Acknowledgements:

Catalog theme depicts some of the great events of American History in commemoration of our nation’s Bicentennial Celebration. Illustrations and graphics by Technical Graphics Students under direction of Sam Anslyn, Associate Professor.

Graphic Design by Philip Dockter
Glendale Community College

Founded 1927
A Public Community College offering instruction in the areas of General Education, Pre-Professional Training, Vocational, and Technical Education

Catalog
1975-1976
1500 NORTH 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
Blanch M. Greenwood
John C. Hedlund
Carl Raggio
William B. Murphy

Superintendent
Burtis E. Taylor

Glendale Community College
Administration
John A. Grande: President—Assistant Superintendent
John A. Davitt: Administrative Dean—Student Personnel
Ivan L. Jones: Administrative Dean—Instruction
David C. Leek: Administrative Dean—Continuing Education
Harold B. Cochrane: Dean—Guidance and Counseling
Dwain O. Reinbolt: Dean—Admissions and Records
Thomas S. Ryan: Dean—Occupational Education
J. Walter Smith: Dean—Student Activities
Charles C. Wheelock: Dean—Community Services and Summer Session
Harry L. Beck: Acting Coordinator—Adult Education
Patricia A. Lienhard: Coordinator—Women’s Services
Mrs. Barbara N. McGuire: Coordinator—Parent Education and Home Arts
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College Calendar 1975-1976

1975
May 23  PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m.*
May 26  Legal Holiday (Memorial Day)
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 17-19 Summer Session Registration
June 20  End of Semester II
June 23  Summer Session Begins
July 3  PRE-REGISTRATION EXAMINATIONS, 1:00 p.m.-4:00 p.m.*
July 4  Legal Holiday (Independence Day)
July 25 PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m.*
August 1 Summer Session Ends (six week)
August 22 Summer Session Ends (nine week)
August 25 PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m.*
September 1 Legal Holiday (Labor Day)
September 8 PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m.*
September 9 Legal Holiday (Admission Day)
September 15 Class Instruction begins for Semester I
November 11 Legal Holiday (Veterans' Day)
December 29 PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m.*

1976
January 1 Legal Holiday
January 9  PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m.*
January 26 PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m.*
February 12 Legal Holiday (Lincoln's Birthday)
February 16 Legal Holiday (Washington's Birthday)
May 21  PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m.*
May 31  Legal Holiday (Memorial Day)
June 19  PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m.*
July 1  PRE-REGISTRATION EXAMINATIONS, 8:30 a.m.-11:30 a.m.*
July 23  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.
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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 unceasing 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 up-date 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 36-1/2 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:

- English (9, 10, 11) .......................................................... (30 sem. hrs.) 3 cr.
- Mathematics (9 or higher) ........................................... (10 sem. hrs.) 1 cr.
- World History (Modern) ............................................... (10 sem. hrs.) 1 cr.
- Lab. Science (10 or higher) ................................. (10 sem. hrs.) 1 cr.
- American History (11) ................................................. 1 cr.
- American Government (12) ........................................... (5 sem. hrs.) ½ cr.
- Major sequence (other than English and History) ....... (35 sem. hrs.) 3½ cr.
- Elective (including First Aid and Driver Education) .... (50 sem. hrs.) 5 cr.

**TOTAL** ........................................................................ (160 sem. hrs.) 16 cr.

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 Educational 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 23, 1975 and end August 1, 1975. 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 través 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 otras formas de ayuda serán combinadas para ayudar a aquellos que demuestren necesidad económica y capacidad para estudios escolares.

El Colegio también ofrece ayuda en varias áreas tales como: educación autoprogramada, cursos cortos para refrescar conocimientos de secretaría,
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 300 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 45,000 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, oversize 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 choice of any number of programs,
2. As many as 32 students can listen to one phonorecording at the same time,
3. Six student stations have phonorecord player installations so students can individually control and listen to phonorecords,
4. 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,
5. 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 of 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.

New Horizons Program

The New Horizons Program for Women has a major goal of providing any woman the opportunity to expand her views and increase her personal, academic, and vocational self-fulfillment in an educational environment which is both flexible and accessible. The development of the New Horizons Program has been extended to include special college credit seminars as offered by the women counselors. The seminars consist of vocational and educational exploration and decision-making, personal development, study skills, and individual and group counseling concerning the problems of family responsibility, time scheduling, and academic pressures of women who have recently returned to college.

Transfers to Four-Year Colleges and Universities

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 184.

2. In addition, it is advisable for the student 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 the length of Veteran entitlement to be 45 months as a maximum. It is suggested that Veterans complete 12 units a semester if they are to complete their objective in the 45 month maximum.

Women's Center
The Women’s Center is located in Campus Center and is open to all women students at Glendale Community College as well as all interested women in the community. It is staffed by specially-trained peer counselors. It is an informal spot for the women to get together for information and friendship.

Cooperative Education
Glendale Community College, under a State approved plan, cooperates with local students, business, and industry in the Cooperative Education-Work Experience
program. Each community college in California has the responsibility within the limits of their resources to maximize and utilize all possible educational experiences which are advantageous to the students. One method is through Cooperative Education-Work Experience programs. Through the cooperation of business, industry, and government, students earn credit for supervised off-campus employment. Occupational Cooperative Education-Work Experience must be directly related to the student's two year career college program. Coordinated classroom instruction is included to help the student understand and appreciate the problems of business and industry. The student must maintain an enrollment of no less than eight units including Cooperative Education.

*See page 184 this catalog.
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 current students and former students in securing part-time and full-time employment. Applications should be made in person at the Placement Office in the Student Services Building.

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

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, and/or the Financial Aid Office.

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 April 1, 1973 are eligible to apply for these grants. Applications are available in the Financial Aid Office.

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 $1000 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 Financial Aid Office.
Health Center  Glendale Community College provides a professional certificated nurse for hearing, vision screening and health counseling. Referrals are made to appropriate community resources. She is on campus each Wednesday. A Health Clerk is available in the Women's Gymnasium, Room 103, to administer First Aid. Her hours are 8 a.m. to 2:30 p.m. daily. Accidents occurring outside these hours are reported to AD 107. Extended day students report accidents to AD 124.

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 Insurance 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 available in the Financial Aid Office.

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 $300 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, Glendale Branch, Scholarship, Glendale Chapter  Two scholarships are awarded to outstanding Botany students, one each semester, as selected by students majoring in Botany.

American Business Women's Association, Verdugo-Glen Chapter  A number of scholarships are awarded each year to help women students defray their expenses while attending Glendale Community College.

Assistance League of Glendale Scholarship  The Assistance League of Glendale awards $100 each to three continuing students for expenses while attending College.

Associated Women Students Scholarship  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 at Glendale Community College or at an institution of higher learning.

Bank of America  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.

Building Contractors' Association of Glendale  A $250 scholarship is awarded to a student continuing his education at Glendale Community College majoring in the field of Architecture.

Chevy Chase Estates Garden Club  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.

Delta Kappa Gamma, Epsilon Epsilon Chapter  One $100 scholarship awarded biennially for a woman transferring to a four-year college or university, with teaching as her goal.

Delta Kappa Gamma, Xi Chapter  One $200 scholarship for a woman transferring to a four-year college or university and planning for a career in the field of education.

Derrill Place Memorial Scholarship  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.
**Doehring Foundation**  
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.

**Edvard Greig Norwegian Scholarship**  
six $50 scholarships are awarded each year to help defray Glendale Community College expenses.

**Eleanor Kentner Kohler Memorial Scholarship**  
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.

**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 his/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 Art Association**  
One $500 scholarship for an outstanding art student chosen by the Glendale Art Association from three candidates recommended by the Art Department of Glendale Community College.

**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 College Patrons Club Music Scholarships

Six Season Tickets to the Glendale Symphony are awarded each year to outstanding music students recommended by the Music Department at Glendale Community College. These tickets are purchased by the Glendale Community College Patrons Club.

Glendale Community College Patrons Club Women's Center Scholarships

Two $75 scholarships are awarded to mature women students to assist them in continuing their education at Glendale Community College.

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 Women's Classified Service Clubs

One $200 scholarship is awarded to a woman student transferring to an upper division institution. Funds for this scholarship are donated by the Altrusa, Pilot, Soroptimist, and Zonta Clubs of Glendale.

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.

International Club Scholarships

Two $100 scholarships are awarded each semester to assist International Students meet their expenses at Glendale Community College. Funds are raised by the Glendale Community College International Club.

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. In addition, alternate awards are made.

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 $400 scholarship or two $200 scholarships are 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 the outstanding graduating man selected 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 $150 scholarships are awarded each year to a man and a woman resident of La Crescenta who are either continuing their education at Glendale Community College or 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.

Los Angeles Advertising Club Scholarship  One $200 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.

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.

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.

Owen Marsh Meredith Scholarship  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.

Pauline Hagelin Music Scholarship  The Glendale Community College Patrons Club awards a $100 scholarship to a woman graduate selected by the music department. This scholarship is in honor of Mrs. Pauline Hagelin.
Richard W. Tang, Jr. Memorial  Each year $50 is awarded to the outstanding male athlete of Glendale Community College.

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.

Toastmasters Jewel City, Chapter 29  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.

Tuesday Afternoon Club Scholarships  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.

Valley National Bank Scholarship  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.

Women's Athletic Club Study Grant  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.

Women's Center Scholarships  Six $50 scholarships, donated by the Soroptomist Club of Glendale, are awarded to assist mature women students in continuing their education at Glendale Community College. The awardees are selected by the staff of the Glendale Community College Women's Center.

Women's Committee, Glendale Chamber of Commerce  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.

Women's Committee of the Glendale Symphony Association  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.
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

The Student Services card 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, those students not purchasing a Student Services card 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 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 Hour” 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
  - Open to all
- **A.S.B. Executive Board**
  - Governing Body: Both
  - Open to all
- **A.M.S. Board**
  - Governing Body: Men
  - Open to all
- **A.W.S. Board**
  - Governing Body: Women
  - Open to all
- **Inter-Club Council**
  - Governing Body: Both
  - Open to all

#### Athletic Organizations
- **Intercollegiate Sports Assn.**
  - Co-ed Sports: Both
  - Open to all

#### Interest Clubs
- **Alpha Chi**
- **American Society of Engineers and Architects**
- **Aqua Vaqs**
- **Archi**
- **Baha'i Club of Glendale Community College**
- **Beta Kappa**
- **Biography**
- **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**
  - Service: Both
- **Delta Chi Delta**
  - Service: Women
- **Gamma Delta Phi**
  - Service: Women
- **Phi Alpha Theta**
  - Service: Women
- **Psi Delta Phi**
  - Service: Women
- **Zeta Sigma Phi**
  - Service: Women

### Notes
- Application 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 Services, 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.
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 admission 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

The following statement of the rules regarding residency is intended for general information only. Please refer specific questions regarding residency determination to the Office of Admissions and Records at the college.

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.

A “resident student” means any person who has been a bonafide resident of the state of California for one year or more on the day preceding the first day of instruction of a semester or session during which he proposes to attend.

A “non-resident student” means any person who has had legal residence in California for less than one year on the day preceding the first day of instruction of a semester or session during which he proposes to attend.

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 a small portion in 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. 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 1975-76 at $29 per semester unit for out-of-state students. International Student tuition rates are established on a yearly basis. For information concerning International rates call the Office 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. In addition, a new course Multi-Media 190 offers students an opportunity to receive training as student aids, tutors, and paraprofessionals. This training involves learning, testing and prescription techniques, taking Super 8 movies for use in the classroom, as well as methods of producing film loops, and minicourse learning packages. Students taking this course are given first consideration as aides and tutors in the Learning Resource Center.

**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 officially enroll in classes listed on the Study List at the time of registration. These classes constitute the official program of the student. Changes to this program may be made by completion of a Petition for Change of Program.

Continuing students enroll according to the times published in the Schedule of Classes. New or returning students enroll at the time and day specified for them by the Admissions Office.
The student is held accountable for all classes in the official program as a result of original registration or addition through Petition for Change of Program. The student may not receive credit for classes attended unless they are part of the official program. Registration for purposes of 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 $29 per semester unit. 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.

A Health Services fee is required of all students. This fee provides various health services on the college campus as well as an on-campus accident insurance policy. The fee is $3 per semester for students enrolled in 9 or more units and $2 per semester for students enrolled in 8 1/2 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 through payment of the Student Services Fee. All students are expected to pay this fee. 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 college activities as well as discounts in over thirty (30) Glendale retail stores. In addition, this fee funds the emergency loan fund, the college bookstore, the business office and a scholarship program.

**Associated Student Body Membership**

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.

### Grades, Grade Points, and Grade Point Average

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: 4 grade points per unit
- **B** — Good, above average: 3 grade points per unit
- **C** — Average: 2 grade points per unit
- **D** — Barely passing: 1 grade point per unit
- **F** — Failure: 0 grade points
- WF — Withdrew Failing: 0 grade points
- WU — Withdrew Unofficial: 0 grade points
- Inc/W — Incomplete Withdrawal: 0 grade points
- Inc/F — Incomplete Failure: 0 grade points
- **W** — Withdrawn: 0 grade points
- CR — Credit: 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
Credit for Advanced Placment 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

Upon consent of the instructor and 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:

- Art 101, 102, 103, 106, 107, 108, 113, 116
- Aviation and Transportation 110, 111, 115, 116, 120, 121, 122, 123, 124, 125, 126, 127
- Business 122, 128, 129
- Chemistry 101, 102, 110, 141
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, 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)
- Home Arts (all)
- Machine Shop (all)
- Materials and Processes 146

*Note: For midst joined after 9th week of the semester
Biology (all)  Mathematics 140, 141, 143, 144, 150
Business (all courses except 101, Metals 115
102, 245)  Mineralogy (all)
Chemistry 110, 141, 143  Multi-Media 190
Drafting (all)  Music (all except 163)
Economics 101, 102, 107  Paleontology 101
Electronics 171, 172  Philosophy (all)
Engineering 101, 103, 104, 108,  Photography (all)
110, 142  Physical Science 131
English 103, 105, 106, 109, 110, 122,  Physics 110, 145
123, 124, 125, 126, 128, 190, 192,
193, 199  Police Science (all)
Fire Science (all)  Political Science 102, 104, 110, 151
Food Service 111, 112,  Psychology (all)
113, 114, 115, 116, 117, 118, 119  Real Estate (all)
Food Service Management  Social Science 102, 122
211, 212, 213, 214  Sociology (all)
French 110  Spanish 106, 110
Geology 101, 105, 110  Speech 121
Guidance (all)  Supervision (all)
Health & Physical Education 121-195  Technical Graphics (all)
History 101, 102, 106, 107, 108, 109, 111,
Theater Arts 103, 104, 109, 110
112, 113, 119, 120, 151  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 or 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 subpoena requirements, 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 of the Office of Admissions 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, (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.

**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 214.

   Humanities
   Fine Arts
   Language Arts
   Social Sciences

   Science
   Biology
   Mathematics
   Physical Science

   Applied Arts
   Business
   Health
   Home Arts
   Technology
   Vocational Nursing

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, 128, 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; Physical 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, 111, 112, 113, 117, 118, 119, 120, 151; Political Science 101, 102, 103, 104, 105, 106, 108, 110, 151; Psychology 101, 102, 110, 131; Social Science 102, 121, 122, 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, 127, 128, 198; Music 101, 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, 122, 128, 129, 145, 147, 161; Economics 107; English 101, 102, 120, 131, 132, 190, 191, 192, 199; Food Service 113-119; Food Service Management 211-214; Home Arts 105, 123; Journalism 101, 102; Mathematics 140, 141, 143, 144, 150; Philosophy 117; Social Science 141; Speech 101, 121; Supervision 111, 112; All Foreign Languages (101 through 106 only).

*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 41.
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

**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, 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 and Design (Commercial)**

The two-year curriculum prepares a student to enter employment as an architectural draftsman in the architects' offices or transfer to a university. 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, 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.

Aviation and Transportation  
Airlines Administration  is for those who wish to enter airline work as Clerks, Agents, Station and Traffic Managers

These courses are required: Aviation and Transportation 120, 128, 130
Business 105, 145, 147 or equivalent
Psychology 110

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

Aviation and Transportation  
Flight Attendant  is for those who wish to become flight attendants. 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 Attendant Program should take Aviation and Transportation 129 prior to Aviation and Transportation 120.

These courses are required: Aviation and Transportation 120, 129, 130
Home Arts 133
Psychology 110
Speech 101 or Speech 121

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

Aviation and Transportation—Aircraft  
Powerplant Maintenance and Overhaul (FAA Powerplant License)  These courses are required: Aviation and Transportation 141, 142, 143
Aviation and Transportation—
Aircraft and Powerplant
Maintenance and Overhaul
(FAA Powerplant and
Air Frame 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: Aviation and Transportation 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.

Aviation and Transportation
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: Aviation and Transportation 120
Advanced Pilot Training: Aviation and Transportation 121, 122, 123, 124, 126

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

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 contact 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, 122 and either 128 or 129, 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, 126, 127, 130, 135, 147, 149, 157, 162, 257
Cooperative Education 102
Economics 107
Business-Banking  Banking Credit Certificate

This certificate is designed for banking students who are pursuing a career in the lending segment of banking operations. The program is approved by the American Institute of Banking and A.I.B. courses taken elsewhere are accepted at Glendale Community College.

These courses are required: Business 101 and 102, 122, 161, 180; Economics 101 or 105; Business 117 or 111, Business 145 or 147 or English 101 or 120; Business 151, 181, 182.

Banking and Finance Certificate

The Banking and Finance program is designed for students who are pursuing a career in a financial institution such as a bank, savings and loan, credit union, thrift company or a finance company. This program is approved by the American Institute of Banking and A.I.B. courses taken elsewhere are accepted at Glendale Community College.

These courses are required: Business 101 and 102 or 105 and 106, 122, 161, 180; Economics 101 or 105; Business 117 or 111, Business 145 or 147 or English 101 or 120.

Banking Management Certificate

This is a supervisory certificate designed for students who are interested in banking operations. The emphasis is placed on management techniques as they relate to banking and other financial institutions.

These courses are required: Business 101 and 102 or 105 and 106, 122, 161, 180; Economics 101 or 105; Business 117 or 111, Business 145 or English 101 or 120, Business 147 or Supervision 111 or 112; Supervision 101, 102, 103 or 104 or 105.

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, 122, 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, 128, 129, 130, 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, 122, 143, 145, 155, 157 or 201, 231, 233, 235, 243, 245

Elective units from the following list are recommended:
Business 106 or 102, 119, 141, 147, 161 or 165, 175, 246
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, 124, 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
This curriculum is designed for those who plan careers in activities such as marketing; marketing research; public relations; selling; retail selling; retail store management; advertising; and a sole proprietorship. The suggested curriculum offers a general education in business administration as well as basic training in the specialty.

These courses are required: Business 101 or 105, 117, 122, 141, 161, 171, 173, 177, Speech 121

Elective units from the following list are recommended: Business 102 or 106, 119, 128, 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, 122, 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, 128, 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, 122, 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, 128, 129, 130, 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, 145, 221, 222, 225, 237, 243
Psychology 101 or 110

Elective units from the following list are recommended: Biology 112
Business 101 or 105, 117, 122, 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
propriorship. 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. In addition to either Business 101, Business 105, or Real Estate 103 and one of the following: Business 161, Real Estate 101, or Real Estate 113, (Real Estate 101 may not be taken for college credit after the completion of any other Real Estate course.)

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

These courses are required: Real Estate 103, 105, 107, 109, 111, and Business 101 or 105.

A minimum of nine units must be selected from the following: Business 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, 122, 141, 143, 151, 153, 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 professional service.

These courses are required: Business 105 or 101, 117, 119, 143, 145, 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, 122, 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, 122, 141, 143, 147, 151, 155, 162, 210 or 211, 236, 246, 249
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, 122, 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.

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)

This curriculum is designed to familiarize students with essentials of electronics. The program consists of both classroom participation which familiarizes the student with electronic theory and a laboratory portion where the student learns how to assemble circuits and use electronic equipment. The curriculum is constantly being updated to reflect the rapid changes in industry. Upon completion the student should have developed techniques and skills suitable for entry into industry as a technician or to transfer to a four-year institution.

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
Business 145
Home Arts 105, 117, 118, 119, 120, 122, 123, 133

**Food Service**
The Food Service Certificate Program is a two year curriculum designed to prepare students for employment in various positions of the food industry. The courses will provide comprehensive knowledge of quantity cooking, operational and communicational skills essential for a food service career.
These courses are required: Food Service 111, 112, 113, 114, 115, 116, 117.
Elective Units: Food Service 118, 119; Home Arts 133; and Psychology 101.

**Food Service Management**

A Certificate of Food Management will be granted to those who satisfactorily complete a 24-unit program from the following:

Food Service 111, 113, 114, 116, 117; Food Service Management 211, 212, 213, 214.

Elective units from the following are recommended:
Supervision 101, 112

**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 the 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
Physical 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, 109
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, 136, 138, 140, 141, 142

Electives (6 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; if wishing to become newspaper photographers, they would profit by courses in journalism; if interested in graphic art, courses in technical graphics are recommended.

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 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, business, 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

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
Elective units from the following are recommended:
Social Science 101, 102

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
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 Repair 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 immediately 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: Aviation and Transportation 120; Chemistry 101, 102; Economics 101; Engineering 103, 104; English 101; Mathematics 103, 104, 130; Physics 101, 102, 103; Psychology 101; Speech 101.

Required courses—Operations: Aviation and Transportation 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: Chemistry 101, 105; English 101, 102; History 110;
Political Science 101; Mathematics 101, 102; Health and Physical Education 101.
Recommended: Biology 137; Psychology 101; Speech 101; Welding 117.

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 or Speech 101; Mathematics 103, 104; Physics
101; Psychology 101; Political Science 101, 106; History 110; Economics 105;
Philosophy 101 or 117; 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; English 102 or Speech 101; Business 111; Psychology 101; Political
Science 101, 106; History 110; Economics 105; Philosophy 101 or 117; Geology 101;
Biology 122, 124; Art 116; Architecture 103, 105; Sociology 101.

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 or Speech 101; Business 111, 165; Psychology 101; Political
Science 101, 106; History 110; Economics 105; Philosophy 101 or 117; Physical
Science 131; Geology 101; Biology 124; Art 116; Architecture 103, 105; Sociology 101.

Business Administration
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, 130; Economics 101-102, 107; English 101-
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,
122, 128, 161; Economics 101-102, 107. See page 214 for general education
requirements for California State University, Los Angeles.

California State University, Fresno
Students planning to enter the School of Business, California State University,
Fresno, at the end of two years at Glendale Community College must complete a
minimum of 60 transferable units and a maximum of 70 units, with an overall "C"
average in all work. If possible, the general education requirements should be certified. The following Glendale Community College courses are highly recommended: Business 101, 102, 111, 122, 128, 161, 171; and Economics 101, 102, and 107.

**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 214 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)
Business (10 units) Business 111-112

*Natural Sciences (6 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 211.

**Pepperdine University**

The following are required or elective lower division course 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: Aviation and Transportation; 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.)

**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 187 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 must 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.

Criminal Justice  California State University, Long Beach
Majors in Criminal Justice 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 criminal justice.

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.

University of California, San Francisco
These courses are required: Chemistry 101, 102, 105, 106

English 101-102
Biology 101-102
Physics 105, 106
Psychology 101, 102 or 107

Twelve 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
Health and Physical Education 101
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.

*Art 151 is recommended in preparation for the Dental Aptitude test.
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
Biology 112, 120, 121
Business 101
Sociology 101, or Anthropology 102
Psychology 131
Home Arts 125, 135

Economics Economics majors should follow the curriculum pattern outlined under General Education Requirements for Graduation from Colleges and Universities. See page 184.

University of California, Berkeley
Required: Economics 101, 102, 107

University of California, Los Angeles
Required: Economics 101, 102; Mathematics 103
Recommended: Economics 111

University of Southern California
Required: Economics 101, 102; Mathematics 103

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 engineering, civil engineering/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, 130; 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; two semesters of Health and Physical Education activity courses.

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 101*, 103**, 108***, 110; Chemistry 101, 102.

*Engineering 101 not required by Electrical Engineering.
**Engineering 103 required by Mechanical Engineering only.
***Engineering 108 required only for Electrical Engineering and Aerospace 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 requirements see page 214.

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

**Inter-disciplinary Majors**: Aeronautics and Astronautics, Applied Science, Environmental Engineering, Product Design.

**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.

**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. Masses 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.

*Students planning to transfer to Berkeley should include Mathematics 130 which will satisfy the lower division required course on introduction to programming.

Lower division engineering courses in the University of California, Berkeley, curricula include: Civil Engineering: Engineering 103, 108, 110; Electrical Engineering and Computer Science: Engineering 108; Industrial Engineering and Operations Research: Engineering 108; Mechanical Engineering: Engineering 103, 108, 110; Materials Science and Engineering: Engineering 108, 110. Engineering Science students should include: English 101 or Speech 101, technical electives; Bioengineering students should include: Biology 101, 102, those in Engineering Geoscience: Geology 105, 110; all others three (semester) units of Engineering 103, 108, 110. All double major programs between curricula are described in the Announcement of the College of Engineering.

**Students planning to transfer to Davis are not required to take Engineering 104. Students should take English 101 and 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 University of California at San Diego should decide which USCD college they wish to enter, and work toward completing appropriate general education requirements—although requirements for the major should take first priority. No lower division engineering courses are required.

**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, Biomedical, 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 105; 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 or Chemical Engineering).

*It must also include Chemistry 102 and 103 for majors in Chemical, Petroleum, and Biomedical Engineering.

**California State University, Sacramento

Bachelor of Science degrees are offered in Civil, Electrical, and Mechanical Engineering. Students planning to complete the work for an Engineering Degree should include in their programs the following courses: Chemistry 101, 102;
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, 102; 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, two semesters.

**California State University, Sacramento**

The Engineering Technology program at California State University, Sacramento is for students who have completed a two-year technology program for an A.S. degree at a community college or have the equivalent training. The program currently offers options in Construction Technology and in Mechanical Technology.

In conjunction with completing the requirements for the A.S. degree, students should take the following courses: Biology 122; Chemistry 110; English 101, 102; Mathematics 101, 102; Physics 105, 106; Engineering 103, 104.

**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 46 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. One year of Latin in high school is 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 at 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 Humboldt State University, offers a Bachelor of Science and M.S. Degree in Forestry. 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.

*Courses that must be completed prior to admission to Humboldt.

**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 184.

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 or Biology 101; 40 units of lower division courses in Physics 101, 102, 103; Chemistry 101-102, 103; Mathematics 103, 104, 105, 106; Economics 107.

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 103.

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 184.

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 or History 107-108 or History 108-109. Two courses chosen from the following: History 103, 104, 117-118, 120.

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 concerned with going into teaching or pursuing careers in industry at the technician and management levels. At present, degree programs in industrial arts leading to the credential or industrial technology are offered in the following state colleges and state universities: California State Polytechnic University, San Luis Obispo; Chico, Fresno, Humboldt, Los Angeles, Long Beach, San Diego, San Francisco, and San Jose.
California State University, Fresno
In addition to the completion of a certifiable General Education program as outlined on page 214 the following courses are recommended: Machine Shop 101; Metals 115; Welding 117; Engineering 101; Electronics 175 or 177; Photography 101 or 102; Printing 101.

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 214.

California State University, Los Angeles
In addition to the completion of the General Education requirements (see page 214) the following courses must be elected.

Drafting 131 or Engineering 101; Metals 115; Electronics 171 or Electronics 175; Photography 101-102; Supervision 113

California State University, San Jose
Students planning to attend San Jose to seek a major in industrial arts should complete the following: No more than four distinct technical basic courses, one of which should be Technical Graphics 165; English 101-102 and English 105; Speech 101; History 117-118 and Political Science 101; Chemistry 101, 102, 105, and in addition, Biology 101; and six units from Art 101, 102, 103, 106, 107, 108 and Music 120, 125, 126.

California State University, Chico
In addition to the completion of the General Education requirements (see page 214.) The following courses must be elected:

Drafting 131; Electronics 171; Metals 115; Photography 101; Printing 101-104; Technical Graphics 165, 166.

Industrial Technology California State University, Fresno
Prepares students for technical management positions in industry. Options in the Manufacturing and Constructions industries with emphases in a number of technical areas are available. At present programs are offered at the following California State Universities: Fresno, San Jose, Long Beach, San Luis Obispo, Chico, and San Diego. The catalogs of these particular Universities should be consulted for requirement details.

Construction Option:
Core: Architecture 101; Electronics 175; Business 101, 122; Chemistry 110; Mathematics 103; Materials and Processes 146.

Architectural Drafting Emphasis: Engineering 103;
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 214 including:
Economics 101, 102; Physics 105, 106.

*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. The Industrial Arts and Technology Department should be contacted as early as possible for additional information.

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 103; Political Science 105-106; Physics 105, 106. Any course in Art, Music, or Theater Arts (3 units).

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 103; Political Science 105, 106; Physics 105, 106. Any course in Art, Music, or Theater Arts (3 units).

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 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; Economics 111 or History 110; Political Science 105-106; any course in Art, Music, or Theater Arts (3 units).

Note: Maximum of 24 technical units may be transferred, to include Machine Shop 101, Drafting 131, technical electronics.
Additional courses may be taken in the Options: Construction — Business 101, Philosophy 117
Electronics — Business 101, Philosophy 117
Manufacturing — Business 101, Philosophy 117
Hastings College of the Law, University of California

The Dean and Committees on Admissions do not require that the prospective students 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 students should endeavor to provide themselves 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 students by exposing them to more of the complex problems of our society and in providing them with a greater acuity for logical perception and in-depth analysis. It is essential that the students possess 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 their studies. All applicants are required to take the Law School Admission Test administered by the Educational Testing Service, and register with the Law School Data Assembly Service (LSDAS).

In recognition of the under-representation of minority members in the legal profession, in 1969 the College initiated the Legal Education Opportunity Program (LEOP) designed to increase significantly its minority student enrollment. As a result of this program, the number of Black, Chicano, Asian, and American Indian students in the College has increased substantially. This program includes a flexible admissions approach. Any applicant wanting his or her file evaluated under the LEOP Program should so state that fact on the application.

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 several fields with emphasis on a particular field of interest. 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 a particular area. 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 or she 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 1974-75 edition, published in October, 1974, 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, 116, 130. Acceptable electives are Police Science 107, 126. 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 recommended for the student who intends to major in Liberal Studies at California State University, Long Beach: English 101, 102. Two courses from: English 105, 106, 122, 123, 125, 126. Mathematics 138 or Mathematics 103 and Mathematics 104. One or two courses from: Chemistry 101, 110; Physics 105, 110; Geology 110. History 110, Political Science 101 and Political Science 106 or History 117, 118 and Political Science 106. Three courses from: Anthropology 102; Economics 101, 102; Geography 101, 102; Political Science 102, 103; Psychology 101, 110; and Sociology 101, 102. Three courses from: Art 101, 102, 113, 115; Music 111, 120 (at least one Music and one Art course). Two courses from: Art 108; History 119, 120; Philosophy 114. Optional courses: English 103; 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 Glendale Community College courses are required:


Electives may be taken from Political Science 101; Geography 105; History 110, 117, 118; Music 110, 120, 125, 126; Art 101, 102, 103, 106, 107, 108, 110; Physical Education 169, 172, 173, 175; and courses from the foreign languages, literature, and philosophy.

**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 the MLS, Ph.D. and DLS degrees, though only one course is offered to undergraduates. The program at UCLA is also primarily a graduate program offering courses leading to the MLS, though two courses are offered to undergraduates. UCLA is officially accredited by the State of California for its program leading to a Library Services Credential (School Library Media
Specialist). 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. Both UCLA and UCB offer 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 184.

**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 117) during their senior year. (See degree requirements outlined in the Graduate Bulletin.)

Lib 1 and Lib 100 are service courses open to all students who wish to strengthen their background in the use of library resources.

**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 semester units or the equivalent number of quarter 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, 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.
*Biology must include one (1) year of General Biology

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)
(Biology 138, Mathematics 132 or Mathematics 134 offered at U.C.L.A. or equivalent must be completed for admission. Physical chemistry is recommended.)

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, 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 211.

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 Humboldt State University
At Humboldt State University, the student may obtain a Bachelor of Science Degree in Fisheries, Forestry, Wildlife Management, Oceanography, Natural Resources, and Range Management. A M.S. Degree in Natural Resources is available in Watershed Management as well as all of the fields listed above.

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 Humboldt State University 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

*Students will take Microbiology 200B, a, and the lower division Nursing Courses, Chemistry 152* at California State University, Los Angeles.

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
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 193.

*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.
The following courses are required: Chemistry 101-102, 105-106; Economics 107 or Psychology 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 102
English 101-102
Mathematics 103
Physics 105-106
Psychology 101
Electives (12 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 (graduate level only); 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 at 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 211 as well as additional requirements in Natural Sciences. Science credit must include Biology 101-102, 120, 121; Chemistry 101, 102; Physics 105, 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:
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 March 15 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 214.
**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 184.

**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.

**Psychobiology**

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 Psychobiology.

**University of California at Los Angeles**

Required: Biology 101, 102; Chemistry 101, 102, 105; Business 125 or Mathematics 130; Mathematics 103, 104; Physics 105, 106; Psychology 101, 107.

Note: This major is an alternative to the general Psychology Major and is designed for students who plan to go on to graduate work in Psychobiology or the Health Sciences.

**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 184.

**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, 107; Biology 101; a course in Physics and Chemistry (Physics 105, 106, 110 and/or Chemistry 101, 110); Mathematics 103, 104; Anthropology 101; Business 125 or Mathematics 130.

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**

The School of Public Health offers undergraduate instruction leading to the Bachelor of Science degree as well as graduate instruction leading to the Master of Science, Master of Public Health, Doctor of Philosophy, and Doctor of Public
Health degrees. Public Health is a broad, multidisciplinary field of study directed toward the understanding and control of factors affecting the health of populations. Public Health relies heavily on research methods to identify important health relationships and uses the community or social approach to the problems of health and disease in their preventive or therapeutic aspects. The concerns of public health cut across national boundaries, and include the functions of both voluntary and governmental agencies and of research and teaching institutions.

Students may prepare themselves for careers in such basic specialties as epidemiology, biostatistics, nutritional sciences and environmental health. They may also prepare themselves for the newer challenges of community well-being such as the operation of hospitals, the health education of the public, organization of medical care, community health administration and behavioral sciences in public health.

**Undergraduate Curricula**
The Bachelor of Science is a two-year degree program for students in the junior and senior years. Students may select a major from: Biostatistics, environmental health, health education, health records science, and nutritional sciences. Except for the major in health records science, admission is limited to student transfers within the University of California. Students from other colleges or universities who are interested in the health records science major must meet the general University requirements for admission. Two applications must be filed. One with the Office of Student Affairs, School of Public Health, University of California, Los Angeles 90024 and the other application may be obtained from the Director of Admissions, 1147 Murphy Hall, University of California, Los Angeles 90024. A fee of $20 must accompany this last application. (If check or money order, make check payable to the Regents of the University of California.)

Applications should be filed well in advance of March 15 of the year in which the student wishes to be admitted, as most students are admitted for the fall quarter.

Students preparing for admission should take: (1) two years of one foreign language in high school; (2) two years of high school mathematics; (3) English 101; (4) Chemistry 101-102; (5) Biology 101-102, 112; (6) Mathematics 103-104; (7) satisfy the American History and Institutions requirement (History 117-118 recommended); (8) three courses in social sciences; (9) three courses in humanities. Applicants must also have completed at least 84 quarter units of acceptable work with a 2.00 (C) grade point average. Those presenting more than 90 quarter units will be admitted only if they can complete all degree requirements within the School limit of 208 quarter units.

**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 Preschool and Elementary School**

This career requires as much interest in children themselves as in curriculum content. Preparation for teaching children includes (1) psychology, sociology, anthropology and biology content which builds understanding of human development and (2) broad knowledge of the humanities and sciences. Pacific Oaks specializes in preparation for infancy through the 6th grade.

Pacific Oaks curriculum prepares for teaching in a wide variety of early childhood programs including Day Care, Head Start and elementary school and also for advanced study leading to such careers as parent education leadership, child welfare work, research, child development laboratory and community college teaching, and early childhood administration and supervision.

A student may enroll in a program leading to a California State Multiple Subjects Teaching Credential, which authorizes teaching in preschool through 12th grade in self-contained classrooms. To get a preliminary credential, students in this program must complete a B.A. with either (a) a Diversified Major or (b) a Human Development major and pass a state exam. The professional preparation may be included as part of the B.A. program or completed in a 5th year post-baccalaureate program.

Completion of the Recommended transfer program for Pacific Oaks College (see page 208 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, 121; 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 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 14 1/2 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, 1/2 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.

TELEVISION COURSES

A few courses available only by television are identified by "TV only." Television courses are not available each semester, but will be listed in the Schedule of Classes when they are offered. Those courses available both on television and on Campus will be described "TV also."

Accounting

PRINCIPLES OF ACCOUNTING
See Business 101, 102

BOOKKEEPING
See Business 105, 106

BUSINESS DATA PROCESSING
See Business 122, 124, 126, 127, 130, 135.
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 3 UNITS 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 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 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.; methods of determining time, as Carbon-14, potassium-argon, dendro-chronology, 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 3 UNITS

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 commer-
cial 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.

Art

101—HISTORY OF ART—TV also 3 UNITS

Prerequisite: None.

A survey and appreciation of the architecture, painting and sculpture from their origins in prehistoric times to early medieval.
Lecture 3 hours.

102—HISTORY OF ART 3 UNITS

Prerequisite: None.

A survey and appreciation of the architecture, painting and sculpture from the Early Medieval period through the 18th Century. An introduction to the philosophical, economic, and political ideas that influenced those trends.
Lecture 3 hours.

103—HISTORY OF ART 3 UNITS

Prerequisite: None.

A survey of the growth of 19th and 20th century trends in painting, sculpture, architecture and the minor arts in Europe and the United States from their origins to the present.
Lecture 3 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 aspects 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 acrylics. 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**

*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**

*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**

*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**

*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**

*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**

*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**

*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**

*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—TV also 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.

Automatic Sprinkler and Fire Control

101—THE INDUSTRY AND SPRINKLERS 3 UNITS
Prerequisite: Employment as a fire sprinkler fitter apprentice or consent of instructor.

Overview of the trade and the industry, classes of sprinkler systems, fundamental elements of system design, and sprinkler head characteristics. The first course of a ten-course series for those apprenticed in the trade.

Lecture 3 hours.
102—FIRE CONTROL MATHEMATICS  3 UNITS

Prerequisite: Automatic Sprinkler and Fire Control 101.
Review of trade mathematics with special attention to applications necessary to accomplish the jobs involved in this field.
Lecture 3 hours.

103—PIPE INSTALLATION AND MAINTENANCE  3 UNITS

Prerequisite: Automatic Sprinkler and Fire Control 102
Covers various aspects of underground piping, including joints, installation methods, protection from freezing, hydrants, valves, tests, connections, types of pipe, flushing techniques, and dealing with pipe corrosion.
Lecture 3 hours.

104—FIRE CONTROL HYDRAULICS  3 UNITS

Prerequisite: Automatic Sprinkler and Fire Control 103
Covers elements of the practical aspects of hydraulics needed by those employed as automatic sprinkler fitters.
Lecture 3 hours.

105—BLUEPRINT READING AND SKETCHING  3 UNITS

Prerequisite: Automatic Sprinkler and Fire Control 104
Covers freehand sketching and blueprint reading as they apply to automatic sprinkler fitter operations.
Lecture 3 hours.

106—WATER CONTROL AND INDUSTRY ECONOMICS  3 UNITS

Prerequisite: Automatic Sprinkler and Fire Control 105
Covers water supply as to conducting, friction, and flow problems, pressure measurement and control, storage, and pumps as well as practical economics in regard to fire control workers. Also covers elements of cost and job planning.
Lecture 3 hours.

107—FIRE CONTROL VALVES  3 UNITS

Prerequisite: Automatic Sprinkler and Fire Control 106
Covers nature and operation of various kinds of valves and alarms.
Lecture 3 hours.

108—DRY SYSTEMS, TANKS, AND PUMPS  3 UNITS

Prerequisite: Automatic Sprinkler and Fire Control 107
Covers dry systems, tanks and pumps.
Lecture 3 hours.

109—SAFETY AND SPECIALIZED SYSTEMS  3 UNITS

Prerequisite: Automatic Sprinkler and Fire Control 108
Covers the economics of safety, rigging and scaffolding, and various specialized systems.
Lecture 3 hours.

110—THERMOSTATIC CONTROL AND REPORTS  3 UNITS

Prerequisite: Automatic Sprinkler and Fire Control 109
Covers thermostatically controlled systems and reports of special use to the fire sprinkler fitter.
Lecture 3 hours.

Aviation and Transportation
(Formerly Aerospace Technologies)

101—AUTOMOTIVE MAINTENANCE FOR CONSUMERS  1 UNIT

(Formerly Auto Mechanics 101)

Prerequisite: None.

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

Aviation and Transportation 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

(Formerly Auto Mechanics 102)

Prerequisite: Aviation and Transportation 101 or equivalent.

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

Aviation and Transportation 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
(Formerly Auto Mechanics 103)

Prerequisite: Aviation and Transportation 101 or equivalent.

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

Aviation and Transportation 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
(Formerly Auto Mechanics 104)

Prerequisite: Aviation and Transportation 101 or equivalent.

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

Aviation and Transportation 104 is designed to acquaint the trainee with the various automotive suspension systems. Emphasis 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)

110—PRIVATE PILOT FLIGHT COURSE 2 UNITS
(Formerly Aerospace Technologies 110)

Prerequisite: Aviation and Transportation 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
(Formerly Aerospace Technologies 111)

Prerequisite: Aviation and Transportation 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 Aviation and Transportation 110 and 111.

Lecture 1 hour.

112—COMMERCIAL PILOT FLIGHT COURSE 3 UNITS
(Formerly Aerospace Technologies 112)

Prerequisite: Aviation and Transportation 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
(Formerly Aerospace Technologies 113)

Prerequisite: One hundred hours of flying time or completion of Aviation and Transportation 112. Aviation and Transportation 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
(Formerly Aerospace Technologies 115)

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
(Formerly Aerospace Technologies 116)

Prerequisite: Commercial Pilot’s License or Aviation and Transportation 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 Instrumental 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
(Formerly Aerospace Technologies 120)

Prerequisite: None.

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


Lecture 5 hours.

121—NAVIGATION  3 UNITS
(Formerly Aerospace Technologies 121)

Prerequisite: Aviation and Transportation 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
(Formerly Aerospace Technologies 122)

Prerequisite: Aviation and Transportation 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 at-
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mosphere, 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 3 UNITS
(Formerly Aerospace Technologies 123)

Prerequisite: Aviation and Transportation 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 3 hours.

124—RADIO PROCEDURES AND FLIGHT REGULATIONS 3 UNITS
(Formerly Aerospace Technologies 124)

Prerequisite: Aviation and Transportation 120 or a Private Pilot’s License.

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 3 hours.

125—INSTRUMENT PROCEDURES AND RADIO NAVIGATION 3 UNITS
(Formerly Aerospace Technologies 125)

Prerequisite: Aviation and Transportation, 120, 122, or Private Pilot’s License meets all prerequisites.

Note: It is recommended that Aviation and Transportation 131 be taken concurrently.

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 3 UNITS
(Formerly Aerospace Technologies 126)

Prerequisite: Aviation and Transportation 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 3 hours.

127—FLIGHT TRAINING MANEUVERS 3 UNITS
(Formerly Aerospace Technologies 127)

Prerequisite: Aviation and Transportation 120 or Private Pilot’s License meets all prerequisites.

A detailed study of the maneuvers required for the safe, skillful operation of an airplane. The performance and application of the various maneuvers required by the Federal Aviation Administration for the Private and Commercial Pilot Flight tests will be examined in detail.

Lecture 3 hours.

128—AIRPORT OPERATIONS 3 UNITS
(Formerly Aerospace Technologies 128)

Prerequisite: None.

Note: Aviation and Transportation 120 and 130 are recommended.

Aviation and Transportation 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 ATTENDANT 3 UNITS
(Formerly Aerospace Technologies 129)

Prerequisite: None.

Note: It is recommended that this course be taken prior to or concurrently with Aviation and Transportation 120.
Aviation and Transportation 129 will prepare the student for employment as a flight attendant and will present the advantages and disadvantages of the job.

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

Lecture 3 hours.

130—AIR TRANSPORTATION 3 UNITS
(Formerly Aerospace Technologies 130)

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
(Formerly Aerospace Technologies 131)

Prerequisite: Aviation and Transportation 122.

Note: It is recommended that Aviation and Transportation 125 be taken concurrently.

Aviation and Transportation 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
(Formerly Aerospace Technologies 137)

Prerequisite: Aviation and Transportation 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
(Formerly Aerospace Technologies 141)

Prerequisite: None.

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

The completion of Aviation and Transportation 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 Aviation and Transportation 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
(Formerly Aerospace Technologies 142)

Prerequisite: None.

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

The completion of Aviation and Transportation 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 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 10 hours, laboratory 20 hours.

143—AIRCRAFT POWERPLANT MAINTENANCE AND OVERHAUL 16 UNITS
(Formerly Aerospace Technologies 143)

Prerequisite: Aviation and Transportation 141 and 142.
The completion of Aviation and Transportation 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, propeller, 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
(Formerly Aerospace Technologies 145)

**Prerequisite:** Aviation and Transportation 143, or a powerplant rating.

Aviation and Transportation 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 Aviation and Transportation 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
(Formerly Aerospace Technologies 146)

**Prerequisite:** Aviation and Transportation 145.

Aviation and Transportation 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
(Formerly Aerospace Technologies 148)

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

**Note:** Aviation and Transportation 148 may not be taken for credit if student has completed Aviation and Transportation 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
(Formerly Aerospace Technologies 149)

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

The successful completion of Aviation and Transportation 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.

**Biology**

101—GENERAL BIOLOGY 4 UNITS

**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 4 UNITS

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 5 UNITS

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 4 UNITS

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 4 UNITS

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 4 UNITS

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 3 UNITS

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 3 UNITS

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 4 UNITS

Prerequisite: Biology 122 or Biology 101.

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—FIELD BIOLOGY 5 UNITS

Prerequisite: None.

Note: A course in either high school or college biology and consent of the instructor is recommended.

Ecological studies of alpine to lower desert and aquatic communities. Emphasis is on field investigation of the types, distribution, and diversity of plants and animals within each community. Environmental factors such as climate, soils, and landforms will be integrated with community studies. An extended period in the field may be substituted for a number of shorter field trips (see current class schedule).
Lecture, investigation, and demonstration 7 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.
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 after 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 and roots, Boolean Algebra as applied in set theory, circuits, logic statements and binary arithmetic; fundamentals of algebra and analytic geometry; linear and quadratic functions; 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)

122—INTRODUCTION TO BUSINESS DATA PROCESSING 2 UNITS

(Formerly Business 123)

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.

Lecture and discussion 3 hours, laboratory projects 2 hours to be arranged (8 weeks).

124—COMPUTER OPERATIONS 3 UNITS

Prerequisite: Business 122 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 flow-charting, data flow, scheduling, and distribution of reports.

Lecture and discussion 3 hours.

126—ADVANCED PROGRAMMING PRINCIPLES 3 UNITS

Prerequisite: Business 122 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 SYSTEMS 360 AND 370 PROGRAMMING PRINCIPLES 3 UNITS

Prerequisite: A grade of "C" in Business 122 and either Business 128 or Business 129 or Business 130 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.

128—BASIC PROGRAMMING 2 UNITS

(Formerly Business 123)

Prerequisite: Business 122 (may be taken concurrently) or Business 111 or Mathematics 101 or equivalent work experience with consent of instructor.

A course in programming time-shared computers using BASIC programming language, which includes defining the problem; flowcharting; writing, executing, and debugging application programs; and programs pertaining to his own subject area and process these programs using the time-sharing equipment of the on-campus computer.

Lecture and discussion 3 hours, laboratory 2 hours to be arranged (8 weeks).

129—FORTRAN PROGRAMMING 2 UNITS

Prerequisite: Business 128 or Business 101 or Business 111 or Mathematics 101 or equivalent work experience with consent of instructor.

Note: No credit will be granted to students who have already received credit for Mathematics 130.
A course in programming computers in the FORTRAN language for those who plan to be programmers or for those whose work may be related to computer applications in business, industry, or education. A student may write application programs pertaining to his own subject matter and test these programs by batch-processing.

Lecture and discussion 3 hours, laboratory 2 hours to be arranged (8 weeks).

130—COBOL PROGRAMMING 3 UNITS

Prerequisite: A grade of "C" or better in Business 122 and either Business 128 or Business 129 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 systems configurations and to business problem-solving applications. Includes rules for COBOL words, statements, divisions, file usage, literals, page format, debugging, table generation, disk and magnetic tape files, editing, and other features.

Lecture and discussion 3 hours.

135—SYSTEMS ANALYSIS 3 UNITS

Prerequisite: Business 122.

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 ORGANIZATION AND MANAGEMENT 3 UNITS

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. 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 only 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**  
**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**  
**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**  
**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—TV also**  
**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—NOTE MAKING FOR SCHOOL AND BUSINESS**  
**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**  
**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, bailments, and agency.

Cases, lecture, and discussion 3 hours.

**162—BUSINESS LAW**  
**Prerequisite:** Business 161.

Deals with the law of sales, negotiable instruments, partnership corporations, and trade regulation.

Cases, lecture, and discussion 3 hours.

**165—LAW FOR THE LAYMAN—TV also**  
**(TV title "Law for the '70's")**  
**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**  
**Prerequisite:** None.
An introductory course intended to acquaint students with the business practices involved in the activities of moving goods and services from the producer to the ultimate consumer. The course reviews the marketing system and the psychology and sociology of consumer decisions. Additional areas of interest include: retailing; wholesaling; new product decisions; pricing; distribution; advertising; and marketing research.

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.

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.

180—BANKING OPERATIONS  3 UNITS

Prerequisite: None.

Provides an understanding of the basic functions of banking and a working knowledge of a bank.

Lecture 3 hours.

181—FINANCIAL STATEMENT ANALYSIS  3 UNITS

Prerequisite: Business 101, or consent of the instructor.

Provides a complete understanding of the Income Statement and the Balance Sheet. These financial statements are further analyzed as to components, and ratios are developed to determine the firm's financial position.

Lecture 3 hours.

182—INSTALLMENT CREDIT  3 UNITS

Prerequisite: None.

Explains the evolution of installment credit and its current status. Credit risk evaluation is analyzed from the standpoint of loan information, interview, investigation, and credit decisions. Practical applications of cost analysis, rate structures, and collection procedures are presented.

Lecture 3 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 235 and Business 211 (enrollment for the second eight weeks is optional upon achievement of 80 wpm) 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 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 procedures 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 knowledge, realistic skills, and attitudes 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, discussion, 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 the following: (1) Business 221, and (2) 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 typing 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 per-
sonalized 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 tech-
niques 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 own 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

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

Prerequisite: An introductory college chemistry course or high school chemistry or Physical Science 131 with a grade of "C" or better; Mathematics 101 with a grade of "C" or better 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

Prerequisite: Chemistry 101 with a grade of "C" or better.

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

Prerequisite: Chemistry 102 with a grade of "C" or better.

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

Prerequisite: Chemistry 102 with a grade of "C" or better.

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 3 hours, laboratory 3 hours.

106—ORGANIC CHEMISTRY

Prerequisite: Chemistry 105 with a grade of "C" or better.

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 3 hours, laboratory 3 hours.

110—ELEMENTS OF GENERAL CHEMISTRY

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) 2 UNITS

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) 2 UNITS

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 directly 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.

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.

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.

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.

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

129—FUNDAMENTALS OF DRAFTING (FOR TECHNICIANS)  2 UNITS

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, 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 AND MACHINE DETAILING  7 UNITS

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 166.

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.
Economics

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.

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.


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 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.

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Emergency Medical Technology

101—EMERGENCY MEDICAL TECHNICIAN 6 UNITS

Prerequisite: Acceptable Pre-registration Examination scores and instructor approval.

Acquisition of basic knowledge, skills, and attitudes necessary to effectively respond to emergency situations that threaten the lives of individuals.

Lecture-laboratory 6 hours, 10 clinical hours.

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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 and 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 101.

Note: Required of all English majors.

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 101.

Note: Required of all English majors. 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 101.

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 101.

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 understanding 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

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

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

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

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 impor-
tance of plays written since 1870. The aim of the course is to
enable the student to make an intelligent evaluation of con-
temporary drama.

Lecture 2 hours.

127—CHILDREN’S LITERATURE
(Formerly 15)

Prerequisite: None.

English 127 is a survey of the literature suitable for children of
different age levels. The student is taught to develop stand-
ards by which to judge the merits of the literature that is
available for children.

Lecture 3 hours.

128—BIBLE AS LITERATURE

Prerequisite: None.

English 128 consists of a survey of the major literary genres in
the Bible and their most representative forms. Attention will
be given to selected prose and verse forms, with a stress on
recurrent themes, images, and symbols.

Lecture 3 hours.

131—INDUSTRIAL ENGLISH

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 earn-
ed in English 131 is “B” or higher, the course will be accep-
table 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 cor-
respondence.

Lecture 3 hours, laboratory 1 hour.

132—INDUSTRIAL ENGLISH

Prerequisite: None.

A course designed for students taking technical education
courses. It includes training in oral communications with
emphasis being placed on evaluation of various forms of
public utterances, such as political speeches and radio and
television editorial comment or other non-fiction presen-
tations. It also includes reading and analysis of newspaper
materials, short fictional works and poetry. To accomplish
this, the student will study briefly the nature, history, and
function of language as well as the basic problems of seman-
tics and word usage.

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, 122, 124.

Fire Science

Classes in Fire Science are offered in the Extended Day Program as in-service training and up-grading for fire fighting 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.

Fire suppression organization; fire suppression equipment; characteristics and behavior of fire; fire hazard properties of ordinary materials; building design and construction; extinguishing agents; basic fire fighting tactics; and public relations.

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.

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.

106—RELATED CODES AND ORDINANCES 3 UNITS

Prerequisite: Fire Science 103 or employment in a related occupation.

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.

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.

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.

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.

113—SANITATION AND SAFETY CONTROL 3 UNITS

Prerequisite: None.

Personal cleanliness, sanitary practices in food preparation, cause, control and investigation of illness caused by food contamination. Dishwashing procedures, sanitation of kitchen equipment, storage and refrigeration. Investigation of cleansing materials and use of proper disposal of garbage and refuse. Safety precautions and accident prevention.

Lecture 3 hours.

114—NUTRITION AND MENU PLANNING 3 UNITS

Prerequisite: None

Principles of nutrition and their relation to quantity food preparation and menu planning. Principles of menu planning in relation to food custom, various age groups, deficiency diseases applied to quantity food production.

Lecture 3 hours.

115—ORIENTATION TO THE HOSPITALITY INDUSTRY 3 UNITS

Prerequisite: None

This orientation class is designed to give a student the opportunity to evaluate his occupational needs in the hospitality industry through work exploratory experience. Local, private, as well as national food service, lodging, and transportation businesses will be explored.

Lecture 3 hours.

116—QUANTITY FOOD PURCHASING 3 UNITS

Prerequisite: None

Purchasing of food for institutions with regard to season, convenience, price, kind, and principles of storage and use. Learn to prepare purchasing schedules, inventory forms, and graphs showing seasonal variations.

Lecture 3 hours.

117—FOOD MANAGEMENT AND COST CONTROL 3 UNITS

Prerequisite: None

Analysis of menu planning procedures: inventories, costs, profit and loss sheets, menu work sheets, and weight and
measures in quality recipes. The student will learn to prepare weekly, monthly, and annual reports and determine food cost per meal, labor cost per meal, operational and total cost per meal.

Lecture 3 hours.

118—INTRODUCTION TO HEALTH CARE DIETARY SERVICE
3 UNITS

Prerequisite: None.
A study of the function of a health care facility dietary department, its policies, financial management and organization of the food service. Consideration is given to appropriate menus for all age groups, modified diets, terminology used, types of food service available, standards of tray and cafeteria service, uniform system of accounting, and general legal and operational problems.
Lecture 3 hours.

119—ADVANCED FOOD SERVICES PRACTICE
3 UNITS

Prerequisite: None.
Field practice in various types of food service operation (commercial, school, hospital) as a technical assistant under direct supervision. Advance responsibilities as a food handler and food service operator in institutional food service. Lecture and laboratory experience using total food service education to complement variety of job duties.
Lecture 3 hours, laboratory 4 hours.

Food Service Management

212—DINING ROOM SERVICES
2 UNITS

Prerequisite: Food Service Management 211.
How to operate a successful food sales and service operation. Management of a dining room including good housekeeping techniques, fine food, and efficient service. Type of dining service included: waited table service (French, Russian, American, English), limited service, counter, tray service, catering, and vending.
Lecture 2 hours.

213—CATERING
2 UNITS

Prerequisite: Food Service Management 212
The theory and practice of operating a catering operation. Practice given in the managing of the total operation as well as some experience in specialty food preparation.
Lecture 2 hours.

214—BEVERAGES
3 UNITS

Prerequisite: Food Service Management 213.
A study of the beverage costs, and uses in commercial restaurants and hotels. Analysis of the operation, sales, costs and profit functions are studied. Produce information and the study of the historical background of beverages are covered. The organization and operation of a bar, wine cellar, or catered services are studied.
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  
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  
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  
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  
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.

106—ADVANCED CONVERSATIONAL FRENCH  
Prerequisite: French 105 or permission of the instructor.
French 106 is designed for those students who wish to sharpen their ability to articulate in French by discussing issues that go beyond concrete descriptions into the area of intellectual ideas.
Lecture 2 hours.

110—BASIC CONVERSATIONAL FRENCH  
Prerequisite: None
Note: Must be taken prior to French 102.
An introduction to French with emphasis on developing essential skills in communication. The verbal active method used; stresses oral expression. The course also develops a working knowledge of reading and writing French.
Lecture 2 hours, laboratory 1 hour.

Geography

101—ELEMENTS OF GEOGRAPHY—TV also  
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  
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 occupancy.
Lecture 3 hours.

105—ECONOMIC GEOGRAPHY  
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.

Geology

101—PHYSICAL GEOLOGY 3 UNITS
Prerequisite: None.
Note: This course may not be taken for credit by students who have completed Geology 110. Second semester standing or a good high school record recommended.
A study of the physical materials and processes of the earth.
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 belles-lettres 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 notetaking, 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  (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 notetaking, 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  (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 notetaking, 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 notetaking, 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.

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—COEDUCATION 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) 2 1/2 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.
Laboratory 2 hours.

129—ADVANCED BASKETBALL (VARSITY) 2 1/2 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 1 UNIT

*Prerequisite:* None.

Instruction and practice in the fundamental techniques and rules of the game. Individual and team play.
Laboratory 2 hours.

132—TOUCH FOOTBALL 1 UNIT

*Prerequisite:* None.

Instruction and practice in fundamentals, with the development of team play and competition.
Laboratory 2 hours.

133—INTERMEDIATE FOOTBALL 1 UNIT

*Prerequisite:* None.

Instruction and practice in techniques of individual offense and defense.
Spring semester only.
Laboratory 2 hours.

134—ADVANCED FOOTBALL (VARSITY) 2 1/2 UNITS

*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) 2 UNITS

*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 1 UNIT

*Prerequisite:* None.

Instruction and practice in the fundamental techniques of tumbling and apparatus.
Laboratory 2 hours.

140—SOCCER 1 UNIT

*Prerequisite:* None.

Instruction and practice in the basic fundamentals, tech-
niques, and rules. Development of team play, with emphasis on offensive and defensive strategy.
Laboratory 2 hours.

145—BEGINNING TENNIS 1 UNIT

Prerequisite: None.
Instruction and practice in the basic strokes, fundamental techniques and rules of the game.
Laboratory 2 hours.

146—INTERMEDIATE TENNIS 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.

147—ADVANCED TENNIS (VARSITY) 2½ UNITS

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 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.

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) 2½ 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) 2½ 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.

155—ADVANCED VOLLEYBALL 1½ UNITS

Prerequisite: Previous playing experience in volleyball.
Note: Recommended for physical education majors. Limited to students trying out for varsity volleyball teams.
Instruction and practice in individual fundamentals, development of team play and court strategy for competitive participation.
Laboratory 3 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  1-1½ UNITS

Prerequisite: None.
Instruction in the technique of archery and participation in official target archery tournaments.
Laboratory 2-3 hours.

164—INTERMEDIATE ARCHERY—COEDUCATIONAL  1-1½ UNITS

Prerequisite: Health and Physical Education 163 or credit in high school.
Practice in target and tournament shooting using National Archery Association Tournament Rounds.
Laboratory 2-3 hours.

165—BEGINNING BADMINTON—COEDUCATIONAL  1-1½ UNITS

Prerequisite: None.
Instruction in the rules and practice in individual fundamentals, development of singles and doubles play, and competitive participation.
Laboratory 2-3 hours.

166—INTERMEDIATE BADMINTON—COEDUCATIONAL  1-1½ UNITS

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  1 UNIT

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 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  1-1½ UNITS

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 2-3 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 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
1-2 UNITS

Prerequisite: None.

Health and Physical Education 175 provides opportunity for personal development in modern dance technique.

Laboratory 2-4 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.

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
1-1½ UNITS

Prerequisite: None.

Instruction and practice in the basic strokes, fundamental techniques and rules of the game.

Laboratory 2-3 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.

139
189—BEGINNING VOLLEYBALL—COEDUCATIONAL
1-1½ UNITS

Prerequisite: None.

Instruction and practice in volleyball techniques with team tournaments.
Laboratory 2-3 hours.

190—INTERMEDIATE VOLLEYBALL—COEDUCATIONAL
1-1½ UNITS

Prerequisite: Health and Physical Education 189 or equivalent.

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
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.

192—YOGA—COEDUCATIONAL—TV only
2 UNITS

Prerequisite: None.

The course involves basic yogic postures, breathing and meditation techniques intended to increase body agility, suppleness and establish a regimen of healthful living. The course of thirty programs covers the various yoga postures, methods, and exercises. New yogic exercises and breathing techniques are introduced, demonstrated, explained in detail, and their value emphasized. Meditational and inspirational concepts are also presented at appropriate times. 30 one-half hour programs.

193—BEGINNING BICYCLING—COEDUCATIONAL
1 UNIT

Prerequisite: A light weight bicycle.

An introduction to cycling as a lifetime activity. Emphasis on bicycling and information on safety, maintenance, and riding efficiency. Increasing personal physical fitness by cycling.
Laboratory 2 hours.

194—INTERMEDIATE BICYCLING—COEDUCATIONAL
2 UNITS

Prerequisite: A light weight bicycle. Health and Physical Education 193, or experience in bicycling and knowledge of safety and maintenance procedures.

Instruction in maintenance, safety, and riding efficiency. Increasing cycling fitness by hill climbs, time trials, and short rides. Preparing for cycling tour. Takes students into more advanced skills and techniques of bicycling accompanied by longer rides.
Lecture 1 hour, laboratory 3 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 his disability.
Laboratory 2 hours.

Health and Physical Education for Women

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 she (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.

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.

105—SPORTS OFFICIATING FOR WOMEN

2 UNITS

Prerequisite: Participation in basketball, volleyball, and softball.

Note: Recommended for physical education and recreation majors and for prospective community youth leaders.

A theory and practical course in the techniques of officiating basketball, volleyball, and softball.

Lecture 1 hour, laboratory 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 1-1½ UNITS

Prerequisite: None.

Instruction in the rules and practice in fundamentals, development of singles and doubles play, and competitive participation.

Laboratory 2-3 hours.

123—INTERMEDIATE BADMINTON 1-1½ UNITS

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 2-3 hours.

130—BODY CONTOURING AND CONDITIONING 1-1½ UNITS

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 2-3 hours.

142—BEGINNING SPORTS 1-1½ UNITS

Prerequisite: None.

Instruction in the fundamental techniques of seasonal sports: basketball, volleyball, and softball.

Laboratory 2-3 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 1-1½ UNITS

Prerequisite: None.

Instruction and practice in tennis strokes, techniques, and rules.

Laboratory 2-3 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
1-1½ UNITS
Prerequisite: None.
Instruction in the technique of archery and participation in official target archery tournaments
Laboratory 2-3 hours.

164—INTERMEDIATE ARCHERY—
COEDUCATIONAL
1-1½ UNITS
Prerequisite: Health and Physical Education 163 or credit in high school.
Practice in target and tournament shooting using National Archery Association Tournament Rounds.
Laboratory 2-3 hours.

165—BEGINNING BADMINTON—
COEDUCATIONAL
1-1½ UNITS
Prerequisite: None.
Instruction in the rules and practice in individual fundamentals, development of singles and doubles play, and competitive participation.
Laboratory 2-3 hours.

166—INTERMEDIATE BADMINTON—
COEDUCATIONAL
1-1½ UNITS
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
1 UNIT
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
1-1½ UNITS
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 2-3 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 1-2 UNITS**

*Prerequisite:* None.

Health and Physical Education 175 provides opportunity for personal development in modern dance technique.
Laboratory 2-4 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.

**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 1-1½ UNITS**

*Prerequisite:* None.

Instruction and practice in the basic strokes, fundamental techniques, and rules of the game.
Laboratory 2-3 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 1-1½ UNITS**

*Prerequisite:* None.

Instruction and practice in volleyball techniques with team tournaments.
Laboratory 2-3 hours.
190—INTERMEDIATE VOLLEYBALL 1-1½ UNITS
      COEDUCATIONAL

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-  2 UNITS
      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.

192—YOGA—COEDUCATIONAL— TV only  2 UNITS

Prerequisite: None.

The course involves basic yogic postures, breathing and meditation techniques intended to increase body agility, suppleness and establish a regimen of healthful living. The course of thirty programs covers the various yoga postures, methods, and exercises. New yogic exercises and breathing techniques are introduced, demonstrated, explained in detail, and their value emphasized. Meditational and inspirational concepts are also presented at appropriate times.
30 one-half hour programs

193—BEGINNING BICYCLING  1 UNIT
      COEDUCATIONAL

Prerequisite: A light weight bicycle.

An introduction to cycling as a lifetime activity. Emphasis on bicycling and information on safety, maintenance, and riding efficiency. Increasing personal physical fitness by cycling.
Laboratory 2 hours.

194—INTERMEDIATE BICYCLING  2 UNITS
      COEDUCATIONAL

Prerequisite: A light weight bicycle. Health and Physical Education 193, or experience in bicycling and knowledge of safety and maintenance procedures.

Instruction in maintenance, safety, and riding efficiency. Increasing cycling fitness by hill climbs, time trials, and short rides. Preparing for cycling tour. Takes student into more advanced skills and techniques of bicycling accompanied by longer rides.
Lecture 1 hour, laboratory 3 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.

History

101—HISTORY OF WESTERN EUROPE  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 108 will receive only one unit of credit for History 101.

The growth of western European civilization from the decline of the Roman Empire to the 17th Century. An introduction to the study of history, giving a general perspective of the development of those political, economic, and social institutions which explain our present-day civilization. An attempt is made to orient the student's thinking to present world problems.
Lecture 3 hours.

102—HISTORY OF WESTERN EUROPE  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 109 will receive only one unit of credit for History 102.

The growth of western European civilization from the 17th Century to the present time. An introduction to the study of history, giving a general perspective of the development of
those political, economic, and social institutions which explain our present-day civilization. An attempt is made to orient the student’s thinking to present world problems.

Lecture 3 hours.

103—HISTORY OF LATIN AMERICA 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 Latin America from discovery to independence. The planting of the European civilization in Latin America, the growth of the colonies of the different nations, colonial systems, the international contest for the continents, the wars of independence in Hispanic-America.

Lecture 3 hours.

104—HISTORY OF LATIN AMERICA 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 Latin America from the establishing of the independent Latin 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 or 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 requirements in American History. Recommended for students transferring to California State University, Los Angeles.

Lecture 3 hours.

111—THE WOMAN IN AMERICAN HISTORY 3 UNITS

Prerequisite: None

A survey of the history of women in America from the colonial period to the present with emphasis on relevant political, economic, and social factors. Traditional roles of women in society are analyzed in terms of literary images, popular culture, and stereotypes. Attitudes and prejudices held by both sexes toward each other, reform movements, religious crusades, women's rights, and emancipation movements are examined in the context of American History.

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.

113—SOCIAL, CULTURAL, AND POLITICAL BACKGROUND OF THE MEXICAN PEOPLE 3 UNITS

Prerequisite: A grade of "C" or better in a college level political science or history course or Social Science 131 or consent of the instructor or satisfactory score on the Reading and Language sub-tests of the Pre-registration Examination.

An in-depth study of the emergence of the Mexican institutions and traditions from Pre-Colombian days to the present. The course is designed to meet the needs of the college student who wishes to understand the development of the modern Mexican nation. Modern Mexico and its development is the primary concern of this course.

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.

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.

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.

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

105—INTRODUCTION TO TEXTILES 3 UNITS

Prerequisite: None.

Home Arts 105 includes a study of sources and characteristics of man-made and natural fibers and the processes used in manufacturing and finishing textile materials as a background for those seeking employment in the textile industry, as well as meeting the needs of Home Arts, Business, and Art Majors, and Fashion Designers, and consumers desiring acquisition of current information regarding trends in the textile field.

Lecture 3 hours.

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

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

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

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

Prerequisite: None.

A study of the principles of fashion. Includes a study of fashion designers, apparel producers, and fashion retailers.

Lecture 2 hours.

123—FASHION SKETCHING

Prerequisite: None.

Home Arts 123 includes the development of a fashion figure including design concepts. Use of various media includes, pencil, watercolor, chalk, as well as ink, in order to render the figure in costume detail.

Students will develop skills necessary to render various fabrics, furs, feathers, as well as accessories, including jewelry.

Lecture 1 hour, laboratory 2 hours.

124—FASHION ECONOMICS

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

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

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

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 appropriate play activities. Behavior of the pre-school child in the group situation is studied through weekly observations at nursery schools, and the role of the pre-school teacher is examined.

Lecture 3 hours.

141—FIELD PRACTICE IN A PRE-SCHOOL PROGRAM

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

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

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.

150—A TIME TO GROW—TV only 3 UNITS

Prerequisite: None.

A college course in child growth and development. Special attention to children's physical, cognitive, and social-emotional development. Presentation of some of the major points of view, research findings, and literature which have been contributed by a variety of disciplines.

45 one-half hour programs.

COSTUME CONSTRUCTION
See Theater Arts 123.

INTERIOR DESIGN
See Art 130.

MARRIAGE AND FAMILY LIVING
See Psychology 131.
Italian

110—CONVERSATIONAL ITALIAN 2 UNITS
Prerequisite: None.
Fundamentals of grammar and correct pronunciation are stressed so that the student can employ a small working vocabulary in conversation and writing. The ability to read simple Italian is also developed.
Study and practice 3 hours.

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 levels 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 demonstration 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 if 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 up-grade 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)

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 with a grade of “C” or better and Mathematics 141 with a grade of “C” or better, or one year of algebra and one year of plane geometry in high school with a grade of “C” or better. 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 with a grade of “C” or better or two years of algebra and one year of plane geometry in high school with grades of “C” or better.

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 with a grade of “C” or better and Mathematics 102 with a grade of “C” or better, or two years of algebra, one year of plane geometry, and one semester of trigonometry in high school with grades of “C” or better or equivalents.

Note: Mathematics 101 or 102 may not be taken concurrently.

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 with a grade of "C" or better.  
Note: Mathematics 101, 102, or 103 may not be taken concurrently.  
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 with a grade of "C" or better.  
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 with a grade of "C" or better.  
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.  
Note: No credit will be granted to students who have already received credit for Business 129.  
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 with a grade of "C" or better or one year of algebra in high school with a grade of "C" or better.  
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 art 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.

**Microbiology**

See Biology 112.

**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 scintillator for identification of uranium-radium bearing ores.

Lecture 1 hour, laboratory 2 hours.

**Multi-Media**

190—TECHNIQUES FOR MULTI-MEDIA AIDES (SEE NOTE)

*Prerequisite: None.*

*Note: Since Multi-Media 190 is constructed in three distinct but related modules, the open entry/open exit policy will apply. The course may be taken for one, two, or three units of credit.*

Multi-Media 190 is a beginning course in the techniques needed by Multi-Media Aides in the Learning Resource Center at Glendale Community College and in other resource centers, skill centers, and libraries. Training and experience provided in the utilization of media self-teaching materials and equipment. Emphasis is on use of programmed texts and devices.

Lecture 18 hours, supervised practice and study 6 hours per unit.

**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, canon 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—TV also  
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 in 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 3 hours, directed listening 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 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 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  
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  
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  
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  
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  
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  
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  
WIND—BRASS  
Prerequisite: None.

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

Music 140 provides class instruction in the basic techniques of woodwind 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 woodwind 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.  

*Note:* This course may be taken for one unit each semester for a total of four semesters.  

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, symphonically 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.

156—GUITAR I  2 UNITS
Prerequisite: None.

Note: Students are required to have a standard six (6) string guitar to use in class and for practice.

A course designed for students who wish to learn the elementary techniques of guitar playing. Included will be the study of basic stringing, tuning, fingering, playing techniques, notation, chording, reading of simple guitar music, and the playing of simple melodies and accompaniments.

Lecture 1 hour, laboratory 1 hour. Three (3) hours practice by arrangement.

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).
116—ETHICS  
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  
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  
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  
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  
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*  
Prerequisite: Photography 101, and Art 113.

Photography 102 is lecture and laboratory practice.

Lecture 1 hour, laboratory 3 hours.

103—INTERMEDIATE PHOTOGRAPHY*  
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*  
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).
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 audition 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.
PHYSICAL SCIENCE

107—SPECIAL PROJECTS—PHOTOGRAPHY
(SEE NOTE)

Prerequisite: None.

Note: Two hours are required for each unit earned. May be taken for one, 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.

*The College reserves the right to retain student work for one year for exhibit purposes.

Physical 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.

Physics

101—ENGINEERING PHYSICS  5 UNITS

Prerequisite: Physics 111 with a grade of "C" or better or physics taken in high school with a grade of "C" or better and Mathematics 103 with a grade of "C" or better. (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 with a grade of "C" or better and Mathematics 104 with a grade of "C" or better. (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 current theory, laws of magnetism and magnetic properties of matter, electromagnetism 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 with a grade of "C" or better and Mathematics 104 with a grade of "C" or better. (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
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
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
Prerequisite: Mathematics 102 with a grade of "C" or better, or trigonometry in high school with a grade of "C" or better. 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
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.

101—INTRODUCTION TO LAW ENFORCEMENT
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
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 statutes.

Lecture 3 hours.

104—CRIMINAL LAW II
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
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 dis-
order and prospects for the future in American Law En-
forcement. In-depth analysis of the relationships and respon-
sibilities 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 of-
fer, 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 uniform-
ed 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 dis-
putes; 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 per-
tains 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 in-
vestigation 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; inter-
views 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 of-
fer.
The organization, functions, and jurisdiction of juvenile agen-
cies; 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.
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 seeking 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  3 UNITS
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 of 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 2 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, 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.

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.

Covered other processes, 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.

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, interpersonal 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 PRACTICES 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.

Real Estate

Courses are offered in the field of Real Estate to provide professional education for those who have chosen real estate as a career, and to assist persons now engaged in real estate services to develop a higher quality of professional service.

101—REAL ESTATE PRINCIPLES 3 UNITS

Prerequisite: None.

The fundamental real estate course covering the basic laws and principles of California real estate, gives understanding, background, and terminology necessary for advanced study in specialized courses. Of assistance to those preparing for the real estate salesman license examination.

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 ownership 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 Estate 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 Estate 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.

113—PROPERTY MANAGEMENT 3 UNITS

Prerequisite: None.

Provides a basic course in the management of income properties. Analyzes specific types of properties that are
managed. Formulates and discusses the major problems of leasing, collections, rent schedules, tenant selection, neighborhood analysis, purchasing, evictions, preventive maintenance, depreciation, record keeping, and economics of property. Compiles a set of procedures for practical utilization in property management.

Lecture 3 hours.

Russian

110—BASIC CONVERSATIONAL RUSSIAN 2 UNITS

Prerequisite: None.

Fundamentals of grammar and correct pronunciation so that the student can employ a small working vocabulary in conversation and writing. The ability to read simple Russian is also developed.

Lecture 2 hours, laboratory 1 hour.

SCIENCE

See Physical Science 131

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.

102—EDUCATIONAL PARTICIPATION IN THE COMMUNITY 1-3 UNITS

Prerequisite: Social Science 101 or consent of the instructor.

Note: Student may repeat the course for credit but may not receive a total of more than 3 units of credit.

Classroom and field experiences in the educational system. Weekly class lectures and discussion concerning current problems, curriculum, methods, and materials being experienced in today's schools. Logs detailing weekly field experiences including reactions to all and problems discovered in relation to the experience.

Lecture 1 hour, fieldwork 5 hours (to be arranged).

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.

Note: This course is included in the list of State-approved college courses for school staff preparation in the history, culture, and current problems of racial and ethnic minorities (Article 3.3, Education Code Section 13344.1)

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.

122—MEXICAN-AMERICAN STUDIES 3 UNITS

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

Note: This course is included in the list of State-approved college courses for school staff preparation in the history, culture, and current problems of racial and ethnic minorities (Article 3.3, Education Code Section 13344.1).

A study of the Mexican-Americans in contemporary society. An analysis of the role, accomplishments and contributions of the Mexican-American people.

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 131-121 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.

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.

150—THE ASCENT OF MAN—TV only 2 UNITS

Prerequisite: None.

Students will demonstrate their knowledge of intellectual history tracing the major events in the biological and cultural evolution of man. The course traces the development of science and art as expressions of the special gifts that characterize man and that have made him unique among the animal species. Emphasis is placed on the processes of thought and imagination which are involved in the various attempts made by man to analyze and understand the nature of the universe and of himself.

13 one-hour programs

Sociology

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.
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.

110—BASIC CONVERSATIONAL SPANISH  2 UNITS
Prerequisite: None.
Note: Must be taken prior to Spanish 102.
An introduction to Spanish with emphasis on developing essential skills in communication. The verbal active method used stresses oral expression. The course develops working knowledge of reading and writing as well. Includes use of tapes or cassettes in the language laboratory.
Lecture 2 hours, laboratory 1 hour.

138—SPANISH FOR SCHOOL PERSONNEL  2 UNITS
Prerequisite: None.
Minimum fundamentals of Spanish grammar and correct pronunciation so that teachers and other school personnel can communicate with parents and pupils whose language is Spanish. Dialogues are emphasized.
Lecture and practice 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 3 UNITS

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 2 UNITS

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.

139—COMMUNICATION WITH THE DEAF 2 UNITS

Prerequisite: None.

Provides instruction in sign language, finger-spelling, and lipreading. Combined, they are referred to as total communication. The history and purposes of such signs and practice in their use are included.

Lecture and practice 3 hours.

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 3 UNITS

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 3 UNITS

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 3 UNITS

Prerequisite: Supervision 102.

Covers development of human relations climate; patterns, function, and types of leadership, simulation training; organizational levels; staff relationships; 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 3 UNITS

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 3 UNITS

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 COMMUNICATIONS 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 3 UNITS

Prerequisite: Supervision 101.
Management and supervisory responsibility for fire and accident prevention. Accident reports and the supervisor. Good

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 major should have at least one semester of make-up.
Lecture 1 hour, laboratory 2 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—STAGE COSTUME  (SEE NOTE)

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)

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  2 UNITS

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 5 hours, 28 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 3 hours, 27 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 2 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 2 hours, 28 clinical hours.

110—LIFE SCIENCES FOR HEALTH TECHNOLOGY II 2 UNITS
Prerequisite: Successful completion of Vocational Nursing 105.
Study of the normal anatomical and physiological functioning of the human body. Study will include those systems not covered in Vocational Nursing 105.
Lecture 2 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 2 hours, 28 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 3 hours, 24 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 3 hours, 28 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 3 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 3 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 3 hours, 30 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 3 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 the knowledge necessary for caring for emotional disturbances in patients of all ages.
Lecture 3 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.
Completion of the following subjects, and a "B" average in work completed in grades 10 to 12 with no grades 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
      - 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
   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
   *The second, a requirement in foreign languages, 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 requirement 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
   English 102, 105, 106, 109, 110, 122, 123, 125, 126, 198
   French 103, 104
   German 103, 104
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 course work 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.
(Recommended for Engineering: Chemistry 101-102, two years of the social...
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:

<table>
<thead>
<tr>
<th>Major in</th>
<th>Systematic Musicology</th>
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<tbody>
<tr>
<td>History of Art</td>
<td>Opera</td>
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<tr>
<td>Painting/Sculpture/Graphic Arts</td>
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<tr>
<td>Design</td>
<td>Major in Dance</td>
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<tr>
<td>Major in Music</td>
<td>Major in Theater</td>
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<td>Composition and Theory</td>
<td>Motion Picture and Television**</td>
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<td>Ethnomusicology</td>
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<td>History and Literature</td>
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<td>Performance</td>
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<td>Music Education</td>
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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; Chemistry 101, 102, 103, 105, 106, 110; Physical 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, 103; Economics 101, 102, 105, 107, 111; Geography 102, 105; History (all courses) except History 151. Political Science 101, 102, 103, 104, 105, 106, 110; Psychology 101, 102, 131; 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.

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. Consult with counselor for special Fine Arts guidelines.

*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 all majors except 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:

HUMANITIES
African Language
Ancient Near Eastern Civilizations
Arabic
Chinese
Classics
English
Ethnic Arts
French
German
Greek
Hebrew
Indo-European Studies
Italian
Japanese
Jewish Studies
Latin
Linguistics
Near Eastern Studies
Philosophy
Portuguese
Russian
Scandinavian Languages
Spanish
LIFE SCIENCES
Bacteriology
Botany
Kinesiology
Psychology

Psychobiology
Quantitative Psychology
Zoology
PHYSICAL SCIENCES
Applied Geophysics
Astronomy
Biochemistry
Cybernetics
General Chemistry
Engineering Geology
Geology
Mathematics
Mathematics-Applied Science
Mathematics-Computer Science
Mathematics-System Science
Meteorology
Planetary and Space Science
General Physics
SOCIAL SCIENCES
Anthropology
Business-Economics
(for Business Teachers)
Economics
Geography
Geography-Ecosystems
History
Latin American Studies
Political Science
Sociology
Students will complete Plan A or Plan B. For divisional distribution of majors, consult the UCLA General Catalog. To apply on the breadth requirements, a course must have 2 or more semester units of credit. A 1-unit lab science course will apply if it is combined with the lecture. No course in the student's major department will apply on the breadth requirements. Cross-listed courses apply according to the departments under which the courses are taken.

PLAN A: 3 courses (12 quarter units) in each of 3 Divisions outside the Division of the student's major. Completion of semester course 104 in one foreign language exempts one Division (option 2). Courses in other Divisions used in preparation for the major may apply on Plan A.

PLAN B: 7 courses (28 quarter units) in one Division outside the Division of the student's major and one course (4 quarter units) in each of the other Divisions or 2 courses (8 quarter units) in one of the other Divisions. Courses apply as in Plan A above except in the foreign languages. No elementary or intermediate course in foreign language applies if the student has not completed semester course 104 (equivalent to courses 5, 6 at UCLA) in any language. With the completion of course 104, elementary and intermediate courses 101, 102, and 103 in any foreign language may be used on Plan B.

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
   Chemistry 101, 102, 103, 105, 106, 110
   Geography 101
   Geology 101, 105, 110
   Mathematics 103, 104, 105, 106
   Mineralogy 101
   Paleontology 101
   Physical Science 131
   Physics 101, 102, 103, 105, 106, 110, 111

e. Life Sciences
Anthropology 101
Biology 101, 102, 112, 120, 121, 123, 124, 125, 130, 137

f. Social Sciences
Anthropology 102, 103
Economics 101, 102, 105, 111
Geography 102, 105
Political Science 101, 102, 103
Psychology 101, 102, 131
Social Science 121, 131, 132
Sociology 101, 102

g. Humanities
Art 101, 102, 103, 106, 107, 108, 110
English 102, 103, 105, 106, 109, 110, 122, 123, 125, 126, 193
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 exists 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

Plant Science
Psychobiology
Soil Science
Environmental Sciences          Statistics
Paleobiology                    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 the 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, 104, 105, 106, 108, 110
Psychology 101, 102, 110
Social Science 121, 122, 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
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
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 and Fine Arts ................................................................. 15
   Any combination from the following courses, with at least 6 units from the Humanities and at least 3 units from the Fine Arts.

   **Humanities**
   English 101, 102, 105, 106, 109, 110, 122, 123, 125, 193
   History 107, 108, 109
   Philosophy 101, 113, 114, 116, 119, 120

   **Fine Arts**
   Art 101, 102, 103, 106, 107, 108, 110
   English 126
   Music 110, 111, 112, 113, 114, 120, 125, 126
   Photography 101, 102, 103, 105, 107
   Theater Arts 103, 104, 105

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, 104, 105, 106, 108, 110
      Psychology 101, 102, 110, 131
      Social Science 121, 122, 131, 132
      Sociology 101, 102

f. Foreign Language ................................................................. 4-16
   1. Through Language 103
g. Electives .......................................................... 6

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

English 101

Mathematics
Two courses from among: Business 111, 112; Mathematics 103, 104, 105, 106, 130,
138

Natural Science
May be met in either one of two ways:
1. Two courses in one subject in Group 1, 2, or 3.
2. One course from Group 1, 2, or 3, plus two courses from Group 1, 2, 3, and/or 4.
   Group 1. Biology 101, 102, 122
   Group 2. Chemistry 101, 102, 103, 105, 106, 110
   Group 3. Physics 101, 102, 103, 105, 106, 110, 111
   Group 4. Astronomy 101; Biology 112, 120, 121, 123, 124, 125, 130, 137; Geology
          101, 105, 110; Mineralogy 101; Paleontology 101; Physical Science 131

Social Science and Humanities
Choice of two programs:
Program A. Two courses each in Groups 1, 2, and 3.
Program B. One course each in Groups 1, 2, and 3, plus a two-semester
   sequence as in Group 4.
   Group 1. Communications: This is an unusual course, designed to meet the
          particular needs of Third College, and it may be taken after transfer
          without delaying academic progress.
   Group 2. Third World Studies: Anthropology 102; Economics 101; Geography
          105; History 113, 119, 120; Philosophy 113, 114; Political Science 101,
          102, 103, 108, 110; Social Science 121, 122; Sociology 101, 102
   Group 3. Urban and Rural Studies: This too is an unusual course, and may be
          taken after transfer without impeding progress toward the degree.
   Group 4. Sample Optional Sequences: (Courses used in Group 2 above will
          not also apply here.) Anthropology 101, 102, 103 (any 2); Art 101, 102,
          103 (any 2); Economics 101, 102, 105, 107, 111 (any 2); English 102, 103,
          105, 106, 109, 110, 193 (any 2); French 101, 102, 103, 104 (any 2);
          Geography 101, 102, 105 (any 2); History 101-102, 103-104, 107-108-109
          (any 2), 117-118, 119, 120; Music 111-112-113 (any 2), 125-126;
          Philosophy 113-114, 119-120; Political Science 101, 102, 103, 104, 105,
          106, 108, 110 (any 2); Psychology 101, 102, 110, 131 (any 2); Social
          Science 131-132; Sociology 101-102; Spanish (or any other foreign
          language), and two consecutive semesters.
University of California, San Diego
Fourth College—

Fourth College opened in the Fall Quarter, 1974. Some details of the program are still to be announced, but in general it will look like this:

WRITING. English 101, 103

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.

University of California, Santa Barbara
College of Letters and Science—
Bachelor of Arts

a. English 101-102 (Two courses) ................................................................. 6

b. Natural Science and Mathematics (Three courses) .......................... 9-12
   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)
   2. One course from above or from: Anthropology 101, 103; Biology 124; Geography 105; Physical Science 131

c. Fine Arts (Two courses) ................................................................. 6
   Art 101, 102, 103, 106, 107, 108; Music 120, 125, 126

d. Humanities (Three courses) ................................................................. 10
   1. Literature, English 105, 106, 109, 110, 122, 123, 125
   2. Philosophy 101, or 119 and 120; Foreign Language (second year college level); Speech 101

e. History, Social Sciences and Psychology (Three courses) ............. 9-12
   1. Any course from the following:
      Anthropology 103, 104
      Economics 101, 102, 105, 111
      Geography 102
      History: Any course except History 151
      Political Science: Any course except Political Science 106, 151
      Psychology 101
      Sociology 101, 102

Units
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.

University of California, Santa Cruz

Cowell, Stevenson, Crown, Merrill,
College V, Kresge, Oakes,
College VIII

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 Oakes College and College 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 1975-76 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 nine semester units) 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—including History
**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.

a. Communication Skills ................................................................. 6-7
   English 101
   Speech 101 or one semester of language

b. Fine Arts .................................................................................. 3
   Art 101, 102, 103, 106, 107, 108
   Music 110, 120
c. History ................................................................. 6
   Select from any two three-unit history courses.

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
   Physical Science 131
   Physics 101, 102, 103, 105, 106, 110, 111

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........................................6-8
   History 110; 117-118
   Political Science 101 or 105
   Social Science 131-132

b. English .....................................................................................3
   English 101, 120

c. Philosophy ................................................................................9
   Any course in philosophy, at least two must be lower division.

d. Religious Studies .......................................................................9
   Any course in theology and courses on an annually published list of Religious
   Studies.

e. Foreign Language ......................................................................12
   Three semesters of college language study.

f. General Studies ........................................................................27
   1. Humanities (6-15 units in two areas)
      Fine Arts—Art 101 or 102; Music 120, 125, or 126
      Literature—English 102, 105, 106, 109, and/or 110
      History 101, 102

   2. Natural Sciences (6-15 units in two areas)
      Biology 101, 102, 112, 120, 121
      Chemistry—any course or courses
      Physics 105, 106, 110
      Mathematics 103, 104, 105, 106, 130

   3. Social and Behavioral Sciences (6-15 units in two areas)
      Economics 101, 102, 105, 111
      History—Any non-survey U.S. History*
      Political Science 102
      Psychology 101, 102, 110
      Sociology 101, 102
      Anthropology 101, 102

MAJOR REQUIREMENTS: Consult Mount St. Mary's College catalog for major
requirements. Specific requirements for a particular major are designated by the
Major Department.

EXAMINATIONS: Consult Mount St. Mary's College catalog for areas in which
requirements may be satisfied by examination.

*No course may satisfy two requirements.

Occidental College  Students considering transfer into either the sophomore or junior year are
strongly urged to check with the Admission Office for further information if the
descriptions below are not adequate or do not relate sufficiently to the courses
available to them at the college they will attend. They should refer also to the current catalog for information concerning prerequisites for proposed majors.

LOWER DIVISION GENERAL DEGREE REQUIREMENTS FOR THE A.B. DEGREE

English: No English is required. However, competence is insisted upon. Periodic checks are made on the writing performance of all students and a student may be remanded to an English course if his work is sub-standard. Freshman English is recommended.

Foreign Language: Competence in a foreign language at the level of completion of the third term of college work. (one quarter or semester of intermediate level)

Sciences: Science majors should refer to the catalog for specific prerequisites. Non-science majors see General Studies outline below.

Physical Education: Not required.

General Studies: All students entering Occidental College as Freshmen are required to complete a pattern of six General Studies courses by the end of the Junior year. This requirement applies also to transfer students, although it is clear that identical courses cannot be taken at another institution. Students and Counselors should review the Occidental College catalog for course descriptions in General Studies in order to outline a study plan as nearly equivalent as possible. As it applies to transfer students, the General Studies requirement is as follows:

Three Courses: INTRODUCTORY STUDIES. Required of Freshmen are one Freshman Seminar course and two courses in a Perspectives sequence.

Transfer students must take a two-course Perspectives sequence at Occidental or may transfer a similar sequence from a previous institution. Such sequences as History of Civilization, Humanities, etc. may be appropriate. Normally, transfer students may not enroll in Freshman Seminars, but may transfer one course in composition, exposition or a related topic or they will take an additional Divisional Studies course at Occidental (see below)

Three Courses: DIVISIONAL STUDIES: The academic departments of the College are divided among three Divisions: the Sciences and Mathematics (Division A), the Social Sciences (Division B), and the Humanities (Division C). Two Divisional Studies courses must be taken in one of the Divisions outside of which the student's major falls, and the third course must be taken from the other such Division. For example, a student whose major department is in the Humanities must take either two courses from "A" and one from "B", or two from "B" and one from "A".

Transfer students who must take an additional Divisional Studies course in lieu of a Freshman Seminar (see above), must take two courses in each Division other than that of the major.

MAXIMUM GENERAL STUDIES TRANSFER CREDIT:
Sophomores: Three courses. Should be equivalent to Perspectives, Freshman Seminar or a course from Division that does not include student’s major. Balance of courses must be taken at Occidental.

Juniors: Four Courses. Equivalent to Perspectives, Freshman Seminar and one course from a Division that does not include student’s major. Balance of courses must be taken at Occidental.

American Institutions: This requirement is only for those students working toward a teaching credential.

The academic year at Occidental consists of three eleven-week terms, with each student allowed to take no more than three courses per term, plus certain fractional courses. A minimum of thirty-five courses, exclusive of credit for Physical Education activity courses, is required for graduation.

Please note that a maximum of 64 semester (96 quarter) units of lower division credit (equivalent to 18 courses) is accepted for transfer.

Pacific Oaks College

The two-year upper division program leads to the Bachelor of Arts degree in Human Development or in the Diversified Major for the Multiple Subjects Credential. Admission in junior standing requires completion of not less than 60 semester 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. (Students who wish to complete a Diversified Major for credential purposes should plan to take 15 units instead of 9 units in each area listed):

<table>
<thead>
<tr>
<th>Area</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Oral &amp; Written Expression</td>
<td>9-15</td>
</tr>
<tr>
<td>1. REQUIRED: English 101; or English 102 or 120 or Speech 101, 102, or 121.</td>
<td></td>
</tr>
<tr>
<td>2. BY CHOICE: English 103, 105, 106, 109, 110, 121, 122, 123, 125, 126, 198; Journalism.</td>
<td></td>
</tr>
</tbody>
</table>

For the Diversified Major, include at least 6 units in English composition and grammar and 3 units in speech.

<table>
<thead>
<tr>
<th>Area</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Natural Sciences and Mathematics</td>
<td>9-15</td>
</tr>
<tr>
<td>1. REQUIRED: Biology 101, 120, 121, or 122.</td>
<td></td>
</tr>
<tr>
<td>2. BY CHOICE: Anthropology 101; Astronomy 101; Biology 102, 112, 123, 124, 125, 130, 137; Business 111, 112, 117, 119; Chemistry; Economics 107; Geography; Geology; Mathematics- Mineralogy; Paleontology 101; Physics; Physical Science 131.</td>
<td></td>
</tr>
</tbody>
</table>

For the Diversified Major, include at least one course in mathematics.

<table>
<thead>
<tr>
<th>Area</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>c. Social Sciences</td>
<td>9-15</td>
</tr>
<tr>
<td>1. REQUIRED: Psychology 101 and either Sociology 101 or Anthropology 102.</td>
<td></td>
</tr>
<tr>
<td>2. BY CHOICE: Anthropology 103; Economics 101, 102; Geography 105; History 110, 112, 117, 118, 151; Home Arts 135, 136, 140, 141, 142, 143; Political Sciences; Psychology 102, 107, 110, 131; Public Administration; Social Science; Sociology 102, 107; Journalism 101.</td>
<td></td>
</tr>
</tbody>
</table>

For the Diversified Major, include a course which covers the U.S. Constitution.
d. Humanities

No specific course requirement
BY CHOICE: Architecture; Art (any course through Art 150); History 101, 102, 103, 104, 106, 107, 108, 109, 119, 120; Music; Philosophy; Photography; Printing; Theatre Arts; Advanced Foreign Language.

e. Electives

A maximum of 15 units of lower division electives taken in courses other than those listed in the above areas will be accepted. Courses which are NOT acceptable include most business courses, vocational courses, library courses, medical courses, orientation courses, and specifically sectarian religion courses. Health and physical education courses (maximum 4 units) and beginning and intermediate foreign language courses will be accepted as electives. Although a maximum of 15 elective units will be accepted, no elective units are required.

Pepperdine University, Los Angeles

a. Communication

English 101

b. Ethnic Studies

Social Science 121

c. History

History 110 and Political Science 101, History 117-118

d. Humanities

Art 101, 102, 103, 108
English 109 or 110
Music 120, 125, 126
Philosophy 101, 113, 114, 116, 119, 120

e. Social Science

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

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
Physical Science 131, Paleontology 101, Geography 101

g. Physical Education

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
   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

Units

a. Communication
   English 101
   Elective—Speech 101, Foreign Language
   9

b. Fine Arts
   Art 101, 102, 103, 108
   Music 120, 125 or 126
   3

c. Humanities
   History 107, 108, 109; English 102, 105, 106, 109, 110
   9

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
   6

e. Religion
   To be taken at Pepperdine (4 units required of those transferring with 60 units)
   6

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
   9

g. Physical Education
   Activity Courses
   4

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
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.
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 101-120, 126-129, 134-145
      Music—all courses
      Theater Arts 103, 104, 105, 121, 131
         (maximum 6 units each), 109, 110 (maximum 1 unit), 123 (maximum 4 units)
   
   2. Literature
      English 105, 106, 109, 110, 122, 123, 125, 126
   
   3. Philosophy and Religion
      Philosophy 101, 113, 114, 116, 117, 119, 120
   
*c. Natural Sciences (refer to footnote) .......................................................... 11
   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. Physical 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
      Speech 101, 102, 121
   
   2. History and Politics
      History 101, 102, 103, 104, 106, 107, 108, 109, 110 or 117-118, 112, 119, 120
      Political Science 101, 102, 103, 104, 105, 106, 110
   
   3. Man and his Environment
      Economics 101, 102, 105, 111
      Geography 101, 102, 105
   
   4. Human Behavior and Social Interaction
      Anthropology 101, 102, 103
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 200 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, 125, 130, 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
   Physical 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
   Political Science 102, 103, 104, 108, 110
   Psychology 102, 131
   Social Science 101, 102, 121, 122
   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, 127, 128
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
   Home Arts 105
   Journalism 101, 102
   Mathematics 101, 102, 103, 104, 105, 106, 138
   Philosophy 117
   Political Science 107
   Psychology 107
   Sociology 107
   All Foreign Languages
Faculty 1975-1976

Abernathy, C. Cecil ........................................... Assistant Professor of Mathematics
B.A., Southern Missionary College, Tennessee
M.A., California State University, Long Beach
Specialist, Cooperative Education

*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

*Part Time
Beck, Harry L. ..................................... Acting Coordinator—Adult Education  
A.A., Glendale Community College  
A.B., California State University, San Jose

*Beck, Vincent L. .................................................. Instructor in Mathematics  
B.A., St. Mary's College  
M.A., St. Louis University

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