 125, 126

b. Social Science
   Required:
   1. Economics 101-102
   2. History 101-102 or 107-108-109
   3. Political Science 101, or History 117-118
   4. Psychology 101

c. Science and Mathematics
   Required:
   From 1, 2 and 3 choose two laboratory courses.
   1. Chemistry 101, 102, 110
   2. Physics 101, 102, 103, 105, 106, 111
   3. Biology 101, 102, 122, 124
   4. Mathematics 103, 104, 105, 106

d. Major Requirements: Major requirements differ with the discipline, and may be obtained from the Registrar's Office.

e. Electives as needed to complete 60 units.

Loyola Marymount University of Los Angeles

Transfers are admitted each semester—fall and spring.

Students admissible as freshmen to Loyola Marymount University at the time of their graduation from high school, may be admitted to advanced standing at any semester if they have at least a “C” average at the last college attended and at least a “C” average for all previous college work.

Students inadmissible as freshmen at the time of their graduation from high school, may be admitted to advanced standing if they have completed at least the equivalent of 30 semester units of college level work with at least a “C” plus average.

Many courses are acceptable for transfer credit, but the following pattern satisfies the baccalaureate degree requirements for the College of Liberal Arts.

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Communication Skills</td>
</tr>
<tr>
<td>English 101</td>
</tr>
<tr>
<td>Speech 101 or one semester of language</td>
</tr>
<tr>
<td>b. Fine Arts</td>
</tr>
<tr>
<td>Art 101, 102, 103, 106, 107, 108</td>
</tr>
<tr>
<td>Music 110, 120</td>
</tr>
<tr>
<td>c. History</td>
</tr>
<tr>
<td>Select from any two three-unit history courses.</td>
</tr>
</tbody>
</table>
d. Literature/Psychology ................................................................. 6
   English 102, 105, 106, 109, 110
   Psychology 101, 102, 131

e. Philosophy .................................................................................. 6
   Philosophy 101 or 116 or 117 or 120 and 113
   Philosophy 113—Note: will accept as religious studies to satisfy requirement of one lower division religious studies course.

f. Natural Science ........................................................................... 8
   Two college-level science courses or a combination of one college-level mathematics course may be used to fill this requirement.
   Anthropology 101
   Astronomy 101
   Biology 101, 102, 112, 120, 121, 122, 123, 124, 130, 137
   Business 111, 112
   Chemistry 101, 102, 103, 105, 106, 110
   Engineering 110
   Geology 101, 110
   Mathematics 103, 104, 105, 106
   Mineralogy 101
   Paleontology 101
   Physics 101, 102, 103, 105, 106, 110, 111
   Science 131

g. Social Science ............................................................................. 6
   Two three-unit courses must be outside the major field
   Anthropology 102, 103
   Economics 101, 102, 105, 111
   Geography 102, 105
   Police Science 106, 107, 110, 118
   Political Science 101, 102
   Sociology 101, 102
   Social Science 121, 131, 132

   Note: Business majors must complete Business 101, 102, 111, 112, 123, 151, 161, 162; Economics 101, 102, 107; English 101; Speech 101; History 110 or 117; Philosophy (same as e above); a three-unit course in literature (English 102, 105, 106, 109, 110); and a three-unit course in a behavioral science (Psychology 101, 102, 131; Sociology 101, 102).

   Engineering majors must complete Chemistry 101, 102, Engineering 101, 103, 108, 110; Mathematics 103, 104, 105, 106; Physics 101, 102, 103; English 101 and a three-unit course in literature; History 110 or 117; Philosophy (same as e above); and three non-technical electives, preferably from social sciences listed under g above.

   Science/Mathematics students are encouraged to consult their counselor in conjunction with the Loyola Marymount University catalog.

Mount St. Mary's College

The following courses will satisfy General Education Requirements:
a. American History and Institutions
   History 110; 117-118
   Political Science 101 or 105
   Social Science 131-132
b. English ................................................................. 6 units
   English 101, 102, 120

c. Humanities: ............................................................. 9 units
   Chosen from: Fine Arts, Literature, History.

d. Philosophy: ........................................................... 9 units
   Any course in philosophy, at least two must be lower division.

e. Theology: .............................................................. 9 units
   (Non-Catholics may take theology courses or may substitute courses on an
   annually published list of religious studies.

f. Art Form Course: ..................................................... 3 units
   Art 101 or 102
   Music 120, 125 or 126

g. Psychology: ........................................................... 3 units
   Psychology 101

h. Social Science: ......................................................... 9 units
   Economics 101
   History 101, 102, 103, 104, 106, 107, 108, 109, 110
   Political Science 101, 105
   Social Science 131, 132
   Sociology 101
   Anthropology 102, 103

i. Natural Science .......................................................... 9 units
   Physical Science or Mathematics:
   Science 131
   Mathematics 138, 150

j. Biological Science (any course) .................................... 4 units

k. Foreign Language ..................................................... 12 units
   (May complete this requirement by examination.)

Major Requirement: Consult Mount St. Mary's College Catalog for major requirements. Specific requirements for a particular major are designated by the Major Department.

Occidental College

Students considering transfer into either the sophomore or junior year are strongly urged to check with the Admissions Office for further information if needed. They should refer also to the official Occidental College Catalog for information concerning prerequisites for proposed majors.

Transfer Students should take the following courses to establish equivalence of lower division courses at Occidental College:

a. English ................................................................. 6 units
   No English is required. However, competence is insisted upon. Periodic
   checks are made on the writing performance of all students throughout
   their four years of undergraduate work. Whenever it is felt that writing
   is falling below standard, students are remanded to an English class.
   To establish this competence, a course in Freshman English is
   recommended by a counselor.
b. Foreign Language* ................................................................. 12

c. American Institutions** ......................................................... 5-8
   History 117-118; or Political Science 101 or 105 and History 110 or
   Economics 111; Political Science 106 with any of the above or Social
   Science 131-132.

d. General Studies
   *Freshmen: Choose two courses from the following list but not more
   than one from the Natural Sciences. Social Sciences, or Humanities to
   meet two of the six General Studies requirements necessary for
   Sophomore transfers. Four additional courses must be taken at
   Occidental College. (Note: Two courses required in Natural Sciences for
   Junior transfers).

   **Natural Sciences:
   Anthropology 101; Biology 101; Geology 101 or 110; Chemistry 101
   or 110; Physics 105 or 110 or 111; Science 131.

   Social Sciences:
   Anthropology 102, 103; Economics 101-102; History 101-102 or 107-108,

   Humanities:
   Art 101, 102, 103, 108; Music 120, 125; English 105-106, 109-110;
   Philosophy 113-114, 119-120.

   Sophomore: Must take four courses of six General Studies requirements.
   Two additional courses must be taken at Occidental College. Choose from
   the General Studies courses listed above: two courses from the
   Natural Sciences, one course from the Social Sciences and one course
   from the Humanities.

* A score of 550 or better in a Foreign Language on the CEEB Achievement
   Test will exempt a student from the Foreign language requirement.
** Applies only to students who will be teaching credential candidates.

Pacific Oaks College

The two-year upper division program leads to the Bachelor of Arts Degree in
Human Development, or in the Behavioral Sciences. Admission in junior
standing requires completion of not less than 60 units of acceptable college
work with at least a "C" grade average.

Glendale Community College courses which satisfy the lower division general
education requirements are listed below:

a. Oral and Written Expression .................................................. 9
   English 101; English 102 or Speech 101, 102
   English 103, 105-106, 109-110, 120, 121, 122, 123, 125, 126

b. Natural Sciences and Mathematics ..................................... 9
   At least one semester of a laboratory science is required.
   1. One of the following:
      Biology 101, 120, 121, 122
2. One of the following:
   Any course in Chemistry or Physics Science 131

3. Astronomy 101
   Biology 102, 112, 137
   Economics 107
   Geography 101, 102
   Geology 101, 110, 105
   Mathematics (any course numbered through 138)
   Mineralogy 101
   Paleontology 101

c. Social Sciences .......................................................... 5
   Required: one course from each group listed.
   1. Psychology 101
   2. Sociology 101 or Anthropology 102
   3. One or more additional courses selected from:
      Anthropology 102, 103
      Economics 101, 102, 111
      Geography 105
      History (Local, State, or U.S.)
      Political Science
      Psychology 102
      Social Science 131, 132
      Sociology 101, 102

d. Humanities ............................................................... 5
   1 and 2 required.
      Music 125-126
      Philosophy 119-120
   2. Art 113, 114, 115; Music 110, 111, 112, 113, 120; Philosophy 113-114;
      second-year foreign language (103, 104).

e. Electives
   A maximum of 15 units of lower division electives taken in courses other
   than those listed in the above areas with the addition of health and
   physical education (maximum 4 units) and foreign language will be
   accepted.

To meet minimum requirements for Children’s Center Permit: Home

Pepperdine University, Los Angeles

a. Communication .......................................................... 3
   English 101

b. Ethnic Studies .......................................................... 3
   Social Science 121
c. History ................................................................. 6
   History 110 and Political Science 101, History 117-118

d. Humanities ......................................................... 6
   Art 101, 102, 103, 108
   English 109 or 110
   Music 120, 125, 126
   Philosophy 101, 113, 114, 116, 119, 120

e. Social Science .................................................... 6
   Economics 102
   History 106, 107, 108, 109
   Political Science 101, 102, 103, 110
   Psychology 101
   Social Science 131 or 132
   Sociology 101

f. Natural Sciences and Mathematics .......................... 7
   Anthropology 101
   Astronomy 101, Mineralogy 101
   Biology 101, 102, 121, 122, 124, 137
   Chemistry 101, 102, 110
   Geology 101 or 105
   Mathematics 101, 102
   Physics 105, 106, 110
   Science 131, Paleontology 101, Geography 101

g. Physical Education ............................................... 2
   Health and Physical Education 101, 110, or two units of physical education activity.

h. Religion
   To be taken at Pepperdine (4 units required of those transferring with 60 units or more; 6 units with less than 60)

i. General Studies .................................................. 3
   A course in Great Issues to be taken in the upper division at Pepperdine.

Note: The number of units acceptable for transfer in Junior Standing is 60-70. Students who have not completed courses listed above may be accepted with a view of completing the requirements at Pepperdine.

Pepperdine University, Malibu

a. Communication ................................................ 12
   English 101
   Elective—Speech 101, Foreign Language

b. Fine Arts ......................................................... 4
   Art 101, 102, 103, 108
   Music 120, 125, or 126

c. Humanities ...................................................... 12
   History 107, 108, 109; English 102, 105, 106, 109, 110
d. Natural Science
Astronomy 101
Biology 101, 102, 112, 122, 131, 137
Chemistry 101, 110
Geology 101, 105, 110
Philosophy 117
Physics 105, 106, 110
Mathematics 101, 102

e. Religion
To be taken at Pepperdine (4 units required of those transferring with 60 units)

f. Social Science
History 110 and Political Science 101;
History 117-118 or Social Science 131-132
Social Science 121, Economics 101;
Psychology 101, Sociology 101

g. Physical Education
Activity Courses

h. Interdisciplinary
To be taken at Pepperdine University

---

**Stanford University**

University Requirements

a. Writing
Two courses are required: English 101 and 102.

b. Humanities and Fine Arts
Three courses are required. These are to be selected from beginning courses in the subject areas. Foreign language courses are included among the eligible ones.

c. Social Sciences
Three courses are required. History courses are included. The beginning courses in Anthropology, Communications, Economics, Geography, Political Science, Psychology, Sociology, and many introductory History courses are included among the eligible ones.

d. Mathematics 103-104, 105-106; Natural Sciences: Biology 101, 102;
Chemistry 101, 102, 110; Physics 101, 102, 103, 105, 106 and Technology.
Three courses are required.

---

**United States International University, San Diego**
**California Western Campus**
**Elliott Campus**

a. English
English 101-102

b. Mathematics
Select two courses:
Mathematics 101, 102, 103, 104, 105, 106

c. Foreign Language
Proficiency or completion of:
Three semesters of any one language
d. History and Social Science
   Select one course from three different fields:
   Economics 101, 102
   History 102, 109, 117 and 118
   Political Science 101, 105
   Psychology 101, 131
   Sociology 101, Anthropology 102, 103

e. Humanities
   One course from each group:
   Group I
   Art 102, 113, 115
   Music 120, 125, 126

   Group II
   English 105, 106, 122, 123
   Speech 101, 102
   Theater Arts 103 and 104

   Group III
   Philosophy 101, 113, 114, 116, 117

f. Natural Science
   Completion of a minimum of eight semester units of science with at
   least one laboratory science.

University of Southern California
College of Letters, Arts, and Science

A student may transfer after the completion of 30 semester units of
transferable courses. The following courses are general education
requirements which undergraduate students should strive to complete during
their freshman and sophomore years. The requirements for junior standing
are the completion of 64 units of transfer work.

Minimum
Units

a. General
   English 101 ................................................................. 3
   English 102, Speech 101, or Philosophy 117 .............................. 3
   One Foreign Language 101, 102, 103' .................................... 12
   A student may enroll at any point in the sequence determined by
   placement examination. A transfer student with college language may
   continue from the last course completed. Any student may take the USC
   placement test to determine whether this requirement is met.

   *b. Humanities (refer to footnote) ........................................... 15
   Four courses, at least one course from each of the three categories.
   1. The Arts
      Art—History, Appreciation
      Music—History, Appreciation, Harmony
   2. Literature
      English 105, 106, 109, 110
   3. Philosophy and Religion
      Philosophy 101, 113, 114, 116, 117, 119, 120

   215
c. Natural Sciences (refer to footnote) .................................................................
   Three courses, from at least two of these categories:
   1. Astronomy 101
   2. Biology 101, 102, 112, 120, 121, 122, 123, 124, 130, 137
   3. Chemistry 101, 102, 103, 105, 106, 110, 141, 143
   4. Geology 101 or 110, 105; Paleontology 101
   5. Mathematics 101, 102, 103, 104
   6. Physics 101, 102, 103, 105, 106, 110, 111
   7. Science 131

d. Social Sciences (refer to footnote) .............................................................. 15
   Four courses, at least one course from each of the four categories:
   1. Communications
      Journalism 101, 102, 103, 104
      Speech 101, 102, 121
   2. History and Politics
      History 101, 102, 103, 104, 106, 107, 108, 109, 119, 120
      Political Science 102, 103, 105, 110
   3. Man and his Environment
      Economics 101, 102, 105, 111
      Geography 101, 102, 105
   4. Human Behavior and Social Interaction
      Anthropology 102, 108
      Psychology 101, 102, 131
      Sociology 101, 102

To satisfy the remaining general college requirements, the student should complete the following:
1. Select a major and complete the major requirements (see USC College of Letters, Arts and Sciences Bulletin and advisor.)
2. A student whose major falls in one of the three Humanities categories listed below must complete (a) 3 units in each of the remaining two humanities categories (b) 15 units in Social Sciences with at least 3 units in three of the four Social Science categories listed below (c) 11 units in Natural Sciences and Mathematics with at least 3 units in two or more departments listed below.
3. A student whose major falls in one of the four Social Science categories listed below must complete (a) 3 units in two of the remaining three Social Science categories (b) 15 units in the Humanities with at least 3 units in each of the three categories listed below (c) 11 units in Natural Sciences and Mathematics with at least 3 units in two or more departments listed below.
4. A student whose major is in the Natural Sciences and Mathematics division must complete either 15 units in Humanities and 11 units in Social Sciences or 15 units in Social Sciences and 11 units in Humanities. In either case, courses must be taken in at least 3 of the categories in Social Sciences and in all 3 categories in Humanities.

*See your counselor for requirements for Humanities, Natural Sciences, or Social Sciences majors, since the unit requirements in each category are determined by a student's major.
Admission Regulations

Admission standards are prescribed by the Board of Trustees of the California State University and Colleges and are set forth in each college catalog and in Title 5 of the California Administrative Code. The following is a summary of the provisions of concern to the majority of prospective students.

Freshmen—Eligibility is determined by grade point average earned on all subjects except physical education and military science during the last three years of high school and results of either the American College Test or the Scholastic Aptitude Test. A weighted combination of these two items provides an eligibility index. A California high school graduate or resident must have an index placing him among the upper 1/3 of California high school graduates. The minimum required eligibility index is 3072 (grade point average multiplied by 800, plus the total SAT score) or 741 (grade point average x 290 plus 10 x ACT composite score).

Nonresidents who are graduates of high schools in other states must have an eligibility index sufficiently high to place them among the upper 1/6 of California high school graduates. The computation is identical, but the minimum index required is 3402 with SAT, or 826 with ACT.

Procedures for the admission of other students as first-time freshmen, such as students who are graduates of foreign high schools, adults who are not high school graduates as well as admission to special programs for high school seniors, vary from college to college. However eligibility is in all cases based upon criteria designed to assure equivalent likelihood of success.

Transfers—Applicants for admission as transfers from an accredited college or university may be admitted if they were in good standing in the last institution attended and meet either of the following provisions:

1. Students eligible for admission as first-time freshmen either on the basis of requirements in effect at time of application or, if college attendance has been continuous and full-time, on the basis of requirements in effect at time of high school graduation, may be admitted to a CSUC campus provided they have maintained a grade point average of at least 2.0 in all transferable college work attempted.

2. Students not eligible for admission as first-time freshmen may be admitted to a CSUC campus provided they have completed at least 56 semester units of transferable college credit and have maintained a grade point average of at least 2.0 in all such work attempted.

Certain exceptions to the above requirements may be made in rare instances when in the opinion of the college there is evidence of ability to succeed.
General Education Requirement

History and Constitution Requirement

All students seeking a baccalaureate degree are required by California law to demonstrate competence in the Constitution of the United States, in American History, including the study of American institutions and ideals, and in the principles of state and local government established under the Constitution of the State of California. Courses satisfying all or part of this requirement are: Economics 111, History 110, 117-118, Political Science 101, 106, Social Science 131-132.

Breadth Requirement

Breadth Requirement courses which the President of Glendale Community College or his designated officer will certify as meeting the intent expressed in Administrative Code, Title V, section 40405. (Students will complete a minimum of forty (40) units from this list.)

1. Natural Science
   A minimum of three (3) courses must be selected, one of which must be from physical science and one from biological science.

   Biological Science:
   Biology 101, 102, 112, 120, 121, 122, 123, 124, 126, 137
   Paleontology 101
   Physical Science:
   Astronomy 101
   Chemistry 101, 102, 103, 105, 106, 110
   Geography 101
   Geology 101, 105, 110
   Physics 101, 102, 103, 105, 106, 110, 111
   Science 131

2. Social Science
   A minimum of three (3) courses must be selected from Social Sciences
   Psychology (101) (Required)
   Anthropology 101, 102, 103
   Economics 101, 102, 105
   Geography 102, 105
   History 101, 102, 103, 104, 106, 107, 108, 109, 112, 119, 120
   Political Science 102, 103, 104, 108, 110
   Psychology 102, 131
   Social Science 101, 121
   Sociology 101, 102

3. Humanities
   A minimum of three (3) courses must be selected from Humanities.
   Art 101, 102, 103, 106, 107, 108, 110
   English 105, 106, 109, 110
   Music 110, 111, 112, 113, 114, 120, 125, 126, 138
   Philosophy 101, 113, 114, 116, 119, 120

4. Basic Subjects
   A minimum of three (3) courses must be selected from Basic Subjects.
   English 101 (Required)
   Speech 101 (Required)
Business 101, 102, 111, 112, 161
English 102
Economics 107
Health Education 101, 110
Journalism 101, 102
Mathematics 101, 102, 103, 104, 105, 106, 138
Philosophy 117
Political Science 107
Psychology 107
Sociology 107
All Foreign Languages
Faculty 1974-1975

Abernathy, C. Cecil............................................Instructor in Mathematics
B.A., Southern Missionary College, Tennessee
M.A., California State University, Long Beach

*Adams, Patricia L ............................................Instructor in Psychology
B.A., Drew University, New Jersey
M.A., California State University, Los Angeles
Ph.D., University of Southern California

Anderson, Clara Jo .............................................Professor of Business
B.S., Indiana University
M.Ed., University of California at Los Angeles

Androff, Abram A ..............................................Professor of Health and Physical Education
B.S., M.S., University of Southern California
Head Basketball Coach

*Anheier, Thomas L .............................................Instructor in Theater Arts

Anslyn, Samuel S. .............................................Associate Professor of Technical Graphics
Twenty-three years experience in graphic arts field.

*Applegate, Mary Alice ......................................Instructor in Home Arts
B.S.M.E., Newark College of Engineering, Newark, New Jersey

*Archer, John J .................................................Instructor in Real Estate
B.A., Roosevelt University, Illinois

*Baker, Mrs. Joann N .........................................Assistant Professor of English
B.S., Woodbury College
B.A., Occidental College
M.A., Syracuse University

*Baker, William Paul ...........................................Assistant Professor of Art
B.F.A., M.F.A., University of Southern California

Bangs, Olive .....................................................Assistant Professor of English
A.B., Pasadena College
M.A., California State University, Los Angeles

*Bardo, Pamela Darlynn ........................................Instructor in English
B.A., M.A., California State University, Los Angeles

*Barnes, John B. .................................................Instructor in English
B.A., Occidental College

*Baxter, Virginia L .............................................Instructor in History
B.A., M.A., Occidental College

*Beale, Bonnie ..................................................Instructor in Business
B.Ed., University of California at Los Angeles

Beck, Harry L ...................................................Dean, Admissions and Records
A.A., Glendale Community College
A.B., California State University, San Jose

*Part Time
*Beck, Vincent L .......................... Instructor in Mathematics
B.A., St. Mary’s College
M.A., St. Louis University

Belknap, Robert D .......................... Associate Professor of Music
A.B., California State University, San Jose
M.A., Columbia University

*Bell, James D .......................... Instructor in Psychology
B.A., University of California at Los Angeles
M.A., California State University, Los Angeles

*Bennett, James S .......................... Instructor in Business
B.S., University of Arizona

*Bishop, Stephen K .......................... Instructor in Photography
B.A., California State University, Los Angeles

*Black, Donald G .......................... Assistant Professor of Business
B.A., California State University, Los Angeles

*Blain, Robert J .......................... Instructor in Business
B.B.A., Loyola University
M.B.A., University of Southern California

Bochniarz, Robert .......................... Counselor
B.A., St. Edward's University, Austin, Texas
M.S., California State University, Los Angeles

Bouey, James G .......................... Associate Professor of Biology
A.B., University of California at Los Angeles

Boyles, August C .......................... Instructor in Aerospace Technologies

Brighouse, Jeb .......................... Associate Professor of Political Science
A.B., Occidental College
M.A., University of California at Los Angeles

*Brokop, Jewell J .......................... Instructor in Business
A.A., Los Angeles City College

*Brooks, Keir .......................... Instructor in Real Estate
A.B., University of California at Berkeley
Real Estate Certificate, Los Angeles Pierce College and
University of California at Los Angeles

Brophy, John W .......................... Instructor in Business
B.S., Wayne State University, Michigan
M.A., California State University, Los Angeles

Brown, Robert W .......................... Professor of Art
A.B., California State University, San Francisco
M.F.A., California College of Arts and Crafts
M.F.A., University of Southern California

*Part Time
*Bunnell, Victoria D'Tracy ........................................... Instructor in Geology
  B.S., Texas Christian University
  M.S., University of Southern California

Carter, Norma S .................................................... Instructor in Home Arts
  B.A., Fairmont State College, West Virginia
  M.S., University of California, Berkeley

*Catania, Robert F ................................................... Instructor in History
  A.B., Stanford University
  M.A., Harvard University

*Cease, Doreen ........................................................ Instructor in Music
  B.M., Texas University of Arts and Industries

Cease, Wesley ..................................................... Assistant Professor of Music
  A.B., California State University, San Francisco
  Diplom, University of Heidelberg
  Diplom, Badische Musikhochschule

*Champlin, Chad L ................................................... Instructor in Printing
  B.S., California Polytechnic State University

*Clark, John T ........................................................ Instructor in Carpenter
  B.A., California State University, Los Angeles

Cochrane, Harold B .............................................. Dean, Guidance and Counseling
  A.B., M.A., University of Southern California

Coleman, Donald V. ............................................... Professor of Biology
  B.S., George Pepperdine College
  M.A., California State University, Los Angeles

Connett, Theodore R ............................................... Professor of English
  A.B., University of California at Berkeley
  M.A., Columbia University

*Crandall, William H ............................................... Assistant Professor of History
  B.A., M.A., California State University, Los Angeles

Craven, John B ...................................................... Associate Professor of English
  A.B., La Sierra College
  M.A., University of Southern California

*Creadick, Lynn Carleton ........................................ Instructor in Biology
  B.A., M.A., Hunter College, New York

Crippen, Elizabeth B. ............................................... Counselor
  B.Ed., University of California at Los Angeles
  M.A., University of Southern California
  C.P.A., State Board of Accountancy, California

Cudney, Larry L ..................................................... Instructor in Mathematics
  A.A., Santa Monica City College
  B.A., M.A., University of California at Los Angeles

*Part Time
*Cunningham, Jeanne E. Instructor in Psychology  
A.A., Glendale Community College  
B.A., California State University, Los Angeles  
M.S.W., University of Southern California

Daly, Michael J. Assistant Professor of English  
B.A., California State University, Northridge  
M.A., Ph.D., University of Southern California

Davenport, David A. Instructor in Chemistry  
A.A., Glendale Community College  
B.S., University of California, Berkeley  
M.S., California State University, Northridge

Davidson, Ruth E. Instructor in Vocational Nursing  
R.N., New York University, Bellevue School of Nursing Division Chairman  
A.B., M.A., California State University, Los Angeles

Davitt, John A. Administrative Dean, Student Personnel Services  
B.S., M.A., University of San Francisco

DeFrain, Patricia L. Instructor in Business  
B.S., Ohio State University  
M.A., University of Washington

DeGrassi, Leonard R. Associate Professor of Art  
A.B., B.F.A., M.A., University of Southern California  
Corso Perfezionamento Storia d'Arte, Università di Roma

*Delling, Leonard V. Instructor in Physics  
B.S., U.S. Naval Academy, Annapolis  
M.A., California State University, Long Beach

*Derksen, Carl Instructor in Television Repair  
B.S., Kansas State University  
M.A., California State University, Los Angeles

DiPietro, Harriet Louise Associate Professor of Speech  
A.B., M.A., University of Southern California

*Dionis, Robert C. Instructor in Auto Mechanics

Donovan, Blanche K. Associate Professor of Health and Physical Education  
A.B., Occidental College  
M.A., California State University, Los Angeles

Doyle, Mark A. Associate Professor of Sociology  
B.S., Villanova University  
M.A., University of Pennsylvania

*Dwyer, John W. Coordinator, Admissions and Records  
B.A., M.S., California State University, Los Angeles

Emerson, Sharon L. Instructor in Biology  
B.A., University of California, Berkeley  
M.S., Ph.D., University of Southern California

*Part Time
*Erselius, Robert ................................ Instruction in Accounting
  B.S., University of California at Los Angeles
  M.B.A., University of Southern California

Fischer, Egbert D ................................ Associate Professor of Physics
  A.B., Sam Houston State College
  M.A., University of Texas

*Fisher, Anthony B ................................ Instructor in Business
  B.S., Northeastern University

*Fisher, Elmer C .................................... Instructor in Machine Shop

Fisher, Everett G ................................ Professor of Applied Science

*Folz, David ......................................... Instructor in Business
  B.A., University of California at Los Angeles

*Forcier, Arthur A., Jr. ............................. Instructor in Political Science
  B.S., Boston College
  M.A., Boston University

*Friedman, Florence ................................. Instructor in Business
  R.N., Los Angeles County General Hospital School of Nursing
  B.S., California State University, Los Angeles
  M.A., Pasadena College

Friedrich-Mejia, Erika .............................. Professor of German
  B.A., M.A., University of Arizona
  M.A., Azusa Pacific College
  Diplom, Sprachenschule der Landeshauptstadt München
  Certificando de Estudios, Universidad De San Carlos de Guatemala

Gallucci, Linda L. .................................. Counselor
  B.A., M.S., California State University, Los Angeles

*Gardner, Ann C ..................................... Instructor in Sociology
  B.A., University of North Carolina at Greensboro
  M.A., University of North Carolina at Chapel Hill

*Geale, Paul E ....................................... Instructor in Geography
  A.B., University of California at Los Angeles
  M.A., California State University, Los Angeles

Georgias, Andrew J .................................. Instructor in Art
  B.F.A., Bradley University, Illinois
  M.F.A., University of Southern California

*Gertmenian, L. Wayne .............................. Assistant Professor of Economics
  B.A., University of Southern California
  M.A., University of Idaho

Gibson, Charles H. ................................. Professor of History
  A.B., University of California at Berkeley
  M.A., University of Southern California

*Part Time
Glanville, Jerold S ................. Instructor in Aerospace Technologies

Goddard, Frank L .................. Associate Professor
A.B., M.A., Occidental College

Golder, Donald T .................. Associate Professor
B.E., Wisconsin State University
M.S.E., University of Southern California

Gonzales, James E .................. Professor of Architecture
A.B., Adams State College, Colorado

Griffin, Hope C ................... Assistant Professor of Business
A.B., University of California at Berkeley
M.A., California State University, San Francisco

Gross, Lance ...................... Instructor in Health and Physical Education
B.S., M.Ed., Utah State University

Gross, Louis ...................... Professor of Art
A.B., University of California at Berkeley
M.F.A., California College of Arts and Crafts

Guilmette, Collin S ............... Professor of History
A.B., M.S., University of Southern California

Gulbrandson, A. Vinton .......... Instructor in Supervision
A.B., University of California at Los Angeles

Haden, Harley J ................... Professor of Physics
A.B., Occidental College
M.A., University of Southern California

Hall, Judith ....................... Assistant Professor of Art
A.B., Stanford University
M.A., Columbia University

Hallberg, Veloris B ............... Instructor in English
A.B., M.A., Stanford University

Hampton, John A .................. Instructor in Police Science
L.L.B., J.D., Southwestern University
Cert. Police Administration, University of Southern California

Hanley, Timothy G ............... Instructor in English
B.A., M.A., California State University, Los Angeles

Hardison, Richard C ............. Professor of Psychology
A.B., M.A., Occidental College
Ed.D., University of Southern California

Hartman, Charles O ............. Instructor in Drafting

Harvey, Sally J .................. Associate Professor of Spanish
A.B., University of California at Los Angeles
M.A., Inter-American School of Spanish, Mexico

*Part Time
Harwin, Dixon R. ......................... Visiting Professor of Economics
B.A., University of Pennsylvania
M.B.A., Harvard Graduate School of Business

Hawkins, Drake C ...................... Assistant Professor of Political Science
B.S., U.S. Naval Academy, Annapolis
M.A., University of California at Los Angeles

Hawkins, Robert N ..................... Assistant Professor of Geography
B.A., California State University, Los Angeles
M.A., University of California at Los Angeles

*Heck, Rowena .......................... Instructor in Cosmetology

*Henderson, J. Raymond ................ Instructor in Music

High, Wallace S ......................... Associate Professor of Psychology
A.A., Modesto Junior College
A.B., University of California at Santa Barbara
M.A., California State University, San Jose

*Hill, William F ........................ Assistant Professor of Mathematics
B.A., University of California at Los Angeles
M.A., California State University, Los Angeles

*Hillemann, Carl B ........................ Instructor in Business
B.S., Washington University, St. Louis, Missouri
M.S.C., St. Louis University, St. Louis, Missouri

Hirshberg, Jennefer A ................... Instructor in English
B.A., Cornell University
M.A., California State University, Los Angeles

Hollett, Judy K .......................... Instructor in Vocational Nursing
R.N., Bethany Hospital School of Nursing

*Hollingshead, Robert Lee ............... Instructor in Real Estate
B.A., San Francisco State University

*Holmwood, Meryl W ........................ Assistant Professor of Supervision

Horton, Ernest H., Jr .................... Professor of Philosophy
A.B., Los Angeles Pacific College
B.D., Asbury Theological Seminary
Ph.D., University of Southern California

Huber, Walter R .......................... Assistant Professor of Business
A.A., Mount San Antonio College
B.S., M.S., California State University, Los Angeles

Hurst, David O ............................ Associate Professor of Chemistry
B.S., Wheaton College
M.S., University of Illinois

*Hurst, John E ............................ Assistant Professor of Police Science

*Part Time
*Irace, Kathleen O ........................................ Instructor in English
  B.A., Indiana University
  M.A., Purdue University

*Isenberg, Roberta ............................................... Instructor in Music
  B.A., M.A., Occidental College

Janicki, Cyril B .................................................. Professor of Speech
  A.B., Central Y.M.C.A. College, Chicago
  Division Chairman
  M.A., Northwestern University

*Jaramillo, Mike ............................................. Instructor in Health and Physical Education
  B.A., M.A., California State University, San Francisco

Johnson, Clyde .................................................. Assistant Professor of Art
  A.A., Pikeville College
  A.B., Eastern Kentucky State University

Jones, Ivan L ..................................................... Administrative Dean, Instruction
  A.A., Modesto Junior College
  B.A., M.A., University of Washington, Seattle
  Ed.D., University of California at Los Angeles

Jones, W. Mack .................................................. Associate Professor of Applied Science

*Jordan, Jimmy C ............................................. Instructor in Mathematics
  B.A., Occidental College

Kern, David E .................................................. Associate Professor of Applied Science
  A.A., Glendale Community College
  FAA Ratings: Commercial Pilot, Flight Instructor, Airframe and
  Powerplant, Advanced Ground Instructor, Authorized
  Inspector, Designated Examiner, Instrument Instructor
  B.V.Ed., California State University, Long Beach

*Kewley, Joan E. ................................................ Assistant Professor of English
  B.A., Andrews University
  M.A., University of Southern California

Kilkeary, Desmond B ........................................... Instructor in English
  B.A., California State University, Humboldt
  M.A., California State University, Los Angeles

*Kilpatrick, Margaret Ann .................................... Instructor in Psychology
  A.A., Glendale Community College
  B.A., California State University, Los Angeles
  M.S.W., University of Southern California

Kim, Ruth .......................................................... Associate Professor of History
  A.B., California State University, San Jose
  M.A., Stanford University

*Kinsey, Julia ................................................... Instructor in English
  B.A., M.A., University of Southern Mississippi

*Part Time
*Knecht, Mrs. Jane .................................. Assistant Professor of Music
   B.A., University of California at Los Angeles
   M.A., California State University, Los Angeles

Koploy, Bonnie R .................................. Instructor in Biology
   B.S., M.A., California State University, Los Angeles

*Kuebler, Donald E ................................ Instructor in Technical Graphic
   A.A., Los Angeles Valley College

Lashley, Virginia L., C.D.E. ...................... Assistant Professor of Business
   A.B., University of Kansas
   M.A., Occidental College

*Lauter, Elva R .................................. Instructor in English
   B.A., M.A., University of Oregon

Layton, Gordon L. ................................. Assistant Professor of Aerospace Technology

Leek, Anne ........................................ Associate Professor of Business
   B.S., Indiana University of Pennsylvania, Indiana, Pennsylvania
   M.A., New York University

Leek, David C. .................................... Administrative Dean, Continuing Education
   A.B., Huron College
   M.A., Willamette University

LeMieux, Hilary J. ............................... Associate Professor of Health and Physical Education
   D.P.E., University of Otago, New Zealand
   Dip. Tchg., Auckland Teachers College, New Zealand
   M.S., University of Wisconsin

*Lienhard, Jerome T. ............................ Instructor in Business
   B.E.E., University of Detroit

Lienhard, Patricia A. ............................ Counselor
   B.A., Immaculate Heart College
   M.S., California State University, Los Angeles

*Lienhard, Thomas G. ............................ Instructor in Business
   B.E.E., University of Detroit
   M.B.A., University of Southern California

Lillie, Ella L. ..................................... Professor of Mathematics
   A.B., Western Michigan University
   M.A., University of Michigan

Linebaugh, Alven E. ............................. Assistant Professor of Applied Science

*Liotta, Gaspar J. ............................... Assistant Professor of Photography
   B.A., University of California at Los Angeles
   M.A., California State University, Los Angeles

*Part Time
Livingood, Earl R. .................................................. Professor of History
A.A., Santa Monica City College
A.B., M.A., University of California at Los Angeles

*Loftus, Raymond J. ................................................ Instructor in Real Estate
B.S., DePaul University

Lynch, Chester B. .................................................. Professor of Mathematics
A.B., M.A., Occidental College Division Chairman

*Malinowski, Louis E. ................................................ Instructor in Engineering
B.A., University of Minnesota
M.Ed., University of North Dakota

Mallory, William L. ................................................ Instructor in Aerospace Technologies
A.S., Pierce Junior College
FAA Ratings: Powerplant
B.V.Ed., California State University, Los Angeles

Manker, Virginia M. ................................................ Associate Professor of Health and
B.S., University of Arizona Physical Education
M.Ed., Oregon State University

*Mann, John F. .................................................. Assistant Professor of Architecture
B.A., University of California at Santa Barbara
M.S., University Southern California

*Marsh, Walter E. ................................................ Assistant Professor of Mathematics
B.A., Pasadena College

Mayo, Paul E. .................................................. Assistant Professor of Music
B.Mus., University of Southern California

McCreary, Jack E. .................................................. Professor of Psychology
A.B., M.A., University of Southern California

McCuen, Jo Ray ................................................ Associate Professor of English
A.B., Pacific Union College
M.A., Ph.D., University of Southern California

McDonald, E. Lane ................................................ Instructor in Biology
B.S., University of Missouri
M.A., University of California at Los Angeles

McGuire, Barbara N. .................................................. Adult Education, Coordinator Parent Education,
B.A., University of California at Los Angeles
M.A., Teachers College, Columbia University

McKennon, H. Dean ................................................ Assistant Professor of Theater Arts
A.A., Glendale Community College
B.A., M.A., University of California at Los Angeles

McLane, Lucille M. ................................................ Professor of Health and Physical Education
B.S., University of California at Los Angeles Division Chairman
M.A., California State University, Los Angeles

*Part Time
*Meinecke, Richard O.  ....................................................... Instructor in Psychology
A.B., University of California at Riverside
M.A., University of California at Los Angeles

Mercedes, Jose A. ................................................................. Counselor,
A.A., Pasadena City College
B.A., M.S., California State University, Los Angeles

Messec, Murray ......................................................... Instructor in Health and Physical Education
B.S., M.A., Northwestern University

Miller, Emil A. ................................................................. Professor of Applied Science
B.V.E., M.A., California State University, Los Angeles Division Chairman

*Miller, Ray ................................................................. Assistant Professor of Supervision
B.S., United States Naval Academy, Annapolis Cert. Naval
Intelligence and Language School, Anacostia, D.C.

Mondrus, Martin ............................................................ Professor of Art
A.B., California State University, Los Angeles
M.F.A., Claremont Graduate School

*Montante, Angelo Thomas ........................................ Instructor in History
A.A., Santa Monica City College
B.A., University of California at Los Angeles
M.A., California State University, Northridge

Moody, Margaret J. .......................................................... Associate Professor of History
A.A., Los Angeles City College
A.B., M.A., University of Southern California
M.A., California State University, Northridge

*Moore, Georgia J. ............................................................. Instructor in Philosophy
A.B., Augustana College, Illinois
M.A., University of Illinois

Morros, George P. ............................................................ Professor
A.B., M.A., University of Southern California

*Morton, Howard G. .......................................................... Instructor in Real Estate

*Nasco, Michael C. .......................................................... Instructor in Business
B.B.A., University of Miami
M.S., University of Southern California

*Neilson, Ralph R. ............................................................ Instructor in Business
B.S., Brigham Young University
M.B.A., Utah State University

Neufeld, Helen H. ......................................................... Associate Professor of Chemistry
B.S., Murray State University, Kentucky
M.S., University of Redlands
M.S., University of London

*Part Time
*Newman, Harold D. ........................................ Instructor in Real Estate
B.A., Loyola University
M.A., California State University, Los Angeles

Nibley, Linda S. .............................. Assistant Professor of English
A.B., M.A., University of California at Los Angeles

*Nissen, Edward E. .......................... Instructor in Accounting
B.S., Midland College
M.A., Omaha University

Norman, Russell F. .......................... Professor of Business
B.S., M.Ed., University of California at Los Angeles

Norris, Lee .............................. Assistant Professor of Aerospace Technologies

*Novak, Gary A. .............................. Instructor in Geology
B.S., University of Dayton
M.S., Penn State University
Ph.D., Virginia Polytechnic Institute

Nunn, Marshall E. ............................... Professor
A.B., Stanford University
M.S.L.S., University of Southern California

*O'Keefe, William F. ......................... Instructor in Police Science
A.A., Glendale Community College

*Owens, Arthur E. .............................. Instructor in Accounting
B.A., California State University, Los Angeles

*Pack, Richard .............................. Instructor in Geography
B.A., University of California at Los Angeles
M.S., Oregon State University

Parker, William L. ............................ Associate Professor of Philosophy
A.B., Pasadena College (Nazarene)
M.A., University of Southern California

*Pavelsky, Nancy Junkins .................. Instructor in English
A.S., Long Beach City College
B.A., University of California at Los Angeles
M.A., Pepperdine College

*Petitto, Beverly A. ........................ Instructor in English
B.A., Fairmont State College
M.A., Miami University

*Peyton, William M. ......................... Instructor in Accounting
B.S., University of California at Los Angeles
M.B.A., University of Southern California

*Plunkett, Harry L. ............................ Assistant Professor of Business
B.S.E.E., University of Illinois
L.L.B., New York University and Southwestern School of Law
J.D., Southwestern University

*Part Time
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Institution and Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pratt, Anne</td>
<td>Instructor in Vocational Nursing</td>
<td>R.N., Union Hospital Nurses Training School, Massachusetts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P.H.N., St. John's University, New York</td>
</tr>
<tr>
<td>*Radesky, Donald</td>
<td>Instructor in Police Science</td>
<td></td>
</tr>
<tr>
<td>*Reis, Ronald A.</td>
<td>Instructor in Engineering</td>
<td>B.A., M.A., California State University, Los Angeles</td>
</tr>
<tr>
<td>Reinbolt, Dwain O.</td>
<td>Counselor</td>
<td>A.A., Pasadena City College</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A.B., M.A., M.S., California State University, Los Angeles</td>
</tr>
<tr>
<td>Reinhard, C. William</td>
<td>Assistant Professor of Health and Physical Education</td>
<td>A.B., University of California at Berkeley</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Division Chairman</td>
</tr>
<tr>
<td>*Reuter, Virginia S.</td>
<td>Instructor in Business</td>
<td></td>
</tr>
<tr>
<td>*Ricewasser, Robert B.</td>
<td>Instructor in Auto Mechanics</td>
<td>B.A., M.A., California State University, Los Angeles</td>
</tr>
<tr>
<td>*Robinson, W. Earle</td>
<td>Instructor in Business</td>
<td>B.S., Western Michigan University, Kalamazoo, Michigan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.B.A., Michigan State University, Lansing, Michigan</td>
</tr>
<tr>
<td>*Rowan, David L.</td>
<td>Instructor in Business</td>
<td>B.S., M.S., University of Southern California</td>
</tr>
<tr>
<td>Ryan, Thomas S.</td>
<td>Dean, Occupational Education</td>
<td>B.S., M.S., University of Southern California</td>
</tr>
<tr>
<td>Sartoris, James M.</td>
<td>Assistant Professor of Health and Physical Education</td>
<td>B.A., University of Washington</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.A., California State University, Los Angeles</td>
</tr>
<tr>
<td>*Savin, Walter</td>
<td>Instructor in Business</td>
<td>B.S., California State University, Los Angeles</td>
</tr>
<tr>
<td>Schneider, Lorraine</td>
<td>Instructor in Vocational Nursing</td>
<td>R.N., Mounds-Midway School of Nursing, Minnesota</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P.H.N., B.S., California State University, Los Angeles</td>
</tr>
<tr>
<td>*Schwartz, Paul R.</td>
<td>Counselor</td>
<td>A.A., Pasadena City College</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.A., M.A., California State University, Los Angeles</td>
</tr>
<tr>
<td>Scott, Robert K.</td>
<td>Instructor in Theater Arts</td>
<td>A.B., M.A., California State University, Los Angeles</td>
</tr>
<tr>
<td>Seifert, Ramona L.</td>
<td>Associate Professor of Business</td>
<td>A.B., Colorado State College of Education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.A., California State University, Los Angeles</td>
</tr>
</tbody>
</table>

*Part Time*
Shaw, Frances F.  Assistant Professor of Home Arts  
A.A., Glendale Community College  
Bachelor of Vocational Education, California State University, Los Angeles

Shea, William D.  Associate Professor of Mathematics  
A.B., Occidental College  
M.A., California State University, Los Angeles

*Shenfeld, Ruth M.  Instructor in Psychology  
B.A., M.A., University of California at Berkeley

*Simon, Barnet L.  Instructor in Art  
B.A., City College of New York  
M.A., Hunter College of New York

Shively, John D., Jr.  Associate Professor of Applied Science  
B.S., Whittier College

Smith, Charlotte A.  Instructor in Spanish  
B.A., M.A., University of California at Santa Barbara

Smith, J. Walter  Dean of Student Activities  
B.S., M.S., University of Southern California

Smith, James M.  Assistant Professor of Anthropology  
B.A., M.A., California State University, Los Angeles

*Spillman, Nancy Z.  Instructor in Business  
B.S., M.B.A., University of Southern California

Sprague, Diane L.  Assistant Professor  
A.B., University of Michigan  
M.S., California State University, Los Angeles

*Starkweather, Olive  Instructor in Business  
L.L.B., J.D., Southwestern University

*Staub, Jerry Kenneth  Instructor in Business  
B.A., University of Southern California  
J.D., U.S.C. School of Law

Stoney, Daisie A.  Associate Professor of Home Arts  
A.B., M.A., University of California at Los Angeles

*Stormont, Beth  Instructor in Music  
B.A., California State University at Long Beach  
M.A., Occidental College

Strange, William J.  Associate Professor, Director of Library Services  
B.S., M.S., Kansas State Teachers College of Emporia

*Sturges, Clyde W.  Instructor in Business  
B.A., University of Iowa  
M.A., Colorado State College  
L.L.B., University of Southern California

*Part Time
*Swegan, Cheryl A. .......................... Instructor in Aerospace Technologies  
B.S., Miami University, Oxford, Ohio

Tansley, John A. .............................. Assistant Professor of Health and  
A.A., Chaffey College  
A.B., California State University, Long Beach

*Tansley, Sharon L. ............................ Instructor in Home Arts  
B.S., University of Colorado

*Taufer, William Dale ....................... Assistant Professor of Political Science  
B.A., M.A., California State University, Los Angeles

*Thomas, Cynthia A. .......................... Instructor in English  
B.A., California State University at Northridge  
M.A., University of California, Los Angeles

Thomas, Joseph G. ............................ Professor of Journalism  
A.B., M.Ed., University of New Hampshire

*Thomas, William L. ............................ Instructor in Speech  
B.A., M.A., Occidental College

Thomsen, Robert E. ............................ Professor of Art  
A.B., California College of Arts and Crafts  
M.A., Stanford University

*Thorpe, Thomas E. ............................ Instructor in Astronomy  
B.A., M.A., University of California at Los Angeles

Threlkeld, Georgia R. ....................... Associate Professor of Mathematics  
A.B., University of California at Los Angeles  
M.A., University of Southern California

Titchenal, David L. ......................... Professor of Health and Physical Education  
A.B., California State University, San Jose  
M.A., University of Southern California

Trupp, S. Kenneth ............................ Instructor of English  
B.A., Roanoke College, Virginia  
M.A., California State University, San Francisco

Tucker, Delos R. .............................. Associate Professor of Geology  
B.S., M.S., Louisiana State University  
Ph.D., University of Texas

Tufteland, Jerry M. .......................... Instructor in Business  
B.A., Augustana College, South Dakota  
M.A., University of Pittsburgh

*Turner, James M. ............................. Instructor in Fire Science

*Ungerecht, Richard ......................... Instructor in Police Science

Vargo, Edward M. ............................. Associate Professor of Applied Science  
Division Chairman

*Vessella, Thomas ............................. Assistant Professor of Health and  
B.A., California State University, Los Angeles  
Physical Education

*Part Time
Veltman, Clarence .......................... Professor of Chemistry
A.B., Hope College
M.S., Washington University, St. Louis

*Vizuette, Susan L. .......................... Instructor in English
A.B., M.A., Occidental College

*Walentz, Thomas H. ......................... Instructor in Philosophy
A.B., M.A., Ph.L., St. Louis University

*Ward, Eugene J. ............................ Instructor in Speech
B.A., Marshall University
M.A., California State University, Los Angeles

*Werner, Robert W. .......................... Instructor in Police Science
A.A., El Camino College

Wheelock, Charles C. ........................ Dean, Adult Education,
A.B., Westmont College, Santa Barbara Community Services, and
M.A., California State University, Los Angeles Summer Session
Ed.D., University of California at Los Angeles

Williams, Richard L. ........................ Instructor in Political Science
B.A., M.A., California State University, San Jose

*Willis, LaVerne ............................ Instructor in Business
A.A., Pasadena City College

*Wilson, Veva E. ............................ Associate Professor of Education
A.B., California State University, San Jose
M.S., University of Southern California

*Wiskup, Leon A. ............................ Assistant Professor of Speech
B.A., Bates College, Lewiston, Maine
M.A., Boston University

*Yaman, Francis M., Jr. ....................... Instructor in Accounting
B.S., M.B.A., University of Southern California

*Yanover, Robert M. .......................... Instructor in Supervision
B.S., M.S., California State University, Los Angeles

Yarick, Burnell E. ........................... Professor of Botany
B.S., University of California at Los Angeles
M.S., California State University, Humboldt

*Young, John T. .............................. Instructor in Economics
B.A., M.A., University of California, Santa Barbara

Young, Milton B. ............................ Professor of Music
B.Mus., University of Redlands
M.Mus., University of Southern California

Youngquist, Joel C. .......................... Professor of Economics
A.B., Occidental College
M.B.A., Harvard Graduate School of Business Administration

*Part Time
Index

A
Accounting, courses; 50, 61, 90, 108
  curriculum; 50
Accreditation; 14
Activities, student; 28-30
Address, College; 3
Administration, college; 5
Admission Requirements; 31
Adult Education, see
  Continuing Education
  Advanced Placement
  Examinations,
  Credit for; 39
  Non-Credit; 15
Advanced standing on entry
to universities; 19
Advertising, courses; 103
  curriculum; 48
Advisory Committees; 14
Aeronautics; 61
Aerospace Technologies,
  courses; 92
  curriculum; 48-49
  Mechanic curriculum; 48
  “A” and “P” licenses; 49
  Pilot Training, curriculum; 49
Agriculture; 62
Air Force ROTC; 14
Airlines industry, courses; 92
  curriculums; 48-49
Algebra, courses; 155
American history, course; 47
Anatomy, see Biology 120
Anthropology, courses; 97
Application, admission; 31
Archaeology, see Anthropology 103
Architectural Drafting;
  curriculum; 49, 62
Architectural courses; 98
Art, courses; 100
  curriculum; 49
Associate in Arts Degree,
  requirements; 45
Associated Student Body; 28, 37
Astronomy, course; 106
Athletic program; 28
Attendance and punctuality; 43
Auto Mechanics; 106
Awards, see Scholarships

B
Band, courses; 161
Banking, course; 110
  curriculum; 49-50
Biology, courses; 107
Board of Education; 5
Bookkeeping, see Business 108-109
  courses; 108
  curriculum; 51
Botany, see Biology 137
Business Administration, 62
Business, courses; 108
  curriculums; 50-55
  machines; 111
  mathematics; 110, 154

C
Calculus, courses; 155
Calendar; 7-9
California State University and
  Colleges; 217
  Campus Center; 21
  Speakers; 29
Carpentry; 117
Ceramics, courses; 103
Certificate Programs; 47, 48-60
Certified Public Accountant,
  requirements; 50
Changes of Program; 43
Chemistry, courses; 119
  curriculum; 64
Child study, courses; 151
Children’s Centers; 57
Chiropractic;
  Los Angeles, College of; 64
City and Regional Planning; 62
Claremont Men’s College; 208
Clerical, curriculum; 112
Clothing, courses; 150
Clubs; 28-30
College Calendar; 7-10
College Level Examination; 40
Colloquia; 90
Community Services; 13
Computer Programming; 110
Conduct, General; 42-43
Continuing Education; 14
Constitution, U.S.,
  requirement for graduation; 45
Cooperative Education; 20,
  courses; 120
Cosmetology; 55, 120
Costs; 36
Counseling services; 12, 35
Course Descriptions; 90-188
Courses, eligibility for; 35
Credit by Examination; 40-41
Credit for Advanced Placement,
  Examinations; 40
Credit for Military Training; 40
Credit-No Credit Courses; 15, 41-42
Criminology, see Police Science
Curriculums, suggested; 47

D
Data Processing; 51, 110
Degree, Associate in Arts; 45
Dental Hygienist, curriculum; 65
Dental Materials, course; 106
Dentistry, curriculum; 66
Descriptive Geometry; 98, 125
Developmental Studies; 90
Dietetics; 67
Dismissal; 38
Distributive Education; 52
Drafting, courses; 122
Draftsman, curriculum; 55
Drama and Radio Production,
  courses; 182
Dropping courses, see Withdrawal

E
Economics, courses; 123
Education, Code; 34
Educational Opportunity, Grant; 21
Educational Philosophy; 11
Electronics, courses; 124
Electronics Technician,
courses; 124
curriculum; 55
Eligibility for courses; 35-36
Employment; 21
Engineering, courses; 125
curriculum; 56, 67
English courses; 126
requirement for graduation; 45
Entrance requirements; 31
Examination,
credit by; 40-41
final; 44
pre-registration; 7-9, 32
Executive Secretary, curriculum; 54
Extended Day; 14

F
Faculty; 220
Fashion design, courses; 150
curriculum; 56
Fees, Student Body; 36
Final Examinations; 44
Fire Science; 129
First Aid, courses; 136, 142
requirement for graduation; 45
Flight training, courses; 92
curriculum; 48
Foreign Language,
courses; 132, 133, 137
curriculum; 72
Foreign Study; 90
Forestry and conservation,
curriculum; 73
French, courses; 132

G
G.E.D. Testing; 16
General Information; 12-20
Geography, courses; 133
curriculum; 73
Geology, courses; 133
curriculum; 74
Geometry, courses; 98, 125, 155
German, courses; 133

H
Handicapped Students; 17
Hazing; 29
Health Education,
courses; 135-147
Health center; 21
History, courses; 147
curriculum; 74
requirements for graduation; 45
Holidays; 7-9
Home Arts, courses; 150
Honors; 29
Honor Societies; 29
Housing; 22
Hygiene, requirement for
graduation; 45

I
Industrial Arts, curriculum; 74
Industrial Technology,
curriculum; 76
Information, general; 12-20
En Espanol; 17
Instrumental music,
courses; 160
Insurance, courses; 112
curriculum; 52
Interior Design; 103
International field
study; 90
International Students; 18
Investments, course; 112

J
Jewelry, courses; 105

L
Landscape Architecture; 62
Law courses; 113
criminal; 168
curriculum; 76
Law Enforcement and
Administration; 78
Leadership class; 136, 143
Learning Resource Center; 35
Leave of absence; 43
Legal Secretary, curriculum; 54
Lettering; 104
Liberal studies; 78
Librarianship, curriculum; 79
Library; 18
Library Assistant, curriculum; 56
Library Technician; 153
Library Technician; 153
Limited Student; 31
Literature; 127
Loans; 22
Location of College; 3
Loma Linda University; 67
Los Angeles College of
Optometry, see Southern California
College of Optometry
Lower division, general;
requirements; 19
Loyola University of
Los Angeles; 208

M
Machine Shop, courses; 153
Machinist, curriculum; 59
Manufacturing Technology; 57
Marketing, course; 113
Marriage, course; 173
Materials and processes
course; 155
Mathematics, courses; 155
business; 110
proficiency examination; 32
requirements for graduation; 45
Matriculated Student; 31
Measles immunization; 34
Medical Assistant, 53
(Administrative); 115
Medical Secretary,
curriculum; 54, 115
Medical Technologist,
curriculum; 81
Medicine, curriculum; 80
University of California; 81
University of California,
San Francisco; 81
University of
Southern California, 82
Stanford University; 80
University of California,
Davis; 81
University of California, Irvine,
California College of
Medicine; 81
Merchandising, course; 113
Metals, courses; 157
Meteorology, course; 94
Microbiology, see Biology 112
Mineralogy, course; 158
Mount St. Mary's College; 209
Music, courses; 158

N
National Field Study; 90
Natural Resources,
curriculum; 82
Navigation, courses; 94
Non-matriculated Student; 31
Nursery School,
curriculum; 57
Nursing-(R.N.), curriculum; 82
Nursing, vocational,
courses; 57, 185
Nutrition, course; 151

O
Obligations, clearance of; 44
Occidental College; 210
Oceanography; 83
Office orientation, course; 115
Officers of Administration; 5
Optometric Technician; 84
Optometry, curriculum; 83
Orchestra, course; 161
Organ, course; 163
Organization roster; 30
Organizations, student; 28
Orientation of new students; 29

P
Pacific Oaks College; 88, 211
Painting; 104
Paleontology, course; 163
Pepperdine University
Los Angeles; 212
Malibu; 213
Personal Development; 151
Perspective, course; 98
Petitions; 44
Change of Program; 44
Honorable Dismissal; 44
Pharmacy, curriculum; 84
Philosophy, courses; 163
Philosophy of the College; 12
Photographic, courses; 164
curriculum; 57
Physical Education; 44
courses; 135-147
exemption; 44
requirement for graduation; 45
Teacher; 85
Physical Therapy, curriculum; 85
Physics, courses; 165
curriculum; 85
Physiology, see Biology 121
Piano, course; 162
Pilot training, courses; 92
curriculum; 49, 61
Podiatry; 86
Police Science and
Administration, courses; 168
curriculum; 58, 86
see Law Enforcement and
Administration
Poliomyelitis immunization; 34
Political Science
courses; 170

curriculum; 87
requirement for graduation; 45
Pre-dental, curriculum; 66
Pre-registration
Examinations; 32-33
Pre-school child, course; 151
President; 5
Printing; 172
Probation, academic; 38
general; 41
Psychology, courses; 173
curriculum; 87
Public Administration
courses; 173
Public Health, curriculum; 87
Public Health, School of; 87

R
Reading, course; 127
Real Estate, courses; 174
curriculum; 53, 58
Recreation; 29
Recreational Leadership,
curriculum; 58, 136, 143
Registration, dates; 7-9
procedure; 36
Religions; 163
Remedial Education; 13
Residence requirements; 33-34

S
Salesmanship, course; 113
Scholarship standards; 38-39
academic probation; 37
Scholarship and aid funds; 22-27
Scholastic information and
regulations; 38-44
Science, General course; 175
Sculpture; 104
Secretarial training, courses; 114
curriculum; 54
Shakespeare; 128
Shorthand, courses; 114
Silk Screen Printing; 105
Slide rule, courses; 126
Social Science, courses; 175
Social Studies Statistician
curriculum; 58
Sociology, courses; 176
Southern California College of Optometry; 84
Spanish, courses; 177
Speakers, Campus; 29
Speech, courses; 177
curriculum; 88
Stagecraft, courses; 183
Stanford University; 214
State University and Colleges; 217
Stewardess, Flight; 48, 95
Student Government and Activities; 28-30
associated; 37
health; 21
leadership; 136, 143
Student Services; 21-27
Summer Term; 16
Superintendent; 5
Supervision
courses; 178
curriculum; 58
Supplemental Educational opportunity grant; 21

Transfer Students, Program for; 19, 189-216
Trigonometry, course; 155
Tuition; 33, 36
Typing, courses; 116

United States International University, San Diego; 214
Units, definition; 38
limitations; 38
requirement for graduation; 45
University of California
Berkeley; 191
lower division requirements-business administration; 63
letters and sciences; 191
University of California
Davis; 192
University of California, Irvine; 193
University of California, L.A.
accounting; 61
admission; 189
business administration; 62
College of Fine Arts; 195
Dentistry; 66
Letters and Science; 196
University of California, Riverside
College of Letters and
Science; 198
University of California, San Diego, Muir College, 202
Revelle College; 203
Third College; 204
Fourth College; 205
University of California, S.B.
College of Letters and
Science; 205
University of California, Santa Cruz; 206
University of Southern California
Business, school of; 63
Dentistry; 66
Lower division requirements-
Letters, Arts and Sciences; 215

Veterans, education; 20
military training credit; 40
Veterinary Medicine,
curriculum; 88
Vocal music, courses; 159
Vocational Nursing, courses; 185
curriculum; 57

Welding, courses; 187
Withdrawal from class; 43-44
from College; 43-44
Work Experience; 19, 187